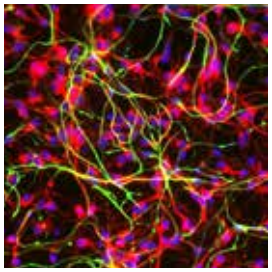
Stanford MEDICINE

PROFESSIONALISM AND LEADERSHIP

2017



ADVANCING SCIENCE

EDUCATIONAL EXCELLENCE

CLINICAL INNOVATION

COMMUNITY COMMITMENT & ENGAGEMENT

ACADEMIC UPDATE

Department of Psychiatry and Behavioral Sciences

Stanford MEDICINE | Department of Psychiatry and Behavioral Sciences

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psychiatry.stanford.edu

Contents

Together, we are creating a new paradigm for modern psychiatry.

Message from the Chair

Together we are creating a new paradigm for modern psychiatry. This transformational approach to psychiatry at Stanford differs in its intention, which moves beyond understanding and eradicating disease toward the imperative of fostering health, resilience, and wellbeing. This transformational new psychiatry differs in that it is much more richly informed by extraordinary scientific discoveries and, at the same time, by an appreciation of the ancient role of the therapeutic relationship in human healing.

Our approach to psychiatry is driven by innovation -- combining novel approaches and technologies to tackle the hardest challenges in the laboratory, clinic, and community. Our transformational new approach exists because of the acceleration of work by scientists, scholars, educators and learners in many academic disciplines. Rapidly translating great science and dismantling societal barriers, our work seeks to revolutionize standards of care for millions of people burdened by mental disorders. This is an expression of Precision Health and Wellness, the strategic vision of Stanford Medicine, and it is ambitious. We are transforming human health.

We have arrived at this moment because of the creativity, tenacity, and clarity of purpose of our academic community. We all have a role in advancing science, clinical innovation and service, educational excellence, community commitment and engagement, and professionalism and leadership. These missions, taken together, become a transformative methodology and have become the basis of The Transformational New Psychiatry at Stanford.

Laura Roberts, M.D., M.A.

Chairman and Katharine Dexter McCormick and Stanley McCormick Memorial Professor
Department of Psychiatry and Behavioral Sciences, Stanford University School of Medicine

Psychiatry and Behavioral Sciences of Stanford Medicine

Our aim is to enable great science, prepare great people, and inspire a great society to create a better future for all whose lives are affected by mental illness.

The Department of Psychiatry and Behavioral Sciences of Stanford Medicine has a great tradition of fundamental science, translational and clinical research, subspecialty expertise, multidisciplinary education, and influential leadership. Our faculty members are highly accomplished scientists, master clinicians, teachers, and community-engaged leaders with transformative impact across many disciplines of science, medicine, and health policy. Our work spans and integrates five interdependent academic missions of advancing science, clinical innovation and service, educational excellence, community commitment and engagement, and professionalism and leadership.

Advancing truly transformative science of significance to human health, now and in the future, is clearly Stanford Medicine's most important role throughout the world. The capacity of our department – one of the largest at Stanford University – to conduct great science and to connect this creative and influential work with our other academic missions is what distinguishes us and continues to inspire us.

The overarching aim of creating a better future is predicated on our shared pursuit of discovery across the basic, translational, clinical, and population sciences. This aim is also predicated on our collaborative efforts to translate and back-translate new knowledge in our training of scientists and expert clinicians, in supporting the careers of outstanding faculty and learners, and in addressing the needs of communities, local and global. Moreover, if we are to ensure that clinical care today at Stanford – and ten years from now throughout the world – leads to far better health outcomes, scientific discovery must be expressed in new approaches to prevention, new therapeutics, and new models of care.

Academic medicine is entrusted with human health.

Academic medicine is entrusted with improving the health of individuals, communities, and populations. And in academic psychiatry and the behavioral sciences, we have a special responsibility to advance understanding of the nature of the brain and of behavior and to explore the role of personal meaning and the therapeutic relationship in human health -- not only to lessen the burden of disease in the world but also to foster wellbeing, resilience and strengths for generations to come.

Together we have created a truly distinguished department.

Building on the remarkable accomplishments of the past, together we have established a great modern academic department, integrating and accelerating our five missions of advancing science, clinical innovation and service, educational excellence, community engagement and commitment, and professionalism and leadership. And together we are making a difference in the lives of our patients, our students, our neighborhood, and our world. It is my privilege to serve with you in leading this department. With deep respect and my heartfelt thanks to my colleagues throughout our department, I offer these reflections on what is distinct about our academic home.

Our department is inspired.

We are a community dedicated to transformational change and social good. We understand the impact of mental illnesses, which are the second leading cause of disability and premature mortality globally, and we are deeply affected by the immense suffering and social injustices associated with these conditions. We see that the path to health for people and populations is enabled by creating and applying new knowledge, by engaging in innovation, and by preparing future generations of scientists and clinicians. Each of us, whether faculty, learner, or staff, is passionate about our work because we recognize its vital importance to humanity -- to all of our health and futures.

Our department takes on the hardest problems.

We aim to cure mental illness. We advance understanding of the body's most complex organ, the brain: its biological underpinnings, its functions, its development, its plasticity, its regulation, its dysfunction, its vulnerabilities, its aging, and its resilience. We study cognition, behavior, emotion, and relationships. We use this knowledge to develop evidence-based treatments, and with compassion and expertise we care for individuals living with prevalent, severe, and often highly treatment-resistant conditions. Our work informs clinical practices, systems of care, and health policy to reduce disability, loss of life, and stigma. We do not turn away from the hardest problems. Instead we move toward them. We understand that resolving the hardest problems will make the greatest difference.

Our department is a hothouse of creativity.

Our scientists develop highly innovative approaches to discovery at every level in the clinical and behavioral neurosciences, thereby exerting scientific leadership throughout the world. In our laboratories, the molecular, cellular, and circuit mechanisms of mental disorders are being decrypted with leading-edge technologies like optogenetics, patient-derived pluripotent stem cells techniques, neurocomputational-imaging models, e-health inventions, and more. Breakthroughs are translated to clinics, communities, and populations and accelerated by the latest approaches using big data analytics, design thinking, implementation science, and wisdom derived from collaboration across disciplines and spheres of life. Today, our faculty and trainees engage in ingenuity and innovation, transforming clinical methods and models of care across many nations. For tomorrow, we have built a pipeline of creative and critical thinkers whose work will advance knowledge and health beyond what we can now imagine.

Our department is a community in which we value all people.

We are a community defined by our commitment to respect and to inclusiveness. We embrace diversity for its intrinsic value, not merely accepting differences among us but cherishing them as the opportunity for greater mutualism, demonstrations of authentic regard, and growth of our community. We promote the wellbeing of others and take joy in one another's success. We love our students, mentees, and trainees, and we are saddened by the hardships we see that are associated with stigma, unconscious bias, and disparities. We are present and compassionate in our work, helping others, whether in our neighborhood or around the world, to bear the suffering that comes with illness, loss, and trauma. We engage in work that fosters health and a sense of belonging, even for those who are most marginalized in society.

Our department makes connections and works shoulder to shoulder.

We are a network of scientists, clinicians, educators, trainees, and staff with the shared intent to make a difference through our efforts in science, clinical care, education, the community, and leadership. We form research collaborations across the Stanford campus, we participate in and lead professional organizations, we teach at every level in the university, and we lecture internationally. As educators, we endeavor to bring forward the best in our gifted students through mentorship and rich collaborative learning experiences. We provide care in all parts of Stanford Medicine, with its continuum of care, outreach activities, and civic responsibilities. We join public health efforts in Palo Alto and across the globe. We work together, shoulder to shoulder, making intentional connections across the five interdependent missions of the department, as the prime strategy for transformative change.

Our department is creating the path to a better future.

Our department is home to leaders, innovators, and learners creating the path to a better future. The attributes that distinguish the department are many, and I have highlighted just a few. Being inspired, creative, and collaborative. Being drawn to the hardest problems, intellectually and personally. Making connections. Valuing all people. Always seeking to make a difference in the present, and yet always understanding our role in academic medicine as stewards of tomorrow. Seeking to bring about transformative change.

We are all touched by mental illness.

Every one of us, no matter our circumstance, is touched by the personal and societal impact of mental illness. The leaders, innovators, and learners of our department understand this. We envision a better world – a world of improved health and lessened burdens of mental illness. We imagine a future in which children, adults, and elders live each day well and encounter life's inevitable challenges with strength. And we are creating the path to this better future.

Department Snapshot

#10
ranked psychiatry department in the US for NIH funding in 2016

117%
increase in clinical activity since 2010

6,000+
total learners FY16

Top 12
psychiatry residency program in 2015 and 2016 ranking by US News/Doximity

72,651
visits in departmental clinics in FY16

100%
of ACGME and APA training programs with maximum years of accreditation

206
current competitively funded projects and agreements

4 and 10
members of the National Academy of Sciences and the Institute of Medicine

650+
publications by department faculty in 2016

15%
of residents and postdocs identify as underrepresented minorities

11
endowed professorships in the department

100%
on-time performance for academic affairs since 2010

14
faculty with K-awards

86k
square feet of department space

30%
of department faculty identify as minorities

7100+
patients seen in the adult clinic in CY16

Professionalism and Leadership

547
department faculty

360
department staff

5
interdependent academic missions

26%
of tenure line faculty are women (up from 8% in FY10)

36%
of department leadership team are women and/or identify as minorities

Academic medical centers have a special opportunity to promote, model, and encourage professionalism and leadership in all aspects of our work with students, patients, peers, and superiors. Professionalism in our Department means not only acquiring specialized knowledge of psychiatric care and treatment, though this is absolutely critical, but also promoting competency, integrity, self-regulation, and accountability in all clinical, academic, and administrative endeavors. Professionalism aligns with our mission of building leadership competency.

Leaders should embody professionalism, but leadership encompasses more than professionalism alone. Leadership requires the ability to articulate a vision, while supporting and empowering others to engage in and critically reflect on that vision and the actions taken to accomplish it. In our Department, the attitudes, knowledge, and skills necessary for leadership are developed in collaboration with other important missions related to patient care, training, research, and community engagement.


Cheryl Gore-Felton,PhD


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Alan Louie, MD


Heather Kenna, MA, MS

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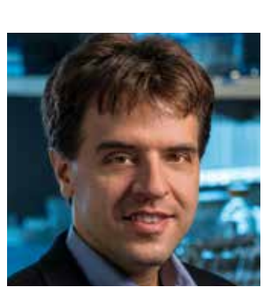
Associate Chair - Clinician Educator Professional Development



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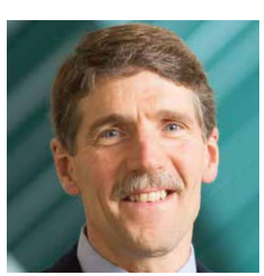

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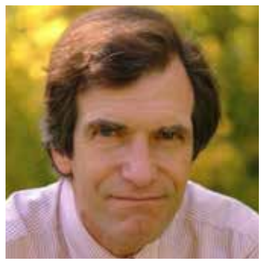

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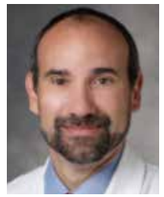

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Diana Naranjo, PhD
Clinical Associate Professor

Seiji Nishino, MD, PhD
Emeritus (Active) Professor

Douglas Noordsy, MD
Clinical Professor

Ruth O'Hara, PhD
Associate Professor

Maurice Ohayon, MD, DSc, PhD
Professor

Nichole Olson, PhD
Clinical Instructor

Sarah Ordaz, PhD
Instructor

Lilya Osipov, PhD
Clinical Instructor

Michael Ostacher, MD, MPH, MMSc
Associate Professor

Oxana Palesh, PhD
Assistant Professor

Jennifer Park, PhD
Clinical Instructor

Karen Parker, PhD
Associate Professor

Sergiu Pasca, MD
Assistant Professor

Bina Patel, MD
Clinical Assistant Professor

Sujata Patel, MD
Clinical Assistant Professor

Rafael Pelayo, MD
Clinical Professor

Jennifer Phillips, PhD
Clinical Associate Professor

Lisa Post, PhD
Clinical Associate Professor

Shaozheng Qin, PhD
Instructor

Erica Ragan, PhD
Clinical Instructor

Douglas Rait, PhD
Clinical Professor

Kristin Raj, MD
Clinical Instructor

Natalie Rasgon, MD, PhD
Professor

Elizabeth Reichert, PhD
Clinical Assistant Professor

Daryn Reicherter, MD
Clinical Associate Professor

Allan Reiss, MD
Professor

Alan Ringold, MD
Clinical Professor

Thalia Robakis, MD, PhD
Clinical Assistant Professor

Laura Roberts, MD, MA
Professor

Anstella Robinson, MD
Clinical Associate Professor

Athena Robinson, PhD
Clinical Assistant Professor

Carolyn Rodriguez, MD, PhD
Assistant Professor

Craig Rosen, PhD
Associate Professor

Cristin Runfola, PhD
Clinical Instructor

Josef Ruzek, PhD
Professor

Srikanth Ryali, PhD
Instructor

Debra Safer, MD
Associate Professor

Manish Saggar, PhD
Assistant Professor

Katherine Sanborn, MD
Clinical Assistant Professor

Mary Sanders, PhD
Clinical Associate Professor

Gisela Sandoval, MD, PhD
Clinical Assistant Professor

Vidushi Savant, MD
Clinical Instructor

Alan Schatzberg, MD
Professor

Logan Schneider, MD
Clinical Instructor

Nirao Shah, MD, PhD
Professor

Richard Shaw, MD
Professor

Yelizaveta Sher, MD
Clinical Assistant Professor

Norah Simpson, PhD
Clinical Assistant Professor

Manpreet Singh, MD, MS
Assistant Professor

Hugh Solvason, MD, PhD
Clinical Associate Professor

Barbara Sommer, MD
Emeritus (Active) Professor

David Spiegel, MD
Professor

Nicole Starace, PhD
Clinical Instructor

Hans Steiner, MD
Emeritus (Active) Professor

Keith Sudheimer, PhD
Instructor

Edith Sullivan, PhD
Professor

Shannon Sullivan, MD
Clinical Assistant Professor

Patricia Suppes, MD, PhD
Professor

Steven Sust, MD
Clinical Instructor

Margo Thienemann, MD
Clinical Professor

Allison Thompson, PhD
Clinical Associate Professor

Jared Tinklenberg, MD
Professor

Julie Tinklenberg, MD
Clinical Assistant Professor

Ranak Trivedi, PhD
Assistant Professor

Mickey Trockel, MD, PhD
Clinical Associate Professor

Alexander Urban, PhD
Assistant Professor

Linsey Utzinger, PsyD
Clinical Assistant Professor

Mytilee Vemuri, MD, MBA
Clinical Assistant Professor

Po Wang, MD
Clinical Professor

Katherine Williams, MD
Clinical Associate Professor

Leanne Williams, PhD
Professor

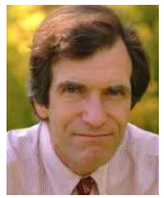
Nolan Williams, MD
Instructor

Sharon Williams, PhD
Clinical Professor

Helen Wilson, PhD
Clinical Assistant Professor

Shannon Wiltsey-Stirman, PhD
Assistant Professor

Matthew Wright, MD, PhD
Instructor



Jerome Yesavage, MD
Professor

Jong Yoon, MD
Assistant Professor

Sanno Zack, PhD
Clinical Associate Professor

Laraine Zappert, PhD
Clinical Professor

Jamie Zeitzer, PhD
Assistant Professor

Secondary Appointments

Chwen-Yuen Angie Chen, MD
Clinical Assistant Professor

Lu Chen, PhD
Professor

Karl Deisseroth, MD, PhD
Professor

Korey Hood, PhD
Clinical Professor

Mitchell Miglis, MD
Clinical Assistant Professor

Not Pictured

Jessica Crawford, MD
Clinical Instructor

Sara Gandy, MD
Clinical Associate Professor

Sue Kim, MD, MS
Clinical Assistant Professor

Sheila Lahijani, MD
Clinical Assistant Professor

Laura Lazzeroni, PhD
Associate Professor

Andrea Lewallen, PhD
Clinical Instructor

Kristine Luce, PhD
Clinical Associate Professor

Margaret Marnell, PhD
Clinical Associate Professor

Jennifer Alexis Ortiz, PhD
Clinical Instructor

Yasmin Owusu, MD
Clinical Assistant Professor

Janani Venugopalakrishnan, MD
Clinical Instructor

M. Dhyanne Warner, MD, PhD
Clinical Professor

Tonita Wroolie, PhD
Clinical Associate Professor

Lynn Yudofsky, MD
Clinical Instructor

NB: We offer a heartfelt apology for an error in the photograph of one of our faculty members in last year's Annual Update.

Emeritus Faculty

Elizabeth Bing, PhD
Emeritus Faculty (Academic Council)

Raymond Clayton, PhD
Emeritus Faculty (Academic Council)

William Dement, MD, PhD, DSc
Emeritus Faculty (Academic Council)

Judith Ford, PhD
Emeritus Faculty (Academic Council)

Ira Glick, MD
Emeritus Faculty

Roy King, MD
Emeritus Faculty (Academic Council)

Helena Kraemer, PhD
Emeritus Faculty (Academic Council)

P Herbert Leiderman, MD
Emeritus Faculty (Academic Council)

Robert Matano, PhD
Emeritus Faculty (Academic Council)

Rudolf Moos, PhD
Emeritus Faculty (Academic Council)

Adolf Pfefferbaum, MD
Emeritus Faculty (Academic Council)

Walton Roth, MD
Emeritus Faculty (Academic Council)

Javaid Sheikh, MD, MBA
Emeritus Faculty (Academic Council)

Craig Barr Taylor, MD
Emeritus Faculty (Academic Council)

Larry Thompson, PhD
Emeritus Faculty (Academic Council)

Brant Wenegrat, MD
Emeritus Faculty (Academic Council)

Irvin Yalom, MD
Emeritus Faculty (Academic Council)

Vincent Zarcone, MD
Emeritus Faculty (Academic Council)

By Courtesy

Michele Barry, MD, FACP
Professor

Katharine Edwards, PhD
Clinical Assistant Professor

Ira Friedman, MD
Clinical Professor

Joseph Garner, PhD
Associate Professor

Michael Greicius, MD
Associate Professor

Casey Halpern, MD
Assistant Professor

Thomas Harrison
Clinical Associate Professor

Valerie Hoover, PhD
Clinical Instructor

Lynne Huffman, MD
Associate Professor

Safwan Jaradeh, MD
Professor

Jordan Newmark, MD
Clinical Assistant Professor

Barbara Sourkes, MD
Professor

Thomas Sudhof, MD
Professor

Dennis Wall, PhD
Associate Professor

Max Wintermark, MD, MAS, MBA
Professor

Affiliated Faculty

John Ashford, MD, PhD
Clinical Professor

Peter Bayley, PhD
Clinical Assistant Professor

Sherry Beaudreau, PhD
Clinical Associate Professor

Stephen Black, PhD, PhD
Clinical Assistant Professor

Daniel Blonigen, PhD
Clinical Assistant Professor

Kimberly Brodsky, PhD
Clinical Assistant Professor

Sarah Carey, MD
Clinical Assistant Professor

Eve Carlson, PhD
Clinical Professor

Jauhtai Cheng, MD, PhD
Clinical Assistant Professor

Marylene Cloitre, PhD
Clinical Professor

Smita Das, MD, PhD, MPH
Clinical Assistant Professor

Katherine Eisen, PhD
Clinical Assistant Professor

Glen Elliott, MD, PhD
Clinical Professor

Jennifer Kaci Fairchild, PhD
Clinical Associate Professor

William Faustman, PhD
Clinical Professor

Howard Fenn, MD
Clinical Associate Professor

Ansgar Furst, PhD
Clinical Associate Professor

Aazaz Haq, MD
Clinical Assistant Professor

John Herbert, MD
Clinical Assistant Professor

Val Herman, MD
Clinical Instructor

Olga Hewett, MD
Clinical Instructor

Jeanette Hsu, PhD
Clinical Associate Professor

Lynette Lukuang Hsu, MD
Clinical Associate Professor

Rex Huang, MD, FAPA
Clinical Assistant Professor

Emily Hugo, PsyD
Clinical Assistant Professor

Joung Won Terri Huh, PhD
Clinical Assistant Professor

Shaili Jain, MD
Clinical Associate Professor

Neda Kharrazi, PsyD
Clinical Instructor

Eric Kuhn, PhD
Clinical Assistant Professor

Malathy Kuppuswamy, MD
Clinical Assistant Professor

Whitney Landa, MD
Clinical Assistant Professor

Tina Lee, MD
Clinical Associate Professor

Bruce Linenberg, PhD
Clinical Associate Professor

Alka Mathur, MD
Clinical Instructor

Shannon McCaslin-Rodrigo, PhD
Clinical Associate Professor

Tamar Meidav, MD
Clinical Assistant Professor

Kalpana Nathan, MD
Clinical Associate Professor

Manasi Rana, MD, MBBS
Clinical Assistant Professor

Divy Ravindranath, MD, MS
Clinical Assistant Professor

Allyson Rosen, PhD
Clinical Associate Professor

Ahmad Salehi , MD, PhD
Clinical Professor

Blake Scanlon, PhD
Clinical Assistant Professor

Simran Singh, MD
Clinical Assistant Professor

Tasha Souter, MD
Clinical Assistant Professor

Joy Taylor, PhD
Clinical Professor

Quyen Tiet, PhD
Clinical Associate Professor

Christine Timko, PhD
Clinical Professor

Jodie Trafton, PhD
Clinical Associate Professor

Marina Urman-Yotam, MD
Clinical Instructor

Julie Weitlauf, PhD
Clinical Professor

William Wilkes, MD
Clinical Assistant Professor

Steven Woodward, PhD
Clinical Professor

Sarah Yasmin, MD, MPH
Clinical Assistant Professor

Joshua Zeier, PhD
Clinical Instructor

Anna Nedelisky Zeman, PhD
Clinical Assistant Professor

Raziya Wang, MD
Clinical Assistant Professor

Adjunct Clinical Faculty

Vivien Abad, MD
Adjunct Clinical Assistant Professor

Diana Adams, EdD
Adjunct Clinical Assistant Professor

Richard Almond, MD
Adjunct Clinical Professor

Mildred Ash, MD (Emeritus)
Adjunct Clinical Assistant Professor

Vandana Aspen, PhD
Adjunct Clinical Instructor

Anthony Atwell, MD
Adjunct Clinical Professor

Richard Bale, PhD (Emeritus)
Adjunct Clinical Associate Professor

Barbara Ballinger, MD
Adjunct Clinical Assistant Professor

Daniel Becker, MD
Adjunct Clinical Professor

Jacqueline Becker, PhD (Emeritus)
Adjunct Clinical Assistant Professor

Joseph Belanoff, MD
Adjunct Clinical Instructor

Kimberly Bell, MD
Adjunct Clinical Instructor

Peter Berman, PhD (Emeritus)
Adjunct Clinical Associate Professor

Maria Pilar Bernal-Estevez, MD
Adjunct Clinical Associate Professor

Kari Berquist, PhD
Adjunct Clinical Assistant Professor

Elizabeth Biggart, PhD
Adjunct Clinical Assistant Professor

Britney Blair, PsyD
Adjunct Clinical Instructor

Barbara Brandt, PhD
Adjunct Clinical Assistant Professor

Michael Brant-Zawadzki
Adjunct Clinical Professor

Neil Brast, MD (Emeritus)
Adjunct Clinical Associate Professor

Alan Brauer, MD (Emeritus)
Adjunct Clinical Associate Professor

John Brentar, PhD
Adjunct Clinical Instructor

Charles Browning, MD (Emeritus)
Adjunct Clinical Associate Professor

Charles Bryant, MD (Emeritus)
Adjunct Clinical Associate Professor

Louise Buck, MD (Emeritus)
Adjunct Clinical Associate Professor

David Burns, MD (Emeritus)
Adjunct Clinical Professor

Macario Camacho, MD
Adjunct Cinical Assistant Professor

Charles Casella, MD (Emeritus)
Adjunct Clinical Associate Professor

Randolph Charlton, MD
Adjunct Clinical Professor

Cynthia Chatterjee, MD
Adjunct Clinical Assistant Professor

Carolyn Compton, PhD (Emeritus)
Adjunct Clinical Associate Professor

James Corby, MD (Emeritus)
Adjunct Clinical Professor

Richard Corelli, MD
Adjunct Clinical Associate Professor

David Daniels, MD
Adjunct Clinical Professor

Vanessa de la Cruz, MD
Adjunct Clinical Assistant Professor

Katherine DeVaul, MD
Adjunct Clinical Assistant Professor

Adjunct Clinical Faculty (cont.)

Norman Dishotsky, MD (Emeritus)
Adjunct Clinical Professor Emeritus

Harvey Dondershine, MD (Emeritus)
Adjunct Clinical Professor

Kathleen Dong, MD
Adjunct Clinical Assistant Professor

Jennifer Dore, MD
Adjunct Clinical Instructor

Edward Duggan, PhD
Adjunct Clinical Assistant Professor

Magdolna Dunai, MD
Adjunct Clinical Associate Professor

Susan Edelman, MD
Adjunct Clinical Associate Professor

Jack Edelstein, MD (Emeritus)
Adjunct Clinical Professor

Elaine Ehrman, PhD (Emeritus)
Adjunct Clinical Associate Professor

Donald Ehrman, PhD (Emeritus)
Adjunct Clinical Professor

Kathleen Eldredge, PhD
Adjunct Clinical Assistant Professor

Stephanie Evans, PhD
Adjunct Clinical Instructor

Mehran Farid-Moayer, MD
Adjunct Clinical Assistant Professor

Barbara Finn, PhD
Adjunct Clinical Assistant Professor

Stanley Fischman, MD
Adjunct Clinical Associate Professor

Shela Fisk, PhD
Adjunct Clinical Assistant Professor

Caroline Fleck, PhD
Adjunct Clinical Instructor

Justine Forbes, MD (Emeritus)
Adjunct Clinical Associate Professor

Sarah Forsberg, PsyD
Adjunct Clinical Instructor

Craig Forte, MSW
Adjunct Clinical Assistant Professor

William Fry, MD (Emeritus)
Adjunct Clinical Associate Professor

Emery Fu, MD
Adjunct Clinical Instructor

Ivan Gendzel, MD (Emeritus)
Adjunct Clinical Associate Professor

M Rameen Ghorieshi, MD
Adjunct Clinical Instructor

John Glathe, MD (Emeritus)
Adjunct Clinical Professor

Cheryl Goodrich, PhD
Adjunct Clinical Assistant Professor

Elsa Gordon, MD (Emeritus)
Adjunct Clinical Associate Professor

Christine Gray, PhD
Adjunct Clinical Assistant Professor

John Greene, MD
Adjunct Clinical Assistant Professor

Robert Harris, MD (Emeritus)
Adjunct Clinical Associate Professor

William Hart, MD
Adjunct Clinical Assistant Professor

Nancy Haug, PhD
Adjunct Clinical Associate Professor

James Hawkins, MD (Emeritus)
Adjunct Clinical Associate Professor

Elizabeth Herb, MD (Emeritus)
Adjunct Clinical Associate Professor

George Hogle, MD (Emeritus)
Adjunct Clinical Associate Professor

Robert Holaway, PhD
Adjunct Clinical Assistant Professor

Suzanne Horowitz, PhD (Emeritus)
Adjunct Clinical Associate Professor

Leslie Hsu, MD (Emeritus)
Adjunct Clinical Associate Professor

Shehlanoor Huseni, MD
Adjunct Clinical Instructor

Paula Jacobsen, LCSW
Adjunct Clinical Professor

Michael Jaffe, MD
Adjunct Clinical Instructor

Vikas Jain, MD
Adjunct Clinical Instructor

Rania Johnson, MD
Adjunct Clinical Instructor

Megan Jones, PsyD
Adjunct Clinical Assistant Professor

Jonathan Kaplan, MD
Adjunct Clinical Associate Professor

Gloria Kardong, MD
Adjunct Clinical Associate Professor

Ayelet Kattan, PsyD
Adjunct Clinical Instructor

Maor Katz, MD
Adjunct Clinical Instructor

Stewart Kiritz, PhD (Emeritus)
Adjunct Clinical Assistant Professor

Lila Kramer, MD (Emeritus)
Adjunct Clinical Associate Professor

Tonja Krautter, PsyD, LCSW
Adjunct Clinical Instructor

Kerry Kravitz, MD, PhD
Adjunct Clinical Associate Professor

Robert Landeen, MD (Emeritus)
Adjunct Clinical Assistant Professor

Gary Lapid, MD (Emeritus)
Adjunct Clinical Associate Professor

Adjunct Clinical Faculty (cont.)

Gloria Leiderman, PhD (Emeritus)
Adjunct Clinical Associate Professor

JoAnn LeMaistre, PhD (Emeritus)
Adjunct Clinical Assistant Professor

Laurie Leventhal-Belfer, PhD
Adjunct Clinical Assistant Professor

Jill Levitt, PhD
Adjunct Clinical Instructor

Michael Loughran, PhD
Adjunct Clinical Associate Professor

Elizabeth Mahler, MD
Adjunct Clinical Assistant Professor

Mark Mahowald, MD
Adjunct Clinical Professor

Alan Maloney, MD
Adjunct Clinical Associate Professor

Mali Mann, MD
Adjunct Clinical Associate Professor

Susan Markowitz, PhD (Emeritus)
Adjunct Clinical Assistant Professor

John Marquis, PhD (Emeritus)
Adjunct Clinical Assistant Professor

Alka Mathur, MD
Adjunct Clinical Instructor

Matthew May, MD
Adjunct Clinical Instructor

Johanna Mayer, PhD (Emeritus)
Adjunct Clinical Assistant Professor

Viola Mecke, PhD (Emeritus)
Adjunct Clinical Professor

Terry Miller, MD
Adjunct Clinical Associate Professor

James Missett, MD, PhD (Emeritus)
Adjunct Clinical Associate Professor

Kerry Mitchell, MD
Adjunct Clinical Assistant Professor

Donald James Mordecai, MD
Adjunct Clinical Associate Professor

Elliot Morrison, MD (Emeritus)
Adjunct Clinical Associate Professor

James Moses, PhD (Emeritus)
Adjunct Clinical Professor

Anna Muelling, MD (Emeritus)
Adjunct Clinical Associate Professor

Ricardo Muñoz, PhD
Adjunct Clinical Professor

Thomas Nagy, PhD
Adjunct Clinical Associate Professor

Sharon Nash, PhD
Adjunct Clinical Assistant Professor

John Neal, PhD
Adjunct Clinical Assistant Professor

Nicholas Ney, PhD
Adjunct Clinical Assistant Professor

Cynthia Nguyen, MD
Adjunct Clinical Associate Professor

George Norbeck, MD (Emeritus)
Adjunct Clinical Assistant Professor

Mary Ann Norfleet, PhD (Emeritus)
Adjunct Clinical Professor

Harold Novotny, MD (Emeritus)
Adjunct Clinical Associate Professor

Michael O'Connor, PhD (Emeritus)
Adjunct Clinical Assistant Professor

Chinyere Ogbonna, MD
Adjunct Clinical Instructor

Mari Shimizu Ormiston, MD
Adjunct Clinical Instructor

Chirag Pandya, MD
Adjunct Clinical Instructor

Isabel Paret, PhD (Emeritus)
Adjunct Clinical Associate Professor

Gerald Piaget, PhD (Emeritus)
Adjunct Clinical Associate Professor

Thomas Plante, PhD
Adjunct Clinical Professor

Donn Posner, PhD
Adjunct Clinical Associate Professor

Nelson Powell, MD, DDS
Adjunct Clinical Professor

Fawn Powers, PhD (Emeritus)
Adjunct Clinical Assistant Professor

Rebecca Powers, MD
Adjunct Clinical Associate Professor

Michael Quach, MD
Adjunct Clinical Instructor

Stacey Quo, DDS
Adjunct Clinical Assistant Professor

Anil Rama, MD
Adjunct Clinical Instructor

Ildiko Ran, MFT, CGP
Adjunct Clinical Instructor

George Reimer (Emeritus)
Adjunct Clinical Professor

C June Reynolds, MD
Adjunct Clinical Instructor

Angela Riccelli, LCSW (Emeritus)
Adjunct Clinical Assistant Professor

Elizabeth Richards, MD (Emeritus)
Adjunct Clinical Associate Professor

Stephen Richmond, MD
Adjunct Clinical Assistant Professor

David Ringo, MD, PhD (Emeritus)
Adjunct Clinical Assistant Professor

Jules Riskin, MD (Emeritus)
Adjunct Clinical Associate Professor

Beverly Rodriguez, MD, PhD
Adjunct Clinical Assistant Professor

Adjunct Clinical Faculty (cont.)

Jerome Rose, MD (Emeritus)
Adjunct Clinical Associate Professor

Deborah Rose, MD (Emeritus)
Adjunct Clinical Assistant Professor

Alan Rosenthal, MD
Adjunct Clinical Professor

Elise Rossiter, PhD, MS
Adjunct Clinical Associate Professor

Jacob Roth, MD
Adjunct Clinical Instructor

Deborah Rovine, MD
Adjunct Clinical Instructor

Chad Ruoff, MD
Adjunct Clinical Assistant Professor

Jonathan Russ, MD (Emeritus)
Adjunct Clinical Associate Professor

Kenneth Seeman, MD (Emeritus)
Adjunct Clinical Associate Professor

Nicole Shiloff, PhD
Adjunct Clinical Assistant Professor

Alan Sidle, MD, PhD (Emeritus)
Adjunct Clinical Associate Professor

Judith Simon, PhD
Adjunct Clinical Instructor

Carol Slotnick, MSW, PhD
Adjunct Clinical Assistant Professor

Michael Smith, PhD
Adjunct Clinical Assistant Professor

John Smolowe, MD (Emeritus)
Adjunct Clinical Associate Professor

Suzan Song, MD
Adjunct Clinical Instructor

Dena Sorbo, LCSW
Adjunct Clinical Instructor

Mary Jo Spencer, LCSW (Emeritus)
Adjunct Clinical Assistant Professor

Janet Spraggins, MD
Adjunct Clinical Assistant Professor

Nicholas St John, PhD
Adjunct Clinical Instructor

Sheldon Starr, PhD (Emeritus)
Adjunct Clinical Associate Professor

Maria-Christina Stewart, PhD
Adjunct Clinical Instructor

Cary Lee Stone, LCSW (Emeritus)
Adjunct Clinical Associate Professor

Thomas Tarshis, MD
Adjunct Clinical Assistant Professor

Jacob Towery, MD
Adjunct Clinical Instructor

Dona Tversky, MD
Adjunct Clinical Instructor

William Van Stone, MD (Emeritus)
Adjunct Clinical Associate Professor

Shivani Verma Chmura, MD
Adjunct Clinical Assistant Professor

Leon Wanerman, MD
Adjunct Clinical Associate Professor

Saul Wasserman, MD (Emeritus)
Adjunct Clinical Associate Professor

William Waterfield, Jr, MD (Emeritus)
Adjunct Clinical Associate Professor

Randall Weingarten, MD
Adjunct Clinical Professor

Joellen Werne, MD (Emeritus)
Adjunct Clinical Associate Professor

Barbara White-Huber, PhD(Emeritus)
Adjunct Clinical Assistant Professor

Dana Wideman, PhD
Adjunct Clinical Assistant Professor

George Wilkinson, MD
Adjunct Clinical Associate Professor

William Wittner, MD (Emeritus)
Adjunct Clinical Associate Professor

Kenneth Woodrow, MD
Adjunct Clinical Associate Professor

Frances Wren, MB, BCh
Adjunct Clinical Associate Professor

Gary Wynbrandt, MD
Adjunct Clinical Assistant Professor

Helen Yeni-Komshian, MD
Adjunct Clinical Instructor

Robert Yoerg, MD (Emeritus)
Adjunct Clinical Associate Professor

Lenora Yuen, PhD
Adjunct Clinical Assistant Professor

Kin Yuen, PhD
Adjunct Clinical Instructor

Adrianna Zimring, PhD
Adjunct Clinical Instructor

Eugene Zukowsky, PhD (Emeritus)
Adjunct Clinical Associate Professor

Adjunct Faculty

Dean Carson, PhD
Adjunct Lecturer

Alison Darcy, PhD
Adjunct Lecturer

Sanjay Dube, MBBS
Adjunct Professor

David Eagleman, PhD
Adjunct Professor

Wendy Froelich-Santino, PhD
Adjunct Lecturer

Thomas R Insel, MD
Adjunct Professor

Leena Khanzode, MD
Adjunct Lecturer

Brian Kleis, MD
Adjunct Lecturer

Karoly Nikolich, PhD
Adjunct Professor

Mary Jane Otte, PhD
Adjunct Lecturer

Joy Pollard, PhD
Adjunct Lecturer

James Reich, MD, MPH
Adjunct Professor

Consulting Faculty

Thomas Anders, MD
Consulting Professor

Jed Black, MD
Consulting Associate Professor

Mark Buchfuhrer, MD
Consulting Assistant Professor

Sophia Colamarino, PhD
Consulting Associate Professor

Steven Harris, MD
Consulting Associate Professor

William Hewlett, MD, PhD
Consulting Associate Professor

Paul Insel, PhD
Consulting Associate Professor

Martin Mumenthaler, PharmD
Consulting Assistant Professor

Bradley Novak, MD
Consulting Assistant Professor

Michael Bret Schneider, MD
Consulting Associate Professor

Allison Siebern, PhD
Consulting Assistant Professor

Lynn Waelde, PhD
Consulting Professor

Faculty Lecturers

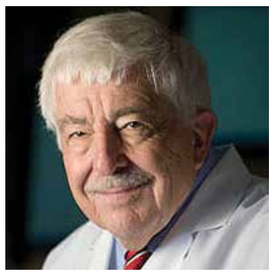
Kathryn Dewitt, PhD
Senior Lecturer

David Schrom, JD
Lecturer

Recognition of Service

2016 Professoriate Retirements

William Dement, MD, PhD



Dr. Dement is a pioneer and international authority in the field of sleep medicine. His illustrious portfolio of work includes the very first studies on the connection between rapid eye movement and dreaming, as well as ground-breaking studies using electroencephalogram (EEG) during sleep. He founded the American Sleep Disorders Association, which later became the American Academy of Sleep Medicine. Dr. Dement also served as chairman of the National Commission on Sleep Disorders Research, whose final report led directly to the creation of a new agency within the National Institutes of Health, the National Center on Sleep Disorders Research. In 1977, he launched what became the leading scientific journal in the field of sleep medicine, Sleep, and served as its Co-Editor-in-Chief for over 20 years. Dr. Dement has been a member of our department faculty since 1962.

Dolores Gallagher-Thompson, PhD, ABPP

Dr. Gallagher-Thompson is world-renowned leader in the field of geropsychology. Her scholarly research has been focused on the development and evaluation of targeted psychosocial interventions for the treatment of late-life depression and distress in family caregivers of older adults with Alzheimer's disease or other forms of dementia. She is a Founding Fellow of the Academy of Cognitive Therapy and is renowned for her clinical expertise in the area of cognitive behavioral therapy. She was also instrumental in the development of the Stanford Geriatric Education Center, and served as its Director for over 9 years. Dr. Gallagher-Thompson first joined Stanford in 1981, and has been a member of our department faculty since 1988.

Cheryl Koopman, PhD

Dr. Koopman is an internationally recognized researcher who has made significant contributions to understanding stress and health in the social and political context. Her scholarly work includes studies on stress reactions to traumatic exposure, including interpersonal violence, natural disasters, and/or serious illness, such as breast/gynecological cancer, Lyme disease, or HIV/AIDS, in the context of previous life history, risk and resilience factors, and demographic characteristics. Her track record includes extensive national leadership, including past service as President of the International Society of Political Psychology. Dr. Koopman first joined Stanford in 1991, and has been a member of our department faculty since 1998.

Faculty Honors

National Academy of Sciences

Karl Deisseroth, MD, PhD
Stanford University
Primary: Systems Neuroscience
Secondary: Cellular and Molecular Neuroscience

Emmanuel Mignot, MD, PhD
Stanford University
Primary: Medical Physiology and Metabolism

Robert Malenka, MD, PhD
Stanford University
Primary: Cellular and Molecular Neuroscience
Secondary: Systems Neuroscience

Thomas Sudhof, MD
Stanford University
Primary: Cellular and Molecular Neuroscience
Secondary: Biochemistry

Institute of Medicine

Michele Barry, MD, FACP
Stanford University School of Medicine
Elected 2002
California

Emmanuel Mignot, MD, PhD
Stanford University School of Medicine
Elected 2005
California

Karl Deisseroth, MD, PhD
Stanford University
Elected 2010
California

Allan Reiss, MD
Stanford University School of Medicine
Elected 2009
California

William Dement, PhD
Stanford University
Elected 1983
California

Alan Schatzberg, MD
Stanford University School of Medicine
Elected 2003
California

Helena Chmura Kraemer, PhD
Stanford University
Elected 2003
California

David Spiegel, MD
Stanford University School of Medicine
Elected 2012
California

Robert Malenka, MD, PhD
Stanford University School of Medicine
Elected 2004
California

Thomas Sudhof, MD
Stanford University School of Medicine
Elected 2007
California

Pictured Alphabetically: Barry, Deisseroth, Dement, Kraemer, Malenka, Mignot, Reiss, Schatzberg, Spiegel, Sudhof

Annual Chairman's Awards

The Annual Chairman's Awards were initiated in 2012 to recognize faculty in our Department for their exceptional work in one or more of the Department's interdependent mission areas: advancing science, clinical innovation and service, educational excellence, community commitment and engagement, and leadership and professionalism. We also created the "Unsung Hero" award to recognize individuals who give tirelessly and selflessly to the members and/or missions of the Department. Candidates for the Annual Chairman's Awards are nominated each year by the faculty and are vetted by the Departmental Advisory Committee on Annual Awards and Nominations before final selections are made by the Chairman.

2017 Chairman's Award Winners

Christian Guilleminault, MD, DBiol
Unsung Hero

Heather Kenna, MA, MS
Unsung Hero

Karl Deisseroth, MD, PhD
Advancing Science

Alan Louie, MD
Educational Excellence

Kristine Luce, PhD
Educational Excellence

Dolores Gallagher-Thompson, PhD, ABPP
Clinical Innovation & Service

Helen Wilson, PhD
Community Commitment
and Engagement

Rona Hu, MD
Community Commitment
and Engagement

Bruce Arnow, PhD
Professionalism &
Leadership

Jeanette Hsu, PhD
Professionalism &
Leadership

2012-2016 Chairman's Award Winners

1. Steven Adelsheim, MD (2014)
   Community Commitment and Engagement
2. Jacob Ballon, MD, MPH (2016)
   Clinical Innovation
3. Belinda Bandstra, MD, MA (2016)
   Educational Excellence
4. Sherry Beaudreau, PhD (2015)
   Advancing Science
5. Victor Carrion, MD (2013)
   Community Commitment and Engagement
6. Sallie De Golia, MD, MPH (2014)
   Educational Excellence
7. John Etchemendy, PhD (2014)
   Unsung Hero
8. Amit Etkin, MD, PhD (2014)
   Clinical Innovation and Advancing Science
9. Cheryl Gore-Felton, PhD (2016)
   Professionalism & Leadership
10. Joachim Hallmayer, MD, Dr med (2015)
    Unsung Hero
11. Antonio Hardan, MD (2015)
    Advancing Science
12. Kimberly Hill, PhD (2014)
    Leadership and Unsung Hero
13. Booil Jo, PhD (2012)
    Leadership and Unsung Hero
14. Shashank Joshi, MD (2012)
    Community Commitment and Engagement
15. Shelli Kesler, PhD (2014)
    Clinical Innovation and Advancing Science
16. Tina Lee, MD (2014)
    Leadership and Unsung Hero
17. Anna Lembke, MD (2015)
    Clinical Innovation
18. Linda Lotspeich, MD, MEd (2013)
    Leadership and Unsung Hero
19. Rachel Manber, MD (2012)
    Clinical Innovation and Advancing Science
20. Ruth O'Hara, PhD (2015)
    Professionalism & Leadership
21. Jennifer Phillips, PhD (2016)
    Unsung Hero
22. Daryn Reicherter, MD (2015 and 2016)
    Community Commitment and Engagement
23. Yelizaveta Sher, MD (2016)
    Clinical Innovation
24. Alexander Urban, PhD (2013)
    Clinical Innovation and Advancing Science
25. Leanne Williams, PhD (2016)
    Advancing Science
26. Sanno Zack, PhD (2016)
    Professionalism & Leadership

Psychiatry and Behavioral Sciences

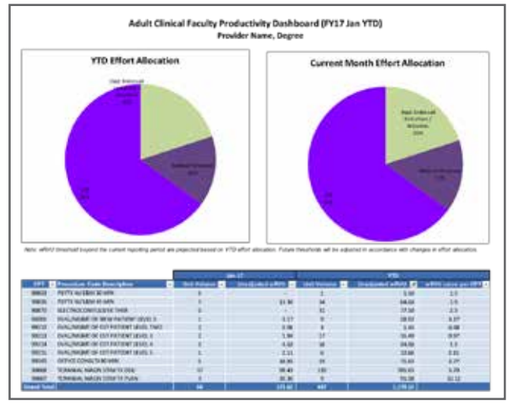
Intentional Model of Academic Excellence

Our Department embraces an intentional model of excellence in modern academic department leadership and organization. Our Department is structured to bring greater academic coherence, organizational alignment and accountability, and transparency to our governance. This configuration also brings new opportunities for increased cross collaboration within the Department and also with other programs in the School of Medicine and the University and with our hospitals and community partners.

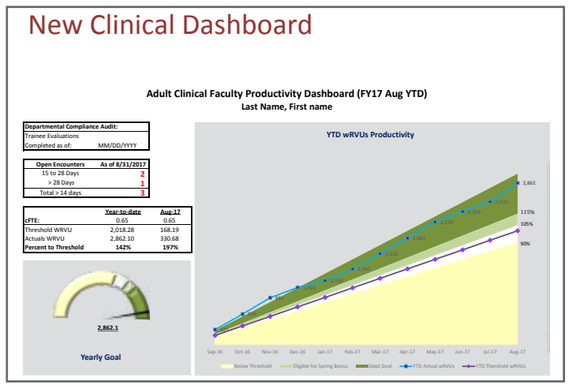
In developing strategy and reaching key decisions, the Chair works in close partnership with the Vice Chair, Associate Chairs, Division Chiefs, and the Senior Staff Leadership Team of the Department and with key leaders across the School of Medicine and our affiliated hospitals, Stanford Health Care, Stanford Children's Health, and Palo Alto Veterans Affairs Health Care System. Advisory Committees facilitate and assist in oversight of key departmental functions and responsibilities, such as faculty appointments and promotions, clinical executive and operations, and space use and allocation. We established a Council of Major Laboratories to enhance strategic development and increase representation of scientific perspectives in Department leadership. The Senior Staff Leadership Team continues to evolve, and prioritizes best practices and the highest standards of professionalism.

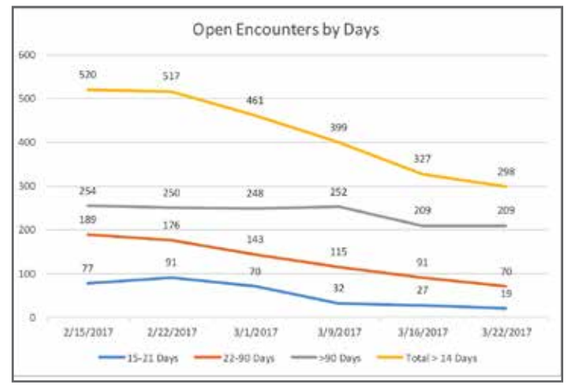
The fundamental work of the Department occurs in our Divisions, Major Laboratories, and the Chair's Special Initiatives. The Department has five divisions that have a full academic portfolio with scientific, clinical, educational, community, and leadership commitments; the five Divisions are Child and Adolescent Psychiatry and Child Development, General Psychiatry and Psychology, Interdisciplinary Brain Sciences, Public Mental Health and Population Sciences, and Sleep Medicine. Within these Divisions reside many of our highly recognized centers and research programs, such as the Mood Disorders Clinic, Eating Disorder Clinic, and the Stanford Center for Sleep Sciences and Medicine.

The Major Laboratories include the Early Life Stress and Pediatric Anxiety Program, the Personalized and Translational Neuroscience Lab (PanLab), the Program on Genetics of Brain Function, the Nancy Friend Pritzker Laboratory, the Stanford Cognitive and Systems Neuroscience Lab, the Center on Stress and Health, the SRI Alcohol Research Program, and the Neurobiology of Brain States Lab. The major laboratories engage in scientific discovery, mentorship, and training and often work closely with the clinical, education, and community programs of the Department., The Special Initiatives of the Chair are novel and diverse academic activities of special priority to the Department, such as Community Outreach Activities, Precision Mental Health, Humanities and Medicine, and The Stanford Center for Youth Mental Health and Wellbeing.



New Clinical Dashboard





Sally Scientist MD PhD — **March 2017** — Department of Psychiatry and Behavioral Sciences: Research Snapshot

Stanford University Compliance Reminders	Due Date
Quarterly Expense Certification	May 31, 2017 for JAN-MAR17 expenses
IRB CITI Medical Researcher Human Subjects	April 2017
Annual Conflict of Interest Certification	Completed for 2017
Payroll Distribution Certification	Completed for 2017
HIPAA training	On-demand by School of Medicine

Based on data from Blue Ridge Institute for Medical Research, Stanford Psychiatry and Behavioral Sciences is ranked #10 nationally for NIH funding to Departments of Psychiatry.

The financial data in this report has been verified by your Finance Manager, Arty Accountant.

Externally funded grants — As of 3/31/2016

Project Name	Funded By	Award	SPO	Performance Period		Estimated Award Amt	Direct Cost	Indirect Cost	Funded to Date	Expenses to Date	Available Balance	Est Future Funds
Active												
Sleepiness in zombies with anxiety and depression	NIH (R21)	PABGG	67889	05/01/12	04/30/15	425,000	270,524	154,476	425,000	419,000	6,000	0
Evaluation of TMS in rural zombies	GSK	UXXXX	67890	08/15/14	08/14/15	66,000	54,660	11,340	30,083	2,903	27,180	35,917
Drug-reward neural network activiation in zombies: do they dream?	NIH (P50)	PABLD	111999	01/15/14	01/14/19	1,000,000	500,000	500,000	250,000	111,641	138,359	750,000
Under Review												
Youth zombie engagement with facebook and sleep quality	NIH (R21)		120089	07/01/15	01/31/17	425,000	275,000	150,000				
Quietus for the next generation of zombies	SFARI		130909	07/01/15	06/30/17	178,000	142,400	35,600				
Projects Completed in the Last 24 Months												
Family intervention to boost aging parent memory	University of Chicago (NIH sub)		12345	09/01/11	05/31/14	100,000						
DBS and PET in chronic smokers: chain reaction	NIH (R01)		12346	09/02/11	06/01/14	750,000						
Creating surveillance systems that comply with international zombie regulations	NIH (R21)		12347	09/03/11	06/02/14	425,000						

Fiscal Year 17 Designated, Gift, Endowment Funds — As of 1/31/2015

Purpose	Title	PTA	Beginning Balance	Expenses	Current Balance
Unrestricted	Funds from Fixed Price Contracts	1002007-100-EASYM	10,000	(1,234)	8,766
Unrestricted	Donation	1002007-100-GEASY	70,000	(34,000)	36,000
Gift, Research	Zebras & Zombie Cohabitation Fund	1002007-100-HEASY	100,000	(13,678)	86,322
Endowment	Professor Right On Fund	1002007-100-KEASY	323,078	0	323,078

Please work with us to verify that the space allocation below is correct.

Current iSpace allocation

Room	Building	Room Type	Function Description	Function %	PI %	Sq Ft
3006	3165 Porter	ANIMAL PROCEDURE ROOM	RESEARCH - ORGANIZED	100	100	381
3008	401 Quarry	RESEARCH OFFICE	RESEARCH - ORGANIZED	100	100	181
A201	1520 Page Mil	POSTDOC OFFICE	RESEARCH - ORGANIZED	100	100	20

2017 Publications (Scopus/PubMed)

Jones B, Taylor J, Prince P, Smythe L
Comparison of zombie reactivity in dark spaces versus direct sunlight
(2016) JAMA Psychiatry

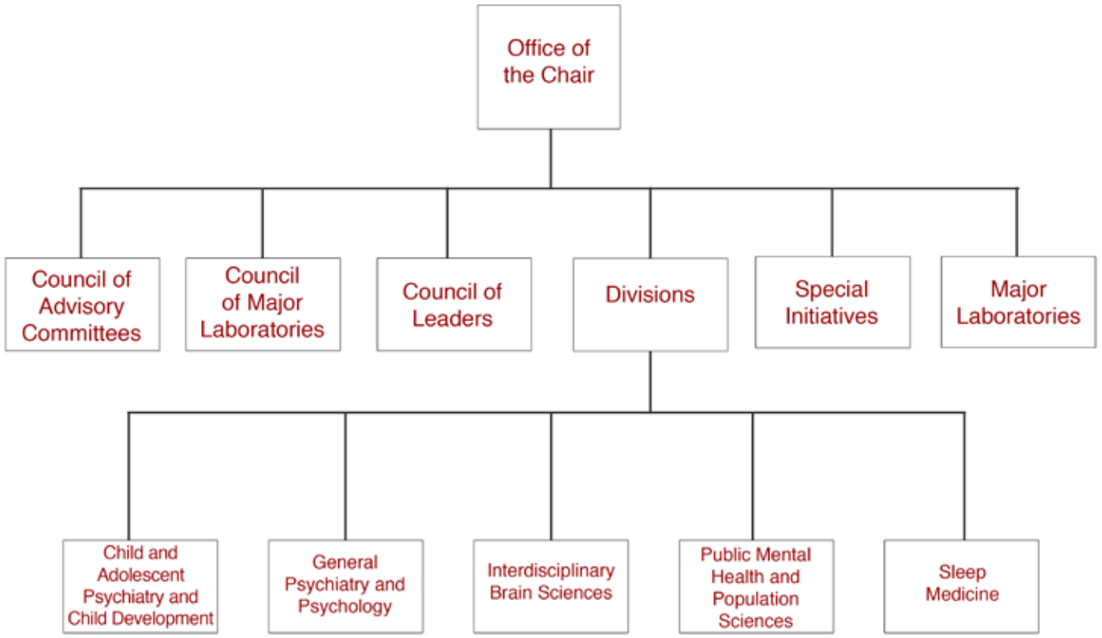
Prince P, Taylor J, Scientist S
Predicting cold press response in unsedated zombies
(2016) J Psychiatr Res.

Scientist S, Jones B, Taylor J, Prince P, Smythe L
Valence and salience in zombie networks of the dead and near dead
(2015) Psychological Medicine

Jones B, Taylor J, Prince P, Smythe L. Scientist S
Dark spaces versus direct sunlight: zombie reactivity to pain
(2015) JAMA Psychiatry

Psychiatry and Behavioral Sciences

Structure



Council of Advisory Committees

Clinical Executive Committee
Clinical Operations Committees
Clinical Strategic Planning Committee
Appointments and Promotions Advisory Committees
Adjunct Clinical Faculty Advisory Committee
Strategic Space Use and Allocation Advisory Committee
Departmental Community Engagement Advisory Committee
Grand Rounds/CME Committee
Advisory Committee on Annual Awards and Nominations
Veterans Affairs Psychiatry Education Committee
Education Leadership and Integration Advisory Committee

Council of Leaders

Vice Chair
Associate Chairs
Division Chiefs
Chair of Major Laboratories Steering Committee
Senior Staff Leadership Team

Council of Major Laboratories (including incubator)

Early Life Stress and Pediatric Anxiety Program (Victor Carrion, MD)
Chetty Lab (Sundari Chetty, PhD)
de Lecea Lab (Luis de Lecea, PhD)
Etkin Lab (Amit Etkin, MD, PhD)
Program on the Genetics of Brain Function (Douglas Levinson, MD)
Nancy Friend Pritzker Laboratory (Robert Malenka, MD, PhD)
Cognitive & Systems Neuroscience Lab (Vinod Menon, PhD)
Shah Lab (Nirao Shah, MD, PhD)
Center on Stress and Health (David Spiegel, MD)
Sullivan Lab (Edith Sullivan, PhD)
Urban Lab (Alexander Urban, PhD)
PanLab (Leanne Williams, PhD)

Special Initiatives of the Chair

The Belonging Project
The Bike Beyond Project
Brainstorm
Clinical Neuroscience Internship Experience (CNI-X)
Community Outreach Activities
Editor-in-Chief, Books: American Psychiatric Association
Editorial Office: Academic Psychiatry
Forensic Psychiatry
Humanities and Medicine
Lyme Disease Working Group
Pegasus Physician Writers at Stanford
Precision Mental Health
Project Catalyst for Mental Health
Reimagining Mental Healthcare
Small Grants Project
Stanford Center for Youth Mental Health and Wellbeing
Technology and Mental Health
WellConnect

Divisions

Child and Adolescent Psychiatry and Child Development
Autism
Eating Disorders
General
Mood & Anxiety
Psychosomatic
Special Programs & Nested Laboratories

General Psychiatry & Psychology
Addiction
Clinical Trials
General
Geriatric
Inpatient & Acute
Interventional
Psychosomatic
Psychosocial
Special Programs & Nested Laboratories

Interdisciplinary Brain Sciences
Clinical Neuroscience
Behavioral Neuroscience
Research

Public Mental Health & Population Sciences
Epidemiology
Health Policy
Student Health & Wellbeing
Veteran & Military
Vulnerable & Special Populations
Special Programs & Nested Laboratories

Sleep Medicine
General Sleep & Insomnia
Narcolepsy
Parasomnias
Sleep Dental
Sleep Surgery
Special Programs & Nested Laboratories

Divisions of the Department

Division of Child and Adolescent Psychiatry and Child Development

Our Clinics and Hospital-Based Services are an integral part of one of the preeminent child and adolescent mental health treatment consortiums in the country, which includes the Stanford Children's Health and Lucile Packard Children's Hospital, Stanford Hospital & Clinics, and Stanford University School of Medicine.

Child and Adolescent Psychiatry Faculty provide comprehensive clinical services using evidence-based intervention to achieve excellence in patient care, while implementing innovative approaches to optimize functioning and long-term outcome. These services are provided through several outpatient specialty clinics, inpatient programs, and community-based programs. The outpatient clinics provide psychiatric care to children and adolescents with a variety of diagnoses from 2 to 18 years of age. Clinic staff, consisting of child psychiatrists and psychologists, child psychiatry and post-doctoral psychology fellows, and general psychiatry residents, provides initial evaluations, second opinions, and ongoing treatment, in the areas of Early Life Stress and Pediatric Anxiety, Early Psychosis, Eating Disorders, Disruptive Behavior Disorders such as Attention Deficit Hyperactivity Disorder, Mood Disorders, Psychological Assessment, Autism and Developmental Disorders, and School-Based Mental Health. The Comprehensive Pediatric Care Unit is a 15-bed unit that serves children and adolescents with eating disorder related medical problems severe enough to require hospitalization. The Pediatric Psychiatry Consultation Service provides inpatient and outpatient psychiatric consultation and treatment to the general pediatric and pediatric and surgical subspecialty services at Packard Children's Hospital and covers the emergency room at Stanford University Medical Center. More recently, a Stanford Team started working at Mills Peninsula Health Services Inpatient Adolescent Psychiatric Unit with the goal of covering up to eight beds.

In addition to the clinical activities, faculty in the child division are involved in a wide range of research activities including stem cell investigations, cutting edge biological and neuroimaging studies, longitudinal observational programs, and innovative clinical trials. These activities are generating promising findings that are helping to advance the science of youth mental health leading to improved prognosis and long-term outcome of children and adolescents suffering from neuropsychiatric disorders.

Finally, the Child and Adolescent Psychiatry Faculty are very active academically with, on average, more than 45 manuscripts published yearly in peer-reviewed journals and more than 100 scientific lectures presented at regional, national, and international meetings.

Division of General Psychiatry and Psychology

The Division of General Psychiatry and Psychology is focused on adult mental health and carries out its work across all five of the Department's missions, namely advancing science, clinical innovation and service, educational excellence, community engagement, and leadership and professionalism. The scientific interests of our faculty cover a broad range of mental health problems and include programs in basic and translational science, treatment development and evaluation, and dissemination/implementation.

Our division is also the home of several key departmental educational programs including our Adult Psychiatry Residency, our Adult Clinical Post-Doctoral Fellowships, our T32 Fellowships in Adult Mental Health Disorders, and our graduate clinical psychology program, the PGSP-Stanford PsyD Consortium (operated jointly with Palo Alto University).

The division provides comprehensive psychiatric and psychological services across a continuum of care. Outpatient clinics include a range of specialties encompassing Mood Disorders, Bipolar Disorder, Interventional Psychiatry (including transcranial magnetic stimulation), Geropsychiatry, Women's Wellness, Obsessive-Compulsive Disorder, Psychosis, Integrative Medicine, Psychosomatic Medicine, Addiction Medicine/Dual Diagnosis, Sleep Health and Insomnia, and Neuropsychiatry.

The Evaluation and Brief Intervention team provides a Consultation Clinic for patients who require urgent assessment, as well as an Evaluation Clinic for short-term treatment. The division supports an active Consultation and Liaison service for hospitalized patients in other departments and patients seen in the Cancer Center. The Integrated Behavioral Health Service is under development to support Stanford Primary Care Medicine. The Psychosocial and Subspecialty Care Clinic provides psychotherapy including Cognitive Behavioral Therapy, Dialectical Behavior Therapy (DBT), and Couples/Family Therapy for patients with a wide range of presenting problems. Subspecialties include Eating Disorders, Sports Medicine, Adult DBT, Couples and Family Therapy, Neuropsychological Assessment, Sleep Heath/ Insomnia and the Wellness Program for Stanford faculty and trainees. The Individual Psychotherapy Clinic, staffed by Department of Psychiatry residents, provides the opportunity for patients to receive long-term psychodynamic psychotherapy.

As part of a world-renowned university hospital, Stanford's psychiatry service is prepared to treat individuals with complex and challenging illnesses. The Inpatient Psychiatry Service at Stanford is recognized for its commitment to coordinating all patient care through a multidisciplinary team including psychiatrists, psychologists, nurses, occupational and physical therapists, social workers and case managers. The 29-bed Inpatient Psychiatry Service features both open and secured unit programs. Our treatment program is structured to maintain the safety, dignity, and confidentiality of every patient on the unit.

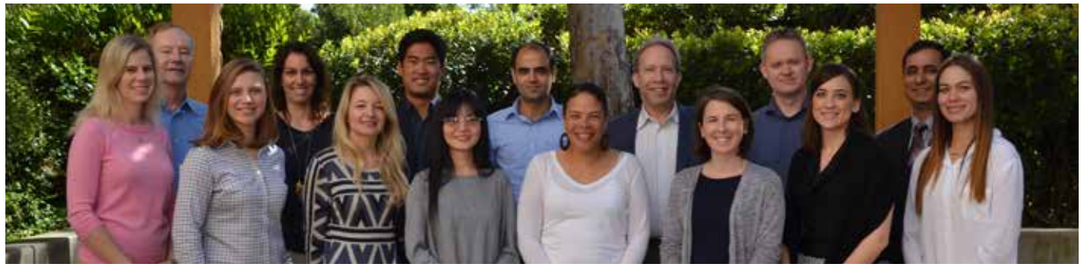
18,000+

visits in our departmental/LPCH clinics in FY16

40,000+

visits in our departmental/SHC clinics in FY16

Division of Interdisciplinary Brain Sciences



The Division of Interdisciplinary Brain Sciences (DIBS) offer specialized clinical services that combine evidence-based practices with innovation in research across the lifespan. Our clinical services focus on the intersection among genetic risk influences, brain development, cognitive-behavioral outcomes and environmental factors. Individuals with neurodevelopmental disorders are one focus, including syndromic conditions such as fragile X syndrome, Turner syndrome, Klinefelter syndrome, 47XYY, Williams syndrome, 22q deletion syndrome (VCFS), Prader-Willi syndrome, and behavioral and neuropsychiatric symptoms associated with intellectual disability. Developmental disorders associated with medical risk factors are another focus, such as fetal alcohol exposure, preterm birth, diabetes, and disorders of sex development are also a focus. Treatments encompass a broad range of modalities, including behavioral therapy, family therapy, parent training, cognitive-behavioral therapy, and psychopharmacology. Assessment and treatment take place in the context of close collaboration with other medical specialties as appropriate, including endocrinology, medical genetics, pediatrics and neurology. The Division also recently established the Stanford Executive Function Clinic, which provides consultation services and comprehensive evaluation for individuals with executive function deficits and symptoms typically associated with attention deficit hyperactivity disorder. The clinic provides individual or group organizational skills therapy focused on enhancement of executive functioning for school-age children and teens whose symptoms affect behavioral function. Guidance/consultation on pharmacological intervention is also offered.

The Center for Interdisciplinary Brain Sciences (CIBSR) is the research arm of the Division of Interdisciplinary Brain Sciences. CIBSR brings together faculty in psychiatry, developmental, behavioral and experimental psychology, statistics and computational neuroscience. The collective research efforts of the CIBSR are committed to:

- Leveraging interdisciplinary knowledge to provide explanatory models for human behavior that capture the inherent complexity of biological and environmental factors and their interaction.
- Developing innovative methodologies for the study of the brain and applying these tools to better understand brain relationships to cognition and behavior.
- Addressing an individual as whole person undergoing unique trajectories of typical and atypical development, across all stages of the lifespan.
- Using research findings to prototype and implement novel interventions for disorders of the brain.

Individual PI's comprising CIBSR include Dr. Jennifer Bruno, Dr. Tamar Green, Dr. Scott Hall, Dr. David Hong, Dr. Hadi Hosseini, Dr. Booil Jo, Dr. Allan Reiss, Dr. Manish Saggar, and Dr. Gisela Sandoval.

Division of Public Mental Health and Population Sciences

The Division of Public Mental Health and Population Sciences focuses on understanding and enhancing the wellbeing of populations throughout the world and of distinct and special populations by bridging the fields of psychiatry, epidemiology, psychology, ethics, and public policy. The Division is a newly evolving academic program engaged in the Department's five missions of advancing science, clinical innovation and service, educational excellence, community commitment and engagement, and professionalism and leadership. It was created three years ago to respond to the need for documentation and promotion of public mental health by public health authorities and professionals, with the goal of enhancing understanding about mental wellbeing and psychiatric disorders around the world.

This Division strives to reach the following objectives in parallel with the departmental missions: developing science in the field of public mental health; developing innovative screening and intervention tools to address gaps in clinical care and treatment, particularly for vulnerable populations; organizing educational opportunities for learners of all levels at the university and globally; serving the community through program development and outreach to address the unique needs of vulnerable populations; and establishing leadership in the field of public mental health. We meet these objectives through the creation and development of several sections, including Public Mental Health and Epidemiology, Public Mental Health and Addiction Policy, Student Well Being and Young Adult Public Health, Veteran and Military Populations, and Ethics and Vulnerable/At Risk Populations.

The faculty in the Division of Public Mental Health and Population Sciences has an extremely broad spectrum of expertise. The division harnesses the academic resources of Stanford University, encompassing the renowned areas of scholarship in medicine, business, law, education, biomedical data and computer science, social sciences, policy, ethics and design. Research endeavors across our division broadly focus on improving public mental health, reducing health disparities, removing barriers to care and reducing stigma, reaching vulnerable populations, and advancing precision health in psychiatry. For example, the Veteran and Military Populations section has focused on the dissemination of novel treatments for depression and post-traumatic stress disorder, efforts that mirror the major challenge of widespread affective and stress disorders in this vulnerable population.

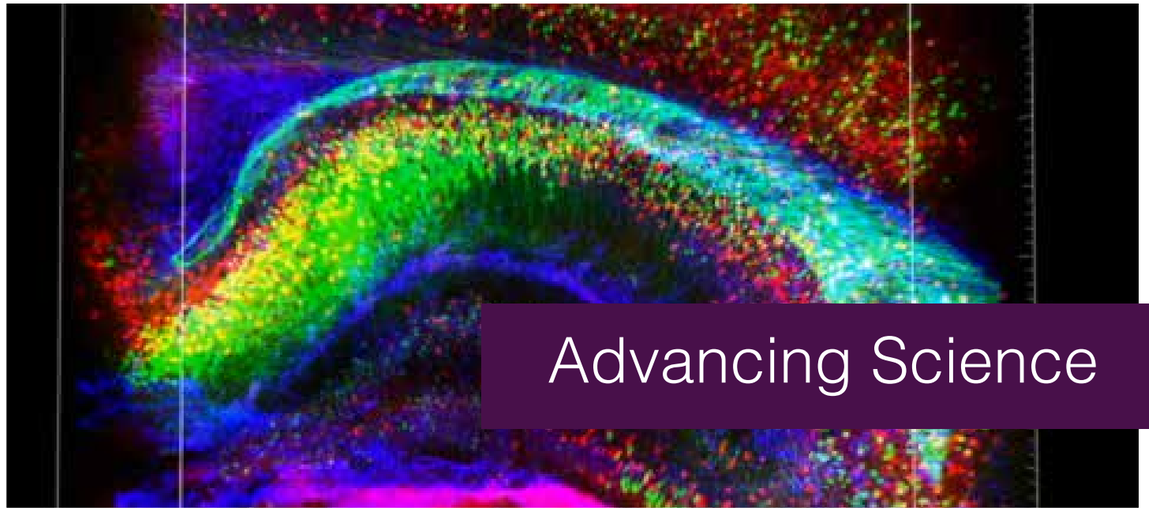
The Division encourages the development of professionals as well as trainees, students, and psychiatry residents. The faculty engage in the development of new science in the area of population psychiatry, as well as dissemination of that knowledge and application to communities locally and globally.

Division of Sleep Medicine

Seventy million people suffer from chronic, severe sleep disorders in the United States. That means nearly one of every four Americans has a sleep problem. No other chronic disease affects more people than obstructive sleep apnea, a potentially fatal condition that causes some individuals to stop breathing several hundred times every night.

As the birthplace of sleep medicine, Stanford has been instrumental in developing the field of sleep medicine.

Under the division leadership of Dr. Emmanuel Mignot and the medical direction of Dr. Clete Kushida, the Stanford Sleep Medicine Center encompasses the diverse specialties required to effectively treat patients with sleep issues. The Center has more than 100 physicians, psychologists, researchers, staff, and trainees who are devoted to the study and treatment of sleep and sleep disorders. Our clinical faculty comprises psychologists, psychiatrists, neurologists, pulmonologists, and pediatricians, and our clinic attracts patients worldwide for its specialized consultations in Sleep Surgery, Insomnia, Narcolepsy, Restless Legs Syndrome, Parasomnias, and Dental Sleep Medicine. In 2009, the Stanford Sleep Medicine Center moved to a state-of-the-art facility in the Stanford Medicine Outpatient Center in Redwood City. The facility has 18 bedrooms, 14 designated for clinic patients and 4 for research studies; we also perform home-based sleep studies. We conduct approximately 10,000 clinic visits and 3,000 in-laboratory sleep studies per year.



Advancing Science

39 faculty with more than 100 publications	20 faculty with more than 200 publications	11 faculty with more than 300 publications	
84 faculty with more than 1,000 citations	63 faculty with more than 2,000 citations	41 faculty with more than 5,000 citations	21 faculty with more than 10,000 citations
			7 faculty with more than 20,000 citations

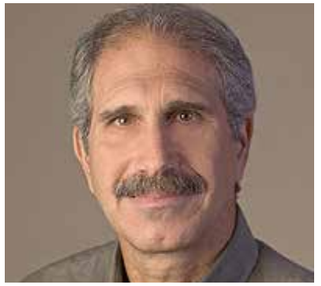
Advancing a Continuum of Science

Major Laboratories: Exemplars

The pathophysiology of virtually all mental illnesses ranging from autism to depression to schizhoprenia remains enigmatic in part because of the complexity of the underlying genetic and environmental causes and, more importantly, because of our poor knowledge of how the brain normally functions to generate thoughts, feelings, and behavior. As a consequence, little progress has been made in the development and delivery of therapeutics to patients with mental illnesses. With this disease burden often comes painful stigma that prevents patients from understanding the source of their suffering and limits use of already-available treatments. Despite these obstacles, because of major methodological advances in how scientists can study and manipulate the brain, it is clear that by combining the best basic neuroscience with thoughtful clinical research, we will make major progress in understanding the pathophysiology of mental illness and this in turn will lead to more efficacious treatments. Specifically, that by basic and clinical neuroscientists working together in an interdisciplinary manner to prioritize the discovery, development and dissemination of novel and scalable interventions, Stanford scientists are creating a “living laboratory” that catalyzes both scientific and clinical advances.

Large scale human genetic studies have demonstrated that many of the genes associated with mental illness encode for proteins that influence synapse function and neuronal connectivity. Because the molecular basis of circuit function has been robustly conserved over evolution from animals to humans, as has the connectivity of many behaviorally-relevant neural circuits, basic science researchers can study how genetic abnormalities that contribute to mental illness result in malfunction in specific circuits in model organisms. Basic neuroscientists can also use sophisticated molecular genetic approaches and complex imaging methods to define in unprecedented detail new brain circuits that may be involved in causing mental illness symptoms. In turn, clinical neuroscience researchers can apply brain imaging, neurostimulation and genomic tools to understand and manipulate related circuits in patients, for improving both diagnostics and treatments. Indeed, it is now possible for basic and clinical/human neuroscience researchers to work together so that in an iterative fashion – whereby information collected by basic science researchers will influence and guide clinical researchers while the findings from human research will help basic scientists focus on the questions and topics that have the most direct relevance to understanding and curing mental illnesses. The range and impact of the work at Stanford is illustrated below through the work of several of the many faculty members whose efforts are critical for success of this mission.

What distinguishes the work at Stanford from typical basic or clinical research is that the focus on development of novel diagnostics and interventions through rapid translation requires linking tools and concepts from across generally distinct research and clinical domains. This approach to science both holds great scientific and clinical promise, and is naturally at home in the collaborative and interdisciplinary environment at Stanford.



Robert Malenka, MD, PhD, serves as the Associate Chair - Scientific Discovery. He works with scientists across the Department and the University and he also serves as the Deputy Director of the Stanford Neurosciences Institute. In these roles, he advances fundamental neuroscience from the platform of the Nancy Friend Pritzker Laboratory and the Department more broadly. In his work, he uses animal models to understand how specific neuronal populations underlie adaptive behavior (such as the response to reward), and when dysfunctional generate symptoms relevant to those that define major mental illnesses (such as blunted response to rewarding stimuli or excessive seeking of reward). These circuits and symptoms are core to clinical disorders such as major depression, where reward signals are blunted, and addiction, where the seeking of reward is excessive and maladaptive.

Leanne Williams, PhD, Associate Chair - Research Strategy and Oversight, uses brain imaging and behavioral probes to understand the associations between variations in anxiety/depressive symptoms as well as quality of life and the functioning of a variety of emotional and cognitive brain circuits. This work aims to bring clinical neuroscience to real-world clinics. Dr. Williams is also the inaugural Chair of the steering committee for the Major Laboratories and Clinical Translational Neurosciences Incubator – a new initiative of the Department of Psychiatry and Behavioral Sciences. The Clinical Translational Neurosciences Incubator pursues the Department’s mission to develop outstanding leaders in discovery science and in the translation of scientific insights for clinical excellence. In order to serve its leadership functions, the incubator engages faculty experts with extensive track records in mentorship and in directing clinical and translational neuroscience programs. The Incubator, with its faculty experts, serves as a source of guidance for early career investigators and scholars. Together, expert members of the Incubator also develop scientific themes that continue to distinguish our Department as a national and international leader. These themes integrate paradigm shifts in precision mental health and translational psychiatry. They focus on special and vulnerable populations and harness the interdisciplinary strengths of our campus and our labs.

Across themes, we are leading the way in new technology platforms for optogenetics, stem cells, neuroimaging technologies, genomics and digital health. Facilitating the integration of insights within and across each theme are our breakthroughs in computation and new data science approaches. Reflecting our commitment to a translational cycle, we disseminate key research findings into clinical care and commercialize our breakthroughs for widespread access.

The laboratory of Amit Etkin, MD, PhD, an Associate Professor in the Department, bridges between fundamental research on circuit function and regulation in humans, and its application for the development of novel circuit-targeting interventions in patients with mood, anxiety or trauma-related disorders using non-invasive brain stimulation. Driving this work is the goal of more rapid clinical neuroscience translation, comprised of a feedback loop by which: neuroscience and clinical insights are conceived into novel clinical interventions; they are tested in an “experimental medicine” framework that maximizes knowledge gained from each patient; and lessons are derived from both clinical and neuroscience outcomes that direct revision of these interventions.

Advancing Science

Professoriate Faculty

Treatment of Mood Disorders

Bruce Arnow, PhD
Professor

Dr. Arnow's research interests include 1) treatment outcome in depression; 2) predictors and moderators of outcome in the treatment of depression; 3) epidemiology of chronic pain and depression; and 4) relationships among child maltreatment and adult outcomes including health and psychiatric illness, use of health care services, and response to both psychological and pharmacologic treatment.

RECENT WORKS:

Laws, H.B., Constantino, M.J., Sayer, A.G., Klein, D.N., Kocsis, J.H., Manber, R., Markowitz, J.C., Rothbaum, B.O., Steidtmann, D., Thase, M.E., & Arnow, B.A. (2016). Convergence in patient-therapist therapeutic alliance ratings and its relation to outcome in chronic depression treatment. Psychotherapy Research, 1-15.

Arnow, B.A., Blasey, C., Williams, L.M., Palmer, D., Rekshan, W., Schatzberg, A.F. Etkin, A., Kulkarni, J., & Rush, A.J. (2015). Are depression subtypes relevant in predicting antidepressant response?: A report from the iSPOT-D trial. American Journal of Psychiatry, 172, 743-750.

Arnow, B.A., Steidtmann, D., Blasey, C., Manber, R., Constantino, M.J., Klein, D.N., Markowitz, J.C., Rothbaum, B.O., Thase, M.E., Fisher, A.J., & Kocsis, J.H. (2013). The relationship between the therapeutic alliance and outcome in two distinct psychotherapies for chronic depression. Journal of Consulting and Clinical Psychology, 81, 627-638.

Steidtmann, D., Manber, R., Blasey, C., Markowitz, J.C. Klein, D.N., Rothbaum, B.O., Thase, M.E., Kocsis, J.H., & Arnow, B.A. (2013). Detecting critical decision points in psychotherapy and psychotherapy + medication for chronic depression. Journal of Consulting and Clinical Psychology, 81, 783-792.

Arnow, B.A., Blasey, C., Hunkeler, E., Lee, J., & Hayward, C. (2011). Does gender moderate the relationship between childhood maltreatment and adult depression? Child Maltreatment, 16, 175-183.

Stanford Neuropsychiatry Research Program

John Barry, MD, Professor
Sepideh N Bajestan, MD, PhD, Clinical Assistant Professor

Neuropsychiatry focuses on diagnosis and treatment of the frequently seen co-morbid psychiatric illness in patients with neurological disorders. Cognitive dysfunction is also a commonly observed phenomenon in this population but is often difficult to treat for fear of exacerbating the underlying illness. Our Program is focused on multidisciplinary research on prevention, diagnosis and treatment of neuropsychiatric disorders in addition to researching innovative approaches for community engagement.

Our group has recently completed a double blind, randomized crossover study examining the effects of methylphenidate on cognition and seizure control in patients with epilepsy compared to healthy controls. In addition, Functional Neurological Disorders are seen commonly in neurology clinics. We have focused on the evaluation of a variety of interventions for this patient population including a recently published CBT trial, and an ongoing group DBT and psychodynamic interventions clinical trial. The group is also establishing a pilot partial hospitalization treatment program with a standardized intervention. Our group has also launched research on innovative clinical neuroscience modules to facilitated clinicians' communication with neuropsychiatric patients in order to foster community engagement.

RECENT WORKS:

Ducharme S, Bajestan SN, Dickerson BC, Voon V, Psychiatric Presentations of C9orf72 Mutation: What are the Implications for Psychiatrists, J Neuropsychiatry Clin Neurosci. 2017 Feb 27

J Adams, Valerie Alipio-Jocson, Katherine Inoyama, Victoria Bartlett, Saira Sandhu, Jemima Oso, John J. Barry, David Loring, Kim Meador. Methylphenidate, cognition and epilepsy A double-blind, placebo controlled, single-dose study. Neurology 2017;88:470-476.

LaFrance WC Jr, Baird GL, Barry JJ, Blum AS, Frank Webb A, Keitner GI, Machan JT, Miller I, Szaflarski JP. Multicenter pilot treatment trial for psychogenic nonepileptic seizures: a randomized clinical trial. NES Treatment Trial (NEST-T) Consortium, JAMA Psychiatry. 2014 Sep;71(9):997-1005. doi: 10.1001/jamapsychiatry.2014.817.

Bajestan SN, LaFrance WCJ, Clinical Approaches to Psychogenic Nonepileptic Seizures, Focus Journal, Clinical Neuropsychiatry, Volume14, Issue 4, 2016. pp. 422-431.

Bajestan SN, Lockman J, Dunn LB, Roberts LW, Ethical Considerations in Neuropsychiatric Disorders, Focus Journal, Clinical Neuropsychiatry, Volume14, Issue 4, 2016. pp. 477-481.

Treatment of Suicidal Behavior in Adolescents

Michele Berk, PhD
Assistant Professor

The focus of Dr. Berk's research is on psychotherapy approaches for treating suicidal behavior in adolescents. Suicide and suicide attempts are significant public health problems among teens. Despite the fact that suicide is currently the second leading cause of death among 10-24 year-olds in the United States (CDC, 2015), there is surprisingly little research on effective psychosocial treatments for these youth. At present, there are no treatments specifically targeting suicide attempts in adolescents that meet criteria for a "well-established" empirically supported treatment. Dr. Berk is currently one of four Principal Investigators of a multisite NIMH-sponsored RCT of DBT for adolescents at high risk for suicide (NCT01528020: Collaborative Adolescent Research on Emotions and Suicide [CARES], PI: Linehan, McCauley, Berk, & Asarnow). As part of this research, they have also received funding from the American Foundation for Suicide Prevention (AFSP) to examine the relationship between sleep disturbance and suicidality in this high risk population.

Dr. Berk is currently conducting pilot work, funded by a Department Small Grant Award, to test the feasibility and effectiveness of a DBT-based parenting intervention for parents of suicidal and self-harming teens. She has also conducted research on the dissemination of DBT into community settings, as well as research on other cognitive behavioral treatment approaches for suicidal adolescents and brief interventions in the Emergency Department designed to link high risk youth to outpatient care.

RECENT WORKS:

Berk, M.S., Adrian, M., McCauley, E., Asarnow, J.A., Avina, C., & Linehan, M.M. (2014). Conducting research on adolescent suicide attempters: dilemmas and decisions. The Behavior Therapist, 37, 65–69.

Berk, M.S., & Asarnow, J.R. (2015). Assessment of suicidal youth in the emergency department. Suicide and Life-Threatening Behavior, 45, 345-359.

Asarnow, J.R., Berk, M.S., Hughes, J.L., & Anderson, N.L. (2015). The SAFETY Program: A treatment-development trial of a cognitive-behavioral family treatment for adolescent suicide attempters. Journal of Clinical Child and Adolescent Psychology, 44, 184-203.

Berk, M.S. & Hughes, J. (2015). Cognitive-behavioral approaches for treating suicidal behavior in adolescents. Current Psychiatry Reviews, 12, 4-13.

Asarnow, J.R., Berk, M.S., Zhang, L., Wang, P., & Tang, L. (2016). Emergency department youth patients with suicidal ideation or attempts: Predicting suicide attempts through 18 months of follow-up. Suicide and Life-Threatening Behavior.

Science of Suicide Prevention

Rebecca Bernert, PhD
Assistant Professor

Dr. Bernert is Director of the Suicide Prevention Research Laboratory within the Stanford Mood Disorders Center. She is a suicidologist, with sub-specialty expertise in suicide prevention clinical trials, standardized suicide risk assessment and best practice management. She has sub-specialty training in behavioral sleep medicine, with a background in sleep and circadian physiology. Her program utilizes cognitive, biological (e.g., fMRI), and behavioral testing paradigms, with an emphasis on translational therapeutics. Dr. Bernert has collaborated with NIH, DOD, DARPA, SAMHSA, and The White House on suicide prevention initiatives; and recently contributed to the 2014 VACO Mental Health Innovations Workgroup as well as the 2013 VA/DOD Clinical Practice Guidelines (CPG) for the Assessment and Management of Patients at Risk for Suicide. Her research focuses on the development of novel therapeutic targets for suicide prevention across the lifespan, particularly those aiming to reduce stigma and enhance access to care. A specific focus of this work employs the use of brief or rapid-action, low-risk intervention approaches for suicide prevention. Dr. Bernert has several suicide prevention clinical trials underway, funded by NIH and DOD, testing the preliminary efficacy of a non pharmacological insomnia treatment on suicidal behaviors. Within this framework, we are focused on the investigation of transdiagnostic risk factors and proposed biomarkers that promise to inform the pathogenesis of risk and treatment innovation. Advisory and advocacy work, centered on the way in which such research guides public health policy, dissemination, and national strategies for suicide prevention, represents a recent extension of this work. This focuses on best practices in the use of lethal means restriction and enhanced early-warning surveillance of suicidal behaviors to guide prevention efforts with broad public health impact.

RECENT WORKS:

Bernert RA, Hom MA*, Roberts LW (2014). A review of multidisciplinary clinical practice guidelines in suicide prevention: Toward an emerging standard in suicide risk assessment and management, training and practice. Academic Psychiatry, 38(5): 585-92

Bernert RA, Turvey C, Conwell Y, Joiner TE (2014). Association of poor subjective sleep quality with risk for death by suicide during a 10-year period: A longitudinal, population-based study of late life. JAMA Psychiatry, 71(10): 1129-37

Bernert RA, Iwata N*, Duncan W, Luckenbaugh D, Ballard EB*, Zarate C (in press). Sleep architecture abnormalities as a putative biomarker of suicidal ideation in treatment resistant unipolar and bipolar depression. Journal of Affective Disorders.

Neural Bases of Eating Disorders and Obesity

Cara Bohon, PhD
Assistant Professor

Dr. Bohon's research explores neural processes that underlie disturbances of eating. Her current work includes an NIH-funded study examining the neural basis of emotion regulation and reward response in women who engage in binge eating to better understand the heterogeneous antecedents of binge eating in different individuals and help develop targeted treatments. Another project examines emotion regulation and cognitive function in adolescent girls engaging in binge eating or purging to explore how deficits in cognitive control can impede effective emotion regulation. Dr. Bohon is also interested in similarities and differences in cognition and reward processing across psychopathologies, and was funded by NARSAD to study this in adolescents with anorexia nervosa and obsessive-compulsive disorder. Finally, she is interested in reward and emotion in the context of obesity development across the lifespan and is currently collaborating with Drs. Manpreet Singh and Natalie Rasgon on an NIH-funded longitudinal study investigating the development of depression and insulin resistance in adolescents.

RECENT WORKS:

Bohon, C. (2014). Greater emotional eating scores associated with reduced frontolimbic activation to palatable taste in adolescents. Obesity, 22, 1814-1820.

Bohon, C., & Stice, E. (2012). Negative affect and neural response to palatable food intake in bulimia nervosa. Appetite, 58, 964-970.

Bohon, C., & Stice, E. (2011). Reward abnormalities among women with full and subthreshold bulimia nervosa: A functional magnetic resonance imaging study. International Journal of Eating Disorders, 44, 585-595.

Bohon, C., Stice, E., Spoor, S. (2009). Female emotional eaters show abnormalities in consummatory and anticipatory food reward: A functional magnetic resonance imaging study. International Journal of Eating Disorders, 42, 210-221

Stice, E., Spoor, S., Bohon, C., & Small, D. (2008). Relation between obesity and blunted striatal response to food is moderated by Taq1A1 DRD2 gene. Science, 322, 449-452.

Early Life Stress and Pediatric Anxiety Program (ELSPAP)

Victor Carrion, MD
Professor

Dr. Victor Carrion's research focuses on 1) improving understanding of the biological, psychological, and behavioral correlates of early life stress and trauma, and 2) developing and evaluating interventions that promote wellness and resilience for those facing adversity. Under Dr. Carrion's leadership, Stanford's Early Life Stress and Pediatric Anxiety Program (ELSPAP) utilizes comprehensive, multi-method developmental neuroscience research designs to evaluate interventions and to inform policy. ELSPAP researchers and collaborators supplement evidence-based assessment of psychosocial functioning with advanced, cutting-edge measurement of neurobiological markers including magnetic resonance imaging (sMRI and fMRI), functional near infrared spectroscopy (fNIRS), ambulatory polysomnography, and endocrine assays. These neuroscience tools evaluate outcomes related to stress and trauma exposure in childhood, as well as responses to individual and systems-level interventions. Current research projects aim to develop and evaluate interventions including Cue-Centered Treatment, a manualized therapy protocol for youth exposed to chronic adversity and trauma; school-wide yoga and mindfulness-based health education; mental health consultation and wellness programming in community settings; virtual reality for the treatment of anxiety disorders; and therapy services delivered in outpatient care at a large children's hospital. Through the empirically-supported, neuroscience-based evaluation of these interventions, Dr. Carrion and his team seek to disseminate results regarding promising, efficacious practices in order to inform and impact institutional, state, and national policies that address the needs of children and families exposed to trauma and adversity.

RECENT WORKS:

Klabunde, M., Weems, C., Raman, M., & Carrion, V.G. (2017). The Moderating Effects of Sex on Insula Subdivision Structure in Youth with Post Traumatic Stress Symptoms. Depression and Anxiety, 34: 51–58.

Carrion, V.G. (2016). Treatment Manual for Children Exposed to Trauma – Stanford Cue-Centered Therapy: A Structured Multi-Modal Intervention for Youth Experiencing Posttraumatic Symptoms. Oxford University Press.

Walker E, Carrion, V.G. (2015). The Center for Youth Wellness: a community-based approach to holistic Healthcare in San Francisco. In Professionalism and Ethics in Medicine: A Study Guide for Physicians-in-Training (Roberts, Ed.).

Pediatric Bipolar Disorders Program

Kiki Chang, MD
Professor

As Director of the Pediatric Bipolar Disorders Program, Dr. Chang conducts research into various facets of bipolar disorder. He is currently conducting phenomenologic, biologic, pharmacologic, and genetic studies of bipolar disorder in adults and children. These studies include brain imaging (MRI, MRS, fMRI) and medication and therapy trials. He is particularly interested in detecting prodromal bipolar disorder in children who might then be treated in order to prevent the development of full bipolar disorder. To do this, he has been studying children of parents with bipolar disorder who are at high risk for developing the disorder themselves.

As Director of Pediatric Acute-onset Neuropsychiatric Syndrome (PANS) Psychiatry Research, Dr. Chang is investigating underlying causes for the acute neuropsychiatric symptoms in these children. In conjunction with the PANS Clinic at Lucile Packard Children's Hospital, he is collecting phenomenological, immunologic, and brain imaging data, in the first study ever to investigate this illness in this way.

RECENT WORKS:

Inhibited Temperament and Hippocampal Volume in Offspring of Parents with Bipolar Disorder. Kim E, Garrett A, Boucher S, Park MH, Howe M, Sanders E, Kelley RG, Reiss AL, Chang KD, Singh MK. J Child Adolesc Psychopharmacol. 2016 Oct 21

Pediatric Bipolar Disorder: Combination Pharmacotherapy, Adverse Effects, and Treatment of High-Risk Youth. Chang KD. J Clin Psychiatry. 2016;77 Suppl E1:e3. doi: 10.4088/JCP.15017su1c.03. PMID: 27570929

Long-term Safety of Asenapine in Pediatric Patients Diagnosed With Bipolar I Disorder: A 50-Week Open-Label, Flexible-Dose Trial. Findling RL, Landbloom RL, Mackle M, Wu X, Snow-Adami L, Chang K, Durgam S. Paediatr Drugs. 2016 Oct;18(5):367-78. doi: 10.1007/s40272-016-0184-2. PMID: 27461426

Gender by onset age interaction may characterize distinct phenotypic subgroups in bipolarpatients. Holtzman JN, Miller S, Hooshmand F, Wang PW, Chang KD, Goffin KC, Hill SJ, Ketter TA, Rasgon NL. J Psychiatr Res. 2016 May;76:128-35. doi: 10.1016/j.jpsychires.2016.02.009. PMID: 26926801

Neurobiology of Brain States

Luis de Lecea, PhD
Professor

Changes in arousal states are at the core of most neuropsychiatric disorders. Our laboratory focuses on the study of the neuronal underpinnings of arousal and hyperarousal states associated with anxiety and addiction. In particular, our group uses state-of-the art neuroscience methods, including calcium recordings in freely moving animals, optogenetics and behavioral analysis to decipher the neuronal circuitry controlling transitions between sleep and wakefulness, as well as transitions that occur upon stressful stimuli. Over the years our group has discovered and characterized three neurotransmitter systems that modulate arousal states. Drugs that interact with these transmitters have recently been approved for the treatment of insomnia. We expect that our research will lead to more breakthroughs in the treatment of anxiety disorders and addiction.

RECENT WORKS:

Adamantidis A, Zhang, F., Aravanis AM, Deisseroth K, de Lecea L. (2007) Neural substrates of awakening probed by optogenetic control of hypocretin neurons. Nature 15;450(7168):420-424. First report of an optogenetic experiment in a freely moving animal. ISI highly cited paper (in the 99th percentile of neuroscience papers)

Carter ME, Yizhar O, Chikahisa S, Nguyen H, Adamantidis A ,Nishino S, Deisseroth K, de Lecea L (2010) "Tuning arousal with optogenetic modulation of locus coeruleus neurons" Nature Neurosci 13:1526-33 ISI highly cited paper (in the 99th percentile of all neuroscience papers)

Rolls, A. , Pang W, Ibarra I., Colas D, Bonnavion P, Korin B., Heller HC, Weissman IL, de Lecea L. Sleep disruption impairs hematopoietic stem cell transplantation in mice. Nat. Commun. 2015 Oct 14;6:8516. doi: 10.1038/ncomms9516.

Eban- Rothschild A, Rothschild G, Giardino WJ, Jones JR, de Lecea L VTA Dopaminergic neurons bidirectionally regulate ethologically relevant sleep/wake behaviors. Nature Neuroscience 19:1356-66 (2016)

Depression Research Clinic

Charles DeBattista, MD, DMH
Professor

Dr. DeBattista's current research interests focus on treatment resistant depression, developing novel biological interventions in the treatment of mental illness, studying anti-glucocorticoid drugs in the treatment of mood disorders, and augmentation strategies in the treatment of depression.

He serves as an Investigator on several studies. The International Study to Predict Optimised Treatment - in Depression is aimed to identify genetic, physical and psychological markers (or combinations of them) that predict specific response to a range of antidepressants treatment in patients diagnosed with major depressive disorder. Investigate Efficacy & Safety of RO4995819 vs. Placebo as Adjunct Treatment in Patients with Major Depressive Disorder explores the efficacy of a 6-week treatment with an investigational medication, RO4995819, versus placebo as adjunctive therapy in patients with major depression. Functional MRI Before and After Treatment for Depression aims to understand how depression changes brain activity and how this relates to mood, anxiety, and cognitive functions like memory, and to develop a brain-imaging test that will predict either before or within two weeks of starting a medicine whether the treatment will work. Radiosurgical Neuromodulation for Refractory Depression aims to evaluate the safety and effectiveness of an investigational procedure for treating people with treatment resistant bipolar depression. Ropinirole Controlled Release (CR) as an Adjunctive Agent in the Treatment of Major Depression studies patients who are currently taking antidepressant medication but not fully responding. Treatment Trial for Psychogenic Nonepileptic Seizures aims to investigate report rates of nonepileptic seizures in patients who receive targeted pharmacotherapy (sertraline) or focused psychotherapy (cognitive behavioral therapy-informed psychotherapy or combined treatment (CBT-ip + sertraline) compared to patients who receive community care or treatment as usual.

RECENT WORKS:

Cognitive and emotional biomarkers of melancholic depression: An iSPOT-D report JOURNAL OF AFFECTIVE DISORDERS Day, C. V., Gatt, J. M., Etkin, A., DeBattista, C., Schatzberg, A. F., Williams, L. M. 2015; 176: 141-150.

Impairment and distress patterns distinguishing the melancholic depression subtype: An iSPOT-D report JOURNAL OF AFFECTIVE DISORDERS Day, C. V., Rush, A. J., Harris, A. W., Boyce, P. M., Rekshan, W., Etkin, A., DeBattista, C., Schatzberg, A. F., Arnow, B. A., Williams, L. M. 2015; 174: 493-502.

Stanford's Geriatric Psychiatry Program

Laura B. Dunn, MD, Professor
Erin Cassidy-Eagle, PhD, Clinical Associate Professor

Dr. Dunn is Director of the Geriatric Psychiatry Fellowship Program at Stanford. She conducts research in several areas, including: enhancing care for older adults with psychiatric conditions; examining ethical issues in clinical research, particularly in populations considered potentially "vulnerable" in the research context; and understanding the symptom experience of cancer patients.

Dr. Cassidy-Eagle is a Psychologist in the Geriatric Psychiatry Outpatient Clinic. Her research focuses on sleep, cognition and mental health in older adults. Recently, Drs. Dunn and Cassidy-Eagle have also conducted an assessment of current practices and barriers related to older adults' ability to access mental health care.

They are currently implementing a pilot program that provides educational and consultative outreach to primary care providers here at Stanford in hopes of increasing the number of mild to moderately depressed older adults able to access support.

RECENT WORKS:

Dunn, L.B.; Wiley, J.; Garrett, S.; Hlubocky, F.; Daugherty, C.; Trupin, L.; Munster, P.; Dohan, D. Interest in initiating an early phase clinical trial: Results of a longitudinal study of advanced cancer patients. Psychooncology. 2016; May 27. doi: 10.1002/pon.4179. [Epub ahead of print] PMID: 27233054

Colley, A.; Halpern, J.; Paul, S.; Micco, G.; Lahiff, M.; Wright, F.; Levine, J.D.; Mastick, J.; Hammer, M.J.; Miaskowski, C.; Dunn, L.B. Factors associated with oncology patients' involvement in shared decision-making during chemotherapy. Psychooncology. 2016; Sep 20. doi: 10.1002/pon.4284. PMID: 27649058

Barrera, A.Z.; Dunn, L.B.; Nichols, A.; Reardon, S.; Munoz, R.F. Getting it 'right': Ensuring informed consent for an online clinical trial. Journal of Empirical Research on Human Research Ethics. 2016; Sep 14. pii: 1556264616668974. [Epub ahead of print] PMID: 27630213

Palmer, B.W.; Harmell A.L.; Pinto, L.L.; Dunn, L.B.; Kim, S.Y.H.; Golshan, S.; Jeste, D.V. Determinants of capacity to consent to research on Alzheimer's disease. Clinical Gerontologist. 2017;40(1):24-34. doi: 10.1080/07317115.2016.1197352. PMID: 28154452

Neurobiological and Neurocognitive Research

Timothy Durazzo, PhD
Associate Professor

Dr. Durazzo's research program focuses on:

1. Neurobiological and neurocognitive predictors of relapse in alcohol/substance use disorders:while several psychosocial correlates of relapse after treatment have been identified, the neurobiological and neurocognitive risk factors for relapse are largely unspecified. Our methods involve multimodality MR neuroimaging and neurocognitive assessments to identify the neurobiological and neurocognitive factors that predict relapse in alcohol/substance use disorders. This research will inform the development of more efficacious treatments for alcohol/substance use disorders to prevent the high rate of relapse seen in these conditions.

2. Neurobiological and neurocognitive consequences of cigarette smoking: the vast majority of research on the adverse health effects of cigarette smoking has focused on cardiac and pulmonary functions, vascular systems, and risk for cancer. It is clear that smoking involves adverse effects on the human brain. Our methods involve multimodality MR neuroimaging and neurocognitive assessments to delineate the under-appreciated effects of chronic smoking on neurobiological and neurocognitive function in "healthy" individuals, as well as adults recovering from alcohol/substance use disorder, and mild traumatic brain injury. Understanding the neurobiological and neurocognitive consequences of smoking, and the mechanisms by which smoking injures the brain, are necessary to facilitate more efficacious interventions for smoking cessation.

RECENT WORKS:

Durazzo, TC, Meyerhoff, DJ. Psychiatric, Demographic and Brain Morphological Predictors of Relapse after Treatment for an Alcohol Use Disorder. Alcohol Clinical and Experimental Research 41: 107-116, 2017.

Durazzo, TC, Mon, A, Gazdzinski, S, Meyerhoff, DJ. Regional brain volume changes in alcohol dependent individuals during early abstinence: associations with relapse following treatment. Addiction Biology. doi: 10.1111/adb.12420, 2016.

Durazzo, TC, Korecka, M, Trojanowski, JQ, Weiner, MW, O'Hara, R, Ashford, JW, Shaw, L. Active cigarette smoking in cognitively-normal elders and probable Alzheimer's disease is associated with elevated cerebrospinal fluid oxidative stress biomarkers. J of Alzheimer's Disease 54: 99-107, 2016.

Durazzo, TC, Mattsson, N, Weiner, MW. Interaction of Cigarette Smoking History with APOE Genotype and Age on Amyloid Level, Glucose Metabolism, and Neurocognition in Cognitively-Normal Elders. Nicotine and Tobacco Research 18: 204-11, 2016.

Deisseroth Lab

Karl Deisseroth, MD, PhD
Professor

Karl Deisseroth is the D.H. Chen Professor of Bioengineering and of Psychiatry and Behavioral Sciences at Stanford University, and Investigator of the Howard Hughes Medical Institute. He received his undergraduate degree from Harvard, his PhD from Stanford, and his MD from Stanford. He also completed postdoctoral training, medical internship, and adult psychiatry residency at Stanford, and he is board-certified by the American Board of Psychiatry and Neurology. He continues as a practicing psychiatrist at Stanford with specialization in affective disorders and autism-spectrum disease, employing medications along with neural stimulation. In the engineering school he developed and launched the undergraduate degree in Bioengineering at Stanford, and continues to serve as Director of Undergraduate Education in Bioengineering, while also teaching yearly medical physiology and optics courses. National-scale service has included the NIH BRAIN Initiative Working Group and nonprofit disease foundations including the Brain and Behavior Research Foundation (NARSAD) and the Michael J. Fox Foundation for Parkinson's Research.

His laboratory created and developed both optogenetics (a technology for precisely controlling millisecond-scale activity patterns in specific cell types using microbial opsin genes and fiberoptic-based neural interfaces) and CLARITY (a technology for creating composites of biological molecules in tissue covalently linked to polymer hydrogels, allowing removal of unlinked tissue elements to create transparency and accessibility to macromolecular labels; the resulting new structure allows high-resolution optical access to structural and molecular detail within intact tissues without disassembly). He also has employed his technologies to discover the neural cell types and connections that cause adaptive and maladaptive behaviors, and has disseminated the technologies to thousands of laboratories around the world.

RECENT WORKS:

Deisseroth K (2015). Optogenetics: ten years of microbial opsins in neuroscience. Nature Neuroscience 18:1213-25.

Rajasethupathy P, Sankaran S, Marshel JH, Kim C, Ferenczi F, Lee SY, Berndt A, Jaffe A, Lo M, Liston C & Deisseroth K (2015). Projections from neocortex recruit hub neurons in hippocampus: targeted top-down control of memory retrieval. Nature 526:653-9.

Etkin Lab

Amit Etkin, MD, PhD
Assistant Professor

Recent findings from the Etkin Lab have identified neurobiological predictors of treatment outcome in post-traumatic stress disorder (PTSD), which have a high potential for use in clinics. Based on these findings, the Lab was awarded a large foundation grant to accelerate validation and clinical translation of these findings into easy-to-acquire clinic-ready biomarkers. Parallel work in depression has also identified predictors for repetitive transcranial magnetic stimulation treatment for depression, and are now being used by the Lab to optimize and personalize neurostimulation treatment in depression.

RECENT WORKS:

McTeague LM, Huemer J, Carreon DM, Jiang Y, Eickhoff SB, Etkin A. "Identification of Common Neural Circuit Disruptions in Cognitive Control Across Psychiatric Disorders," American Journal of Psychiatry, in press

Etkin A, Buchel C, Gross JJ. "The Neural Bases of Emotion Regulation." Nature Reviews Neuroscience, 16(11):693-700 (2015).

Drysdale AT, Grosenick L, Downar J, Dunlop K, Mansouri F, Meng Y, Fetcho R, Zebley B, Oathes DJ, Etkin A, Schatzberg AF, Sudheimer K, Keller J, Mayberg HS, Gunning FM, Alexopoulos GS, Fox MD, Pascual-Leone A, Voss HU, Casey BJ, Dubin MJ, Lisoton C. "Resting State Connectivity Biomarkers Define Neurophysiological Biotypes of Depression", Nature Medicine, 23(1):28-38 (2017).

Psychology and Biobehavioral Sciences Laboratory

Cheryl Gore-Felton, PhD
Professor

The Stanford Psychology and Biobehavioral Sciences Lab is dedicated to understanding the psychological, behavioral, social, and physiological challenges as well as sources of resilience associated with chronic illnesses. Scientists in the lab conduct research that focuses on model development to understand factors that decrease morbidity and mortality associated with chronic diseases, as well as test novel interventions to reduce psychiatric symptoms, and enhance adaptive behaviors associated with diseases that are debilitating and often life threatening.

RECENT WORKS:

Hendriksen, E., Williams, E., Sporn, N., Greer, J., DeGrange, A., Koopman, C. (2015). Worried together: a qualitative study of shared anxiety in patients with metastatic non-small cell lung cancer and their family caregivers. SUPPORTIVE CARE IN CANCER; 23 (4): 1035-1041

Kamen, C., Arganbright, J., Kienitz, E., Weller, M., Khaylis, A., Shenkman, T., Smith, S., Koopman, C., Gore-Felton, C. (2015). HIV-related stigma: implications for symptoms of anxiety and depression among Malawian women. AJAR-AFRICAN JOURNAL OF AIDS RESEARCH; 14 (1): 67-73.

Yiaslas, T. A., Kamen, C., Arteaga, A., Lee, S., Briscoe-Smith, A., Koopman, C., Gore-Felton, C. (2014).The Relationship Between Sexual Trauma, Peritraumatic Dissociation, Posttraumatic Stress Disorder, and HIV-Related Health in HIV-Positive Men. JOURNAL OF TRAUMA & DISSOCIATION; 15 (4): 420-435

Gore-Felton, C., Ginzburg, K., Chartier, M., Gardner, W., Agnew-Blais, J., McGarvey, E., Weiss, E., Koopman, C. (2013). Attachment style and coping in relation to posttraumatic stress disorder symptoms among adults living with HIV/AIDS. JOURNAL OF BEHAVIORAL MEDICINE; 36 (1): 51-60

Obstructive Sleep Apnea

Christian Guilleminault, MD
Professor

Dr. Guilleminault's research has investigated the oral cavity changes that can be associated with pediatric sleep-disordered-breathing. Some of the changes are related to very early in life abnormal sucking, swallowing, chewing, speech and nasal breathing. Remedy of these functional problems may decrease occurrence of obstructive-sleep-apnea. A problem that could be remedied at birth and is rarely systematically checked is the presence of a short lingual frenulum, a defect that "runs in families". It is a common phenotype in children with OSA and it impacts the maxillary and mandibular development, increasing the risk of upper-airway collapsibility during sleep.

RECENT WORKS:

Guilleminault C, Huseni S, Lo L. A frequent phenotype for paediatrics obstructive sleep apnea: short lingual frenulum Eur.Respir.J 2016 2: 00043-16; DOI: 10.1183/23120541.00043-2016.

Yoon A, Zaghy S, Weitzman R, Ha S, Law CS, Guilleminault C, Liu SYC. Towards a Functional Definition of Ankyloglossia: Validating Current Grading Scales for Lingual Frenulum Length and Tongue Mobility in 1052 subjects .Sleep Breath. 2017 (in press)

de Castro Martinelli R, Quieroz Marchesan I, Jordao Gusmao R, de Castro Rodriguez. A Berretin Felix G Histological characteristics of altered lingual frenulum. Intern. J. Pediatr. Child Health 2014; 2: 5-9.

Translational Applied Behavior Analysis Lab

Scott Hall, PhD
Associate Professor

The Translational Applied Behavior Analysis Laboratory is dedicated to understanding the behavioral and neuropathological underpinnings of severe problem behaviors, such as aggression, self-injury, and social skills deficits, commonly shown by children and adults diagnosed with intellectual and developmental disabilities (IDD). Led by Dr. Scott Hall, PhD, the lab utilizes state-of-the-art neuroimaging and behavioral assessments based on the principles of applied behavior analysis. The primary goals of the lab are to determine how environmental and biological factors affect the development of aberrant behaviors, and to develop targeted treatments. Our research portfolio includes studies employing telemedicine to allow treatments to be conducted in areas where trained behavior analysts or other appropriate treatment providers are not available or financially feasible. Other studies include the integration of social skills training, state-of-the-art eye tracking, and multimodal brain imaging. Genetic conditions that cause IDD, such as fragile X syndrome, Prader-Willi syndrome, and Cornelia de Lange syndrome, among others, are utilized as valuable study models for understanding problem behaviors in individuals with IDD. Our lab has received research grant funding from NIMH, NICHD, the National Fragile X Foundation, the Foundation for Prader-Willi Research, the Simons Foundation, the John Merck Fund, and the Stanford Child Health Research Institute. More information can be found at med.stanford.edu/tabalab.

RECENT WORKS:

Hall SS, Jiang H, Reiss AL & Greicius MD (2013). Identifying large-scale brain networks in fragile X syndrome. JAMA Psychiatry, 70, 1215-1223.

Hall SS, Hammond JL, Hirt M, Hustyi K, & Reiss AL (2014). Using discrete trial training to identify specific learning impairments in boys with fragile X syndrome. Journal of Autism and Developmental Disorders, 44, 1659-1670.

Klabunde M, Saggar M, Hammond JL, Hustyi KM, Reiss AL, & Hall SS (2015). Neural correlates of skin-picking behavior in Prader-Willi syndrome. Human Brain Mapping, 36, 4135-4143.

Klabunde M, Saggar M, Hustyi KM, Kelley RG, Reiss AL & Hall SS (2015). Examining the neural correlates of emergent equivalence relations in fragile X syndrome. Psychiatry Research: Neuroimaging, 233, 373-379.

Genetics, iPSCs and Neurodevelopmental Disorders

Joachim Hallmayer, MD, Dr med
Associate Professor

The focus of the research in the Hallmayer lab is to find genetic variations that impact the development of Autism Spectrum Disorders (ASD) and other neuropsychiatric disorders. Through the work from his lab and others we now know that a substantial proportion of genetic risk for ASDs resides in rare variants associated with high odds ratios for risk. Further, by paralleling molecular studies, the Hallmayer lab employed a twin study design approach that demonstrated that the susceptibility to develop autism has moderate genetic heritability and a substantial shared twin environmental component.

During the past several years the Hallmayer lab, in collaboration with a team of investigators (Drs. O'Hara, Pasca, Urban, Bernstein), has become one of the first groups to study neurons derived from induced pluripotent stem cells (iPSCs) with the goal of understanding the mechanisms by which common and rare variants increase the risk for developing ASD. Using this approach, they have identified cellular and molecular phenotypes for rare but highly penetrant forms of autism, which were rescued by treatment with specific pharmacologic agents acting on identified molecular targets. More recently they started to characterize neurons derived from iPSCs from patients with 22q11 deletion syndrome (or Velocardiofacial Syndrome). They are also extending this research to idiopathic forms of autism by establishing iPSC lines from 200 children with an ASD and 100 age and gender-matched control subjects.

RECENT WORKS:

Hallmayer J, Cleveland S, Torres A, Phillips J, Cohen B, Torigoe T, Miller J, Fedele A, Collins J, Smith K, Lotspeich L, Croen LA, Ozonoff S, Lajonchere C, Grether JK, Risch N (2011). Genetic Heritability and Shared Environmental Factors Among Twin Pairs With Autism. Arch Gen Psychiatry 68(11):1095-102.

Paşca S, Portmann T, Yazawa M, Voineagu I, Paşca A, Cord B, Palmer T, Chikahisa S, Seiji N, Bernstein JA, Hallmayer J, Geschwind D, Dolmetsch RE (2011). Using iPS cell-derived neurons to uncover the cellular basis of autism in patients with Timothy Syndrome Nat Medicine 27;17(12):1657-62.

Froehlich-Santino W, Londono Tobon A, Cleveland S, Torres A, Phillips J, Cohen B, Torigoe T, Miller J, Fedele A, Collins J, Smith K, Lotspeich L, Croen LA, Ozonoff S, Lajonchere C, Grether JK, O'Hara R, Hallmayer J. Prenatal and perinatal risk factors in a twin study of autism spectrum disorders. J Psychiatr Res. 2014 Jul;54:100-8

Autism and Developmental Disorders Research Program

Antonio Hardan, MD
Professor

The Autism and Developmental Disorders Research Program (ADDRP) focuses on the examination of the neurobiology of autism spectrum disorder (ASD), and on the development of innovative treatment for individuals with developmental disorders. Investigators involved in the ADDRP include several faculty members from the division of child psychiatry including Drs. Grace Gengoux, Jennifer Phillips, Kari Berquist, Lawrence Fung, and Antonio Hardan. Over the years, this team developed collaborations with several investigators at Stanford and across the country. The tools used by ADDRP to examine the neurobiology of ASD have involved multiple modalities including state-of-the-art imaging methodologies (e.g., anatomical MRI, magnetic resonance spectroscopy, and positron emission tomography) and novel approaches to develop blood-based biomarkers. ASD is a heterogeneous group of disorders, and the main goals of these investigations are to identify subgroups that will share common pathologic pathways. Additionally, the ADDRP team has been working on the development of several innovative interventions. They include the assessment of the safety and efficacy of novel molecules, such as N-acetylcysteine, pregnenolone, oxytocin, and vasopressin, in targeting the core deficits as well as associated features. Furthermore, the group has focused on the investigation of behaviorally- and developmentally-based interventions for very young children with ASD, with particular interest in targeting those with limited language abilities. Finally, and more recently, the ADDRP investigators have been working on the development and use of objective measures (e.g., eye tracking, structured laboratory observation) that are sensitive and valid to be used in clinical trials since existing measures are overly subjective.

Hong Lab

David Hong, MD
Assistant Professor

Dr. Hong's lab is affiliated with the Center for Interdisciplinary Brain Sciences Research, and focuses on two major domains: (1) examining sex-specific determinants of neurodevelopment, including investigation of sex chromosome influence on brain anatomy and function, as demonstrated by sex chromosome aneuploidies. Utilizing genomic, neuroimaging and cognitive-behavioral methods he investigates mechanisms by which differential gene expression from the sex chromosomes may influence social cognition and executive functions. He has recently extrapolated this work by studying how genetic factors interface with sex steroid influence, particularly in the modulation of brain development during the dynamic period of adolescence in transgender youth. (2) Dr. Hong also investigates neural correlates of executive function, a complex cognitive ability that is affected in a number of disorders. His recent research aims to deconstruct the significant heterogeneity associated with these deficits, using childhood attention deficit hyperactivity disorder as a model. He currently serves as Director of the Executive Function Clinic in the Division of Interdisciplinary Brain Sciences.

RECENT WORKS:

Green T, Chromik LC, Mazaika PK, Fierro K, Raman MM, Lazzeroni LC, Hong DS, Reiss AL. Aberrant parietal cortex developmental trajectories in girls with Turner syndrome and related visual-spatial cognitive development: a preliminary study. Am J Med Genet B Neuropsychiatr Genet. 2014;165B(6):531-40.

Hong DS, Hoeft F, Marzelli MM, Lepage JF, Ross J, Reiss AL. Influence of the X-chromosome on neuroanatomy: evidence from Turner and Klinefelter syndromes. Journal of Neuroscience. 2014;34(10):3509-16.

Hong DS and Reiss AL. Cognitive and neurological aspects of sex chromosome aneuploidies. Lancet Neurology. 2014;13(3):306-18.

Neuroscience and Neuropsychiatry

Hadi Hosseini, PhD
Assistant Professor

Dr. Hosseini's research portfolio crosses multiple disciplines including cognitive neuroscience, computational neuropsychiatry, multimodal neuroimaging and neurocognitive rehabilitation. His computational neuropsychiatry research mainly involves investigating alterations in the organization of connectome in various neurodevelopmental and neurocognitive disorders using state of the art neuroimaging techniques (fMRI, rsfMRI, sMRI, DWI, fNIRS) combined with novel computational methods (graph theoretical and multivariate pattern analyses). One of his contributions to the neuroscience community was the development of an open-source graph analysis toolbox (GAT) (https://mailman.stanford.edu/mailman/listinfo/gat_user_forum) that facilitates topological analyses of functional and structural brain networks in human. He recently received a five-year career development award to investigate connectome-level alterations in Alzheimer's disease.

The ultimate goal of Dr. Hosseini's research is to translate the findings from his computational neuropsychiatry research toward developing personalized interventions. Dr. Hosseini and his lab have been developing personalized interventions that integrate computerized cognitive rehabilitation, real-time functional brain imaging and neurofeedback, as well as virtual reality (VR) tailored toward targeted rehabilitation of the affected brain networks in ADHD. He has received several awards, including a NARSAD's Young Investigator Award, to pursue this research direction.

Dr. Hosseini has been co-teaching the Neuroimaging Research Methods (Psyc250) at Stanford Psychiatry since 2012.

RECENT WORKS:

S.M.H. Hosseini, P. Mazaika, N. Mauras, B. Buckingham, S. Weinzimer, E. Tsalikian, N. White, A. Reiss (2016). Altered integration of structural covariance networks in young children with type 1 diabetes. Human Brain Mapping 37(11), 4034-46.

J. Bruno, S.M.H. Hosseini, M. Saggar, E.M. Quintin, M.R. Raman, A.L. Reiss (2016). Altered brain network segregation in fragile X syndrome revealed by structural connectomics. Cerebral Cortex (In Press).

S.M.H. Hosseini, S.R. Kesler (2013). Comparing connectivity pattern and small-world organization between structural correlation networks and resting state networks in healthy adults. NeuroImage 78, 402-414.

Addictions and Health Policy

Keith Humphreys, PhD
Professor

Humphreys' research team has focused in recent years on three areas: (1) Health services research on interventions for people with substance use disorders, (2) The exclusion of individuals from clinical research and its clinical, ethical and scientific implications, and (3) Public policies regarding addiction and mental illness. Area (1) has included studies of treatment quality and access measures, integration of substance use disorder care into other health care settings (e.g., liver clinics) and studies of self-help organizations (e.g., Humphreys, Blodgett & Wagner, 2014). Area (2) has been pursued by a team of VA and Stanford colleagues who completed reviews of the degree of exclusion in many disease areas including schizophrenia, major depression, anxiety disorders, bipolar disorder and neurological disorders. This also included a study of the exclusion of people with psychiatric disorders from medical research that documented its prevalence and assessed its ethical implications (Humphreys, Blodgett & Roberts, 2015). Area (3) has been a mixture of scholarly reviews (e.g., Strang et al., 2012) and direct work with public policy makers at the local, state, national and international level. Most recently this included Humphreys being a senior editor for the Surgeon General of the United States' recent landmark report on addiction. Humphreys has also worked extensively with mentees and colleagues to expand their capacity to participate in the public policy process by helping them prepare legislative testimony, write newspaper editorials and interact with elected officials.

RECENT WORKS:

Humphreys, K., Blodgett, J., & Roberts, L. (2015). The exclusion of people with psychiatric disorders from medical research. Journal of Psychiatric Research, 70, 28-32.

Humphreys, K., Blodgett, J. C.& Wagner, T.H. (2014). Estimating the efficacy of Alcoholics Anonymous without self-selection bias: An instrumental variables re-analysis of randomized clinical trials. Alcoholism: Clinical and Experimental Research, 11, 2688-2694.

Humphreys, K., Maisel, N.C., Blodgett, J.C., Fuh, I.L., & Finney, J.W. (2013). Extent and reporting of patient non-enrollment in influential randomized clinical trials, 2002-2010. JAMA Internal Medicine, 173, 1029-1031.

Strang, J. S., Babor, T., Caulkins, J., Foxcroft, D., Fischer, B., & Humphreys, K. (2012). Drug policy and the public good: Evidence for effective interventions. The Lancet, 378, 71-83.

Biostatistics

Booil Jo, PhD
Associate professor

Dr. Jo has been at the lead in developing pragmatic statistical methods based on the intersection of causal inference and latent variable modeling. Over the past decade, she published on various methodological topics such as treatment noncompliance, handling of nested data such as from cluster randomized trials, causal mediation, missing data, propensity scores, and longitudinal heterogeneity. Her current program of research is focused on developing statistical methods that jointly utilize latent variable modeling, causal inference, and machine learning approaches with the goal of improving the quality in personalized medicine. She is also actively involved in biostatics education, consulting, and collaborative work in various fields of psychiatry/mental health research.

The Biostatistics group in the Department of Psychiatry and Behavioral Sciences leads Biostatistics consulting and education. The group intends to facilitate effective quantitative education and training for junior and senior researchers and to advance science through effective collaborations among clinical and quantitative researchers. The group consists of several PhD statisticians with diverse expertise in clinical trials, longitudinal studies, genetics, causal inference, latent variable modeling, survival analysis, and mobile health – Booil Jo, Helena Kraemer, Jane Kim, Laura Lazzeroni, Tyson Holmes, and Christine Blasey. The group also consists of experienced analysts including Eric Neri , Art Noda, Sarah Pajarito, and Hanyang Shen.

School Mental Health and Community-Based Participatory Research

Shashank Joshi, MD
Associate Professor

The Stanford / LPCH School Mental Health Program, has studied 3 primary areas: 1) School-based suicide prevention, 2) The interaction of culture, stigma, and help-seeking among diverse youth and their families, and 3) Process considerations based on the principles of therapeutic engagement with students, school staff, families, and communities.

We have implemented and evaluated peer-led (and adult-mentored), culturally-adapted mental health interventions for several communities affected by suicide clusters. Since we started this work in 2011, the schools we have engaged with have reported a significant increase in referrals made by peers to get help for their friends in distress, and many teen lives have been saved because a peer acted on their behalf. This year, over 5,600 students in the SF Bay are involved in this school-based suicide prevention approach, known as Sources of Strength. The social messaging and mentor guided peer-to-peer activities that are part of this program have led to more students being able to name trusted adults they would go to when seeking help for themselves or for peers.

In 2017-18, we will be studying classroom teacher self-efficacy in student mental health, by utilizing a virtual classroom interaction platform in school districts within Santa Clara and San Mateo Counties. We will also continue our study of cultural factors that act as either enhancers or barriers to help-seeking in adolescents, especially for those from immigrant families.

RECENT WORKS:

Sholevar P and Joshi SV, (in press). Cultural Child & Adolescent Psychiatry. In Martin A (ed.) Lewis' Child & Adolescent Psychiatry, 5th edition. 2017; Philadelphia, Wolters Kluwer

Wang R and Joshi SV (in press). Mental health issues among 1st generation college students. In Roberts LW, (ed.) College Student Mental Health, 2017; Philadelphia, Springer

Wang SD, Loftus P, Chu I, Martin A, Hwang WC & Joshi SV: Acculturative Family Distancing (AFD) in Middle School Students: An Examination of Family Cohesion, Ruminations, and Help-Seeking Behaviors in Relation to Depression, under review, Transcultural Psychiatry

Joshi SV, Merrell S, Dunlap P, Hartley S, and Kataoka SE. Community collaboration in school-based suicide prevention. In Roberts LW, Reicherter D, Adelsheim S, Joshi SV (eds.) Partnerships for Mental Health: A Guide to Community and Academic Collaboration. 2015; Philadelphia, Springer, pp163-178

Center for Human Sleep Research

Clete Kushida, MD, PhD
Professor

The Center for Human Sleep Research focuses on conducting large-scale clinical trials in sleep medicine and developing the electronic network informatics infrastructure to support these trials. They are currently conducting a PCORI-supported study: Sustainable Methods, Algorithms, and Research Tools for Delivering Optimal Care Study (SMART DOCS). This study is designed to: 1) develop a new patient-centered outcomes and coordinated-care management (PCCM) approach for sleep medicine, enabling providers and patients access to specific and relevant information and resources, thereby allowing patients to make informed health care decisions and providers to assist patients in achieving their preferred outcomes; and 2) conduct a randomized trial that will test the PCCM approach for sleep medicine against a conventional diagnostic/treatment outpatient medical care approach with assessment of patient satisfaction and perception of care in 1,806 enrolled patients. The analyses are completed on AHRQ-supported Comparative Outcomes Management with Electronic Data Technology (COMET) Project, in which they repurposed and expanded the electronic infrastructure and tools we developed during our NHLBI-supported Apnea Positive Pressure Long-term Efficacy Study, to conduct a comparative effectiveness trial with cardiovascular endpoints on two treatments for obstructive sleep apnea (OSA) patients. They are also conducting industry-sponsored trials on a novel nasal stent for treating OSA, a new medication for adolescent patients with restless legs syndrome, and innovative wearable devices for detecting sleep-wake patterns.

RECENT WORKS:

Kushida CA, Nichols DA, HolmesTH, Miller R, Griffin K, Cardell C-Y, Hyde PR, Cohen E, Manber R, Walsh JK. SMART DOCS: A new patient-centered outcomes and coordinated-care management approach for the future practice of sleep medicine. Sleep. 2015 Feb 1;38(2):315-26.

Holmes TH, Zulman DM, Kushida CA. Adjustment for variable adherence under hierarchical structure: Instrumental variable modeling through compound residual inclusion. Med Care. 2016 Jan 13. (Epub ahead of print)

Quan SF, Budhiraja R, Clarke DP, Goodwin JL, Gottlieb DJ, Nichols DA, Simon RD, Smith TW, Walsh JK, Kushida CA. Impact of treatment with continuous positive airway pressure (CPAP) on weight in obstructive sleep apnea. J Clin Sleep Med. 2013 Oct 15;9(10):989-93.

Interpreting Biomedical Research from the Perspective of Statistical Epistemology

Laura Lazzeroni, PhD
Associate Professor

A major theme in Dr. Lazzeroni's research is the search for better understanding of the impact on biomedical research of fundamental properties of statistics, such as power, bias, and p-values. The results from Dr. Lazzeroni's group provide surprising new insights into the large, high-throughput studies that are common in genomics and into the problem of replication. The research demonstrates that high-throughput studies that examine very large numbers of genetic predictors can maintain very good power to reject the null hypothesis, with relatively moderate increases in sample sizes. However, such studies provide almost no resolution for comparing or ranking the relative strength of competing genetic predictors. To aid in the interpretation of research findings, the group has provided new solutions for quantifying the uncertainty embedded in observed p-values. One method, in particular, provides explicit confidence intervals for the power of a replication study, based on a p-value from prior or pilot data. Very large sample sizes are needed to ensure good power for replication unless the p-value of the initial study is extremely small. Other work has demonstrated a flaw in a commonly used application of the sign test in genomics and led to a new algorithm for estimating heritability in twins. Many heritability estimates, especially those from smaller studies, are biased upward, contributing to the well-known "missing heritability" problem. The new algorithm removes this bias, yielding smaller, more realistic assessments of the genetic contributions underlying a trait.

RECENT WORKS:

Lazzeroni LC, Ray A. The cost of large numbers of hypothesis tests on power, effect size and sample size. Molecular Psychiatry 2012; 17 (1): 108-114

Lazzeroni LC, Lu Y, Belitskaya-Levy I. P-values in genomics: Apparent precision masks high uncertainty. Molecular Psychiatry 2014; 19 (12): 1336-1340

Lazzeroni LC, Lu Y, Belitskaya-Levy I. Solutions for quantifying p-value uncertainty and replication power. Nature Methods 2016; 13 (2): 107-108

Lazzeroni LC. Evaluating the evidence of replication for genetic associations with schizophrenia. JAMA Psychiatry 2014; 71 (1): 94-5

Lazzeroni, LC, Ray, A. A generalized DeFries-Fulker regression framework for the analysis of twin data. Behavior Genetics 2013; 43 (1): 85-96

Addiction Medicine Dual Diagnosis Clinic

Anna Lembke, MD
Assistant Professor

The Addiction Medicine Dual Diagnosis Clinic continues to explore ways to improve the treatment of patients with co-occurring substance use disorders and other addictions. Dr Matt Kendra is the recipient of a Stanford Cancer Center grant to innovate smoking cessation treatment. Dr. Alexis Ortiz has launched a new DBT group for patients with substance use disorders, and is involved in state-wide education efforts to teach behavioral health interventions to primary care doctors. Our social worker, Tracy Chesler, is at the forefront of brand new clinical programs to improve systems of care in our clinic. Dr. Anna Lembke continues to work toward improving the education of physicians in the dangers of overprescribing and the importance of identifying and treating addiction. We welcome Dr. Mark McGovern as a new colleague from Dartmouth, a national expert on the integration of behavioral health into primary care.

RECENT WORKS:

Lembke, A. Drug Dealer, MD: How Doctors Were Duped, Patients Got Hooked, and Why It's So Hard to Stop, Johns Hopkins University Press, November 15, 2016

Lembke, A., Humphreys, K., Newmark, J. Weighing the Risks and Benefits of Chronic Opioid Therapy, American Family Physician, 2016; 93(12):982-990.

Lembke, A., Chen, J. Use of Opioid Agonist Therapy for Medicare Patients in 2013. JAMA Psychiatry, 2016;73(9):990-992. doi:10.1001/jamapsychiatry.2016.

Chen, J., Humphreys, K., Shah, N.H., Lembke, A. Distribution of Opioids by Different Types of Medicare Prescribers, JAMA Internal Medicine, 2016; 176(2):259-261.

Haug, N.A., Bielenberg, J., Linder, S. H., Lembke, A. Assessment of provider attitudes toward #naloxone on Twitter. Substance Abuse, 2016; 37(1):35-41.

Program on the Genetics Of Brain Function

Douglas Levinson, MD
Professor

The Program on the Genetics of Brain Function (GBF) includes the labs of Douglas Levinson and Alex Urban. We investigate genetic sequences and mechanisms with relevance to the etiology of psychiatric disorders.

The Levinson lab is currently involved in the following projects:

- Large-scale meta-analysis of genome-wide association study data for psychiatric disorders (major depressive disorder, schizophrenia, anorexia nervosa, post-traumatic stress disorder, cross-disorder analyses) carried out by the Psychiatric Genomics Consortium and other consortia (Levinson, Duncan).
- Synaptic, genomic and morphological effects of genetic mutations association with high risk of schizophrenia, as part of an NIMH National Cooperative Reprogrammed Cell Research Group (NCRCRG) (Levinson, Südhof, Wernig, Aronow, Pang, Swanson, Dage).
- Large-scale study of association of schizophrenia with DNA sequence variation in the HLA region of chromosome 6 (Levinson, Mignot, Mindrinos, Fernandez-Vina).
- Detection of somatic mutations of mobile elements (retrotransposon sequences) in the brain, using whole-genome sequencing (Levinson, Urban, Snyder).
- Psychopathology and genetics of early-onset schizophrenia (Laurent-Levinson and Levinson).
- Genetics of learning disabilities (Laurent-Levinson).

RECENT WORKS:

The Influence of Age and Sex on Genetic Associations with Adult Body Size and Shape: A Large-Scale Genome-Wide Interaction Study. Winkler TW, Justice AE, Graff M, Barata L, Feitosa MF, Chu S, Czajkowski J, Esko T, Fall T, Kilpeläinen TO, Lu Y, Mägi R, Mihailov E, Pers TH, Rüeger S, Teumer A, Loos RJ, et al. PLoS Genet. 2015 Oct 1;11(10):e1005378. doi: 10.1371/journal.pgen.1005378. eCollection 2015 Oct.

New data and an old puzzle: the negative association between schizophrenia and rheumatoid arthritis. Lee SH, Byrne EM, Hultman CM, Kähler A, Vinkhuyzen AA, Ripke S, Andreassen OA, Frisell T, Gusev A, Hu X, Karlsson R, Mantzioris VX, McGrath JJ, Mehta D, Stahl EA, Zhao Q, van Riel P, et al. Int J Epidemiol. 2015 Aug 18. pii: dyv136

Genetic Differences in the Immediate Transcriptome Response to Stress Predict Risk-Related Brain Function and Psychiatric Disorders.Arloth J, Bogdan R, Weber P, Frishman G, Menke A, Wagner KV, Balsevich G, Schmidt MV, Karbalai N, Czamara D, Altmann A, Trümbach D, Wurst W, Mehta D, Uhr M, Klengel T, Erhardt A, Carey CE, Conley ED; Major Depressive Disorder Working Group of the Psychiatric Genomics Consortium (PGC), Ruepp A, Müller-Myhsok B, Hariri AR, Binder EB; Major Depressive Disorder Working Group of the Psychiatric Genomics Consortium PGC.Neuron. 2015 Jun 3;86(5):1189-202. doi: 10.1016/j.neuron.2015.05.034.

Stress Disorders

Steven E. Lindley, MD, PhD
Associate Professor

Dr. Lindley's scholarly, clinical, and teaching activities apply interdisciplinary training in neuroscience/pharmacology and medicine/psychiatry to advance health and mental health care for psychiatric patients with disorders related to chronic and severe stress. As Director of Outpatient Mental Health for the VHA Palo Alto HCS, his work focuses on psychiatric disorders in military veterans. The goal is maximizing the use of evidence-based practices and reducing unnecessary medical burden of psychiatric treatments for stress-related disorders. Along this line, he has conducted basic science research on the adverse effects of the stress hormone cortisol and applied research on the efficacy of medication treatments for posttraumatic stress disorder (PTSD). Currently, they are conducting research on the efficacy of innovative treatment approaches for PTSD, using system dynamic modelling to improve access to evidence-based therapies, and developing electronic medical records software that fosters use of evidence-based treatments and continuous monitoring of clinical outcomes and adverse effects. Clinically, his team is developing and implementing clinical programs that improve access to mental health care, and developing mental health treatment programs, policies, and informatics tools to foster evidenced-based care.

RECENT WORKS:

Zimmerman L, Lounsbury D, Rosen C, Kimerling R, Trafton J, and Lindley SE. Participatory system dynamics modeling: Increasing Engagement and precision to improve implementation planning in systems. Administrative Mental Health Policy and Mental Health Services Research, 43(6):834-849, 2016.

Landes SJ, Carlson EB., Ruzek JI., Wang D, Hugo E, DeGaetano N., Chambers J G, and Lindley SE. Provider-driven development of a measurement feedback system to enhance measurement-based care in VA mental health. Cognitive and Behavioral Practice, 22, 87-100, 2015

Jain, S., Hernandez, J.M., and Lindley SE. Peer Support Program for Veterans in Rural Areas. Psychiatric Services, 65 (90): 1177, 2014

DeGaetano, N., Greene, C., Dearaujo, N., and Lindley SE. A Pilot Program in Telepsychiatry for Residents: Initial Outcomes and Program Development. Academic Psychiatry, 39(1):114-8, 2015

Eating Disorders Research Program

James Lock, MD, PhD
Professor

The Eating Disorders Research Program in Stanford's Department of Psychiatry and Behavioral Sciences is an internationally recognized interdisciplinary program examining the biological/neural basis for eating disorders using imaging and neuropsychological assessment, treatment of eating disorder across the diagnostic and age spectrum, and strategies for dissemination and implementation of evidence based treatment for eating disorders, including the use of behavioral health technologies. Current projects include examination of the neural basis of binge eating and reward processes, the role of cognitive training (remediation) in the treatment of adolescents with anorexia nervosa, adaptive use of a smartphone app to address eating disorder symptoms and behaviors, evaluation of web-based training in Family Based Treatment for adolescent eating disorders, novel treatments for young mothers with eating disorders, and family therapy for atypical eating disorders (ARFID). Current institution research collaborators include:, University College, London, UCSF, Columbia University, McMaster University, University of Calgary, Aarhus University, Denmark, University of Sydney, Australia, among others. Current funding is from the NIH, Global Foundation for Eating Disorders, The Davis Foundation, and the Academy of Eating Disorders.

RECENT WORKS:

Le Grange, D. Lock, J, Agras, WS, Bryson, S, Jo, B. Randomized clinical trial comparing family based treatment and cognitive behavioral therapy for adolescent bulimia nervosa. 2015, JAACAP doi: 10.1016/j.jaac.2015.08.008.

Lock, J, Le Grange, D, Agras, WS, Fitzpatrick, KK, Jo, B, Accurso, E, Forsberg, S, Anderson, K, Arnow, K, Sztainer, M, Can adaptive treatment improve outcomes in Family Based Treatment for Adolescents with Anorexia Nervosa? Feasibility and treatment effects of a multi-site treatment study, BRAT: 2015 Oct;73:90-5. doi: 10.1016/j.brat.2015.07.015. Epub 2015 Aug 1.

Sadeh-Sharvit S, Levy-Shiff R, Arnow KD, Lock JD (2015). The Impact of Maternal Eating Disorders and Spousal support on Neurodevelopmental Trajectories in their Toddlers. Abnorm Behav Psychol 1: 102. doi:10.4172/abp.1000102

Darcy, A, Fitzpatrick, KK, Lock, J. Cognitive Remediation Therapy and Cognitive Behavioral Therapy for an older adult with anorexia nervosa: A brief case report. Psychotherapy, 53 (2): 232-40.

Dacry, A, Lock, J (2017). Using technology to improve treatment outcomes in children and adolescents with eating disorders, Child and Adolescent Psychiatry Clinics, 2015: 26 (1): 33-42.

Behavioral Neuroscience

David Lyons, PhD
Professor

A major focus of our work follows from the discovery that mild, but not minimal nor severe stress, exposure promotes subsequent coping and emotion regulation as described by U-shaped functions. Temporal aspects of stress exposure also contribute to the development of vulnerability versus resilience. Chronic stress leads to vulnerability whereas intermittent stress exposure provides repeated opportunities to learn, practice, and improve coping with subsequent gains in emotion regulation and resilience. Recently, we extended the generality of our findings from monkeys to mice in order to exploit molecular genetic tools for dissecting causal mechanisms that mediate experience-dependent links between behavior and brain.

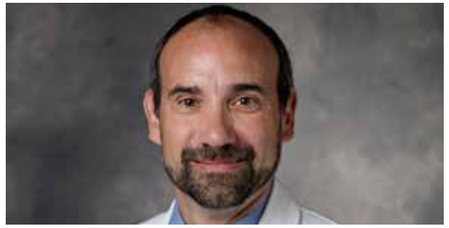
RECENT WORKS:

Lyons, D.M., de Lecea, L., Schatzberg, A.F. (2017). Stress coping and resilience modeled in mice. In: M. Conn (ed), Animal Models for the Study of Human Disease, 2nd edition. San Diego, CA: Academic Press/Elsevier, in press.

Lee AG, Nechvatal JM, Shen B, Buckmaster CL, Levy MJ, Chin FT, Schatzberg AF, Lyons DM. Striatal dopamine D2/3 receptor regulation by stress inoculation in squirrel monkeys. Neurobiology of Stress 2016; 3: 68-73.

Lee MS, Kim YH, Park WS, Park OK, Kwon SH, Hong KS, Rhim H, Shim I, Morita K, Wong DL, Patel PD, Lyons DM, Schatzberg AF, Her S. (2016). Temporal variability of glucocorticoid receptor activity is functionally important for the therapeutic action of fluoxetine in the hippocampus. Molecular Psychiatry 2016; 21: 252-60.

Brockhurst J, Cheleuitte-Nieves C, Buckmaster CL, Schatzberg AF, Lyons DM. Stress inoculation modeled in mice. Translational Psychiatry 2015; 5: e537.



Neuropsychiatry

Jose Maldonado, MD, FAPM, FACFE
Professor

Dr. Maldonado's current research and scholarly interests include Neurobiology and Management of Delirium; Neuropsychiatric Sequelae of Medical Illness and its Treatment; Psychosocial Assessment & Neuropsychiatric Complications of Organ Transplantation; Functional Neurological Disorder; Application of Hypnosis in Psychiatry and Medicine; Neuropsychiatric Sequelae of Traumatic Brain Injury; Pathophysiology and Management of Alcohol Withdrawal; Factitious Disorder & Munchausen's Syndrome; Cultural Diversity in Medical Care; Diagnosis and Treatment of Dissociative Disorders; and Forensic Psychiatry.

RECENT WORKS:

Prolonged neuropsychiatric effects following management of chloroquine intoxication with psychotropic polypharmacy. Clinical case reports Maxwell, N. M., Nevin, R. L., Stahl, S., Block, J., Shugarts, S., Wu, A.H., Dominy, S., Solano-Blanco, M. A., Kappelman-Culver, S., Lee-Messer, C., Maldonado, J.D., Maxwell, A. J. 2015; 3 (6): 379-387

An Insatiable Desire for Tofu: A Case of Restless Legs and Unusual Pica in Iron Deficiency Anemia PSYCHOSOMATICS Sher, Y., Maldonado, J. R. 2014; 55 (6): 680-685

The "Prediction of Alcohol Withdrawal Severity Scale" (PAWSS): Systematic literature review and pilot study of a new scale for the prediction of complicated alcohol withdrawal syndrome ALCOHOL Maldonado, J. R., Sher, Y., Ashouri, J. F., Hills-Evans, K., Swendsen, H., Lolak, S., Miller, A. C. 2014; 48 (4): 375-390

Neuropathogenesis of Delirium: Review of Current Etiologic Theories and Common Pathways AMERICAN JOURNAL OF GERIATRIC PSYCHIATRY Maldonado, J. R. 2013; 21 (12): 1190-1222

Broken Heart Syndrome (Takotsubo Cardiomyopathy) Triggered by Acute Mania: A Review and Case Report PSYCHOSOMATICS Maldonado, J. R., Pajouhi, P., Witteles, R. 2013; 54 (1): 74-79

Nancy Friend Pritzker Laboratory

Robert Malenka, MD, PhD
Professor

The Nancy Pritzker Laboratory under the direction of Robert Malenka, M.D.,Ph.D. uses state-of-the-art tools to understand the molecular mechanisms of brain plasticity and how pathological plasticity contributes to the development of prominent neuropsychiatric disorders. Recent work is beginning to delineate the pathological brain mechanisms underlying some of the most prominent symptoms of autism, depression and addiction in animal models. The lab works closely with clinical colleagues studying patients with the goal of using the knowledge gained from the lab's basic science approaches to advance the diagnosis and treatment of patients suffering from a variety of psychiatric disorders.

RECENT WORKS:

Fucillo, M.V., Rothwell, P.E. and Malenka, R.C. (2016). From synapses to behavior: what rodent models can tell us about neuropsychiatric disease. Biological Psychiatry 79: 4-6.

Heifets, B.D. and Malenka, R.C. (2016). MDMA as a probe and treatment for social behaviors. Cell 166: 269-272

Steinberg, E.E.,Christoffel, D.J., Deisseroth, K. and Malenka, R.C. (2015). Illuminating circuitry relevant to psychiatric disorders with optogenetics. Current Opinion in Neurobiology. 30: 9-16

Schwartz, N., Temkin, P., Jurado, S., Lim, B.K., Heifets, B.D., Polepali, J.S. and Malenka. R.C. (2014). Decreased motivation during chronic pain requires long-term depression in the nucleus accumbens. Science 345: 535-542.

Depression and Insomnia Research Program

Rachel Manber, PhD
Professor

Research in the Sleep Health & Insomnia Program (PI: Rachel Manber) aims to improve sleep of individuals suffering from insomnia using non-pharmacological approaches. Our lab conducts clinical research to answer questions with immediate clinical implications for diverse populations. Much of our research is focused on testing short and long term efficacy, including outcomes beyond sleep (e.g., depressive symptom severity, hypnotic medication use, and CPAP adherence), as well as predictors and mediators of treatment response. Our current research include: 1) a randomized controlled study (RCT) aiming to improve perinatal insomnia, infant sleep, and the quality of maternal-infant interactions; 2) an RCT of the effectiveness of cognitive behavioral therapy for insomnia (CBT-I) for patients with dual diagnosis of depression and insomnia; 3) an RCT of the effectiveness of CBT-I for those with dual diagnosis of sleep apnea and insomnia; and 4) exploring issues related to the delivery and dissemination of CBT-I to patients, including veterans, and to mental health providers.

RECENT WORKS:

Manber R, Buysse DJ, Edinger J, Krystal A, Luther JF, Wisniewski SR, Trockel M, Kraemer HC, & Thase ME. (2016). Efficacy of CBT for Insomnia Combined With Antidepressant Pharmacotherapy in Patients with Comorbid Depression and Insomnia: A Randomized Controlled Trial. Journal of Clinical Psychiatry 77(10):1316-23. PMID: 27788313.

Bei, B, Manber, R, Allen, NB, 5, Trinder, J, Wiley, JF. Too long, too short, or too variable? Intraindividual variability of actigraphy-assessed sleep in adolescents during naturalistically unconstrained sleep. SLEEP. In Press.

Edinger, JD, Manber, R, Buysse, DJ Krystal, AD Thase, ME Gehrman, P Fairholme, C Luther, J and Wisniewski, S. Are Patients with Childhood Onset of Insomnia and Depression More Difficult to Treat Than Those with Adult Onsets of These Disorders? A Report from the TRIAD Study. In Press.

The Center for Behavioral Health Services and Implementation Research

Mark McGovern, PhD
Professor

Although innovative and effective evidence-based pharmacological and psychosocial therapies for behavioral health conditions exist, including for psychiatric and addictive disorders, they are not typically available in routine practice settings. The National Institutes of Health target the majority of grant funding to “discovery” research. Less than .1% of total grant awards are dedicated to the translation of these discoveries to directly benefit patients and families. Implementation science is a new research discipline. The goal of implementation research is to apply rigorous and replicable scientific methods to systematically bridge the research-to-practice gap, thereby improving the chances that people actually get the most effective treatments available. Dr. Mark McGovern and his team have received National Institute on Drug Abuse and National Institute on Alcohol Abuse and Alcoholism awards to conduct translational studies to improve access to evidence-based integrated care for persons with addiction and/or psychiatric disorders. The Center works directly with behavioral health care systems and organizations on implementation practice challenges, and with other researchers across a variety of health care disciplines in implementation research concept, project design, methods and analytics. Dr. McGovern is on the core faculty of the National Institute on Mental Health -funded Implementation Research Institute, where he mentors emerging faculty in implementation research career development within addiction prevention and treatment. The Center for Behavioral Health Services and Implementation Research’s current projects involve designing and evaluating integrated and sustainable models of behavioral health services for primary care and emergency department patients with substance use and psychiatric issues.

RECENT WORKS:

Nordstrom, B., Saunders, E.C., McLeman, B., Meier, A., Lambert-Harris, C., Tanzman, B., Brooklyn, J., King, G., Kloster, N., Lord, C.F., Roberts, W., McGovern, M.P. (2016). Using a learning collaborative strategy with office-based practices to increase access and improve quality of care for patients with opioid use disorders. Journal of Addiction Medicine, 10(2): 115-121. PMCID: PMC4865252.

McGovern, M.P., Lambert-Harris, C., Xie, H., Meier, A., McLeman, B., Saunders, E.C. (2015). A randomized controlled trial of treatments for co-occurring substance use disorders and post-traumatic stress disorder. Addiction, 110(7): 1194-1204. PMCID: PMC4478141.

McGovern, M.P., McHugo, G.J., Drake, R.E., Bond, G., Merrens, M.R. (2013). Implementing evidence-based practices in behavioral health. Center City MN: Hazelden Foundation.

Cognitive and Systems Neurosciences Laboratory

Vinod Menon, PhD
Professor

The overarching goal of the research in Dr. Menon and his team is to investigate the functional architecture of human brain circuits and to determine how disruptions in specific brain networks impact behavior, cognition, emotion, and learning in normal healthy individuals and in individuals with psychiatric and neurological disorders including learning disabilities, autism, ADHD, anxiety and mood disorders, and schizophrenia. They are also involved in quantitative BIG DATA science initiatives with open-source data to advance clinical and translational neuroscience in fundamentally new ways. They aim to drive human cognitive neuroscience forward by (1) Investigating large-scale architecture and wiring of the adult human brain in health and disease, (2) Elucidating the large-scale architecture and wiring of the developing human brain, (3) Developing advanced computational tools for dynamic brain network analysis, (4) Characterizing aberrancies in the human connectome in neurodevelopmental disorders and learning disabilities, (5) Developing new frameworks and computational models for linking brain connectomics and dynamics, and (6) Using systems neuroscience approaches for identifying biomarkers of neurodevelopmental disorders and learning disabilities in children, and for tracking developmental change and predicting clinical outcomes in affected children. This body of work will lead to fundamental discoveries in human brain science, with wide ranging implications for elucidating fundamental biological and disease mechanisms at the systems level.

RECENT WORKS:

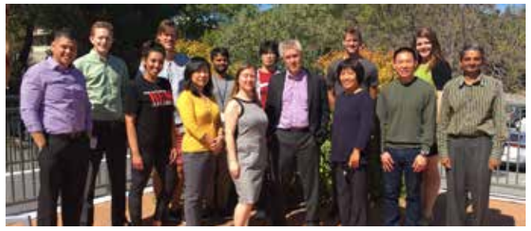
Greicius, M. D., Krasnow, B., Reiss, A. L., & Menon, V. (2003). Functional connectivity in the resting brain: A network analysis of the default mode hypothesis. Proc Natl Acad Sci U S A, 100(1), 253-258.

Sridharan, D., Levitin, D., & Menon, V. (2008). A critical role for the right fronto-insular cortex in switching between central-executive and default-mode networks. Proc Natl Acad Sci U S A, 105(34), 12569-12574.

Menon, V. (2011). Large-scale brain networks and psychopathology: a unifying triple-network model. Trends in Cognitive Sciences, 15(10), 483-506.

Supekar, K., Musen, M., & Menon, V. (2009). Development of large-scale functional brain networks in children. PLoS Biol, 7(7), e1000157.

Uddin, L., Supekar, K., Lynch, C., Khouzam, A., Phillips, J., Feinstein, C., Ryali, S., Menon, V. (2013). Salience network based classification and prediction of symptom severity in children with autism. JAMA Psychiatry, 70(8): 869-79.



Center for Narcolepsy & KLS Research Center

Emmanuel Mignot, MD, PhD
Professor

The major focus of the Mignot laboratory is the study of sleep disorders, most notably narcolepsy. The laboratory uses three different approaches: genetics, immunology, and signal processing/machine learning. A major project is aiming at identifying the target of T cells that are responsible for the autoimmune destruction of hypocretin/orexin cells in narcolepsy, and to understand why the disorder is triggered by specific influenza strains. We are also looking at the genetics of narcolepsy, Kleine –Levin syndrome and Periodic Leg movements during sleep using GWAS, and exome sequencing, and functionally characterizing these genetic effects. Finally, we are using analytics on large clinical datasets of online sleep questionnaire response patterns, activity monitoring, and polysomnography (PSG) recordings. This ranges from simple statistics and epidemiology to deep learning algorithms of the EEG and polysomnography (PSG) signals.

RECENT WORKS:

Narcolepsy in African Americans. Kawai M, O'Hara R, Einen M, Lin L, Mignot E. Sleep. 2015 Nov 1;38(11):1673-81. doi: 10.5665/sleep.5140. PMID: 26158891

HLA-DPB1 and HLA class I confer risk of and protection from narcolepsy. Ollila HM, Ravel JM, Han F, Faraco J, Lin L, Zheng X, Plazzi G, Dauvilliers Y, Pizza F, Hong SC, Jennum P, Knudsen S, Kornum BR, Dong XS, Yan H, Hong H, Coquillard C, Mahlios J, Jolanki O, Einen M, Arnulf I, Högl B, Frauscher B, Crowe C, Partinen M, Huang YS, Bourgin P, Vaarala O, Désautels A, Montplaisir J, Mack SJ, Mindrinos M, Fernandez-Vina M, Mignot E. Am J Hum Genet. 2015 Jan 8;96(1):136-46. doi: 10.1016/j.ajhg.2014.12.010. Erratum in: Am J Hum Genet. 2015 May 7;96(5):852. Lavault, Sophie [removed]; Arnulf, Isabelle [added]. PMID: 25574827

Genome wide analysis of narcolepsy in China implicates novel immune loci and reveals changes in association prior to versus after the 2009 H1N1 influenza pandemic. Han F, Faraco J, Dong XS, Ollila HM, Lin L, Li J, An P, Wang S, Jiang KW, Gao ZC, Zhao L, Yan H, Liu YN, Li QH, Zhang XZ, Hu Y, Wang JY, Lu YH, Lu CJ, Zhou W, Hallmayer J, Huang YS, Strohl KP, Pollmächer T, Mignot E. PLoS Genet. 2013 Oct;9(10):e1003880. doi: 10.1371/journal.pgen.1003880. Epub 2013 Oct 31. PMID: 24204295

ImmunoChip study implicates antigen presentation to T cells in narcolepsy. Faraco J, Lin L, Kornum BR, Kenny EE, Trynka G, Einen M, Rico TJ, Lichtner P, Dauvilliers Y, Arnulf I, Lecendreux M, Javidi S, Geisler P, Mayer G, Pizza F, Poli F, Plazzi G, Overeem S, Lammers GJ, Kemlink D, Sonka K, Nevsimalova S, Rouleau G, Desautels A, Montplaisir J, Frauscher B, Ehrmann L, Högl B, Jennum P, Bourgin P, Peraita-Adrados R, Iranzo A, Bassetti C, Chen WM, Concannon P, Thompson SD, Damotte V, Fontaine B, Breban M, Gieger C, Klopp N, Deloukas P, Wijmenga C, Hallmayer J, Onengut-Gumuscu S, Rich SS, Winkelmann J, Mignot E. PLoS Genet. 2013;9(2):e1003270. doi: 10.1371/journal.pgen.1003270. Epub 2013 Feb 14. PMID: 23459209

Genetics, Neurobiology, and Computational Analysis of Sleep and Associated Behaviors

Philippe Mourrain, PhD
Associate Professor

Because the human brain harbors trillions of synapses, the impact of psychiatric and sleep disorders on such an immense synapse landscape has been out of reach. To model the complex human brain and its diseases, our laboratory uses “simpler” fish and rodent species. We investigate the mechanisms underpinning common vertebrate behaviors and associated defects at the genetic, synaptic, network, and whole brain levels with the latest techniques such as CRISPR-Cas9, GCaMPs light sheet microscopy and array tomography imaging. Recently, using a novel approach combining super-resolution microscopy and protein markers to profile >30 proteins within each individual synapse, we analyzed over 1 million normal and fragile X syndrome (FXS) synapses and found that the intellectual impact of FMR1 silencing is mediated by heterogeneous molecular changes in the synapse populations of the FXS brain. Importantly, we found that mGluR5 antagonism (a molecular mechanism recently targeted in two clinical trials) rescued only a subset of the molecular deficits experienced in the total synapse population. This observation provided a quantitative explanation to the cessation of clinical trials of mGluR5 antagonists for FXS, and strongly suggests that a complete treatment for FXS must require a combination of synergistic drugs that rescue the diverse FXS synaptic deficits. This approach now validated on a cortical model of mental retardation, is mature to uncover the complex synaptic landscape of other pathological contexts or normal behavioral states such as sleep.

RECENT WORKS:

Juntti SA, Hilliard AT, Kent KR, Kumar A, Nguyen A, Jimenez MA, Loveland JL, Mourrain P, Fernald RD. A Neural Basis for Control of Cichlid Female Reproductive Behavior by Prostaglandin F2α. Current Biology 2016 PMID: 26996507

Kim CK, Miri A, Leung LC, Berndt A, Mourrain P, Tank DW, Burdine RD. Prolonged, brain-wide expression of nuclear-localized GCaMP3 for functional circuit mapping. Front Neural Circuits. 2014 8:138. PMID: 25505384

Leung LC, Wang GX, Mourrain P. Imaging zebrafish neural circuitry from whole brain to synapse. Front Neural Circuits. 2013 PMID: 23630470

Colas D, Manca A, Delcroix JD, Mourrain P. Orexin A and orexin receptor 1 axonal traffic in dorsal roots at the CNS/PNS interface. Front Neurosci. 2014 PMID: 24574957

Wang GX, Smith SJ, Mourrain P. Fmr1 KO and fenobam treatment differentially impact distinct synapse populations of mouse neocortex. Neuron. 2014 PMID: 25521380

Lifespan Approaches to Neuropsychiatric Disorders Program

Ruth O’Hara, PhD
Associate Professor

The core focus of Dr. Ruth O’Hara’s lab is to characterize the reciprocal relationship between neurocognitive abilities and neuropsychiatric disorders, and to identify the factors that influence these relationships. Building upon her work demonstrating how affective systems interact with cognitive impairment, her lab has increasingly investigated the overlapping neurocircuitry of cognitive and affect processing. Her group has led the field in demonstrating the role of cognitive impairment in precipitating dysregulated affective and emotional processing in late life. Her work, among others, has led to an increased recognition of the contribution of early developmental processes to psychiatric disorders in mid- to late life. Over the years she has brought together a team of outstanding collaborators, including Drs. Hallmayer, Pasca, Etkin, and Beaudreau, to implement a translational, interdisciplinary program that considers genetic moderators and physiological mechanisms of cognitive and affective outcomes across the lifespan.

RECENT WORKS:

Kawai M, Beaudreau SA, Gould CE, Hantke NC, Jordan JT, O’Hara R. Delta Activity at Sleep Onset and Cognitive Performance in Community-Dwelling Older Adults. In Press. Sleep.

Garrett A, Gupta S, Reiss AL, Waring J, Sudheimer K, Anker L, Sosa N, Hallmayer J, and O’Hara R. Impact of 5-HTTLPR on Hippocampal Subregional Activation in Older Adults. Translational Psychiatry. 2015 Sep 22;5:e639. doi: 10.1038/tp.2015.131. PMID: 26393485

Etkin A, Gyurak A, O’Hara R. A neurobiological approach to the cognitive deficits of psychiatric disorders. Dialogues Clinical Neuroscience. 2013 Dec;15(4):419-29. Review. PMID: 24459409

Gershon A, Sudheimer K, Tirouvanziam R, Hallmayer JF, O’Hara R. The long-term impact of early life adversity on late-life psychiatric disorders. Current Psychiatry Reports. 2013 Apr; 15(4):352. PMID: 23443532

Sleep Epidemiology Research Center

Maurice Ohayon, MD, DSc, PhD
Professor

Our research focuses on the epidemiology of sleep disorders and their comorbidity in the General population. Public Mental Health and public policy issues are actively investigated through epidemiological studies of the General population in order to promote and prevent Sleep and Mental Disorders and help their recognition and treatment. We are pursuing this effort through a longitudinal study of the American General population started in 2001. Every four years, we interview the subjects of this cohort on their Sleep habits, Sleep quantity and quality of Sleep in relationship with their medical and psychiatric conditions. This longitudinal study is now in its fourth wave.

Narcolepsy is another pole of interest of our group. Recently, we have added a very focused research on the family members of Narcoleptic patients.

In an effort to diversify our interests in the domain of Public Health, we have instigated studies to explore the negative feedbacks between sleep and gastroesophageal acid reflux in the US and European populations. We have conducted several studies to exploit the European data on GERD to show how Chronic GERD can be better defined by its Sleep components.

We have developed collaborations with the Academy of Applied Myofunctional Sciences. Our goal is to assess the prevalence of oromiofunctional disturbances and their impacts on sleep.

Finally, in collaboration with NASA, the data accumulated in our epidemiological studies are being used to evaluate the impact of the proliferation of artificial nighttime lights and electromagnetic fields on sleep and mood.

RECENT WORKS:

Ohayon, Maurice M, et al., 2017. “What is good sleep quality? A National Sleep Foundation Expert Consensus Statement” Sleep Health 3.1: 6-19

Ohayon, Maurice M., et al. “Refining duration and frequency thresholds of restless legs syndrome diagnosis criteria.” Neurology 87.24 (2016): 2546-2553.

Czeisler, Charles A., et al. “Sleep-deprived motor vehicle operators are unfit to drive: a multidisciplinary expert consensus statement on drowsy driving.” Sleep Health 2.2 (2016): 94-99.

Cancer Control and Cancer Survivorship Research

Oxana Palesh, PhD
Assistant Professor

Researchers in the Palesh Cancer Survivorship Laboratory at Stanford University focus on understanding the etiology and psychophysiology of treatment side effects in cancer patients and survivors with the goal of developing and testing novel therapeutic approaches to improve clinical outcomes and reduce symptoms, premature aging, and mortality. Our ongoing clinical research includes testing novel behavioral and pharmacological interventions as well as innovative delivery approaches for management of sleep, cancer related fatigue, circadian rhythm disruption, cancer-related cognitive impairments, and health-related quality of life functioning during and subsequent to cancer treatment. We are interested in developing interventions that can also be delivered widely in community oncology settings across the United States, and therefore we are testing these interventions’ feasibility and acceptability in such settings.

RECENT WORKS:

Innominato PF, Spiegel D, Ulusakarya A, Giacchetti S, Bjarnason GA, Lévi F, Palesh O. Subjective sleep and overall survival in chemotherapy-naïve patients with metastatic colorectal cancer. Sleep Med. 2015 Mar;16(3):391-8. doi:10.1016/j.sleep.2014.10.022. PubMed PMID: 25678361.

Palesh O, Aldridge-Gerry A, Zeitzer JM, Koopman C, Neri E, Giese-Davis J, Jo B, Kraemer H, Nouriani B, Spiegel D. Actigraphy-measured sleep disruption as a predictor of survival among women with advanced breast cancer. Sleep. 2014 May 1;37(5):837-42. doi: 10.5665/sleep.3642. PubMed PMID: 24790261; PubMed Central PMCID: PMC3985107.

Palesh O, Aldridge-Gerry A, Bugos K, Pickham D, Chen JJ, Greco R, Swetter SM. Health behaviors and needs of melanoma survivors. Support Care Cancer. 2014 Nov;22(11):2973-80. doi: 10.1007/s00520-014-2286-0. PubMed PMID: 24879390.

Kesler, S., Adams, M., Packer, M., Rao, V., Henneghan, A., Blayney, D., & Palesh, O. (in press). Disrupted brain network functional dynamics and hypercorrelation of structural and functional connectome topology in patients with breast cancer prior to treatment. Brain and Behavior.

Parker Lab
Social Neurosciences Research Program

Karen Parker, PhD
Associate Professor

Research in the Parker Lab Social Neurosciences Research Program at Stanford University spans primate models to patients with autism spectrum disorder (ASD). They are currently developing several innovative monkey models of social impairments, including studies of rhesus monkeys that “spontaneously” exhibit social deficits and common marmoset monkeys which are engineered to do so. Their clinical research studies include biomarker discovery in cerebrospinal fluid and blood samples collected from children with and without ASD, and clinical trials that test the efficacy of novel pharmacotherapies to improve social functioning in children with ASD. The Parker Lab is particularly interested in testing whether “social” neuropeptide (e.g., oxytocin and arginine vasopressin) signaling pathways are robust biomarkers of, and treatment targets for, social impairments in ASD.

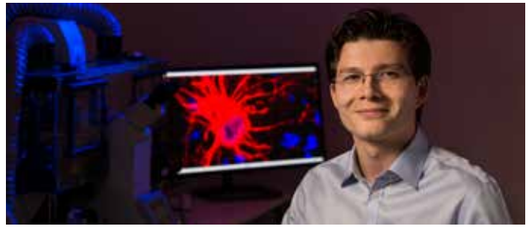
RECENT WORKS:

V. Sclafani et al., Early Predictors of Impaired Social Functioning in Male Rhesus Macaques (Macaca mulatta). PLoS One 11, e0165401 (2016).

D. S. Carson et al., Cerebrospinal fluid and plasma oxytocin concentrations are positively correlated and negatively predict anxiety in children. Mol Psychiatry 20, 1085-1090 (2015).

D. S. Carson et al., Arginine Vasopressin Is a Blood-Based Biomarker of Social Functioning in Children with Autism. PLoS One 10, e0132224 (2015).

K. J. Parker et al., Plasma oxytocin concentrations and OXTR polymorphisms predict social impairments in children with and without autism spectrum disorder. Proc. Natl. Acad. Sci. U.S.A, (2014).



Cellular Mechanisms of Neuropsychiatric Disorders Laboratory

Sergiu Pasca, MD
Assistant Professor

The Pasca Laboratory at Stanford University is primarily focused on the development of in vitro cellular models for studying human brain development and for identifying neuronal phenotypes for specific neuropsychiatric diseases. We are currently pursuing questions in three major inter-related areas. Firstly, we are interested in understanding human brain development and deciphering what makes human corticogenesis unique. We recently developed a novel 3D approach for generating a functional human cortex in vitro and we are generating tools to explore this unique 3D platform. Second, we are using state-of-the-art stem cell biology and neuroscience approaches in combination with high-throughput assays to identify phenotypes associated with neuropsychiatric disorders on the autism and schizophrenia spectrum, such as 22q11.2 deletion syndrome or Timothy syndrome. Third, we recognize the role of the immune system in modulating neuropsychiatric disease and are developing in vitro cellular models that capture the neuro-immune crosstalk.

RECENT WORKS:

Pasca A.M., Sloan S. (co-first), Clarke L.E., Tian Y., Makinson C., Huber N., Kim C-H., Park J-Y., O’Rourke N.A., Nguyen K., Smith S.J., Huguenard J., Geschwind D.H., Barres B.A., and Paşca S.P*. Functional cortical neurons and astrocytes from human pluripotent stem cells in 3D cultures. Nature Methods, 12(7): 671-8, 2015.

Paşca S.P*. Personalized human cortical spheroids. American Journal of Psychiatry, 173:1–2, 2016 (in press).

Deverman B.E., Pravdo P.L., Simpson B.P., Kumar S.R., Chan K.Y., Banerjee A., Wu W-L., Yang B., Huber N., Paşca S.P., Gradinaru V. Cre-dependent capsid selection yields AAVs for global gene transfer to the adult brain. Nature Biotechnology, 34(2): 204-209, 2016.

Paşca S.P.*, Panagiotakos G., and Dolmetsch R.E. Generating
human neurons in vitro and using them to understand psychiatric disorders. Annual Review of Neuroscience, 37:479-501, 2014.

Center for Neuroscience in Women’s Health

Natalie Rasgon, MD, PhD
Professor

Dr. Rasgon, Director of the Stanford Center for Neuroscience in Women’s Health, is currently conducting multiple studies. One is focused on the genetic biomarkers of executive stress and the analysis of telomere length to elucidate the potential effects of executive stress on one’s longevity. This research will be an important contribution to understandings of the health and wellness of executives in the US, which could impact creativity and productivity in future generations. She is also conducting a study on insulin resistance and accelerated cognitive aging. The main purpose is to describe the developmental trajectory of cognitive and neural biomarkers across the spectrum of metabolic dysfunction in overweight/obese adults younger than 50 years of age. The innovative study design will allow us to examine cognitive outcome development over a 25-year span without an investment into the longitudinal observation of changes in cognition and neural function.

RECENT WORKS:

Rasgon NL, Watson, KL, Epel, E, Blackburn, E, & Lin, J. Telomere length as a predictor of response to Pioglitazone in patients with unremitted depression: A preliminary study. Translational Psychiatry. 2016; 6: e709.

Wroolie, TE, Kenna, HA, Watson, K, & Rasgon, N. Cognitive effects of hormone therapy continuation or discontinuation in a sample of women at risk for Alzheimer’s disease. American Journal of Geriatric Psychiatry. 2015; 23(11): 1117-26

Rasgon NL, Kenna HA, Wroolie TE, Williams KE, Demuth BN, Silverman DH. Insulin resistance and medial prefrontal gyrus metabolism in women receiving hormone therapy. Psychiatry Res. 2014; 223(1): 28-36.

Kenna H, Hoeft F, Kelley R, Wroolie T, Demuth B, Reiss A, Rasgon N. Fasting plasma insulin and the default mode network in women at risk for Alzheimer’s disease. Neurobiology of Aging. 2012; 32(3): 641-649.

Center for Interdisciplinary Brain Sciences Research (CIBSR)

Allan Reiss, MD
Professor

Dr. Reiss is Director of DIBS. He participates in the clinical activities described for the division and supervises/mentors many early career scientists and clinician. Active clinical research projects include investigation of brain and cognitive-behavioral development in children with fragile X syndrome, Turner syndrome, Klinefelter syndrome, Williams syndrome, autism and young children with type 1 diabetes. In collaboration with other CIBSR and affiliated faculty, Dr. Reiss also conducts work focused on developing and utilizing advanced imaging and related research methods to improve our understanding of the neural basis of cooperation among two or more individuals, how an individual’s brain responds to unexpected events or distractions while driving, the effect of cycling exercise on attention and learning in children with ADHD, the effects of different treatment approaches on childhood anxiety, and the neuroscience and neurodevelopment of creativity and humor. He is principal investigator on an NIH-funded postdoctoral (T32) research training grant.

RECENT WORKS:

Fung LK, Reiss AL: Moving towards integrative, multi-dimensional research in modern psychiatry: lessons learned from fragile X syndrome. Biological Psychiatry 2015 Dec 18 [Epub ahead of print]. PMID: 26868443.

Klabunde M, Saggar M, Hustyi KM, Hammond JL, Reiss AL, Hall SS: Neural correlates of self-injurious behavior in Prader-Willi syndrome. Human Brain Mapping 2015 Jul 14. [Epubahead of print] PMID: 26173182.

Mazaika P, Weinzimer S, Mauras N, Buckingham B, White N, Tsalikian E, Hershey E, Cato A,Aye T, Fox L, Wilson L, Tansey M, tamborlane W, Peng D, Raman M, Marzelli M, Reiss AL: Variations in brain volume and growth in young children with type 1 diabetes. Diabetes 2015Oct 28. [Epub ahead of print]. PMID: 26512024.

Saggar M, Quintin EM, Kienitz E, Bott NT, Sun Z, Hong D, Chien YH, Liu N, Dougherty RF, Royalty A, Hawthorne G, Reiss AL: Pictionary-based fMRI paradigm to study the neural correlates of spontaneous improvisation and figural creativity. Scientific Reports 5:10894, 2015. PMID: 26018874. PMCID: PMC4446895.

Roberts Laboratory

Laura Roberts, MD, MA
Professor

The Roberts Laboratory is a multidisciplinary team of scholars engaged in empirical and analytic study of issues of ethical salience across research, clinical, education, and policy domains. The team is led by Dr. Laura Roberts, who serves as Chairman and the Katharine Dexter McCormick and Stanley McCormick Memorial Professor in the Department of Psychiatry and Behavioral Medicine at the Stanford University School of Medicine.

Dr. Roberts is an internationally recognized scholar in bioethics, psychiatry, medicine, and medical education. She has received extensive scientific peer-reviewed funding from the National Institutes of Health, the Department of Energy, and private foundations to perform empirical studies of modern ethical issues in research, clinical care, and health policy, with a particular focus on vulnerable and special populations. Her work has led to advances in understanding of ethical aspects of physical and mental illness research, societal implications for genetic innovation, the role of stigma in health disparities, the impact of medical student and physician health issues, and optimal approaches to fostering professionalism in medicine. Dr. Roberts was awarded the MacLean Prize in Ethics in 2015 from the University of Chicago in recognition of this work.

The laboratory was originally established as the Empirical Ethics Group at the University of New Mexico in 1997 where Dr. Roberts was appointed the inaugural Jack and Donna Rust Professor of Biomedical Ethics and founded the University of New Mexico's Institute for Ethics.

RECENT WORKS:

Siegler M, Roberts LW. Clinical Medical Ethics: Landmark Works of Mark Siegler, MD. New York: Springer Science+Business Media, LLC, 2017.

Roberts LW, Hilty D (editors). Handbook of Career Development in Academic Psychiatry and Behavioral Sciences. Second Edition. Arlington, VA: American Psychiatric Association Publishing, 2017.

Roberts LW, Kim JP. Healthy individuals' perspectives on clinical research protocols and influences on enrollment decisions. AJOB Empirical Bioethics. 2016 Dec 14. [Epub ahead of print].

Roberts LW. Addressing authorship issues prospectively: a heuristic approach. Academic Medicine. 2016 Jun 28. [Epub ahead of print]. doi: 10.1097/ACM.0000000000001285.

Translational Therapeutics Lab

Carolyn Rodriguez, MD, PhD
Assistant Professor

The Rodriguez Lab (Translational Therapeutics Lab) utilizes an interdisciplinary approach to examine the underlying basis of obsessive and compulsive behaviors at multiple levels of analysis (from molecule to circuit to network synchrony to behavior). Our aim is to translate these findings and develop targeted treatments for patients with severe mental illnesses like Obsessive-Compulsive Disorder (OCD) and hoarding disorder. We use a variety of techniques (fMRI/MRS/EEG) to observe the in vivo effects of novel drug administration on brain activity in human patients.

Current research focuses on abnormalities within the glutamate pathway, thought to play a role in OCD symptoms. Our discovery that ketamine, a glutamate receptor modulator, can quickly and effectively quell obsessive thoughts - opened a new area of research for rapid-acting therapeutics in OCD. We recently reported that rapastinel, a glutamate receptor modulator, also has rapid action, but with less side-effects than ketamine. We find combining rapid-acting treatments with behavioral therapy can further enhance patient outcomes.

Our lab also explores the brain mechanisms involved in hoarding behaviors and how these differ from normal collecting behavior. In parallel, we aim to raise public awareness regarding the challenges of mental illness and associated stigma by contributing to The Huffington Post and journals on topics such as clutter, ketamine, and the science of fear.

RECENT WORKS:

Rodriguez, C.I., Zwerling, M., Kalanthroff, E., Shen, H., Filippou, M., Jo, B., Simpson, H.B., Burch, R., Moskal, J.R. Effect of a Novel NMDA Receptor Modulator, Rapastinel (formerly GLYX-13) in OCD: A Pilot Study. American Journal of Psychiatry, 2016. Dec 01; 173 (12):1239-1241. PMID: 27903098.

Rodriguez, C.I., Wheaton, M., Zwerling, J., Steinman, S.A., Sonnenfeld, D., Galfalvy, H., and Simpson, H.B. Can Exposure-Based CBT Extend the Effects of Intravenous Ketamine in Obsessive-Compulsive Disorder? An Open-Label Trial. Journal of Clinical Psychiatry, 2016. March; 77(3) 408-410.

Wheaton, M., Abramowitcz, Jacoby, R.J., Zwerling, J., Rodriguez, C. I. An Investigation of the Role of Intolerance of Uncertainty in Hoarding Symptoms. Journal of Affective Disorders, 2016. March 15; 193:208-14. PMID: 26773912

National Center for PTSD Dissemination and Training Division at VAPAHCS

Craig Rosen, PhD
Associate Professor

Dr. Craig Rosen is involved in national efforts to increase use of best mental health practices and to advance implementation science. He focuses particularly on improving care for veterans. Although many VA clinicians are trained in effective evidence-based psychotherapies (EBPs) for PTSD, few veterans get these treatments. Dr. Rosen and colleagues completed a ten-site study that identified clinic leadership, culture, and operational factors that facilitated broader use of EBPs for PTSD. He chaired a VA workgroup that synthesized 20 prior studies on EBP implementation. He developed and tested a telephone-based intervention to improve treatment engagement. He is now evaluating national VA efforts to implement measurement-based care (i.e., use of standardized outcomes measures in clinical decision-making).

Dr. Rosen teaches two courses to Stanford PsyD students. He mentors a cadre of researchers and educators in his role as Deputy Director of the National Center for PTSD Dissemination and Training Division at the VA Palo Alto Health Care System.

RECENT WORKS:

Rosen, C. S., Azevedo, K., Calhoun, P., Capehart, B., Crawford, E., Greenbaum, M.A., Greene, C. J., Harris, A., Hertzberg, M., Lindley., S., Smith, B., Tiet, Q. Q., Wood, A., & Schnurr, P.P. (2017). An RCT of effects of telephone care management on treatment adherence and clinical outcomes among veterans with PTSD. Psychiatric Services, 68, 151-158. doi: appips201600069.

Rosen, C. S., Eftekhari, A., Crowley, J., Kuhn, E., Trent, L., Smith, B., Martin, N., Tran, T., Ruzek, J. I. (2017). Maintenance and reach of exposure psychotherapy for posttraumatic stress disorder 18 months after training. Journal of Traumatic Stress, 1, 63-70. doi: 10.1002/jts.22153.

Rosen, C. S., Matthieu, M. M., Cook, J. M., Wiltsey-Stirman, S., Landes, S. J., Bernardy, N. C., Chard, K. M., Crowley, J., Eftekhari, A., Finley, E. P., Hamblen, J. L., Rosen, Eftekhari, Crowley et al JTS 2017Harik, J. M., Kehle-Forbes, S .M., , Meis, L. A., Rodriguez, A. L., Ruggiero, K. J., Ruzek, J. I., Smith, B. N., Trent, L. & Watts, B. V. (2016) A review of studies on the system-wide implementation of evidence-based psychotherapies for posttraumatic stress disorder in the Veterans Health Administration. Administration and Policy in Mental Health and Mental Health Services Research. 43, 957-977. DOI 10.1007/s10488-016-0755-0

Zimmerman, L., Lounsbury, D., Rosen, C. S., Kimerling, R., Trafton, J., & Lindley, S. (2016). Participatory system dynamics modeling with VA mental health stakeholders: Increasing engagement and precision to improve implementation of evidence-based psychotherapies. Administration and Policy in Mental Health and Mental Health Services Research. 43, 834-849. DOI 10.1007/s10488-016-0754-1

Breland, J. Y., Greenbaum, M.A., Zulman, D., M. & Rosen, C. S. (2015). The effect of medical comorbidities on male and female veterans' use of psychotherapy for PTSD. Medical Care. 53(4 Suppl 1), S120-7. doi:10.1097/MLR.0000000000000284.

Traumatic Stress Technology and Measurement-Based Care

Josef Ruzek, PhD
Professor

Dr. Joe Ruzek began a collaboration with Dr. Alan Louie and others from the Department to develop a workshop and course on applying the methods of design science to help mental health leaders develop innovative solutions to problems. This work is part of the larger Reimagining Mental Healthcare initiative aimed at integrating information technology, design thinking, and implementation science to reinvent mental health services. Dr. Ruzek also continued work on two randomized controlled trials of online training methods focusing on training component cognitive-behavioral therapy skills and increasing familiarity and use of PTSD Clinical Practice Guidelines. He continued to direct the VA's National Center for PTSD Dissemination and Training Division located at the VA Palo Alto Health Care System.

Within the VA, Dr. Ruzek led the Clinician Training workgroup of the national initiative to implement measurement-based care across the healthcare system, and he co-chaired the national workgroup tasked with developing guidance for integration of web and phone technology within VA mental health services.

RECENT WORKS:

Rosen, C., Eftekhari, A., Crowley, J., Smith, B., Kuhn, E., Trent, L., Martin, N., Tran, T., & Ruzek, J. I. (In press). Maintenance and reach of exposure psychotherapy for posttraumatic stress disorder 18 months after training. Journal of Traumatic Stress.

Kuhn, E., Kanuri, N., Hoffman, J. E., Ruzek, J. I., & Taylor, C. B. (in press). A randomized controlled trial of the PTSD Coach app with community trauma survivors. Journal of Consulting and Clinical Psychology.

Ruzek, J. I., Kuhn, E., Jaworski, B. K., Owen, J. E., & Ramsey, K. M. (In press). Mobile mental health interventions following war and disaster. mHealth.

Edwards, K. S., Rosen, R., & Ruzek, J. I. (In press). A standardized patient methodology to assess CBT skills performance: Development and testing in a randomized controlled trial of web-based training. Training and Education in Professional Psychology.

Rosen, R. C., Ruzek, J. I., & Karlin, B. E. (2017). Evidence-based training in the era of evidence-based practice: Challenges and opportunities for training of PTSD providers. Behaviour Research and Therapy, 88, 37-48..

Brucia, E., Cordova, M. J., & Ruzek, J. I. (2017). Critical incident interventions: Crisis response and debriefing. In C. Mitchell and E. Dorian (Eds.), Police psychology and its growing impact on modern law enforcement (pp. 119-142). IGI Global.

Eating and Weight Disorders

Debra Safer, MD
Associate Professor

Dr. Safer and the members of her research team are collaborating on several projects currently. These include a study examining whether Qsymia (phentermine-topiramate), a medication that has been FDA approved for obesity, can be effectively repurposed to target symptoms of binge eating and purging. They are investigating this through a double blind randomized controlled trial using a crossover design. In addition, through a multi-site R01 with researchers in N. Dakota, they are studying the problem of weight regain after bariatric surgery using ecological momentary assessment (EMA) to understand the role of loss of control eating. In a study with important departmental implications, Dr. Safer and her team are assessing the acceptability and feasibility of measurement based care in "real world" clinic settings. Another study examines the role of undetected hypothyroidism in post-bariatric weight regain. The pre-bariatric evaluation is the focus of a different study as a means of predicting poor outcomes after bariatric surgery.

Additional research collaborations involve improving body image among middle age women, improving satisfaction after orthognathic surgery, and evaluating the feasibility and acceptability of an intervention to reduce the risk of obesity among children whose parents underwent bariatric surgery in the past year.

RECENT WORKS:

Vuorinen A-L, Strahilevitz M, Wansink B, & Safer D.L. (in press). How Shifts in Enjoyment of Healthy and Unhealthy Behaviors Relate to Post-Bariatric Weight-Loss Success. Bariatric Surgical Practice and Patient Care.

Robinson AH, Adler S, Darcy AM, Osipov, L. Safer DL* (2016). Early Adherence Targeted Therapy (EATT) for Post-Bariatric Maladaptive Eating Behaviors. Cognitive and Behavioral Practice. 23: 548-560. doi:10.1016/j.cbpra.2015.12.003

Safer, DL, Adler, S., Sethi, S., Fowler, N., Toyama, H., Crisp C., Qsymia For Binge Eating Disorder And Bulimia Nervosa: Protocol and Preliminary Results From A Randomized, Double Blind, Cross-Over Study. Poster to be presented at the Eating Disorder Research Society (EDRS) in New York, NY. October, 2016.

Fowler N, Adler S, Najarian T, Rowsemitt CN, Safer DL. Maladaptive Hypothyroidism, or The Famine Response, After Bariatric Surgery: TSH not the Gold Standard For Detection. Poster to be presented at the 2016 Annual Meeting of the American Society for Metabolic and Bariatric Surgery (ASMBS) for Obesity Week, November 2016. New Orleans, LA.

Extracting Insights from Brain Dynamics in Healthy and Patient Populations

Manish Saggar, PhD
Assistant Professor

The overarching goal for Dr. Saggar's research is to develop computational methods that will allow for extracting insights from brain dynamics in healthy and patient populations. Funded by a career development award (K99/R00, 2015-20; NIMH) and a young investigator award (NARSAD, 2016-18; Brain Behavior Foundation), he is currently developing methods to model variations or "transitions" in underlying neural processes during resting state in healthy participants as well as in individuals with neurodevelopmental disorders.

Dr. Saggar strongly believes that information about transitions in brain dynamics could in turn be used to characterize clinical disorders. Thus, looking forward, rapid transitions might characterize disorders with impaired attention, while "fixed-states" might indicate internal ruminations most characteristic of depressive or anxiety disorders. Capturing and quantifying transitions across mental processes at an individual level could also provide a novel avenue to effectively translate results from group-bases analysis to person-centric clinical applications (i.e., precision medicine). Additionally, he is also working towards understanding the neural correlates of creative capacity across lifespan.

RECENT WORKS:

Saggar, M., Tsalikian, E., Mauras, N., Mazaika, P., White, N. H., Weinzimer, S., et al. (2016). Compensatory Hyper-Connectivity in Developing Brains of Young Children with Type 1 Diabetes. Diabetes, db160414. http://doi.org/10.2337/db16-0414

Saggar, M., Quintin, E.-M., Bott, N. T., Kienitz, E., Chien, Y.-H., Hong, D. W.-C., et al. (2016). Changes in Brain Activation Associated with Spontaneous Improvization and Figural Creativity After Design-Thinking-Based Training: A Longitudinal fMRI Study. Cerebral Cortex, bhw171. http://doi.org/10.1093/cercor/bhw171

Bruno, J. L., Hosseini, S. M. H., Saggar, M., Quintin, E.-M., Raman, M. M., & Reiss, A. L. (2016). Altered Brain Network Segregation in Fragile X Syndrome Revealed by Structural Connectomics. Cerebral Cortex, bhw055. http://doi.org/10.1093/cercor/bhw055

Saggar, M., Hosseini, S. M. H., Bruno, J. L., Quintin, E.-M., Raman, M. M., Kesler, S. R., & Reiss, A. L. (2015). Estimating individual contribution from group-based structural correlation networks. NeuroImage, 120, 274–284. http://doi.org/10.1016/j.neuroimage.2015.07.006

Saggar, M., Zanesco, A. P., King, B. G., Bridwell, D. A., MacLean, K. A., Aichele, S. R., et al. (2015). Mean-field thalamocortical modeling of longitudinal EEG acquired during intensive meditation training. NeuroImage, 114, 88–104. http://doi.org/10.1016/j.neuroimage.2015.03.073

Mood Disorders Center and Depression Research Clinic

Alan Schatzberg, MD
Professor

At some time in our lives, one in five of us will develop a mood disorder, such as depression or bipolar disorder. Its impact will reverberate far beyond any individual's life. Families, friends, communities, economies — all are affected by these diseases. By 2020, depression will rank second in morbidity among all illnesses worldwide; bipolar disorder will rank fifth. Tragically, suicide, often triggered by a mood disorder, takes more than one million lives worldwide every year.

Although the incidence and impact of mood disorders are undeniably on the rise, hope for solutions has never been higher. Through the Stanford Mood Disorders Center and Research Program, scientists and physicians are building on Stanford's traditions of excellence, healing, and innovation. They are leveraging new knowledge of genetics and the brain's molecular processes, and drawing on new techniques for imaging and healing the brain. Merging Stanford's expertise across disciplines—psychiatry, biology, engineering, and myriad other fields—they are streamlining the process of translating laboratory discoveries into breakthrough treatments.

For the past 24 years, Stanford has led the quest for new knowledge and therapies for mood disorders. Today, the center is expanding its reach and mobilizing Stanford's diverse expertise toward a powerful shared mission: to overcome mood disorders through innovation and compassion.

RECENT WORKS:

A Cognitive-Emotional Biomarker for Predicting Remission with Antidepressant Medications: A Report from the iSPOT-D Trial NEUROPSYCHOPHARMACOLOGY Etkin, A., Patenaude, B., Song, Y. J., Usherwood, T., Rekshan, W., Schatzberg, A. F., Rush, A. J., Williams, L. M. 2015; 40 (6): 1332-1342 More

Decreased Hypothalamic Functional Connectivity with Subgenual Cortex in Psychotic Major Depression NEUROPSYCHOPHARMACOLOGY Sudheimer, K., Keller, J., Gomez, R., Tennakoon, L., Reiss, A., Garrett, A., Kenna, H., O'Hara, R., Schatzberg, A. F. 2015; 40 (4): 849-860 More

Circadian dysregulation of clock genes: clues to rapid treatments in major depressive disorder MOLECULAR PSYCHIATRY Bunney, B. G., Li, J. Z., Walsh, D. M., Stein, R., Vawter, M. P., Cartagena, P., BARCHAS, J. D., Schatzberg, A. F., Myers, R. M., Watson, S. J., Akil, H., Bunney, W. E. 2015; 20 (1): 48-55 More

Psychiatric genome-wide association study analyses implicate neuronal, immune and histone pathways NATURE NEUROSCIENCE O'Dushlaine, C., Rossin, L., Lee, P. H., Duncan, L., Parikshak, N. N., Schatzberg, A. F., et al. 2015; 18 (2): 199-209

Biological Basis for Gender Differences in Behavior

Nirao Shah, MD, PhD
Professor

Dr. Nirao Shah's research focuses on understanding how our brain controls gender differences in behavior. He developed this research program as a Jane Coffin Childs and Burroughs Wellcome Fellow in Nobel laureate Richard Axel's laboratory at Columbia University. Dr. Shah started his faculty position at UCSF in 2004 and moved to Stanford University in the Fall of 2016. His research program is widely recognized in terms of high impact publications and funding. He recently published two high profile reviews and a collaborative publication identifying new projections of retinal output neurons, enabled by a neural circuit tracing tool his lab developed. From his lab at Stanford, Dr. Shah and his team are submitting for publication a study in which they identify mechanisms whereby social context powerfully influences male aggression.

Equally exciting are the research directions Dr. Shah is developing in collaboration with Stanford colleagues, including chemical biological approaches to understand hormone signaling (Justin du Bois), genome mapping of gender biases in gene expression (William Greenleaf), and human brain mapping of gendered behaviors (Allan Reiss).

RECENT WORKS:

Yang T, and Shah NM. Molecular and neural control of sexually dimorphic behaviors. Curr Opin Neurobiol, 38:89-95 (2016)

Bayless DW, and Shah NM. Genetic dissection of neural circuits underlying sexually dimorphic social behaviors. Philos Trans R Soc Lond B Biol Sci, 371:pii20150109 (2016).

Delwig A, Larsen DD, Yasumara D, Yang CF, Shah NM, and Copenhagen DR. Retinofugal projections from melanopsin-expressing retinal ganglion cells revealed by intraocular injections of Cre-dependent virus. PLoS One, 11(2):e0149501 (2016).

Stanford Pediatric Psychosocial Optimization Tool (SPPOT)

Richard Shaw, MD
Professor

Dr. Richard Shaw is involved in several research endeavors including the Stanford Pediatric Psychosocial Optimization Tool (SPPOT) – A Measure to Assess the Psychosocial Needs of Pediatric Solid Organ Transplant Candidates. In collaboration with the Division of Pediatric Cardiology, Dr. Shaw and Dr. Lauren Mikula Schneider from our Department are developing a scale to assess the psychosocial needs of pediatric solid organ transplant candidates. The scale is based on earlier work in our Division to help assess patients who are at high risk of nonadherence with their transplant medications which is one of the primary factors associated with organ rejection and loss. The goal is to pilot the measure in the organ transplant clinics at LPCH this coming year and then assess the predictive power of the scale with regard to medical outcomes in a collaboration with other transplant centers.

Dr. Shaw is also working on the Pediatric Psychiatry Consult Service, an App to Deliver Hypnosis Scripts for Use in the Pediatric Medical Setting. The Pediatric Psychiatry Consult Service is developing an LPCH App which will contain a series of scripts used to deliver hypnosis to pediatric patients at LPCH. The App will target common clinical issues seen in the medical setting. These include pain, nausea, anxiety, and insomnia. The App when developed will be offered free of charge to all LPCH patients and family members.

Pediatric Mood Disorders Program
Pediatric Emotion and Resilience Lab (PEARL)

Manpreet Singh, MD, MS
Assistant Professor

The Pediatric Mood Disorders Program at the Stanford University School of Medicine is a program dedicated to improving the lives and well-being of children, adolescents, and families with or at risk for developing major mood disorders. The program strives to improve knowledge of healthy brain and behavioral development through a deeper understanding of how children adapt to stress. Staff in our program are dedicated to identifying biological and environmental risk factors, understanding disease pathophysiology and developmental outcomes, and developing new treatments for mood disorders of childhood onset. The Program's research is multi- and interdisciplinary, bringing together experts from the fields of psychiatry, psychology, computer science, biostatistics and genetics to explore and seek answers for complex questions related to brain-behavior relations in developing youth.

The vision is a program that strives to improve the mental health of children and adolescents affected by mood disorders and to transform delivery of care through fully integrated, globally recognized research, education, and innovation.

RECENT WORKS:

Singh MK, Kelley RG, Chang KD, Gotlib IH. Amygdala resting state functional connectivity in adolescents with Bipolar I Disorder. J American Academy of Child and Adolescent Psychiatry. 2015 Sep;54(9):763-70. PMCID: PMC4548854.

Singh MK, Garrett A, Chang KD. Using neuroimaging to evaluate and guide pharmacological and psychotherapeutic treatments for mood disorders in children. CNS Spectrums 2015 Feb 9:1-10. PMID: 25659836.

Colich NL, Foland-Ross LC, Eggleston C, Ordaz SJ, Singh MK, Gotlib IH. Prefrontal Dysfunction During Sustained Attention with Emotional Interference in Adolescent Depression. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging (In Press)

Gershon A, Singh MK*. Sleep in Adolescents with Bipolar I Disorder: Stability and Relation to Symptom Change, Journal of Clinical Child and Adolescent Psychology (In Press).

Kim E, Garrett A, Boucher S, Park MH, Howe ME, Sanders E, Kelley RG, Reiss AL, Chang KD, Singh MK*. Anxious temperament modulates medial temporal neuroanatomy in youth at risk for bipolar disorder. Journal of Child and Adolescent Psychopharmacology (In Press).

Center on Stress and Health

David Spiegel, MD
Professor

Our Center on Stress and Health studies mind-brain-body relationships between stress and support with sleep, endocrine and immune function, and cancer progression in the following areas:

Psychophysiology and Clinical Effects of Hypnosis. We have conducted neuroimaging studies of hypnosis to understand its brain basis. We have demonstrated hypnotic effects on somatosensory processing using event-related potentials, visual processing using positron emission tomography, and have identified resting state differences in functional connectivity between individuals high and low in hypnotizability using functional magnetic resonance imaging. We have developed a hypnosis video home-training program designed to help parents teach their children self-hypnosis techniques for inducing relaxation and hypnotic analgesia in preparation for difficult medical procedures.

PTSD, Dissociation and Trauma. We identified the role of dissociative processes in both acute and chronic response to traumatic stress, resulting in a new DSM-IV diagnostic category of Acute Stress Disorder, and a new Dissociative Subtype of PTSD in DSM-5.

Psychotherapeutic Support and Cancer Survival. We conducted the first randomized clinical trial that provided evidence that psychotherapeutic support resulted in improved mood, reduced pain, and longer survival with metastatic breast cancer.

Psychophysiological Mediators of Cancer Survival. Our research group has examined psychophysiological mediators of the effect of support on survival. We have so far identified three significant predictors of survival time with metastatic breast cancer: 1) loss of normal diurnal variation in cortisol; 2) depression; and 3) sleep disruption.

RECENT WORKS:

Lang EV, Benotsch EG, Fick LJ, Lutgendorf S, Berbaum ML, Berbaum KS, Logan H, Spiegel D. Adjunctive non-pharmacological analgesia for invasive medical procedures: a randomised trial. Lancet. 2000;355(9214):1486-90.

Hoeft F, Gabrieli JD, Whitfield-Gabrieli S, Haas BW, Bammer R, Menon V, Spiegel D. Functional brain basis of hypnotizability. Archives of General Psychiatry. 2012;69(10):1064-72.

Neuroscience of Addiction Laboratory

Edith Sullivan, PhD
Professor

Alcohol use disorder remains a leading cause of morbidity and mortality in the U.S. and is a major comorbid factor in numerous medical and psychiatric disorders, including HIV infection. Despite its high prevalence, societal and personal cost, and untoward effects on cognitive, motor, and emotional abilities, neural substrates of alcoholism's lasting effects on the brain and its functions are only now unfolding. The Sullivan-Pfefferbaum joint program in human and translational alcoholism research has focused on identifying the location and extent of alcohol-related neuropathology on neural structure and connectivity, factors that influence degradation, and areas open to recovery or compensation. This goal is achieved by determining the condition of network nodes with structural MRI, network connectivity with microstructural measures of diffusion tensor imaging (DTI) fiber tracking, and functional connectivity with task-activated and resting-state functional connectivity MRI (fcMRI) and noninvasive cerebral blood flow (CBF) methods; functional significance of compromise is established with neuropsychological testing. Parallel, in vivo animal models of alcohol exposure using high-field MRI and optogentic approaches enable pursuit of mechanisms underlying neural disruption and opportunities for recovery. Analysis is quantitative and includes novel machine learning technology required for simultaneous analysis of complex data sets and aimed at identifying biomedical phenotypes that improve the mechanistic understanding, diagnosis, and treatment of neuropsychiatric disorders.

RECENT WORKS:

Le Berre, AP, Müller-Oehring EM, Kwon D, Serventi MR, Pfefferbaum A, Sullivan EV (2016): Differential compromise of prospective and retrospective metamemory monitoring and their dissociable structural brain correlates. Cortex 81:192-202.

Sullivan EV, Lane B, Kwon D, Meloy MJ, Tapert SF, Brown SA, Colrain IM, Baker FC, De Bellis MD, Clark DB, Nagel BJ, Pohl KM, Pfefferbaum A (2016): Structural brain anomalies in healthy adolescents in the NCANDA cohort: Relation to neuropsychological test performance, sex, and ethnicity. Brain Imaging and Behavior Epub 2016 Oct 8

Zahr NM, Sullivan EV, Rohlfing T, Mayer D, Collins AM, Luong R, Pfefferbaum A (2016): Concomitants of alcoholism: differential effects of thiamine deficiency, liver damage, and food deprivation on the rat brain in vivo. Psychopharmacology 233:2675-2686.

Zhang Y, Kwon D, Esmaeili-Firidouni P, Pfefferbaum A, Sullivan EV, Javitz H, Valcour V, Pohl KM (2016): Extracting patterns of morphometry distinguishing HIV associated neurodegeneration from Mild Cognitive Impairment via group cardinality constrained classification. Human Brain Mapping 37:4523-4538.

Bipolar and Depression Research Program

Patricia Suppes, MD, PhD, Professor
Michael Ostacher, MD, MPH, MMSc, Associate Professor

The VA Bipolar and Depression Research Program is the mood disorders portion of our Department based at the VA Palo Alto Health Care System. Our mission is to study clinical and translational neuroscience critical to people, especially Veterans, with bipolar disorder and major depressive disorder. We focus on three critical areas:

1) Clinical trials of psychopharmacologic, psychotherapeutic, neurotherapeutic, devices, and web-based interventions in both Veterans and civilians with mood disorders, including those with substance use and other comorbidities, along with a focus on suicide prevention.

2) Promulgation, dissemination, and implementation of evidence-based guidelines for the treatment of multiple populations.

3) Understanding the pathophysiology and neurophysiology of bipolar disorder and major depressive disorder.

We are currently participating in a nationwide, 29-site CSP study of lithium for suicide prevention in Veterans, two web-based studies of interventions for bipolar disorder (one, a NIDA-funded study of online Acceptance and Commitment Therapy for smoking cessation in bipolar disorder; the other an NIMH-funded study of adjunctive, online, crowd-sourced psychoeducation), an international study of infliximab (a TNF-α inhibitor) for bipolar depression, and a trial of the impact of pharmacogenetic information on prescribing in major depressive episodes. We are embarking on new approaches to treat PTSD for our Veteran population, including a trial of a tablet-based device that help moderate breathing by measuring and monitoring expired CO2. We recently received a three-year renewal from the VA Central Office of our site as one of nine national Network of Dedicated Enrollment Sites (NODES) for the VA Cooperative Studies Program (CSP).

RECENT WORKS:

Suppes T, Silva R, Cucchiaro J, Mao Y, targum S, Streicher C, Pikalov A, Loebel A. Lurasidone for the Treatment of Major Depressive Disorder With Mixed Features: A Randomized, Double-Blind, Placebo-Controlled Study. Am J Psychiatry. April 2016;173(4):400-7

McIntyre R, Suppes T, Tandon R, Ostacher M. Florida Best Practice Psychotherapeutic Medication Guidleines for Adults with Major Depressive Disorder. Journal of Clinical Psychiatry. In press.

Alzheimer's Research Center

Jared Tinklenberg, MD
Professor

Dr. Tinklenberg, MD, serves as Director of the Stanford/VA Alzheimer's Research Center (ARC) alongside Dr. Yesavage (Co-Director). Current research is focused on advancing knowledge and understanding of memory disorders. Since 1981, the ARC has been conducting leading research into the causes and treatment of Alzheimer's disease (AD). AD is a progressive disorder of the brain that affects approximately thirty five million people worldwide. The center's multidisciplinary staff includes clinicians and researchers from the Stanford University Department of Psychiatry and from the VA Palo Alto Health Care System. Funded by the U.S. Department of Veterans Affairs, California Department of Health Services, and other sources, the Stanford/VA Alzheimer's Research Center offers information, referral services, and comprehensive diagnostic assessments of individuals with memory problems. In addition to providing advanced caregiver support, intervention, community education, and professional training, the center plays an important role in developing a central pool of information on Alzheimer's disease in California.

RECENT WORKS:

Tinklenberg JR, Kraemer HC, Yaffe K, O'Hara R, Ringman JM, Ashford JW, Yesavage JA, Taylor JL. Donepezil Treatment in ethnically diverse patients with Alzheimer's disease. Am J Geriatric Psychiatry, 23(4):384-390, 2015.

Lazzeroni, L. C., Halbauer, J. D., Ashford, J.W., Noda, A., Hernandez, B., Azor, V., Hozack, N., Hasson, N., Yesavage, J.A., Tinklenberg, J. R. (2013). Memantine is associated with longer survival than Donepezil in a Veterans Affairs prescription database, 1997 to 2008, Journal of Alzheimer's Disease, 36, 791-798, 2013.

Winchester J, Dick MB, Gillen D, Reed B, Miller B, Tinklenberg JR, Mungas D, Chui H, Galasko D, Hewett L, Cotman CW. Walking stabilizes cognitive functioning in Alzheimer's disease (AD) across one year. Arch Gerontol Geriatr, 56(1):96-103, 2013.

Tinklenberg JR, Kraemer HC, Yaffe K, Ross L, Sheikh J, Ashford JW, Yesavage JA, Taylor JL. Donepezil treatment and Alzheimer disease: can the results of randomized clinical trials be applied to Alzheimer disease patients in clinical practice? Am J Geriatr Psychiatry, 15(11):953-60, 2007.

Ashford JW, Kraemer HC, Tinklenberg JR, O'Hara R, Taylor JL, Yesavage JA. Statistical and pharmacoeconomic issues for Alzheimer's screening. Alzheimers Dement, 3(2):126, 2007.

Huey ED, Taylor JL, Luu PA, Oehlert J, Tinklenberg JR. Factors associated with use of medications with potential to impair cognition or cholinesterase inhibitors among Alzheimer's disease patients. Alzheimers Dement, 2(4):314-21, 2006.

Mental Health in Veterans

Ranak Trivedi, PhD
Professor

Dr. Trivedi's research focuses on the prevention and treatment of mental illness in two at-risk populations, Veterans, and family caregivers. She leads a national workgroup within Veterans Health Administration (VHA) to evaluate clinical outcomes for Veterans with mental illness who are seen in VA primary care. They have shown that Veterans with mental illness have worse clinical outcomes than those without a mental illness, and that this difference is not due to worse quality of preventive care. These Veterans have shortened lifespan, and we are examining the combinations of mental illnesses that have highest mortality. In parallel, Dr. Trivedi has both VA and NIH funding to develop tools to ensure timely identification of caregiver stress, programs that can reduce this stress through enhancing patient-caregiver collaborations, and sociobehavioral mechanisms that underlie these collaborations. They have an established self-management program for heart failure patients and their caregivers, and recently received funding to develop a web-based version of the same. She is piloting a brief tool to screen for depression and caregiver burden among caregivers of patients undergoing hemodialysis or chemotherapy at the time of patient point of care. This program has the potential of improving early identification and treatment of depression and caregiver burden. Both are common but are difficult to detect since caregivers often neglect their own care.

RECENT WORKS:

Trivedi, R.B., Slightam, C., Fan, V.S., Rosland, A-M., Nelson, K., Timko, C., Asch, S.M., Zeliadt, S.B., Heidenreich, P., Hebert, P.L., & Piette, J.D. (2016). A Couples' Based Self-Management Program for Heart Failure: Results of a Feasibility Study. Frontiers in Public Health, 4, 171.

Trivedi, R.B., Post, E.P., Sun, H., Pomerantz, A., Saxon, A.J., Arnow, B., Curtis, I., Fihn, S.D., & Nelson, K. (2015). Prevalence, Comorbidity, and Prognosis of Mental Health Among US Veterans. American Journal of Public Health, 105, 2564-2569.

Piette, J.D., Striplin, D., Marinec, N. A., Chen, J., Trivedi, R.B., Aron, D.C., Fisher, L., Aikens, J.E. A mobile health intervention supporting heart failure patients and their informal caregivers: A randomized comparative effectiveness trial. Journal of Medical Internet Research, 17(6):e142.

The Program on the Genetics of Brain Function

Alexander Urban, PhD
Assistant Professor

The Program on the Genetics of Brain Function (GBF) includes the labs of Douglas Levinson and Alex Urban. We investigate genetic sequences and mechanisms with relevance to the etiology of psychiatric disorders.

The Urban lab is investigating the effects of DNA sequence variation in human genomes on normal and abnormal brain development and function.

We develop and use next-generation sequencing based methods to carry out functional genomic and epigenomic studies along several interrelated trajectories of investigation:

- Detection and characterization of genomic sequence variation associated with neuropsychiatric disorders such as schizophrenia, autism spectrum disorders, depression, bipolar disorder, and Tourette syndrome.
- Copy number and structural variants (CNV/SVs) in the human genome DNA sequence: their detection, exact mapping and their effects on multiple levels of molecular control and regulation (DNA methylation, chromatin conformation, gene expression patterns), using iPSC stem cell model systems.
- Somatic genome and transcriptome variation, i.e. genomic mosaicism: its detection, characterization and the elucidation of its functional consequences, in stem cell model systems and primary tissue samples.

The Urban lab is also affiliated with the Department of Genetics and is part of the Program on Genetics of Brain Function as well as a member of (and located in) the Stanford Center for Genomics and Personalized Medicine. Dr. Alex Urban is a Tasha and John Morgridge Faculty Scholar of the Stanford Child Health Research Institute.

RECENT WORKS:

Mills RE, Walter K, Stewart C, Handsaker RE, Chen K, Alkan C, Abyzov A, Yoon SC, Ye S et al. and the 1000 Genomes Project. Mapping structural variation at fine scale by population-scale genome sequencing. Nature. 2011 Feb 3; 470: 59-65.

Abyzov A, Mariani J, Palejev D, Zhang Y, Haney MS, Tomasini L, Rosenberg-Belmaker L, et al. Somatic copy number mosaicism in human skin revealed by induced pluripotent stem cells. Nature. 2012 Dec 20; 492(7429): 438-42.

PanLab: Personalized and Translational Neuroscience Lab

Leanne Williams, PhD
Professor

In the Williams PanLab, Dr. Williams and her team are changing the way we understand and treat mental illness. Depression, anxiety and attention deficit disorders are the most prevalent psychiatric conditions among adults and children. Without preventative approaches and proper treatment, they cause chronic disability. These disorders are often accompanied by other serious problems, such as addiction and obesity. The PanLab is developing a taxonomy that characterizes how each person's symptom experiences relate to underlying brain circuit function, physiology and genetic contributions. Using this taxonomy, we are creating neuroscience-informed tests that guide more precise diagnoses and treatment choices. The PanLab is working with partners at Stanford, the VA Palo Alto and in the community to get these tests and treatments into the field much faster … the right treatment, at the right time, to the right person.

PanLab's projects span the basic science creation of new taxonomies, application of these taxonomies in the clinic and the integration of computation and technology in order to accelerate both discovery and clinical translation:

- Developing a brain-based taxonomy for mental disorders.
- Using a brain-based taxonomy to guide optimal intervention strategies.
- Integrating precision mental health and neuroscience with computation and new technology.

RECENT WORKS:

Williams, LM. Defining biotypes for depression and anxiety based on large-scale circuit dysfunction: A theoretical review of the evidence and future directions for clinical translation. Depression and anxiety, 2017. 34(1):9-24.

Williams, L.M. Precision Psychiatry: A neural circuit taxonomy for depression and anxiety. The Lancet Psychiatry, 2016, 3 (5), 472-480.

Leikauf, J.E., Griffiths, K.R., Saggar, M., Hong, D.S., Clarke, S., Efron D., Tsang, T.W., Hermens, D.F., Kohn, M.R., Williams, L.M. Identification of biotypes in Attention-Deficit/ Hyperactivity Disorder. A report from a randomized, controlled trial. Personalized Medicine in Psychiatry, 2017, in press.

Goldstein-Piekarski, A.N., Korgaonkar, M.S. Green, E.,Suppes, T., Schatzberg, A.F., Hastie, T., Nemeroff, C.B., Williams, L.M. Human amygdala engagement moderated by early life stress exposure is a biobehavioral target for predicting recovery on antidepressants. Proceedings of the National Academy of Sciences, 2016. 113 (42), 11955-11960.

Evidence-Based Psychosocial Treatments

Shannon Wiltsey-Stirman, PhD
Assistant Professor

In many mental health treatment settings, few if any evidence-based psychosocial treatments (EBPs) are available. The overarching goal of our lab's program of research is to determine how to facilitate the high-quality delivery of EBPs in public sector mental health settings. Areas of emphasis include training and consultation, treatment fidelity and adaptation, and the identification of strategies that promote sustained implementation of EBPs.

In the past year, we completed research comparing therapist- and client-level outcomes for different methods of training community-based therapists in EBPs. We also launched an NIMH and CIHR-funded study that compares two strategies for supporting therapists and clinics in their efforts to improve and sustain the use of Cognitive Processing Therapy (CPT) for PTSD in three state and national mental health systems.

Reliable and scalable alternatives to the current, cost-intensive approaches to assessing and supporting EBP fidelity (skilled implementation of treatment elements) are critical to support implementation in low-resource settings. Some of our other NIMH-funded work focuses on identification of new methods to assess CPT fidelity and quality. We are planning to launch a study that extends this program of research to other cognitive behavioral therapies by leveraging routine clinical materials and mobile technology to identify optimal strategies for assessing and supporting treatment fidelity.

RECENT WORKS:

Wiltsey-Stirman, S., Gutner, C., Graham, J., & Langdon, K. (2016). Bridging the gap between research and practice in mental health service settings: An overview of developments in implementation theory and research. Behavior Therapy 47, 920-936.

Wiltsey Stirman, S., Finley, E., Shields, N., Cook, J., Suvak, M., Dimeff, L., Koerner, K., Haine-Schlagel, R. Gutner, C., Burgess, J., Gagnon, D., Beristianos, M., Mallard, K., Ramirez, V., Monson, C. (2017). Study Protocol for Improving and Sustaining Delivery of CPT for PTSD in Mental Health Systems: A Cluster Randomized Trial. Implementation Science.

Ross, D.F., Ionita, G.N., & Wiltsey Stirman, S. (in press). Implementation of a patient-reported routine outcomes monitoring system in a national network of Operational Stress Injury clinics. Administration and Policy in Mental Health Services and Mental Health Services Research. Available online ahead of press: doi:10.1007/s10488-016-0749-y.

Marques, L., Eustis, E. H., Dixon, L., Valentine, S. E., Borba, C., Simon, N. M., Kaysen, D., & Wiltsey Stirman, S. (2016). Delivering cognitive processing therapy in a community health setting: The influence of Latino culture and community violence on posttraumatic cognitions. Psychological Trauma: Theory, Research, Practice, and Policy, 9, 98-106.

Mental Illness Research Education and Clinical Center (MIRECC)

Jerome Yesavage, MD
Professor

The Mental Illness Research Education and Clinical Center (MIRECC) is a national resource for the Department of Veterans Affairs (VA) focused on the cognitive and emotional challenges of Vietnam War Era Veterans. Its civilian branch is the Aging Clinical Research Center (ACRC) funded by the National Institute on Aging, the National Institute of Mental Health, and the Department of Veterans Affairs. These Centers are located at the Palo Alto Veterans Health Care System in Palo Alto adjacent to the Stanford campus. Here experienced investigators from many disciplines of medicine and neuroscience lead a variety of clinical, research, and educational programs, with the aim of improving the lives of older adults affected by Alzheimer's Disease, and other cognitive and emotional challenges.

A major thrust of these programs is to investigate the complex nature of Alzheimer's Disease, its progression over time, its response to treatments, and problems patients and caregivers experience in dealing with the changes that occur. These MIRECC and ACRC programs are closely affiliated with the State of California Alzheimer's Disease Center also based at the VA. Investigators also conduct studies that look at changes which occur over the course of normal aging and a variety of risk factors for developing dementias. Finally, several MIRECC investigators are actively researching important factors associated with preserving cognitive function in older Veterans and civilians. Most recently, studies have focused on the effects of Transcranial Magnetic Stimulation on treating depression, dementia, and mild cognitive impairment.

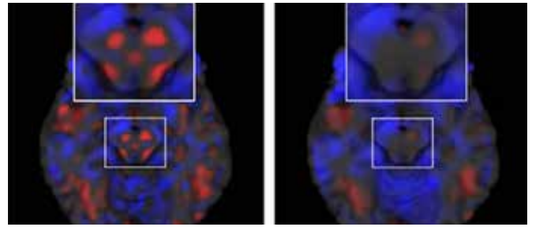
RECENT WORKS:

Newell J, Yesavage JA, Taylor JL, Kraemer HC, Munro CA, Friedman L,Rosenberg PB, Madore M, Chao SZ, Devanand DP, Drye LT, Mintzer JE, Pollock BG, Porsteinsson AP, Schneider LS, Shade DM, Weintraub D, Lyketsos CG, Noda A, Cit ADRG. (2016). Sedation mediates part of Citalopram's effect on agitation in Alzheimer's disease. J Psychiatr Res, 74, 17-21. PMC4744510

Durazzo TC, Meyerhoff DJ, Mon A, Abe C, Gazdzinski S, Murray DE. (2016). Chronic Cigarette Smoking in Healthy Middle-Aged Individuals Is Associated With Decreased Regional Brain N-acetylaspartate and Glutamate Levels. Biol Psychiatry, 79(6), 481-488. PMC4600002

Yochim BP, Beaudreau SA, Kaci Fairchild J, Yutsis MV, Raymond N, Friedman L, Yesavage JA. (2015). Verbal naming test for use with older adults: development and initial validation. J Int Neuropsychol Soc, 21(3), 239-248.

Tinklenberg JR, Kraemer HC, Yaffe K, O'Hara R, Ringman JM, Ashford JW, Yesavage JA, Taylor JL, Ctr CAD. (2015). Donepezil Treatment in Ethnically Diverse Patients with Alzheimer Disease. American Journal of Geriatric Psychiatry, 23(4), 384-390.



Yoon Lab

Jong Yoon, MD
Assistant Professor

The Yoon Lab seeks to discover the brain mechanisms responsible for schizophrenia and psychosis and to translate this knowledge into improvements in how we diagnose and treat these conditions. Towards these ends, our lab has been applying cutting-edge neuroimaging tools to identify neurobiological abnormalities and to test novel systems-level disease models of psychosis and schizophrenia directly in individuals with these conditions. Of particular interest to the lab is the role of neocortical-basal ganglia circuit dysfunction in these conditions. Our working hypothesis of the disease pathophysiology of schizophrenia is that neocortical abnormalities lead to disconnectivity with and dysregulated activity of the basal ganglia. The Yoon Lab has developed new high-resolution functional magnetic resonance imaging methods to more precisely measure the function of important components of the basal ganglia, which given their small size and location deep within the brain has been challenging to image. These include ways to measure the activity of midbrain nuclei, including the substantia nigra, which controls dopamine signaling and the subthalamic nucleus, which is a critical regulator of the flow of information throughout the brain.

RECENT WORKS:

Jong H. Yoon, Paul Larson, Anthony Grandelis, Christian La, Edward Cui, Cameron S. Carter and Michael J. Minzenberg. Delay period activity of the substantia nigra during proactive control of response selection as determined by a novel fMRI localization method. Journal of Cognitive Neuroscience, 2015 Jun; 27(6):1238-48. doi: 10.1162/jocn_a_00775. Epub 2014 Dec 16. PMID: 25514657

Jong H. Yoon, Michael J. Minzenberg, Sherief Raouf, Mark D'Esposito & Cameron S. Carter. Impaired prefrontostriatonigral functional connectivity and substantia nigra hyperactivity in schizophrenia. Biological Psychiatry 2013 Jul 15;74(2):122-9.

Jong H. Yoon, Richard J. Maddock, Ariel S. Rokem, Michael A. Silver, Michael J. Minzenberg, J. Daniel Ragland and Cameron S. Carter. ⊠Gamma⊠aminobutyric acid concentration is reduced in visual cortex in schizophrenia and correlates with orientation-specific surround suppression. Journal of Neuroscience 2010 Mar 10;30(10):3777-81.

Advancing Science

Instructors

Zeitzer Lab

Jaime Zeitzer, PhD
Assistant Professor

The Zeitzer lab has a wide variety of interests all under the umbrella of sleep and circadian physiology. We are leaders in the area of human centric lighting. That is, the use of lighting (artificial and natural) to improve physical and mental health. Stemming from an understanding of the neurobiologic principles of brain physiology, we have both laboratory- and community-based projects examining both basic physiology and applied disease research in areas such as delayed sleep in teens, jet lag, shift work, risk of nocturnal falls in elderly, and cognitive decline. We are also pioneering new forms of data collection and analysis of real-time biologic signals (accelerometry, EKG, EEG, hormones) that are being used for predictive modeling of both psychiatric disease states (e.g., bipolar disorder, cognitive decline, depression) and physical health (e.g., mortality). We work both within the lab and collaboratively with labs around the world to meet our goals of improving the human condition through better science.

RECENT WORKS:

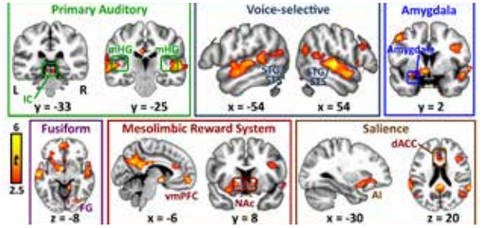
Kaplan KA, Hirshman J, Hernandez B, Stefanick M, Hoffman AR, Redline S, Ancoli-Israel S, Stone K, Friedman L, Zeitzer JM (2017) When a gold standard isn't so golden: Lack of prediction of subjective sleep quality from sleep polysomnography. Biopsychology 123: 37-46.

Najjar RP, Zeitzer JM (2016) Temporal integration of light flashes by the human circadian system. Journal of Clinical Investigation 126: 938-947.

Zeitzer JM (2015) Real life trumps laboratory in matters of public health. Proceedings of the National Academy of Sciences USA 112:E1513.

Zeitzer JM, Fisicaro RA, Ruby NF, Heller HC. Millisecond flashes of light phase delay the human circadian clock during sleep. Journal of Biological Rhythms 29:370-376, 2014.

Zeitzer JM, David R, Friedman L, Mulin E, Garcia R, Wang J, Yesavage JA, Robert PH, Shannon W. Phenotyping apathy in individuals with Alzheimer's using functional principal component analysis. American Journal of Geriatric Psychiatry 21:391, 2013.



Brain Systems for Speech Perception in Children with Autism Spectrum Disorders

Daniel Abrams, PhD
Instructor

Our primary research goals are to understand the brain bases of social communication and language impairments in children with autism spectrum disorders (ASD), and to describe neural changes associated with remediation of these behavioral deficits. Our approach is to study the perception and neural coding of speech: speech is a critical communication signal for social skill acquisition, and impaired speech perception is a hallmark of autism. Importantly, speech provides multiple pieces of social information during human interactions, including "who" is speaking, "what" they are saying, and "how" they feel when saying it. Our current research is focused on the brain systems underlying the perception of these three key aspects of speech. Of particular interest is describing brain signatures underlying a highly salient and important sound source in a child's life: mother's voice. Our recently published results are the first to describe the brain network underlying perception of mother's voice in typically developing children, and preliminary data show brain network differences in processing this salient vocal source in children with ASD, and changes that occur to this network during development. We have also initiated an exciting project examining perception and brain processing of the vocal cues that signal emotional content in speech, known as affective prosody, in children with ASD. Our work will provide new information regarding the perceptual, cognitive, and brain systems that contribute to speech impairments in children with ASD, and may provide critical insight into the biological foundations of social communication and language deficits in this population.

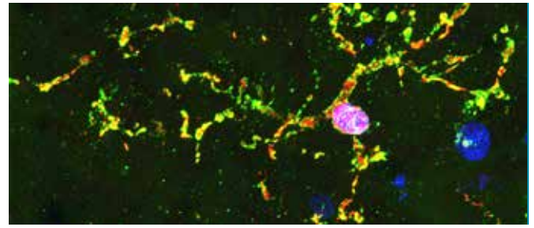
RECENT WORKS:

Abrams DA, et al. (2016) Neural circuits underlying mother's voice perception predict social communication abilities in children. Proceedings of the National Academy of Sciences 113(22):6295–6300.

Abrams DA, et al. (2013) Underconnectivity between voice-selective cortex and reward circuitry in children with autism. Proceedings of the National Academy of Sciences 110(29):12060-12065.

Abrams DA, Uddin LQ, & Menon V (2013) Reply to Brock: Renewed focus on the voice and social reward in children with autism. Proceedings of the National Academy of Sciences of the United States of America 110(42).

Abrams DA & Kraus N (2015) Auditory pathway representation of speech sounds in humans. Handbook of Clinical Audiology, 7th edition, eds Katz J, Chasin M, English K, Hood L, & Tillery KL (Lippincott Williams & Wilkins, Philadelphia), 7th Edition Ed, pp 611-626.



Microglia Impact on Mental Health

F. Christian Bennett
Instructor

Microglia, the brain's resident immune cells, play a central role in normal brain function, but remain poorly understood. Dr. Bennett's research attempts to answer the question "How do microglia contribute to mental health and disease?" Currently, he is developing new methods to derive microglia from blood cells, so that human microglia can be functionally characterized at the cellular and molecular level using a simple blood draw. This will allow us to understand how microglia from people with mental illness contribute to brain abnormalities at a cellular/molecular level so that we can create new treatments targeting microglia.

RECENT WORKS:

Bennett ML, Bennett FC, Liddelow SA, Ajami B, Zamanian JL, Fernhoff NB, Mulinyawe SB, Bohlen CJ, Adil A, Tucker A, Weissman IL, Chang EF, Li G, Grant GA, Hayden Gephart MG, Barres BA. New tools for studying microglia in the mouse and human CNS. Proc Natl Acad Sci U S A. 2016 Mar 22;113(12):E1738-46. doi: 10.1073/pnas.1525528113. PubMed PMID: 26884166; PubMed Central PMCID: PMC4812770.

Functional Neurobiology and Developmental Outcomes

Jennifer Bruno, PhD, MA
Instructor

Dr. Bruno is a translational researcher at the interface of developmental cognitive neuropsychology and neurobiology. Her research is aimed at understanding the neural basis of intellectual and developmental disorders with goals of improving early diagnosis using biomarkers and designing and testing targeted interventions. Current research projects include longitudinal investigations of neurobiological and behavioral outcomes in Fragile X Syndrome and autism spectrum disorders. Dr. Bruno is also developing adaptable non-constraining functional near-infrared spectroscopy (fNIRS) paradigms to assess the neural circuitry underlying cognition in healthy, typically developing individuals and in individuals with neurodevelopmental disorders. Working towards the goal of informing the design of targeted treatments while providing important outcome and progress metrics, Dr. Bruno's research includes infant developmental studies to uncover early, objective biomarkers and assess longitudinal trajectories of aberrant functional and structural brain development.

RECENT WORKS:

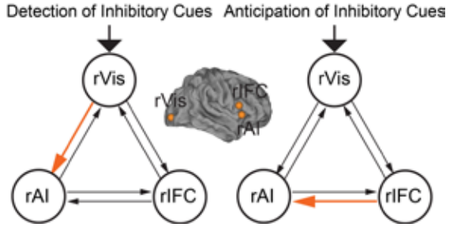
Altered Brain Network Segregation in Fragile X Syndrome Revealed by Structural Connectomics Cerebral Cortex Bruno, J. L., Hosseini, S., Saggar, M., Quintin, E., Raman, M., Reiss, A. L. 2016.

The cognitive developmental profile associated with fragile X syndrome: A longitudinal investigation of cognitive strengths and weaknesses through childhood and adolescence. Development and psychopathology Quintin, E., Jo, B., Hall, S. S., Bruno, J. L., Chromik, L. C., Raman, M. M., Lightbody, A. A., Martin, A., Reiss, A. L. 2016; 28 (4): 1457-1469.

Estimating individual contribution from group-based structural correlation networks Neuroimage Saggar, M., Hosseini, S. M., Bruno, J. L., Quintin, E., Raman, M. M., Kesler, S. R., Reiss, A. L. 2015; 120: 274-284.

Aberrant Face and Gaze Habituation in Fragile X Syndrome American Journal of Psychiatry Bruno, J. L., Garrett, A. S., Quintin, E., Mazaika, P. K., Reiss, A. L. 2014; 171 (10): 1099-1106.

Aberrant basal ganglia metabolism in fragile X syndrome: a magnetic resonance spectroscopy study Journal of Neurodevelopment Disorders Bruno, J. L., Shelly, E. W., Quintin, E., Rostami, M., Patnaik, S., Spielman, D., Mayer, D., Gu, M., Lightbody, A. A., Reiss, A. L. 2013; 5:20.



Human Brain Mechanism in Cognitive Control

Weidong Cai, PhD
Instructor

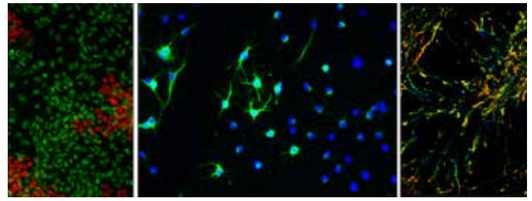
Dr. Cai is focused on understanding how brain networks support cognitive control, how cognitive control networks develop from childhood to adulthood, and how functional networks are disturbed in children with ADHD and autism. A major direction of his research is to investigate dynamic brain mechanism in human cognitive control using sophisticated computational methods and leveraging fast growing "big" public functional neuroimaging data (1-3). In a recent study, Dr. Cai and his team investigated the differential roles of right anterior insula (rAI) and right inferior frontal cortex (rIFC) in detection and anticipation of inhibitory sensory cue (1). Across two independent datasets, they demonstrated that rAI plays a crucial role in detection of inhibitory cues whereas rIFC implements a top-down modulation of rAI during anticipation of inhibitory cues. This finding advances the understanding of dynamic brain mechanism during cognitive control. Another important direction of Dr. Cai's ongoing research is to investigate dynamic brain mechanism of cognitive control in typically developing children and children with ADHD using advanced functional neuroimaging techniques in combination with rigorous experimental design. He hopes the finding will shed new light on understanding dysfunctional brain networks associated with cognitive control deficit and facilitate development of neuroimaging-based biomarkers for ADHD classification as well as symptom prediction.

RECENT WORKS:

Cai W, Chen T, Ide JS, Li CSR, & Menon V (2016) Dissociable fronto-operculum-insula control signals for anticipation and detection of inhibitory sensory cue. Cerebral Cortex.

Cai W, Chen T, Ryali S, Kochalka J, Li CS, Menon V (2016) Causal interactions within a frontal-cingulate-parietal Network during cognitive control: convergent evidence from a multisite-multitask investigation. Cerebral Cortex, 26(5): 2140-2153.

Cai W, Ryali S, Chen T, Li CS, & Menon V (2014) Dissociable roles of right inferior frontal cortex and anterior insula in inhibitory control: evidence from intrinsic and task-related functional parcellation, connectivity, and response profile analyses across multiple datasets. The Journal of Neuroscience 34(44):14652-14667.



Chetty Lab

Sundari Chetty, PhD
Instructor

The Chetty lab is interested in understanding the mechanisms regulating human pluripotent stem cell (hPSC) differentiation. Pluripotent stem cells have great therapeutic potential because they can in theory differentiate into any specialized cell type of the body. However, unlocking this vast potential of stem cells has proven to be challenging in practice. The overarching goal of our research program is to understand these mechanisms to more effectively differentiate hPSCs into desired cell types for cell replacement therapy and disease modeling.

Current projects focus on understanding the genetic and epigenetic mechanisms controlling the developmental potential of hPSCs. We are particularly interested in applying this knowledge to improve the differentiation potential of hPSCs into neuronal and glial cells for understanding the pathology and treatment of neuropsychiatric disorders.

RECENT WORKS:

A.M. Tsankov, V. Akopian, R. Pop, S. Chetty, C.A. Gifford, L. Daheron, N.M. Tsankova, A. Meissner. (2015) A qPCR ScoreCard quantifies the differentiation potential of human pluripotent stem cells. Nature Biotechnology 33: 1182-1192.

S. Chetty*, E.N. Engquist, E. Mehanna, K.O. Lui, A.M. Tsankov, D.A. Melton*. (2015) A Src inhibitor regulates the cell cycle of human pluripotent stem cells and improves directed differentiation. The Journal of Cell Biology 210: 1257-1268
[*co-corresponding author]

S. Chetty, F.W. Pagliuca, C. Honore, A. Kweudjeu, A. Rezania, D.A. Melton. (2013) A simple tool to improve pluripotent stem cell differentiation. Nature Methods 10: 553-556.

S. Chetty, A.R. Friedman, K. Taravosh-Lahn, E.D. Kirby, C. Mirescu, F. Guo, D. Krupik, A. Nicholas, A. Geraghty, A. Krishnamurthy, M. Tsai, D. Covarrubias, A. Wong, D. Francis, R.M. Sapolsky, T.D. Palmer, D. Pleasure, D. Kaufer. (2014) Stress and glucocorticoids promote oligodendrogenesis in the adult hippocampus. Molecular Psychiatry 19: 1275-1283.

Genetic Effects on Mental Health

Laramie Duncan, PhD
Instructor

Since joining Stanford last year Dr. Duncan has continued to work in international genomics consortia, started work with the INSPIRE early psychosis clinic, and began the Laboratory for Genome-Environment Effects on Mental Health. Her work on the world's largest collection of genomic sequence data was published in Nature (Let et al 2016). This resource has already garnered over 300 citations because it provides fundamental information relevant to sequencing studies across medicine.

Dr. Duncan also completed work on the genomics of PTSD and anorexia nervosa. They found that genetic effects on PTSD differ between males and females, with stronger genetic effects in females. For anorexia, they discovered that metabolic factors also contribute to this condition, which is strongly influenced by genetics.

In December (picture above), Dr. Duncan traveled to South Africa to teach at the University of Cape Town. This capacity building program was hosted by the International Brain Research Organization. Investigators from multiple African nations participated in this course designed to make cutting edge statistical genetics methods more accessible to African researchers. The expansion of genetics research to more diverse populations is a primary theme in our group, as addressed in the first three publications listed below and in ongoing projects in the lab.

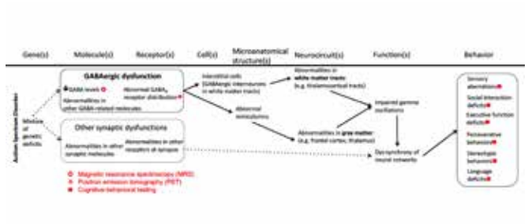
RECENT WORKS:

Lek, M, et al. "Analysis of protein-coding genetic variation in 60,706 humans." Nature 536.7616 (2016): 285-291.

Duncan, LE et. al. "Largest GWAS of PTSD (N=20,070) Yields Genetic Overlap with Schizophrenia and Sex Differences in Heritability" (in revision).

Dalvie, Shareefa, et al. "Large scale genetic research on neuropsychiatric disorders in African populations is needed." EBioMedicine 2.10 (2015): 1259-1261.

Duncan, LE et al. "Genome-Wide Association Study Reveals First Locus for Anorexia Nervosa and Metabolic Correlations" (in revision).



Molecular Neuropsychiatry

Lawrence Fung, MD, PhD
Instructor

Lawrence Fung, MD, PhD, is using molecular neuroimaging to identify biomarkers and targeted treatments for autism and neurodevelopmental disorders. In particular, he examines the GABAergic system, the predominant inhibitory neurotransmission system, in the brains of young adults with Asperger's syndrome or high-functioning Autism Spectrum Disorder (ASD). This study is one of the first of its kind to use positron emission tomography (PET) and magnetic resonance spectroscopy (MRS) to categorize simultaneously the receptors and neurotransmitters of the GABAergic system in Neurodevelopmental Disorders such as ASD. He received a 2016 Young Investigator Award at the 11th International Symposium on Functional NeuroReceptor Mapping of the Living Brain in July for this project. In September 2016, he also received the Clinical Investigator Award / Mentored Clinical Scientist Research Career Development Award (K08) from the National Institutes of Health to conduct this project.

Drs. Fung and Hardan are currently conducting a randomized controlled trial on a neurosteroid called pregnenolone to treat irritability – which includes mood swings, aggression, and self-harming – in adolescents with ASD (funded by the Simons Foundation). This study is supported by the initial findings of their open-label trial which showed that pregnenolone reduced irritability and social withdrawal in adults with ASD.

RECENT WORKS:

Fung LK, Libove R, Phillips J, Haddad F, Hardan AY. Brief Report: An open-label study of the neurosteroid pregnenolone in adults with autism spectrum disorder. Journal of Autism & Developmental Disabilities. 2014 Nov;44(11):2971-7. PMID: 24849255.

Hardan AY, Fung LK, Frazier T, Berquist SW, Minshew NJ, Keshavan MS, Stanley JA. A proton spectroscopy study of white matter in children with autism. Progress in Neuro-Psychopharmacology & Biological Psychiatry. 2015 Nov 16;66:48-53. PMID: 26593330.

Fung LK, Mahajan R, Nozzolillo A, Bernal P, Krasner A, Jo B, Coury D, Whitaker A, Veenstra-Vanderweele J, Hardan AY. Pharmacologic treatment of severe irritability and problem behaviors in autism: a systematic review and meta-analysis. Pediatrics. 137(s2) February 2016:e20152851. PMID: 26908468.

Fung LK and Reiss AL. Moving towards integrative, multi-dimensional research in modern psychiatry: lessons learned from fragile X syndrome. Biological Psychiatry. 2016 Jul 15;80(2):100-11. PMID: 26868443.

Life Stress and Sleep/Circadian Disturbances

Anda Gershon, PhD
Instructor

The goal of the Gershon Lab is to understand the mechanisms by which life stress and sleep/circadian disturbances increase vulnerability to mood disorders. Life stress and sleep/circadian disturbances are two of the most consistently identified risk factors for mood disorders. Despite their importance, relatively little is known about the ways by which these risk factors trigger or sustain mood dysregulation. Understanding the role of these risk factors in mood disordered populations could help to identify novel intervention targets to improve quality of life in affected people, as well as new markers for early detection, improved prediction, and ultimately, protection against the development of mood disorders in high-risk individuals. Our current work focuses on characterizing sleep/circadian rhythm disruptions and the social contexts that may trigger these disruptions in youth who are diagnosed with bipolar disorder. To this end, we use a systematic, ecologically sensitive assessment that combines at-home polysomnography, coupled with ecological momentary assessment methods for measuring circadian rhythms, social interactions, stress, and mood. Our aim is to help clarify the interplay between biological and social factors in the risk for mood disorders, laying the foundation for necessary refinements of existing detection and intervention strategies.

RECENT WORKS:

Thompson, R. J., Mata, J. Gershon, A., Gotlib, I.H. (in press). Adaptive coping mediates the relation between mothers' and daughters' depressive symptoms: A moderated mediation study. Journal of Social and Clinical Psychology.

Gershon A., Singh, M.K. (in press). Sleep in adolescents with bipolar I disorder: Stability and relation to symptom change. Journal of Clinical Child and Adolescent Psychology. doi: 10.1080/15374416.2016.1188699. PMID: 27472039

Kaufman, C., Gershon, A., Eyler, L. T., Depp, C. (2016). Clinical significance of mobile health assessed sleep duration and variability in bipolar disorder. Journal of Psychiatric Research, 81,152-159. doi: 10.1016/j.jpsychires.2016.07.008. PMID: 27451108. PMCID: PMC5064831

Gershon, A., Ram, N., Johnson, S.L., Harvey, A.G., Zeitzer, J. (2016). Daily actigraphy profiles distinguish depressive and well periods in bipolar disorder. Clinical Psychological Science, 4, 641–650. doi: 10.1177/2167702615604613. PMID: 27642544. PMCID: PMC5022043

Neurogenetic Symptoms and Cognitive Function

Tamar Green, MD
Instructor

As a child psychiatrist, Dr. Green works closely with families where an individual is affected by a neurodevelopmental disorder. Her intense engagement with children diagnosed with autism spectrum disorders, attention-deficit-hyperactivity disorder or developmental delay, has instilled a genuine appreciation for the complex interaction between cognition, behavior and genetic risk. Furthermore, Dr. Green has found that it is critical to understand how cognitive development interacts with other familial, social and educational factors to impact diagnosis and treatment strategies. This conceptual approach has been instrumental in how she provides care for children affected by these disorders, whether through family therapy and parent management training, individual therapy, psycho- and genetic education or medications, largely by focusing on how developmentally-informed strategies can improve clinical outcomes.

This work triggered her interest in pediatric clinical neuroscience. For the last four years, Dr. Green has studied the neural and behavioral manifestations of specific genetic risk factors such as those associated with fragile X, Williams syndrome, and Turner syndrome. These studies provided novel and valuable conclusions about the effects of these disease models on the brain. Her subsequent goals are to examine whether SNP and gene expression of the X-linked genes affect neural substrate (brain imaging measures) and ADHD-associated behaviors in Turner syndrome; expend her line of research uncovering neural correlates associated with deficits in attention, memory and social skills to the RASopathies, specifically Noonan syndrome.

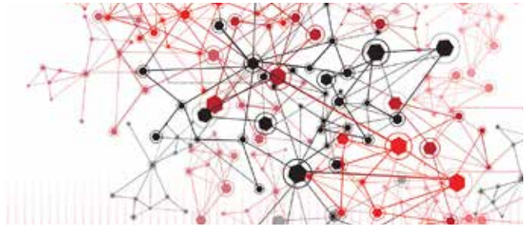
RECENT WORKS:

Green T, Chromik L.C., Mazaika P.K., Fierro K, Raman M., Hong S.D. and Reiss A.L. Aberrant parietal cortex developmental trajectories in girls with Turner syndrome and related visual-spatial cognitive development. Neuropsychiatric Genetics. 2014 Sep;165(6):531-40. PMID: 25044604

Green T*, Barnea-Goraly N*, Raman M.M, Hall S.S, Hong S.D, Reiss A. Effects of the - X Mental Retardation-1 Full Mutation on White Matter Microstructure are Independent of IQ. Br J Psychiatry. 2015 Mar 19. [Epub ahead of print] PMID: 25792692

Green T, Bade Shrestha S, Chromik L, Rutledge K, Pennington B, Hong D, Reiss A. ADHD and Turner Syndrome: Elucidating Sex Chromosome Influences on Behavior and Cognition. Journal of Psychiatric Research, 2015 Sep;68:217-25. PMID:26228422

Green T, Fierro KF, Raman MM, Saggar M, Sheau K, Reiss AL: Surface-based morphometry reveals distinct cortical thickness and surface area profiles in Williams syndrome. Am J Med Genet B Neuropsychiatr Genet. 2016;171(3):402-13. PubMed PMID: 26852730.



Statistical Methods for Public Mental Health

Jane Paik Kim, PhD
Instructor

Dr. Kim's research goal is to develop and use statistical methods to ensure that the most appropriate methods are being used to improve public mental health. Her work currently addresses (1) personalizing and optimizing interventions in mobile health and (2) the robustness of regression-based inference for both randomized trials and observational studies.

With a recently awarded Spectrum Healthcare Innovation Challenge Pilot Grant, Dr. Kim is applying machine learning techniques to personalize behavioral interventions delivered through mobile applications. The project is specifically concerned with developing a reinforcement learning algorithm to guide clinicians who are linked to patients through a mobile app. She is also involved with in a separate NIMH study (PI: Dr. Lock) that tests an adaptive version of a behavioral intervention delivered through a commercially available app.

Dr. Kim has ongoing projects in the area of ethics in collaboration with Dr. Laura Roberts. The overarching goal of this work is to accelerate scientific advances related to mental health by ensuring ethical participation in research. This necessitates assessing positive and negative determinants of participation willingness for potentially vulnerable research subjects and testing models of ethical participation.

RECENT WORKS:

Kim, JP, Sit, T., Ying, Z. (2016). Accelerated failure time models under general biased sampling schemes. Biostatistics.

Roberts LW and Kim JP. (2016). Healthy individuals' perspectives on clinical research protocol and influences on enrollment decisions. AJOB Empirical Bioethics. 6 (2): 33-42.

Kim, JP., Ying, Z. Sit, T. Lu, W. (2013). A Unified approach to semiparametric transformation models under general biased sampling schemes. Journal of the American Statistical Association. 108 (501): 217-227

Neurodevelopment of Interoception

Megan Klabunde, PhD
Instructor

Dr. Klabunde is a researcher within the Center for Interdisciplinary Brain Sciences Research. Her research goal is to examine the neurodevelopment of interoception and its role in emotion processing and empathy throughout childhood and adolescence. She is particularly interested in better understanding how disturbed interoceptive processing may originate and inform the development of various psychiatric disorders. Within the past five years, Dr. Klabunde's interoception and social cognition research has expanded across typical development, neurogenetic syndromes and childhood psychiatric disorders including: Turner syndrome, Prader-Willi syndrome, ADHD, PTSD, anxiety, mood and eating disorders. Her current projects use multimodal assessment tools such as functional Magnetic Resonance Imaging (MRI), functional Near-Infrared Spectroscopy (fNIRS) and physiological, eye-tracking, behavioral and neuropsychological assessments. Additional areas of interest include the role of sex on adolescent brain development, sex differences in the manifestation of symptoms across mental health disorders, the impact of early life stress on interoceptive development and the intersection between interoceptive processing and cognitive control.

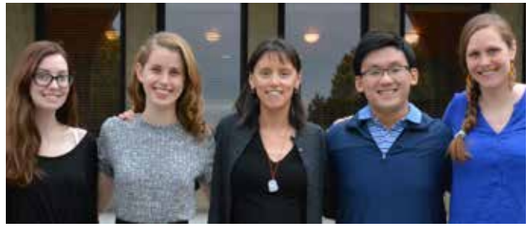
RECENT WORKS:

Klabunde, M., Weems, C., Raman, M., & Carrion, V.G. (2017) The moderating effects of sex on insula subdivision structure in youth with post traumatic stress symptoms. Depression and Anxiety, 34(1): 51-58.

Klabunde, M., Saggar, M., Hustyi, K.M., Hammond, J.L., Reiss, A., & Hall, S. (2015) Neural correlates of self-injurious behavior in prader-willi syndrome. Human Brain Mapping, 36(10): 4135-4143.

Weems, C.F., Klabunde, M., Russell, R.D., Reiss, A., & Carrion, V.G. (2015) Posttraumatic stress and developmental variation in amygdala volumes among youth exposed to trauma. Social Cognitive and Affective Neuroscience, 10(12): 1661-1667.

Klabunde, M., Acheson, D., Boutelle, K., Matthews, S., & Kaye, W. (2013). Interoceptive sensitivity in women recovered from bulimia nervosa, Eating Behaviors. 14, 488-492.



Depression Among Adolescent Teens

Sarah Ordaz, PhD
Instructor

Dr. Ordaz's research seeks to understand three fundamental questions: First, how do trajectories of brain development go awry in youth who become depressed? Second, how is maladaptive brain development perpetuated or worsened over the course of a depressive episode? Third, how might positive parenting buffer against maladaptive trajectories?

In one study, they have recruited early-pubertal girls who will be scanned five times over the course of their pubertal maturation. They will investigate when and how brain network development goes off-course in girls who become depressed, how pubertal hormones might contribute to this, and how positive parenting might buffer against maladaptive trajectories. This is a collaboration with Ian Gotlib and is funded by an NIMH K01 award.

A second study is a longitudinal study of currently-depressed teens. Teens come to the lab twice over the course of six months; at each visit Dr. Ordaz and her team characterize their clinical symptomatology, obtain structural and functional neuroimaging, and assess parenting. They will examine whether positive parenting contributes to a faster recovery from depression by altering brain networks implicated in emotional reactivity, rumination, and emotion regulation. This work is funded by a NARSAD Young Investigator Award and a Klingenstein Third Generation Foundation Award.

RECENT WORKS:

Ordaz, S., LeMoult, J., Colich, N.L., Prasad, G., Pollak, M., Popolizio, M., Price, A., Greicius, M., Gotlib, I. (2016). Ruminative brooding is associated with salience network coherence in early pubertal girls. Social Cognitive and Affective Neuroscience. doi: 10.1093/scan/nsw133

Colich, N., Ho, T., Foland-Ross, L., Eggleston, C., Ordaz, S., Singh, M., Gotlib, I. (2017). Hyperactivation in cognitive control and visual attention brain regions during emotional interference in adolescent depression. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging. doi: 10.1016/j.bpsc.2016.09.001

Gotlib, I. & Ordaz, S. (2015). The importance of assessing neural trajectories in pediatric depression. JAMA Psychiatry, 73(1), 9-10. PMCID26676653

Ordaz, S., Foran, W., Velanova, K., Luna, B. (2013). Longitudinal growth curves of brain function underlying cognitive control through adolescence. Journal of Neuroscience, 33(46), 18109-24. PMCID24227721.

Stress Effects on Learning

Shaozheng Qin, PhD
Instructor

Dr. Qin's primary research interest is to understand how the brain supports learning and memory, and interaction with stress and emotion, and how these processes develop as the brain matures from childhood to adulthood. Using a multi-disciplinary approach, integrating functional brain imaging and experimental behavioral techniques, endocrine, psychophysiology, and genetics, Dr. Qin currently investigates how the medial temporal, prefrontal, and parietal systems interplay to support learning and memory and interact with emotion, and their maturational changes from childhood through adolescence into adulthood. The overarching goals of Dr. Qin's research are to optimize learning and memory in education, and to prevent learning and emotion problems over development. Dr. Qin currently serves as PI on a project titled "Brain Systems Underlying Episodic Memory For Social Stimuli In Childhood Autism."

RECENT WORKS:

Large-scale intrinsic functional network organization along the long axis of the human medial temporal lobe. Qin S, Duan X, Supekar K, Chen H, Chen T, Menon V. Brain Struct Funct. 2015 Sep 3. [Epub ahead of print]

Brain Structural Integrity and Intrinsic Functional Connectivity Forecast 6 Year Longitudinal Growth in Children's Numerical Abilities. Evans TM, Kochalka J, Ngoon TJ, Wu SS, Qin S, Battista C, Menon V. J Neurosci. 2015 Aug 19;35(33):11743-50. doi: 10.1523/JNEUROSCI.0216-15.2015.

Hippocampal-neocortical functional reorganization underlies children's cognitive development. Qin S, Cho S, Chen T, Rosenberg-Lee M, Geary DC, Menon V. Nat Neurosci. 2014 Sep;17(9):1263-9. doi: 10.1038/nn.3788. Epub 2014 Aug 17. Erratum in: Nat Neurosci. 2015 Dec;18(12):1861.

Long-term academic stress increases the late component of error processing: an ERP study. Wu J, Yuan Y, Duan H, Qin S, Buchanan TW, Zhang K, Zhang L. Biol Psychol. 2014 May;99:77-82. doi: 10.1016/j.biopsycho.2014.03.002. Epub 2014 Mar 18.

Amygdala subregional structure and intrinsic functional connectivity predicts individual differences in anxiety during early childhood. Qin S, Young CB, Duan X, Chen T, Supekar K, Menon V. Biol Psychiatry. 2014 Jun 1;75(11):892-900. doi: 10.1016/j.biopsych.2013.10.006. Epub 2013 Oct 11.

Machine Learning and Signal Processing Methods for Neuroimaging

Srikanth Ryali, PhD
Instructor

Srikanth Ryali's research interests are in developing advanced machine learning algorithms for analyzing functional magnetic resonance imaging (fMRI) to understand human brain function. Dr. Ryali develops methods to estimate dynamic causal interactions between brain regions in fMRI data using a state-space approach, to develop robust data clustering algorithms to parcellate the brain into functionally homogeneous regions using resting-state fMRI (rs-fMRI) data, and for classification of neuroimaging data using multivariate pattern recognition approaches. Presently, he is working on estimating time varying functional interactions between brain regions using Bayesian Hidden Markov models. Further, Dr. Ryali is collaborating with colleagues to characterize the differences in time varying functional interactions in healthy children, adults, and clinical populations.

RECENT WORKS:

Ryali, S., et al., Multivariate dynamical systems models for estimating causal interactions in fMRI. Neuroimage, 2011. 54(2): p. 807-23.

Ryali, S., Shih, Y, Chen T, Kochalka, J, Albaugh, D, Fang, Z, Supekar, K, Lee, J.H, Menon, V, Combining optogenetic stimulation and fMRI to validate a multivariate dynamical systems model for estimating causal brain interactions Neuroimage, 2016. In Press.

Ryali, S., et al., Development and validation of consensus clustering-based framework for brain segmentation using resting fMRI. Journal of Neuroscience Methods, 2015. 240: p. 128-40.

Ryali, S., et al., A parcellation scheme based on von Mises-Fisher distributions and Markov random fields for segmenting brain regions using resting-state fMRI NeuroImage, 2012.

Ryali, S., et al., Sparse logistic regression for whole-brain classification of fMRI data. Neuroimage, 2010. 51(2): p. 752-64.

Advancing Science

Clinician Educators

Stanford Brain Stimulation Lab (SBSL)

Nolan Williams, PhD
Instructor

Dr. Williams currently serves as the Director of the Stanford Brain Stimulation Laboratory. The SBSL utilizes novel brain stimulation techniques to probe and modulate the neural networks underlying neuropsychiatric diseases/disorders in an effort to develop new models and novel treatments. They focus on utilizing neurostimulation to probe the neural elements involved in control of conflict regulation within the human brain. The mission of the SBSL is to utilize cutting-edge neuroimaging techniques in an effort to develop new hypotheses regarding proposed dysfunction within the neural networks involved in neuropsychiatric diseases/disorders. With this information, the team utilizes neuromodulation strategies to assess whether our proposed brain-behavior theories are accurate. The SBSL offers research study treatments for numerous neuropsychiatric diseases/disorders. Currently, the SBSL has several active studies examining topics such as treatment-resistant depression, chronic pain, suicide, and obsessive-compulsive disorder. SBSL studies utilize novel brain stimulation techniques, novel psychopharmacological approaches and neuroimaging methods.

RECENT WORKS:

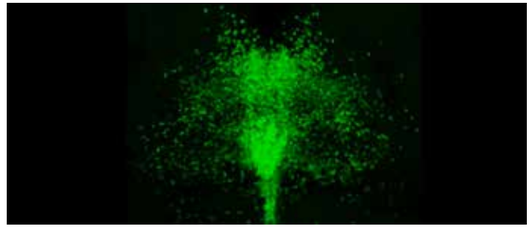
Williams NR, Bentzley BS, Sahlem GL, Pannu J, Korte JE, Revuelta G, Short EB, George MS. Unilateral ultra-brief pulse electroconvulsive therapy for depression in Parkinson's disease. Acta neurologica Scandinavica. 2016. PubMed PMID: 27241213.

Williams NR, Short EB, Hopkins T, Bentzley BS, Sahlem GL, Pannu J, Schmidt M, Borckardt JJ, Korte JE, George MS, Takacs I, Nahas Z. Five-Year Follow-Up of Bilateral Epidural Prefrontal Cortical Stimulation for Treatment-Resistant Depression. Brain stimulation. 2016;9(6):897-904. doi: 10.1016/j.brs.2016.06.054. PubMed PMID: 27443912

Williams NR, Hopkins TR, Short EB, Sahlem GL, Snipes J, Revuelta GJ, George MS, Takacs I. Reward circuit DBS improves Parkinson's gait along with severe depression and OCD. Neurocase. 2016;22(2):201-4. PubMed PMID: 26644268

Williams NR, Taylor JJ, Snipes JM, Short EB, Kantor EM, George MS. Interventional psychiatry: how should psychiatric educators incorporate neuromodulation into training? Academic psychiatry. 2014;38(2):168-76. doi: 10.1007/s40596-014-0050-x. PubMed PMID: 24554501.

Williams NR, Okun MS. Deep brain stimulation (DBS) at the interface of neurology and psychiatry. J Clin Invest. 2013;123(11):4546-56. doi: 10.1172/JCI68341. PubMed PMID: 24177464; PubMed Central PMCID: PMC3809784.



Deciphering Affective Circuitry

Matthew Wright, MD, PhD
Instructor

The goal of Dr. Wright's research is to deepen our understanding of the circuits underlying affective disorders by using molecular and circuit level tools to dissect their detailed structure and function and establish targets for advancing treatment. The focus is primarily on the core conserved circuits that instantiate and control mood and anxiety, including the neuromodulatory centers, such as the dorsal raphe nucleus and ventral tegmental area, as well as circuits that run through the amygdala, brain stem, and hypothalamus.

To achieve this Dr. Wright uses molecular and chemical techniques to advance methods to probe the structure and molecular phenotype of circuits in intact tissues. This anatomical work is combined with techniques to measure cellular resolution activity in these conserved circuits and the effects of precisely modulating these circuits on core affective behaviors such as reward, aversion, and learned helplessness. The work is done in collaboration with Dr. Karl Deisseroth and is supported by an NIMH K08 Award.

RECENT WORKS:

Sylwestrak EL*, Rajasethupathy P*, Wright M*, Jaffe A, Deisseroth K. Multiplexed intact-tissue transcriptional analysis at cellular resolution. Cell 2016 Feb 11;164(4):792-804 *Co-first author

Early Intervention for Child/Adolescent Mental Health Issues

Steven Adelsheim, MD
Clinical Professor

Dr. Adelsheim is a child/adolescent psychiatrist and Director of the Center for Youth Mental Health and Wellbeing, as well as Community Partnerships. His research focuses on developing models of early identification and intervention across the continuum of care for young people and their families when faced with mental health issues.

Recently, in partnership with students and faculty at the Stanford Computer Sciences Department, he has been working to develop effective models of screening young people for mental health conditions across a variety of conditions.

In addition, Dr. Adelsheim is focused on the creation of early public mental health service models in the US to link young people to care, such as the headspace program out of Australia, an early mental health intervention program for young people 12-25.

Dr. Adelsheim has recently become involved in working with a number of programs developing mental health technology solutions to help young people access early support and linkages to direct care as necessary.

In addition, Dr. Adelsheim is leading the development of PEPPNET, the national network for early psychosis clinical programs, in an effort to support the implementation of evidence-based services in the rapidly expanding world of early psychosis programs.
Dr. Adelsheim has been recognized by NAMI, the American Psychiatric Association, and the American Academy of Child and Adolescent Psychiatry for his community mental health partnership efforts.

RECENT WORKS:

Adelsheim, S.; In Depth Article: Commentary; From School Health to Integrated Health: Expanding Our Children's Public Mental Health System, Academic Psychiatry (2014) 38:405–408

Tso, I., Taylor, S., Grove,T., Niendam, T., Adelsheim, S., Auther, A., Cornblatt, B., Carter, C., Calkins, R., Ragland, J., Sale, T., & McFarlane, W. ;Factor analysis of the Scale of Prodromal Symptoms: data from the Early Detection and Intervention for the Prevention of Psychosis Program. Early Intervention in Psychiatry, 2015.

Adelsheim, Bonham, Fore, Glass, Simmons, & Thomas, Creating a National Native Telebehavioral Health Network: The IHS Telebehavioral Health Center of Excellence, chapter in Partnerships for Mental Health, Roberts et al, Springer International Publishing, 2015

Adler Lab

Sarah Adler, PsyD
Clinical Assistant Professor

The Adler Lab focuses on increasing access to behavioral health care. Dr. Adler is currently co-authoring a self–help book for Binge Eating (published by Guilford Press in early 2017). This Dialectical Behavioral Therapy protocol has been studied in 3 RCTs to show efficacy and the book will help dissemination of an evidence based treatment to populations that can't access specialized care. Dr. Adler and her team are investigating behavioral factors that lead to poor outcomes in bariatric surgery patients with Early Adherence Targeted Therapy (EATT), delivered through videoconferencing to remote populations less likely to attend follow-up visits. They are also prospectively and retrospectively testing predictive validity of a screening tool, the SIPAB to identify high-risk bariatric patients. The team is the recipient of a Spectrum SPARK funded study investigating the effects of Qsymia on Binge Eating Disorder (BED) and Bulimia Nervosa (BN). Efficacy will support a new FDA indication, dramatically increasing access in Eating Disordered populations. The Adler Lab has departmental funding used to build software to implement measurement based care using iPads, to improve operational and clinical outcomes. They are building a predictive model to better understand how patient data can be used to improve outcomes, make clinical care more efficient and effective, freeing valuable resources to ultimately increase access to providers.

RECENT WORKS:

Early Adherence Targeted Therapy (EATT) for Postbariatric Maladaptive Eating Behaviors COGNITIVE AND BEHAVIORAL PRACTICE Robinson, A. H., Adler, S., Darcy, A. M., Osipov, L., Safer, D. L. 2016; 23 (4): 548-560

College/University Student Mental Health

Ronald Albucher, MD
Clinical Associate Professor

Dr. Albucher serves as the lead Investigator for Stanford University on a project entitled, “eBridge to Wellness.” It is a 5-year multisite study awarded to the University of Michigan that looks at mental health and general well-being among college students. The project’s goals are to understand the service needs of students and to examine the usefulness of e-Bridge, an online program that may help link students to supportive services. Students at high risk for depression and self-harm (who are not currently in treatment) are identified for participation.

RECENT WORKS:

Albucher RC: Interview in Nature: Under a Cloud; October 2012; Volume 490: 299-301

Levine BH, Albucher RC: FOCUS: Patient Management Exercises in Psychiatry; American Psychiatric Press, Inc. 2011

Albucher, RC: An Integrationist Perspective: A Response to “Bias: Thinking about College Student Psychotherapy versus Drug Treatment and Disability”, Journal of College Student Psychotherapy, Volume 27, Issue 4, 2013

Muslims and Mental Health Lab

Rania Awaad,MD
Clinical Instructor

The Muslims and Mental Health Lab is dedicated to creating an academic home for the study of mental health as it relates to the Islamic faith and Muslim populations. The lab aims to provide the intellectual resources to clinicians, researchers, trainees, educators, community and religious leaders working with or studying Muslims. Current lines of research include: historical representations of mental health in the Muslim world, psychometric scales specific to Muslims, Refugee mental health, Islamophobia and social justice. The lab also hosts a monthly meeting for Bay Area Muslim Mental Health Professionals (BAMMHP) that facilities mentorship and networking opportunities for mental health professionals, paraprofessionals and students interested in working with Muslim populations. Most recently, this effort has spurred a crisis response team for the Bay Area Muslim community. The lab’s latest project on community based participatory research (CBPR) with the American Muslim Community was made possible by a 2016 SPECTRUM grant and upon its completion was awarded the 2017 Stanford Outstanding Community Partnership Award. Other notable accomplishments this past year was an invitation by President Obama and the Secretary of Health and Human Services, Sylvia Burwell, to a convening at the Department of Health in DC to discuss matters relating to Muslim Mental Health. Dr. Rania Awaad represented the SMMH Lab in its capacity as the only academic lab in the country that is specifically dedicated to the mental health needs of Muslim populations.

RECENT WORKS:

Awaad R., Reicherter D. “Cultural Perspectives in the Context of Western Psychological Mind-sets: The Need for Cultural Sensitivity in the Mental Health of Immigrant Youth” in Psychotherapy for Immigrant Youth. Springer International Publishing Switzerland 2016 S.G. Patel, D. Reicherter (eds.)

Hashemi, B., Ali, S., Awaad R. et al. Facilitating mental health screening of war-torn populations using mobile applications. Social Psychiatry and Psychiatric Epidemiology. 2016 Nov 4. PMID: 27815623

Awaad R, Ali S. A Modern Conceptualization of Phobia in al-Balkhi’s 9th Century Treatise: Sustenance of the Body and Soul. Journal of Anxiety Disorders. 2015 Dec 18;37;89-93. PMID: 26741063

Awaad R, Ali S. Obsessional Disorders in Al-Balkhi’s 9th Century Treatise: Sustenance of the Body and Soul, Journal of Affective Disorders. 2015 Jul 15;180:185-9. PMID: 25911133

INSPIRE Clinic

Jacob Ballon, MD, MPH
Clinical Assistant Professor

The INSPIRE Clinic provides comprehensive care for people at-risk for and with psychotic disorders. With a recovery-oriented philosophy, the Clinic provides an array of services including psychopharmacology, psychotherapy, and psychosocial evaluations. As a research clinic, they are focused on collaborating with multiple disciplines throughout the university to conduct clinical and basic science research including functional imaging, clinical trials, basic pathophysiology, and genetics. Some examples of work currently ongoing in the INSPIRE clinic includes, Dr. Kate Hardy’s work conducting research in developing innovative psychotherapy treatments including a cognitive behavioral therapy for psychosis (CBTp), intervention for family members of people with psychosis, and a novel group therapy approach targeted at reducing worrying in people at early stages of psychosis. Dr. Ballon also maintains an interest in developing interventions for treating antipsychotic related metabolic dysfunction and has a pilot study underway to look at the use of bromocriptine for reducing insulin resistance in people treated with antipsychotic medications. The INSPIRE Clinic is also a site in two multi-center clinical trials evaluating the effectiveness of long-acting injectable medications in the early stages of schizophrenia. They are currently applying for grant funding to develop a university-based intervention to reduce the duration of untreated psychosis in college students, and for development of a virtual-reality assisted CBTp treatment.

Interventional Neuropsychiatry

Mahendra Bhati, MD
Clinical Associate Professor

Dr. Mahendra (Mach) Bhati is Section Chief of Interventional Neuropsychiatry and performs clinical research in neuromodulatory approaches to understand and treat mental disorders. His current work involves 1) use of TMS-EEG to identify physiological signals used to define brain disorders and guide treatment, 2) developing closed-loop responsive neurostimulation for treatment of fear-related disorders, and 3) focused ultrasound to treat severe obsessive compulsive disorder and treatment-resistant depression.

RECENT WORKS:

Kubu, C.S., Brelje, T., Butters, M.A., Deckersbach, T., Malloy, P., Moberg, P., Troster, A.I., Williamson, E., Baltuch, G.H., Bhati, M.T., Carpenter, L.L., Dougherty, D.D., Howland, R.H., Rezai, A.R., Malone, D.A. Cognitive Outcome after Ventral Capsule/Ventral Striatum Stimulation for Treatment-Resistant Major Depression. Journal of Neurology, Neurosurgery, and Psychiatry September 2016 [Epub ahead of print].

Taylor, S.F., Bhati, M.T., Dubin, M., Hawkins, J.M., Lisanby, S.H., Morales, O., Reti, I., Sampson, S., Short, B., Spino, C., Wright, J. A naturalistic, multi-site study of repetitive transcranial magnetic stimulation therapy for depression. Journal of Affective Disorders 208:284-290, January 2017.

Siegel, A.M., Barrett, M.A., Bhati, M.T. Deep Brain Stimulation for Alzheimer’s Disease: Ethical Challenges for Clinical Research. Journal of Alzheimer’s Disease 56(2):429-439, 2017 [Epub ahead of print].

Virtual Reality - Immersive Technology (VR-IT) Lab

Kim Bullock, MD
Clinical Associate Professor

The Virtual Reality-Immersive Technology (VR-IT) Laboratory bridges gaps between clinical research, evidenced-based psychotherapy, augmented/virtual reality content development, and medical technologies to innovate treatment for a spectrum of psychiatric and mental health conditions. This lab hosts a variety of Stanford clinicians and scientists interested in exploring and applying virtual reality and associated technologies into clinical practice and research. The lab houses clinical VR trials and trainings to foster scientific innovation thru integrative multidisciplinary collaboration and supports measurement based care. Current projects include pediatric preoperative stress inoculation, VR integrated biofeedback for ADHD, and sensory modulation for auditory hallucinations.

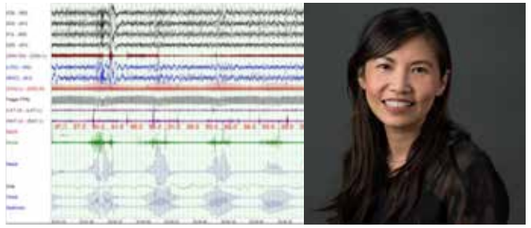
Dr. Bullock is a neuropsychiatrist who founded and directs the lab. She has a primary research interest in the interaction between VR technology and the phenomenon of embodiment as it relates to emotion regulation. She is currently studying the effects of manipulating visual feedback and perceptual illusions on a variety of neuropsychiatric illnesses. She and colleagues have developed an in-office VR mediated mirror visual feedback (MVF) system that allows avatar limb swapping. She is currently investigating whether this may replace traditional MVF in physical therapy and alleviation of unilateral pain syndromes. In addition, she is running a randomized controlled study examining customized embodied VR therapies for functional neurological disorders.

RECENT WORKS:

Bullock K: Group Psychotherapy Treatment for Psychogentic Nonepileptic Seizures in Gates and Rowan's Non-Epileptic Seizures, Fourth Edition by Steven C. Schachter and W. Curt LaFrance Jr., London: Cambridge University Press, 2017.

Bullock K, Barry J: Psychiatric Factors in Psychogenic Nonepileptic Seizures: Towards the Integration of Care, First Edition by in Barbara Dworetzky and Gaston Baslet: Oxford University Press, 2017.

Bullock KD, Mirza N, Forte C, Trockel: Group Dialectical Behavior Therapy Skills Training for Conversion Disorder with Seizures. J Neuropsychiatry Clin Neurosci 2015;27(3):240-3 PMID:25959039.



Central Sleep Apnea and Respiratory Assist Devices for Sleep Apnea Treatment

Michelle Cao, DO
Clinical Assistant Professor

Dr. Cao's expertise includes breathing disorders in neuromuscular disease, central sleep apnea, and home mechanical ventilation. Her research focuses on sleep disordered breathing in neuromuscular disease and advanced positive airway pressure devices for complex breathing disorders. In addition, Dr. Cao is interested in advancing sleep education. Along with Dr. Shannon Sullivan, she is conducting a study evaluating the state of sleep education across primary residency and fellowship training programs in US.

RECENT WORKS:

Chow M, Cao M. The orexin system and sleep disorders: preclinical insights and clinical progress. Nature and Science of Sleep. 2016 in press.

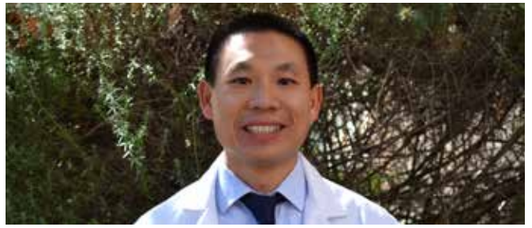
Cao M, Cardell CY, Willes L, Mendoza J, Benjafield A, Kushida C. A Novel Adaptive Servoventilation (ASVAuto) for the Treatment of Central Sleep Apnea Associated with Chronic Use of Opioids. J Clin Sleep Med 2014; 10(8):855-61.

Arora N, Cao M, Javaheri S. Opioids, Sedatives, and Sleep Hypoventilation. Sleep Med Clin 2014; 9(3):391-398.

Cao M, Javaheri S. Management of Opioid Induced Central Sleep Apnea. US Respir Dis 2014. (In press)

Cao M, Guilleminault C, Lin C. Central sleep apnea: effects on stroke volume in heart failure. Am J Resp Crit Care Med 2013; 187(4):340-341.

Cao M, Guilleminault C. Sleep Disordered Breathing, heart failure, and phrenic nerve stimulation. CHEST 2012; 142(4):821-823.



Sleep Disorders

Joseph Cheung, MD, MS
Clinical Instructor

Dr. Cheung is a clinical instructor and a postdoctoral fellow in Sleep Medicine who specializes in treating patients with hypersomnia disorders. His current research involves: (i) studying individuals with long sleep duration by using objective actigraphy measurements; (ii) applying consumer wearable/mobile technologies for sleep monitoring and clinical applications; (iii) searching for large effect genetic factors associated with long sleep duration to help elucidate the pathophysiology of hypersomnia disorders.

RECENT WORKS:

The Boom in Wearable Technology: Cause for Alarm or Just What is Needed to Better Understand Sleep? Sleep de Zambotti, M., Godino, J. G., Baker, F. C., Cheung, J., Patrick, K., Colrain, I. M. 2016; 39 (9): 1761-1762.

Genetic basis of chronotype in humans: Insights from three landmark GWAS. Sleep Kalmbach, D. A., Schneider, L. D., Cheung, J., Bertrand, S. J., Kariharan, T., Pack, A. I., Gehrman, P. R. 2016.

Prevention and Intervention (PI) Laboratory

Victoria Cosgrove, PhD
Clinical Assistant Professor

The Prevention and Intervention (PI) Laboratory (http://med.stanford.edu/cosgrove-pilab/about.html), housed in the Division of Child and Adolescent Psychiatry, investigates the etiology and treatment of affective psychopathology across the life span and within families. Our mission is focused on two overarching aims: (1) to examine, using multilevel analysis (i.e., behavioral, genetic, immunological, etc.), stress-related etiological phenomena involved in the emergence of affective psychopathology in youth and adults within a diathesis-stress framework, and; (2) to develop and test the efficacy of evidence-based psychosocial and pharmacological interventions that promote arousal regulation and decreased inflammation in youth and their families. The PI Lab recently received funding from the Child Health Research Institute at Stanford to study the biology of bullying in adolescents as well as a Stanford Teaching and Mentoring Academy Innovation Grant to develop an interdisciplinary training program for work with complex family systems. We continue active collaborations with Deakin University in Australia and the University of Toronto in Canada to investigate internet-based psychosocial interventions and anti-inflammatory medication treatments, respectively, for adults with bipolar disorder.

RECENT WORKS:

Cosgrove, V.E., Kelsoe, J., Suppes, T.S. (2016). Toward a valid animal model of bipolar disorder: how the Research Domain Criteria help bridge the clinical-basic science divide. Biological Psychiatry, 79(1), 62-70.

Cosgrove, V.E., Suppes, T. (2013). Informing DSM 5: Biological boundaries between Bipolar I, Schizoaffective, and Schizophrenia. BMC Medicine, 11(127).

Cosgrove, V.E., Roybal, D., Chang, K.D. (2013). Bipolar depression in pediatric populations: epidemiology and management. Pediatric Drugs, 15(2): 83-91.

Cosgrove, V.E., Miklowitz, D.J., Rhee, S.H., Hawkey, C., Corley, R., Haberstick, B.,& Smolen, A. (2012). Association between 5HTT, DAT1, and DRD4 and bipolar disorder in youth. Psychiatric Genetics, 22(6), 304.

Cosgrove, V.E., Rhee, S.H., Gelhorn, H., Boeldt, D., Ehringer, M.A., Young, S.E., Corley, R.P., & Hewitt, J.K. (2011). Structure and Etiology of Co-occurring Internalizing and Externalizing Disorders in Adolescents. Journal of Abnormal Child Psychology, 39(1), 109-123.

Medical Student Support

Sallie De Golia, MD, MPH
Clinical Professor

Based on the fact that medical students have higher rates of depression, anxiety, and burnout compared to age-matched samples and the general population, we sought to develop a novel resident-led support group intervention to enhance resilience and protect against burnout. We designed support groups for first and second year medical students that include group co-facilitator experience for psychiatry residents. 40 medical students responded to a choice of women, men, mixed, or diversity groups. Residents received 7 hours of training prior to group initiation and receive bi-weekly group supervision throughout the intervention period. We are assessing group efficacy through pre and post-intervention medical student surveys as well as group cohesion and resident training efficacy (IRB approved).

RECENT WORKS:

Gold J, Bandstra B, DeGolia S. Early Outpatient Experience for Psychiatry Interns: The Evaluation Clinic. Academic Psychiatry 2016, 40(6), 944-946. DOI 10.1007/s40596-016-0581-4

Rissman Y, Isaac S, Khan C, Paiz A, DeGolia S. Developing a Mental Health Curriculum to Build Capacity and Improve Access to Mental Health Care in Rural Guatemala. Academic Psychiatry First online March 2016. DOI 10.1007/s40596-016-0500-8

Yarnell S, DeGolia S. Neuroscience in the Media: How Social Media Changes the Brain. National Neuroscience Curriculum Initiative. January 2016. at www.nncionline.org.

Teen Mental Health

Sara Gandy, MD
Clinical Associate Professor

As part of the department's commitment towards the advancement of the health of our local community, Stanford Department of Psychiatry and Behavioral sciences has formed a standing partnership with Sacred Heart Schools, Atherton.

The primary goal of this newly created partnership is to devise and implement a long-term strategic health and wellness plan for students and families across all school divisions, preschool through grade 12.

Collaborating with Sacred Heart School principals, counselors, and educators, Dr. Gandy is helping the school re-envision its advising and counseling programs, evaluating school culture, and recommending best practices in child and adolescent mental healthcare. In addition, the joint initiative will develop an integrated and comprehensive preschool through grade 12 parent education program, aligned with the school's mission, responsive to timely trends, and relaying the most current research in child and adolescent development.

Early Behavioral Interventions for Autism Spectrum Disorders

Grace Gengoux, PhD
Clinical Associate Professor

Over the past year, Dr. Gengoux's research has continued to focus on the design and evaluation of effective naturalistic behavioral treatment programs for young children with autism. Dr. Gengoux oversees the supervision of a team of therapists providing parent training and in-home treatment for a randomized controlled trial of Pivotal Response Treatment (PI: Hardan) which is nearing completion.

Dr. Gengoux has also continued to strengthen the community partnership with Abilities United where she leads an innovative inclusive social skills research program (PI: Gengoux) focused on improving peer initiations made by children with ASD. A parent training program will be added in the coming year to enhance the program's effectiveness in fostering meaningful friendships for children. Preliminary findings from both projects have been presented at several national and international conferences.

Psychosocial Interventions for Psychosis

Kate Hardy, ClinPsychD
Clinical Assistant Professor

As part of the INSPIRE clinic the goal of this lab is to broaden the development, dissemination, and application of psychosocial interventions for psychosis. Dr. Hardy is an internationally recognized expert in Cognitive Behavioral Therapy for psychosis (CBTp) and researches novel applications of this approach including training family members in key CBTp skills, integrating Virtual Reality technology to augment traditional therapy interventions, and a targeted group intervention for individuals with co-morbid symptoms of psychosis and worry. Recently, in partnership with the Department of State Hospitals, Dr. Hardy has also been exploring outcomes following CBTp training for frontline staff in a forensic setting in CBTp. The lab is supported by students from the PGSP-Stanford PsyD Consortium who are committed to conducting their dissertation research in line with the lab's goals.

RECENT WORKS:

Hardy, K.V., Mayanil, T., Graeber, D. & Adelsheim, S. (2017) Childhood and Adolescent Psychosis in Gullota, T & Blau, G. (Eds) Handbook of Childhood Behavioral Issues: Evidence Based Approaches to Prevention and Treatment.

Fisher, M., Loewy, R., Hardy, K., Schlosser, D. & Vinogradov, S. (2013) Cognitive Interventions Targeting Brain Plasticity in the Prodromal and Early Phases of Schizophrenia, Annual Review of Clinical Psychology, 9, 435-463.

Hardy, K.V. & Loewy, R. (2012) Psychosocial interventions for adolescents at clinical high risk for psychosis: Cognitive Behavioral Therapy, Adolescent Psychiatry, 2, 172-181.

Hardy, K.V, Moore, M., Rose, D., Bennett, R., Jackson-Lane, C., Gause, M., Jackson, A. & Loewy, R. (2011) Filling the Implementation Gap: A Community-Academic Partnership Approach to Early Intervention in Psychosis, Early Intervention in Psychiatry, 5, 366-374.

Hardy, K.V., Dickson, J.M. & Morrison, A.P. (2009) Journey into and through an early detection of psychosis service, Early Intervention in Psychiatry, 3, 52 – 57.

Communication Health Interactive for Parents and Others (CHIPAO)

Rona Hu, MD
Clinical Associate Professor

A 2015 suicide cluster among Palo Alto teenagers made national news, but few reports mentioned that all four suicides were Asian. Nationally, Asian-American youth are at higher suicide risk, citing family acculturation mismatches as especially stressful.

The Stanford psychiatry department responded with interventions for teens; we also talked with parents, who discussed cultural differences, but also requested role-modeling. We immediately planned a series of theatrical performances for Bay Area schools. Faculty and trainees drew on our academic, clinical and personal experiences, writing scripts and acting, depicting scenarios like arguing about grades, dating someone "unsuitable", and embarrassment over a parent's accent. We perform each scene first one way, pause for input, then perform it again, but "better".

The response: coverage from front page news, television and radio, to national and international invitations to perform for schools, communities, and professional meetings. Even more gratifying: parents who realize they are not alone, and talk about their struggles. Responding to requests, we are expanding: vignettes for South Asians and Latinos, outcomes research, and video programs supplementing our live performances. As doctors we have found a "treatment" without side effects, that may save lives.

Website: www.stanfordchipao.com

HPA Axis and Cognition in Major Depression

Jennifer Keller, PhD
Clinical Associate Professor

Dr. Keller's clinical research has examined cognitive, affective, and genetic aspects of major depression. Specifically, her recent work has focused on the relationship of the Hypothalamic Pituitary Adrenal (HPA) Axis and cognition in major depression. In conducting this work, we found that many of these depressed women have experienced interpersonal violence. This led to researching therapeutic groups, which focused on skill building and empowerment, for depressed women who have experienced trauma. Given the long term sequelae of such violence, Dr. Keller has more recently been examining ways to prevent gender-based violence. A recent publication examined whether a school-based program aimed at adolescent boys would help reduce the rate of gender-based violence for adolescent girls in Nairobi, Kenya.

Locally, we are researching similar empowerment prevention programs for adolescent girls and are developing violence prevention programs for adolescent boys. Dr. Keller's clinical research now focuses on several aspects of trauma, including prevention of gender-based violence, as well as understanding the biological, psychosocial, and cognitive effects of trauma.

RECENT WORKS:

Keller, J., Mboya, M.O., Sinclair, J., Githua, O.W., Mulinge, M, Sinclair, L., Bergholz, L., Golden, N.H., & Kapphahn, C. (In Press). A Six-week School Curriculum for High School Boys' Changes Attitudes and Behaviors Related to Gender-Based Violence (GBV) in Kenya. Journal of Interpersonal Violence. Epub 2015 Jun 10. PMID: 26063788.

Keller, J., Gomez, R.G., Williams, G., Lembke, A., Lazzeroni, L., Murphy, Jr., G.M., Schatzberg, A.F. (In press). HPA Axis in Major Depression: Cortisol, Clinical Symptomatology, and Genetic Variation Predict Cognition. Molecular Psychiatry, 2016 Aug 16 [Epub ahead of print].

Young, C.B., Chen, T., Nusslock, R., Keller, J., Schatzberg, A.F., & Menon, V. (In Press). Anhedonia and general distress associated with dissociable connectivity of ventromedial prefrontal cortex in major depressive disorder. Translational Psychiatry. Epub 2016 May 17. PMID 27187232.

Drysdale, A.T., Grosenick, L., Fetcho, R., Downar, J., Dunlop, K., Mansouri, F., Meng,Y., Zebley, B., Oathes, D.J., Etkin, A., Schatzberg, A.F., Sudheimer, K., Keller, J., Mayberg, H.S., Gunning, F.M., Alexopoulos,G.S., Fox, M.D., Pascual-Leone,A., Voss, H.U., Casey, B.J., Dubin, M.J.& Liston, C. (2017). Resting State Connectivity Biomarkers Define Neurophysiological Subtypes of Depression, Nature Medicine, 23(1), 28-38.

Schatzberg, A.F., Keller, J., Tennakoon, L., Lazzaroni, L., Lembke, A., Williams, G., Kramer, F.B., Sarginson, J.E., & Murphy, G. (2014). HPA Axis Genetic Variation, Cortisol, and Psychosis in Major Depression. Molecular Psychiatry, 19(2), 220-7. PMID: 24166410.

Addiction Psychology and the Stanford Tobacco Cessation Program

Matthew Kendra, PhD
Clinical Assistant Professor

Dr. Kendra's group is working to develop two clinical and research programs in the Addiction Medicine and Dual Diagnosis Clinic. First, collaborating with Dr. Nancy Haug's lab and practicum students, we have developed and successfully implemented a 12-session mindfulness-based group psychotherapy protocol to treat substance use disorders and addictive behavior, and are collecting data to determine program effectiveness. Second, the comprehensive Stanford Tobacco Cessation Program has been in place now for over two years. The evidence-based program combines motivational interviewing, carbon monoxide breath monitoring, mindfulness training for smoking cessation, medication consultation, group therapy, and phone follow-up. The program received seed funding from the Stanford Cancer Center (PI/PD Dr. Matthew Kendra; co-I's Dr. Jodi Prochaska, Dr. Oxana Palesh, Dr. Anna Lembke, and collaborators Dr. Lisa Henriksen and Dr. Sean David) to coordinate and expand tobacco treatment in oncology care. Our partnership with the Stanford Cancer Center has allowed us to develop referral pathways, engage oncology providers, explore novel methods of engaging patients in treatment (e.g., automated electronic referral, telemedicine), review the literature on tobacco treatment in oncology care, and track outcomes.

RECENT WORKS:

Truntzer, J., Comer, G., Kendra, M.S., Johnson, J., Behal, R., & Kamal, R.N. (accepted). Perioperative Smoking Cessation and Clinical Care Pathway for Orthopaedic Surgery. The Journal of Bone and Joint Surgery: Reviews.

Kendra, M.S.; Kaiser, E.; Haug, N.; Lembke, A., & Prochaska, J. (2016). Implementing a comprehensive smoking cessation service into a hospital setting: Barriers and successes. Symposium conducted at the annual meeting of the Addiction Health Services Research Conference, Seattle, WA.

Khan Laboratory

Christina Khan, MD, PhD
Clinical Assistant Professor

The goal of the Khan laboratory is to build and sustain academic-community partnerships and outreach in the areas of global mental health and integrated behavioral health. The laboratory conducts community-based research and outreach aimed at the prevention and early identification of mental health problems in vulnerable populations. The lab's work is primarily focused on populations at high risk for trauma, including communities in East Palo Alto, Guatemala, and Zimbabwe, but also on populations at risk for secondary trauma, such as physicians and health workers. The clinical arm of the laboratory aims to promote the integration of behavioral health within existing primary medical and community systems of care. Current sites include Ravenswood Family Health Center in East Palo Alto and communities in rural Guatemala and in Zimbabwe. This is being done through a multi-pronged approach, including: trainings for primary care clinicians and community health workers, development of culturally-tailored diagnostic tools and brief interventions, and the integration of digital tools such as mobile-based interventions and population-based tracking. The research arm of the laboratory has the following aims: 1) implementation research related to the above clinical activities, 2) examination of the relationships among trauma, mindfulness, and trans diagnostic markers of distress, such as emotion regulation, self-esteem, and sleep, and 3) development of tools to better quantify risk and resilience in vulnerable populations. Other efforts include multidisciplinary work in the areas of physician wellness and transgender health.

RECENT WORKS:

Khan, C.T., Louie, A., Reicherter, D., Roberts, L.W. Global mental health: What is the role of academic departments of psychiatry? Academic Psychiatry. Online first, 14 Mar 2016: 1-7.

Rissman, Y.Z., Khan, C.T., Isaac, S.K., Paiz, J.A. & DeGolia, S.G. Developing a Mental Health Curriculum to Build Capacity and Improve Access to Mental Health Care in Rural Guatemala. Academic Psychiatry. Online first, 14 Mar 2016: 1-3.

Khan, C.T. Kombis, brothels, and violence against women: Building global health partnerships to address women's health and empowerment. In Roberts, L. et al. Partnering for Mental Health: A Guide to Community and Academic Collaboration. Springer: New York; 2015.

Khan, C.T., Greene, C., Strauss, J., Spiegel, D., & Weitlauf, J.C. A new perspective on distress during the pelvic examination: The role of traumatic hyperarousal in women with histories of sexual violence. Violence and Gender 2014;1(3):117-23.

Adolescent Mental Health

Hilit Kletter, PhD
Clinical Assistant Professor

Dr. Kletter is involved in a three year randomized controlled trial that is examining three treatment conditions for traumatized youth: Cue Centered Treatment (CCT), a Stanford developed manualized intervention for chronically traumatized youth, Trauma-Focused Cognitive Behavioral Therapy (TF-CBT), and Treatment as Usual, which is compromised of flexible integrated services offered at Stanford Youth Solutions, a community mental health agency in Sacramento. The study aims to recruit 135 youth between the ages of 10-16 to participate. The purpose of the study is to determine what child characteristics predict treatment outcomes, which phases of treatment are most effective, and to identify neuro-markers that may be predictors of treatment outcome. Collaborators include Allan Reiss (neuroimaging consultant), Judy Cohen (TF-CBT consultant), and Carl Weems (statistical consultant). Dr. Kletter is also working on development of a formal certification process for training on CCT as well as assessment of training and dissemination.

RECENT WORKS:

Carrion, VG, Kletter, H, Weems, CF, Rialon Berry, R, & Rettger, JP (2013). Cue-centered treatment protocol for children exposed to interpersonal violence: a school-based randomized controlled trial. Journal of Traumatic Stress, 26, 654-662.

Kletter, H, & Carrion, VG (2016). Posttraumatic stress disorder in youth exposed to war and terror. In E Vermetten, TC Neylan, M Kramer, & SR Pandi-Perumal (eds.). Sleep and Combat-Related Posttraumatic Stress Disorder. New York, NY: Springer Science.

Kletter, H, Rialon, RA, Laor, N, Brom, D, Pat-Horenczyk, P, Shaheen, M...&Carrion, VG (2013). Working with youth exposed to war and violence: recommendations for future research and interventions. Child & Youth Care Forum, 42, 371-388.

Rettger, J, Kletter, H, & Carrion, VG (2016). Trauma and acculturative stress. In SG Patel & D Reicherter (eds.). Psychotherapy for Immigrant Youth. New York, NY: Springer Science.

Child Traumatic Stress Intervention and Program Development

Ryan Matlow, PhD
Clinical Assistant Professor

Dr. Matlow's research focuses on developing and implementing interventions to address childhood exposure to stress, trauma, and adversity. Current projects include evaluation of school-wide prevention programs, implementation of trauma-focused psychotherapy (i.e., Stanford's Cue-Centered Therapy), development of community-based mental health service and wellness consultation programs. These projects apply a neurodevelopmental framework for understanding the impact of child trauma exposure and include measures of neurobiological functioning. Dr. Matlow is interested in the use of community-based participatory research methods to inform program development and evaluation.

Infectious Disease Impact on Mental Health

Lawrence McGlynn, MD
Clinical Professor

Dr. McGlynn continues to focus his work on the care and treatment of those living with HIV/AIDS. His focus has now expanded to include the LGBT population as a whole, and other vulnerable populations (homeless, those struggling with methamphetamine and other substances). A significant portion of Dr. McGlynn's work includes the education of patients, families, communities, and providers. His teaching is accomplished through the American Psychiatric Association's Office of HIV and the Council on Psychosomatic Medicine, through which he leads seminars and workshops domestically and internationally. As Medical Director of the San Jose AIDS Education and Training Centers, Dr. McGlynn guides the focus and direction of the Center's training of Primary Care and Infectious Disease providers throughout California. Dr. McGlynn is also actively engaged in scholarly writing. He is co-editing a book on the use of Motivational Interviewing in HIV and Hepatitis C care. He is also co-editing a comprehensive textbook on Compassionate Care in psychiatry. He continues to contribute chapters to other scholarly volumes, including LGBT Mental Health, Ethical Issues in HIV, and Integrative Medicine.

RECENT WORKS:

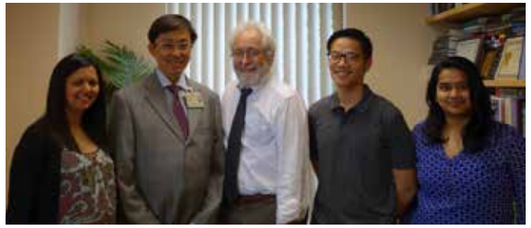
Mc Glynn L. Stanford-Santa Clara County Methamphetamine Task Force. In Partnering for Mental Health: A Guide to Community and Academic Collaboration. Editors: Laura Roberts, Daryn Reicherter, Steven Adelsheim, and Shashank Joshi. 2015.

Gore Felton, C, Mc Glynn L, and Spiegel D. Integrative Medicine in HIV. In Comprehensive Textbook of AIDS Psychiatry - A Paradigm for Integrated Care. Oxford University Press. 2016.

Mc Glynn LM. "HIV Psychopharmacology". In Glick, ID, Balon, R, Zisook, S, et al., ASCP Model Psychopharmacology Curriculum, 6th Edition, American Society of Clinical Psychopharmacology, Glen Oaks, NY. 2016.

Humble M, Pilkinton M, Mc Glynn L. HIV/AIDS: Measuring an Evolving Virus. Journal of Human Behavior in the Social Environment, 2011; 21(3):398-409.

Talbot A, Uwihoreye C, Kamen C, Grant P, McGlynn L, et al. Treating Psychological Trauma Among Rwandan Orphans is Associated With a Reduction in HIV Risk-Taking Behaviors: A Pilot Study. AIDS Educ Prev. 2013 Dec;25(6):468-79.



Bipolar Disorders Clinic

Shefali Miller, MD
Clinical Assistant Professor

Dr. Miller's current research focuses on understanding the effectiveness of novel treatment and monitoring strategies for bipolar disorder. She is the principal investigator of two clinical research studies, including a randomized, double-blind, placebo-controlled trial of adjunctive suvorexant for insomnia related to bipolar disorder, and a retrospective naturalistic study of the clinical effectiveness of lurasidone in bipolar disorder patients. She is also involved in a randomized, double-blind, placebo-controlled study of infliximab for bipolar depression. The results of these studies hold promise to advance our understanding not only of the effectiveness of novel treatments for bipolar disorder, but also of potential underlying etiologic factors contributing to the illness (e.g., orexin and/or other neurotransmitter abnormalities, inflammatory processes). Dr. Miller and her colleagues are also investigating the use of actigraphy to monitor daytime and nighttime activity in bipolar disorder patients, and how these objective measures of activity may correlate with (and potentially predict the onset of) subjectively reported bipolar mood symptoms. In addition to the above research activities, Dr. Miller is dedicated to the use and dissemination of measurement-based care strategies to optimize treatment outcomes and advance clinical research efforts. As such, she is involved in a quality improvement initiative with her colleagues to implement measurement-based care across the Department of Psychiatry, and she has been analyzing measurement-based clinical data collected by the Stanford Bipolar Disorders Clinic and the Stanley Bipolar Network to improve our understanding of bipolar disorder phenomenology, with particular interests in depressive and mixed states and factors influencing longitudinal illness course.

RECENT WORKS:

Miller, S., Suppes, T., Mintz, J., Hellemann, G., Frye, M.A., McElroy, S.L., Nolen, W.A., Kupka, R., Leverich, G.S., Grunze, H., Altshuler, L.L., Keck, P.E., Post, R.M. Mixed depression in bipolar disorder: Prevalence rate and clinical correlates during naturalistic follow-up in the Stanley Bipolar Network. Am J Psychiatry (in press).

Miller, S., Dennehy, E.B., Suppes, T. The prevalence and diagnostic validity of short-duration hypomanic episodes and major depressive episodes. Curr Psychiatry Rep 2016; 18: 27-33.

Hooshmand, F., Miller, S., Dore, J., Wang, P.W., Hill, S.J., Portillo, N., Ketter, T.A. Trends in pharmacotherapy in patients referred to a bipolar specialty clinic, 2000-2011. J Affect Disord 2014; 155: 283-287.

Psychosocial Aspects of Chronic Illness in Children

Diana Naranjo, PhD
Clinical Associate Professor

Dr. Naranjo's clinical research is aimed at overcoming barriers and increasing adherence in persons with chronic illness, specifically diabetes and cystic fibrosis. Two areas of emphasis cut across this work: 1) addressing health disparities in chronic illness through individual, provider, and systems level interventions, and 2) optimizing health and quality of life through medical devices and technologies. Beginning in postdoctoral fellowship, Dr. Naranjo specialized in understanding the unique behavioral, mental health, individual, and family factors that impact health care for youth with chronic illness.

She has successfully implemented a clinic-based transition program for youth with type 1 diabetes within a Quality Improvement framework, and research to implement patient reported outcomes routinely across pediatric health clinics.

RECENT WORKS:

Naranjo, D., Tanenbaum, M., Iturralde, E., & Hood, K.K. (2016). Diabetes technology: uptake, outcomes, barriers and the intersection with distress. Journal of Diabetes Science and Technology 10(4): 852-858. 14. Driscoll, K.A., Raymond, J., Naranjo, D., Patton, S.R. (2016). Fear of Hypoglycemia in Children and Adolescents and Their Parents with Type 1 Diabetes. Current Diabetes Reports 16(8): 77.

Tanenbaum, M.L., Hanes, S.J., Miller, K.M., Naranjo, D., Bensen, R., & Hood, K.K. (2016). Barriers to Device Uptake in Adults with Type 1 Diabetes. Diabetes Care 2016 Nov; dc161536 https://doi.org/10.2337/dc16-1536

Iturralde, E., Tanenbaum, M.L., Hanes, S.J., Suttiratana, S., Ambrosino, J.M., Ly, T.T., Maahs, D.M., Naranjo, D., Walders-Abramson, N., Weinzimer, S.A., Buckingham, B.A., Hood, K.K. (in press). Expectations and Attitudes of Individuals with Type 1 Diabetes Following a Brief Trial of a Hybrid Closed Loop System (DIA-2016-0297). In press at The Diabetes Educator (expected publication March 2017).

Iturralde, E., Tanenbaum, M.L., Naranjo, D., Hood, K.K. (in press) A New Kind of Intimacy: Partner Perspectives on Closed Loop Systems. In press at The PLAID Journal (expected publication February 2017).

Early Psychosis and Physical Exercise

Douglas Noordsy, MD
Clinical Professor

Dr. Noordsy is a faculty affiliate of the Stanford Neurosciences Institute and a member of the Teaching and Mentoring Academy. He presented a case series & treatment algorithm for use of clozapine among people with early psychosis as well as a description of the PEPPNET Lived Experience workgroup at the International Early Psychosis Association in Milan. He is currently analyzing results of the PEPPNET survey on access to care among people with early psychosis with Kate Hardy, ClinPsyD. He is continuing a study of prospective response to regular exercise in people with schizophrenia spectrum disorders. He is also participating in a Linkage Disequilibrium Score Regression (LDSR) genetic correlation analysis of schizophrenia with Laramie Duncan, PhD and others.

Dr. Noordsy is opening a site for a clinical trial of long-acting injectable vs oral medication in people in early schizophrenia. He is developing proposals with Dr. Hardy and Jacob Ballon, MD to study an intervention for early identification of university students developing psychosis, and Virtual Reality enhanced CBT for psychosis. He is collaborating with Tanya Luhrmann, PhD and Dr. Hardy on developing an interdisciplinary center for studying the phenomena of psychosis, voices, visions and beliefs. He is also assisting in developing a center on technology and behavioral health in the department, authoring a chapter for Laura Roberts, MD, MS's University Student Mental Health book, and developing a book on lifestyle psychiatry.

RECENT WORKS:

Noordsy DL, Ashfaq H, Ballon JS. Ultra-low dose clozapine for people with early psychosis: Development of tailored treatment guidelines. 10th International Early Psychosis Association meeting. Early Intervention in Psychiatry, 10(Supplement S1):177-178, 2016.

Hardy KV, Adelsheim SA, Srihari VH, Noordsy DL. PEPPNET: A national network to support coordinated early psychosis service development (Symposium Session 11). 10th International Early Psychosis Association meeting. Early Intervention in Psychiatry, 10(Supplement S1):23-24, 2016.

Mueser KT, Noordsy DL, Drake RE. Serious mental illness. In: The Oxford Handbook of Substance Use Disorders, Volume 2, edited by K. Sher. New York: Oxford University Press, 2016.

Noordsy DL. Innovations in care for people with schizophrenia spectrum disorders. Psychiatric Times, 33(10):12, 2016.

Noordsy DL. Ethical Issues in the Care of People with Schizophrenia. Focus: The Journal of Lifelong Learning in Psychiatry, 14(3):349-353, 2016.

Sports Psychology

Lisa Post, PhD
Clinical Associate Professor

Dr. Post's clinical and research group is focused on improving psychosocial functioning in elite athletes. Recent research initiatives include evaluation of a pilot injured athlete support group designed to support Stanford Athletes that was funded by the National Collegiate Athletic Association (co-PI Norah Simpson). This program was identified as a highly desired resource by both student-athletes and athletic staff. Ongoing work is focusing on how to increase access to this critical support system, as well as continued development and dissemination efforts. Dr. Post serves as the Chief of Sports Psychology in the Stanford Athletic program and also is the Sports Psychologist for the San Francisco 49ers football program. Her clinical program provides direct services to athletes, psychoeducational services to athletic staff, and training to psychology fellows.

RECENT WORKS:

Simpson NS, Gibbs EL, Matheson G (accepted). Optimizing sleep to maximize performance: Implications for elite athletes. Scandinavian Journal of Medicine and Science in Sports.

http://www.ncaa.org/about/resources/research/injured-athlete-support-group-evaluation-pilot-program

STANFORD BYERS CENTER FOR BIODESIGN

Couples and Family Therapy — Team Learning and Design

Douglas Rait, PhD
Clinical Professor

Dr. Rait's current research and scholarly research interests include the therapeutic alliance in couples and family therapy, the family context of health and illness, family-systems training in medical education, work-couple-family balance, the influence of technology on family relationships, health technology innovation, multidisciplinary team performance, and digital applications in the behavioral sciences.

RECENT WORKS:

Wall, J., Hellman, E., Denend, L., Rait, D., Venook, R., Azagury, D., Yock, P., Brinton, T. (2016). The impact of postgraduate health technology innovation training: Outcomes of the Stanford Biodesign Fellowship. Annals of Biomedical Engineering. 12, 1-9.

Glick, I., Rait, D., Heru, A. & Ascher, M. (2015). Couples and family therapy in clinical practice: 5th edition. London: Wiley/Blackwell.

Rait, D. (2015). A family-centered approach to the patient with cancer (561-566). In Holland, J., Breitbart, W., Butow, P., Jacobsen, P., Loscalzo, M. & McCorkle, R. (Eds.). Psycho-Oncology: Third Edition. New York: Oxford.

Rait, D. (2012). Family therapy training in child and adolescent psychiatry fellowship programs. Academic Psychiatry, 36, 448-451.

Rait, D. (2012). Primary treatment approaches in child and adolescent psychiatry training. Academic Psychiatry, 36, 487-489.

Human Rights in Trauma Mental Health Laboratory

Daryn Reicherter, MD
Clinical Associate Professor

Daryn Reicherter is the director of The Human Rights in Trauma Mental Health Laboratory. The laboratory is committed to advancing and applying research on psychiatric sequelae for survivors of human rights abuses with an eye towards informing transitional justice and judicial processes. The lab focuses on the science of the psychological changes and mental health pathology caused by trauma on individuals, their families, and their communities, over time and between generations. Lab affiliates and colleagues analyze and build upon the rich data in the interdisciplinary scientific literature and in specific conflict situations to clearly identify the impact on human psychology of various forms of mass trauma, including genocide, mass killings, rape, and torture. This analysis can be used to clarify the science and/or advocate for the survivors' human rights and mental health in a whole range of settings, including criminal trials, civil suits for monetary damages, and asylum proceedings. The lab will participate in these transitional justice processes in a range of ways, including by providing expert testimony and reports and consulting with the legal teams prosecuting perpetrators or representing victims. The lab's current projects include formal reports for United Nations-backed transitional justice programs for situations in Cambodia and the Central African Republic, and investigations for reports for human rights violations in Haiti and in Somalia. The lab also provides expert opinions for legal clients from Central America, the Caribbean, and the Middle East.

RECENT WORKS:

Cambodia's Hidden Scars: Trauma Psychology and the Khmer Rouge Tribunal. Documentation Center of Cambodia, Phnom Penh, Cambodia. (2016). Van Schaack B, Reicherter D, Chhang Y

Cambodia's Hidden Scars: Trauma Psychology in the Wake of the Khmer Rouge. Documentation Center of Cambodia, Phnom Penh, Cambodia. (2011). Van Schaack B, Reicherter D, Chhang Y

"The Earthquake: Mobile Refugee Clinic in Haiti." In Partnerships for Mental Health pp 179-192 Jayne E. Flemin, Daryn Reicherter (2015)

"Mental Health Consequences of War and Political Conflict." In The International Handbook of Psychiatry: A Concise Guide for Medical Students, Residents, and Medical Practitioners, LW Roberts (Ed.), World Scientific Publishing, Hackensack, NJ. Reicherter D, Sugarbaker R (2013).

Biology of Perinatal Mood Disorders

Thalia Robakis, MD, PhD
Clinical Assistant Professor

Dr. Robakis is interested in perinatal mood disorders and their relationship to early life stress. Her previous work has shown that insecure attachment style in pregnant women is strongly related to the development of postpartum depression. Attachment insecurity is often a result of adverse childhood experiences, and early life stress has been shown to affect epigenetic modification of key genes over the long term. She is currently conducting a study whose purpose is to isolate an epigenetic signature of insecure attachment in pregnant women, and determine how this may be related to the development of depression postpartum.

This work will advance our understanding of how epigenetic modifications contribute to the shaping of personality and to risk for psychiatric disorders. This deeper understanding will improve our ability to explain, prevent, and develop timely interventions for postpartum depression, and perhaps also for the many other psychiatric syndromes that have been linked to suboptimal experiences in early life.

RECENT WORKS:

Robakis TK, Jernick E, Williams KE. Recent advances in understanding maternal perinatal mood disorders. F1000 Reviews. Submitted, currently under review.

Balzafiore D, Robakis TK, Borish S, Budhan V, Rasgon NR. The treatment of bipolar disorder in women. In A. Carvalho & E. Vieta (Eds.), The treatment of bipolar disorder: Integrative treatment strategies and future directions. New York: Oxford University Press. In Press (publication planned for April 2017)

Robakis TK, Williams K E, Crowe S, Lin KW, Gannon J, & Rasgon NL. (2016). Maternal attachment insecurity is a potent predictor of depressive symptoms in the early postnatal period. Journal of Affective Disorders 2016, 190, 623-631.

Robakis TK, Holtzman J, Stemmle PG, Reynolds-May MF, Kenna HA, Rasgon NL. Lamotrigine for Menstrually Entrained Symptoms of Bipolar Disorder. Journal of Affective Disorders, 2015, p 108-115.

Robakis TK, Williams KE, Crowe S, Kenna H, Gannon J, Rasgon NL. Optimistic Outlook Regarding Maternity Protects Against Depressive Symptoms Postpartum. Archives of Women's Mental Health, Aug 5, 2014. PMID 25088532

Eating Disorders: Emotion Dysregulation, Athlete and Bariatric Populations

Athena Robinson, PhD
Clinical Assistant Professor

Dr Robinson's core areas of programmatic research include treatment outcome and implementation research for eating disorders (ED). She has developed and researched several psychotherapeutic interventions, employing evidence-supported theory and treatment for ED, body image enhancement (for athletes), weight loss/ maintenance (including bariatrics), and has facilitated the delivery of such interventions via individual, group, guided self-help, in-person, telephone, and online formats. She is currently engaged in effectiveness studies of 1) an online intensive outpatient program for ED; 2) a mobile application for ED; 3) dialectical behavior therapy skills training groups. Dr Robinson is also co-investigator on a nationwide multi-site implementation study of evidence-based treatment for EDs and depression on college campuses. She has completed research support from the National Institutes of Mental Health, National Cancer Institute, National Collegiate Athletic Association, and Stanford University Center for Cognitive and Neurobiological Imaging Seed Grant.

RECENT WORKS:

S Agras, AH Robinson (Editors), The Oxford Handbook of Eating Disorders. Oxford University Press, in press.

Robinson AH, Darcy AM, Adler S, Safer DS: Early Adherence Targeted Therapy: An Intervention for Maladaptive Eating Behaviors for Post-Bariatric Patients. Cognitive and Behavioral Practice, in press.

Robinson AH, Safer DL, Austin J, Etkin A: Does implicit emotion regulation in Binge Eating Disorder matter? Eating Behaviors, 2015: 18: 86-91. doi: 10.1016/j.eatbeh.2015.05.011.

Robinson AH: Integrative Response Therapy for Binge Eating Disorder. Cognitive and Behavioral Practice, 2013:20(1), 93-105.

Robinson AH, Safer DL: Moderators of Dialectical Behavior Therapy for Binge Eating Disorder: Results from a randomized clinical trial. International Journal of Eating Disorders, 2012:45(4) 597-602.

Genetic Basis for Sleep and Sleep Disorders

Logan Schneider, MD
Clinical Instructor

Dr. Schneider's main career interests are in the genetics of periodic leg movements (PLMs) and obstructive sleep apnea (OSA). Like many others, he is convinced that the key to success in the genetics of sleep apnea is sub-phenotyping. Regarding the genetics of PLMs, he has gathered GWAS data and PLM data from the Wisconsin Sleep Cohort (1,200), a Stanford cohort (900), and MrOS (4,000) and is now conducting GWAS. He is doing the entire analysis from cleaning the data to imputation and association testing. Using this data, he is now estimating heritability of the phenotype, looking at the effect of existing Restless Leg Syndrome (RLS) loci, and exploring the rest of the genome for other associations. Further analyses will also be performed using versatile gene-based association study (VEGAS) and STRING-assisted module search (STAMS) to determine if power could be improved with a gene- or pathway-association strategy. The fact that BTBD9 is a strong gene for both RLS and PLMs, while MEIS1 has stronger effect in RLS and is also associated with insomnia suggest complex pleiotropic effects in RLS that this study will help resolve.

RECENT WORKS:

Kalmbach DA, Schneider LD, Cheung J, Bertrand SJ, Kariharan T, Pack AI, Gehrman PR. Genetic basis of chronotype in humans: Insights from three landmark GWAS. Sleep. 2016 Oct 28. pii: sp-00526-16.

Delirium in Lung Transplant Recipients

Yelizaveta Sher, MD
Clinical Assistant Professor

Dr. Yelizaveta Sher has been corroborating with cystic fibrosis (CF) and lung transplant (LT) teams. As a Mental Health Coordinator in CF clinic, sponsored by CF Foundation, she oversees mental health screening and care. Ongoing research will determine whether mental health interventions embedded in CF clinic improve mental and physical health outcomes in CF patients.

In addition, Dr. Sher has been leading a Quality Improvement (QI) project on timely delirium identification and treatment in LT recipients. The project was inspired by our own retrospective study of 163 LT recipients, which identified a 44% delirium rate post LT surgery. Delirium was associated with longer intensive care unit (12.9 days, 95% CI: 6.1-19.6) and hospital lengths of stay (17.7 days, 95% CI: 7.6-27.8). This publication is currently under review.

In our QI project, the Psychosomatic Medicine team follows each new LT recipient. So far, 37 new LT recipients have been evaluated for development of delirium for at least 5 days post-surgery. Treatment is recommended when needed. In addition to improving patient care, this project will allow us to better identify delirium characteristics and associated outcomes in this patient population, and to design interventions to decrease incidence of delirium and improve outcomes.

RECENT WORKS:

Gold J, Sher Y, Maldonado J, Frontal Lobe Epilepsy: A Primer for Psychiatrists and Systematic Review of Psychiatric Manifestations, Psychosomatics, 2016, Sep-Oct; 57(5): 445-64

Zimbrean P, Crone C, Sher Y, Dew AM, DiMartini A, Transplant Psychiatry: An Introduction, Part 1, Psychiatric Times, September 2016

Zimbrean P, Crone C, Sher Y, Dew AM, DiMartini A, Transplant Psychiatry: Psychiatric Care of Organ Donors and Recipients, Psychiatric Times, October 2016

Sleep and Health

Norah Simpson, PhD
Clinical Assistant Professor

Dr. Simpson's research interests are focused on the intersection of sleep and health, including use of behavioral sleep medicine approaches to improve sleep among individuals with sleep disorders and high performance athletes. She is currently the treatment coordinator for Dr. Rachel Manber's randomized controlled trial of non-pharmacological treatment of peripartum insomnia. She also remains active in experimental sleep loss research; most recently this research examined the impact of repeated episodes of sleep restriction on markers of stress, inflammation and pain.

RECENT WORKS:

Simpson NS, Biolombi M, Scott-Sutherland J, Yang H, Bhatt V, Gautam S, Mullington JM, Haack M. (2016). Dissociation between physiological and subjective responses to the stress of repeated episodes of sleep restriction and recovery. Brain, Behavior & Immunity. pii: S0889-1591(16)30150-7. doi: 10.1016/j.bbi.2016.06.001. [Epub ahead of print].

Simpson NS, Gibbs EL, Matheson GO. (2016). Optimizing sleep to maximize performance: Implications and recommendations for elite athletes. Scandinavian Journal of Medicine and Science in Sport. doi: 10.1111/sms.12703. [Epub ahead of print].

PANS Program

Margo Thienemann, MD
Clinical Professor

Dr. Thienemann is currently involved in research regarding neuroinflammatory pediatric syndrome that presents primarily and abruptly with psychiatric symptoms: PANS (Pediatric Acute-onset Neuropsychiatric Syndrome). In the multidisciplinary PANS Program, Dr. Thienemann, along with Dr. Jenny Frankovich and colleagues, are working to characterize the syndrome, its course and etiology using a database and biorepository. She has been part of creating the PANS Consortium diagnostic guidelines and first author on the PANS treatment guidelines for psychiatric and behavioral interventions.

RECENT WORKS:

Thienemann M , Murphy T, Leckman J, Shaw R , Williams, K, Kapphahn C, Frankovich J, Geller D, Bernstein G, Chang K, Elia, J, Hommer R, Swedo S, PANDAS/PANS Consortium Clinical Management of Pediatric Acute-onset Neuropsychiatric Syndrome (PANS): Part I – Psychiatric and Behavioral Interventions In press, J Child Adolesc Psychopharmacol

Frankovich J, Swedo S, Hernandez J, Dale R, Agalliu D, Williams K, Daines, M, Hornig, M. Chugani H, Sanger T, Muscal E, Pasternack M, Cooperstock M, Gans H, Zhang Y, Cunningham M, Bromberg R, Willet T, Bernstein G, Brown K, Farhadian B, Chang K, Kamalani G, Geller D, Kovacevick M, Sherr J, Shaw R, Leckman J, Murphy T, Thienemann M, PANS/PANDAS Consortium. Clinical Management of Pediatric Acute4onset Neuropsychiatric Syndrome (PANS): Part II – Use of Immunomodulatory Therapies. In press, J Child Adolesc Psychopharmacol.

Kayla Brown, BA, Cristan Farmer, PhD, Bahare Farhadian FNP-c, Joseph Hernandez, MD, Margo Thienemann, MD & Jennifer Frankovich, MD,MS, Pediatric Acute-Onset Neuropsychiatric Syndrome (PANS)- Response to Oral Corticosteroid Bursts: An Observational Study, Under Review

Mahony T, Sidell D, Gans H, Brown K, Farhadian B, Gustafson M, Janell Sherr, Thienemann M, Frankovich J. Improvement of Psychiatric Symptoms in Youth Following Resolution of Sinusitis. In Review.

Mahony M, Sidell D, Gans H, Cooperstock M, Brown M, Cheung JM, Farhadian B, Gustafson M, Thienemann M, Jennifer Frankovich. Palatal petechiae in the absence of Group A Streptococcus in pediatric patients with acute-onset neuropsychiatric deterioration: a cohort study. In review.

Chang K, Frankovich J, Cooperstock M, Cunningham MW, Latimer ME, Murphy TK, Pasternack M, Thienemann M, Williams K, Walter J , Swedo SE Clinical evaluation of youth with pediatric acute-onset neuropsychiatric syndrome (PANS): recommendations from the 2013 PANS Consensus Conference.; PANS Collaborative Consortium. J Child Adolesc Psychopharmacol. Feb;25(1):3-13. (2015)

Frankovich J, Thienemann M, Rana S, Chang K., Five youth with pediatric acute-onset neuropsychiatric syndrome of differing etiologies. J Child Adolesc Psychopharmacol. Feb;25(1):31-7. (2015)

Health for Healers

Mickey Trockel, MD, PhD
Clinical Assistant Professor

Dr. Trockel and his colleagues have recently established the Health for Healers research group (HFH). HFH is a collaborative group for researchers interested in practical evaluation research including the design, implementation, and evaluation of interventions to improve physician wellness. HFH mission aims are 1) to demonstrate the relationship between physician wellness and patient outcomes, and 2) to demonstrate that interventions to improve physician wellness also improve patient outcomes and cost effectiveness of medical care. This research is a natural extension of Dr. Trockel's previous work which includes evaluation of the effects of cognitive and behavioral strategies on sleep health and mood, evaluation of the effects on therapists and their patients of evidence based psychotherapy programs, and evaluation of a variety of primary prevention and health promotion interventions.

RECENT WORKS:

Schrijver, I., Brady, K., Trockel, M. An exploration of key issues and potential solutions that impact physician wellbeing and professional fulfillment at an academic center, Peer J (in press).

Trockel, M., Karlin, B., Brown, G. K., Taylor, C. B., Manber, R. (2015). Effects of Cognitive Behavioral Therapy for Insomnia on Suicidal Ideation in Veterans. SLEEP, 38 (2), 259-265.

Karlin, B., Trockel, M., Taylor, C. B., Gimeno, J., Manber, R. (2013). National Dissemination of Cognitive Behavioral Therapy for Insomnia in Veterans: Therapist and patient-level outcomes. Journal of Clinical and Consulting Psychology, 81, (5) 912-917.

Trockel, M., Manber, R., Chang, V., Thurston, A., Taylor C. B. (2011). An e-mail delivered CBT for sleep health program for college students: effects on sleep quality and depression symptoms. Journal of Clinical Sleep Medicine, 7 (3), 276-281.

Advancing Science

Emeritus Faculty

GIRLTALK: We Talk

Helen Wilson, PhD
Clinical Assistant Professor

Helen Wilson is the Principal Investigator of GIRLTALK: We Talk, a longitudinal study funded by the National Institute of Child Health and Human Development (NICHD) that examines pathways from early violence exposure to dating violence and unsafe sex in a sample of young African American women growing up in underserved communities in Chicago. Dating violence and unsafe sex represent major public health concerns that take place within romantic relationships and disproportionately affect young, urban African American women. Young women who participated in a longitudinal study that began when they were 14-16 years old recently completed a seventh wave of data collection. Current efforts of this project focus on analysis, write up, and presentation of data from this newest wave. Information collected from the young women includes trauma and victimization history, mental health, family, peer, and partner relationships, risk behavior, and resilience. Findings suggest that violent victimization from romantic partners mediates pathways from early violence exposure to both sexual risk and antisocial behavior among these young women. Further analyses are underway to understand this trajectory considering psychological, biological, and interpersonal mechanisms. Findings from this study have been presented at national and international conferences, including the Stockholm Criminology Symposium in June 2016.

RECENT WORKS:

Wilson, H. W., Samuelson, S., Staudenmeyer, A. H., Widom, C. S. (2015). Trajectories of risk associated with childhood abuse and neglect in low-income urban African American girls. Child Abuse & Neglect, 45, 108-21.

Wilson, H. W., Pettineo, L., Edmonds, A., Goodman, E., Emerson, E., Donenberg, G. R. (2015). From violence exposure to the development of sexual risk in low-income urban girls: The role of psychopathology. Child Psychiatry and Human Development, 46, 270-280.

Wilson, H. W., Donenberg, G., Emerson, E. (2014). Violence exposure and the development of sexual risk in low-income African American girls. Journal of Behavioral Medicine, 37, 1091-101.

Implementation of Evidence-Based Therapies in Community Settings

W. Stewart Agras, MD
Professor Emeritus

A problem common to many areas of medical practice is that evidence-based treatments or practices are not used correctly or not used at all, hence providing less than adequate care. This problem pertains to psychiatry and psychology because research has shown that many practitioners do not use evidence-based psychotherapeutic treatments. Dr. Agras is currently investigating this problem by studying 30 college counseling centers across the United States, randomizing colleges to two different methods of training therapists in treatments for eating disorders and depression, and examining the persistence of such training. A smaller project is examining implementation of family-based treatment in anorexia nervosa.

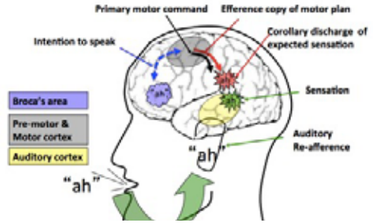
RECENT WORKS:

Agras, W.S., Lock, J., Brandt, H., Bryson, S.W., Dodge, E., Halmi, K.A., Jo, B., Johnson C.,Kaye, W., Wilfley, D., Woodside, B. Comparison of 2 family therapies for adolescent anorexia nervosa: A randomized parallel trial. JAMA Psychiatry, 71:1279-1286, 2014.

Agras, W. S., Fitzsimmons-Craft, E. E., Wilfley, D. E. Evolution of cognitive-behavioral therapy for eating disorders. Behav Res Ther, 88, 26-36, 2017.

Agras, W. S. A simpler therapy may successfully treat adolescents with anorexia nervosa. Evidence-based Mental Health, http://dx.doi.org/10.1136/eb-2016-102535.

Van Tine, M. L., McNicholas, F., Safer, D. L., Agras, W.S. Follow-up of selective eaters from childhood to adulthood. J Eat Behav, In press.



Brain Predictions

Judith Ford, PhD
Professor Emeritus

The brain is in the prediction business. Predictions about imminent sensations can be made in at least two ways: We predict that specific sensations will follow from actions that produce them or “action-based” predictions, and we base predictions of sensations on the immediate past history or “context-based” predictions. We use neurophysiological methods to test the hypothesis that psychosis is associated with a basic inability to predict sensations. For example, if predictive mechanisms are dysfunctional, sensations that should have been predicted, but were not, may be attributed to external sources. These errors of prediction are costly to society and the patient.

Efference copy and corollary discharge mechanisms may be responsible for predicting sensations resulting from our actions. This concept is illustrated below from the point of view of vocalization. Every utterance is accompanied by the transmission of an efference copy of the motor plan to sensory cortex, where a corollary discharge of the expected sensory consequences of the motor act will be compared to the actual sensation. When the sensation was predicted, auditory cortex responds less to it than when it was not predicted. This system is abnormal in patients with psychosis, their first-degree relatives, and in people at clinical high risk for schizophrenia.

RECENT WORKS:

Ford JM, Palzes VA, Roach BJ, Mathalon DH. Did I do that? Abnormal predictive processes in schizophrenia when button pressing to deliver a tone. Schizophrenia bulletin. 2014;40(4):804-12.

Ford JM, Mathalon DH, Heinks T, Kalba S, Faustman WO, Roth WT. Neurophysiological evidence of corollary discharge dysfunction in schizophrenia. The American journal of psychiatry. 2001;158:2069-71.

Ford JM, Mathalon DH, Whitfield S, Faustman WO, Roth WT. Reduced communication between frontal and temporal lobes during talking in schizophrenia. Biological psychiatry. 2002;51(6):485-92

Ford JM, Roach BJ, Mathalon DH. Assessing corollary discharge in humans using noninvasive neurophysiological methods. Nature protocols. 2010;5(6):1160-8.

Wang J, Mathalon DH, Roach BJ, Reilly J, Keedy SK, Sweeney JA, Ford JM. Action planning and predictive coding when speaking. NeuroImage. 2014;91:91-8.

Schizophrenia

Ira Glick, MD
Professor Emeritus

Along with Dr. Jake Ballon, Dr. Glick is doing a long-term follow-up study that has never been done. They have followed patients with schizophrenia over 8-50 years correlating antipsychotic treatment adherence with outcome. Dr. Glick and Dr. Ballon found that "the better the adherence to antipsychotic medication, the better the outcome." If adherence was very poor, outcomes were disastrous.

RECENT WORKS:

Weinberger D, Glick I D, Klein D F: Wither Research Domain Criteria (RDoC) ? The Good, the Bad and the Ugly, Archives Psychiatry,. 2015, 72:1161-1162.

Stillman M A, Brown T, Ritvo E, Glick).I D: Sport psychiatry and psychotherapeutic intervention,circa 2016. Int. Review Psychiatry, 2016, 28:614-622.

Kamis D, Newmark T, Begel D: Glick I D: Cheating and Sports: History, Diagnosis and Treatment. International Review Psychiatry, 2016, 28:551-555.

Glick I D, Brodwin D: Changing the Culture of Sports, Int Review Psychiatry , 2016, 28:629-630.

Brisola-Fantos M, . . . Glick I D. . . Castaldelli-Maia J: Prevalence and correlates of cannabis use among athletes – A systematic review. Am J Addiction, 25: 518-528, 2016.

Glick I D, Davis J M , Zamora D et al: Should Antipsychotic Medications for Schizophrenia Be Given for a Lifetime? A Naturalistic Long-term Followup Study, J Clin. Psychopharm, 2017 (in press).

Bipolar Disorders Clinic

Terence Ketter, MD
Professor Emeritus

The Stanford University Bipolar Disorder Clinic was established in 1995, and has been involved in bipolar disorder etiology, phenomenology, and treatment research since that time. Etiologic research has involved using neuroimaging methods to better understand neurobiology, and explore the possibility of such techniques helping to more effectively target treatments. Phenomenologic research has focused on development and course of bipolar disorder in late adolescence/young adulthood, and links between creativity, temperament, and mood disorders. Treatment research has involved clinical trials of novel medications for bipolar disorder, with emphasis on anticonvulsants, second-generation antipsychotics, and comparative effectiveness of pharmacotherapies. Treatment research has included not only in industry-funded pivotal phase III efficacy and phase IV effectiveness studies, but also large federally-funded comparative effectiveness studies, such as the Systematic Treatment Enhancement Program for Bipolar Disorder (STEP-BD), the Lithium Treatment Moderate dose Use Study (LiTMUS), and the Bipolar Clinical Health Outcomes Initiative in Comparative Effectiveness (Bipolar CHOICE) study. The clinic has practiced evidence-based (using model practice procedures) and measurement-based (using validated STEP-BD assessment and longitudinal monitoring instruments) care since the year 2000. Based on such data, it has published multiple manuscripts in peer-reviewed journals, commonly with Stanford trainees and international visiting scholars as first authors. Topics include pharmacotherapy trends and clinical correlates of onset age, current irritability, current anxiety, episode accumulation, mixed features during depression, illness subtype (e.g., bipolar I disorder versus bipolar II disorder), prior suicide attempts, eating disorders, and use of pharmaceuticals (e.g., lamotrigine and quetiapine alone and in combination with one another, aripiprazole, ziprasidone, and second-generation antipsychotics in bipolar II disorder versus bipolar I disorder). Current research initiatives include efforts to establish mood correlates of actigraphy in bipolar disorder and integrate actigraphy into bipolar disorder clinical care, an investigator-initiated, double-blind, placebo-controlled trial of adjunctive suvorexant for insomnia in bipolar disorder, and an assessment of clinical correlates of lurasidone use in bipolar disorder patients.

OCD Treatment

Lorrin Koran, MD
Professor Emeritus

Dr. Koran is serving as a mentor to two new faculty in the Department of Psychiatry, Dr. Carolyn Rodriguez and Dr. Nolan Williams, as they develop their research into finding new and more effective treatments for obsessive-compulsive disorder (OCD). He continues to serve on the Scientific Advisory Board of the International OCD Foundation (IOCDF), review articles for journals, and give invited lectures before psychiatric professional groups regarding OCD and the anxiety disorders.

RECENT WORKS:

Koran, LM, Aboujaoude E. Promising Treatments for Obsessive-Compulsive Disorder: A Call for Additional Research. Medicinal Chemistry, 2016, in press.

Aboujaoude E and Koran LM. Fluvoxamine. In American Psychiatric Publishing Textbook of Psychopharmacology, Fifth Edition. eds. AF Schatzberg and CB Nemeroff, (Washington DC: American Psychiatric Press, 2017.

Statistics in Psychiatry

Helena Kraemer, PhD
Professor Emeritus

Dr. Kraemer continues to serve as the Statistical Editor for JAMA-Psychiatry, and on the editorial boards of several psychiatry, psychology, applied statistics journals, and thus do a great deal of reviewing. She continues to consult both for colleagues at Stanford, and at other universities, as well as some US government projects, and to teach a few seminars as well. Her focus in her own papers has been on correcting common statistical errors that occur in medical research papers misleading both clinical decision-making and research directions.

RECENT WORKS:

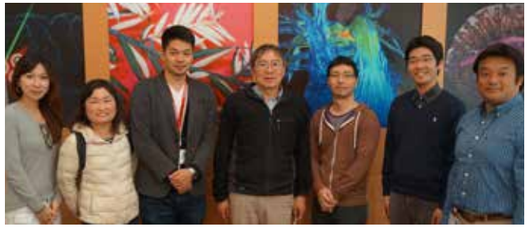
Kraemer HC. Disseminating Justified, Well-=Designed and Well-Executed Studies with Nonsignifiant Test—Reply. JAMA Psych 2016 Jan: 73(1): 89-90

Kraemer HC. Messages for Clinicians: Moderators and Mediators of Treatment Outcome in Randomized Clinical Trials. Am J Psychiatry 2016; 173(7): 672-679.

Trivedi MH, McGrath PF, Fava M, Parsey RV, Kurian BT, Philips ML, Oquendo MA, Bruder G, Pizzagalli D, Troups M, Cooper C, Adams P, Weyandt S, Morris DW, Grannemann BD, Ogden RT, Buckner R, McInnis M, Kraemer HC, Petkova E, Carmody TJ, Weissman MM. Establishing moderators and biosignatures of antidepressant response in clinical care (EMBARC): Rationale and design. J Psychiatr Res. 2016 Jul; 78: 11-23.

Periyakoil VS, Neri E, Kraemer H. patient-Reported Barriers to High-Qualtiy, End-of-Life Care: A Multiethnic, Multilingual, Mixed-Methods Study. Journal of Palliative Medicine 2016 19(4): 373-379.

Newell J, Yesavage JA, Taylow JL, Kraemer HC, Munro CA, Friedman L, Rosenberg PB, Madore M, Chao SZ, Devanand DP, Drye LT, Mintzer JE, Pollock BG, Porsetinsson AP, Schneider LS, Shade DM, Weintraub D, Lykestsos CG, Noda A. Seddation mediates part of the Citalopram's effect on agitation in Alzheimer's disease. Journal of Psychiatric Research. 2016; 74: 17-21.



Sleep and Circadian Neurobiology (SCN) Lab

Seiji Nishino, MD, PhD
Professor Emeritus

The Sleep and Circadian Neurobiology (SCN) Laboratory is an integrated, multidisciplinary research facility dedicated to understanding sleep-wake control and biological rhythms at all levels from molecular to behavioral and developing new generations of pharmaceuticals to remedy the enormous unmet needs of sleep disorders medicine and disorders of circadian timekeeping.

A portion of the research is carried out using rodent models of narcolepsy and circadian rhythm sleep disorders.

The SCN Lab has developed a number of model systems and special resources for research and testing, including the following: (1) A large scale sleep-wake and circadian rhythm bioassay facility, (2) Unique animal model systems including a narcoleptic rodent colony for testing pharmacological agents, other genetically engineered murine models with sleep disorders such as Parkinson's disease (i.e., MitoPark TG mice) and myotonic dystrophy. Our molecular biology laboratory in conjunction with the sleep monitoring, allows us to study/conduct (3) Pharmacology and molecular biology of sleep deprived animals, (4) neurotransmitter and regional drug delivery studies (In vivo microdialysis, HPLC analysis) as well as neurochemical assessments (radioreceptor binding assays, radio/enzyme-immuno assays, gene expression analysis).

RECENT WORKS:

Charizanis, K., et al., Muscleblind-like 2-Mediated Alternative Splicing in the Developing Brain and Dysregulation in Myotonic Dystrophy. Neuron, 2012. 75(3): p. 437-50.

Sato, M., et al., Noninvasive detection of sleep/wake changes and cataplexy-like behaviors in orexin/ataxin-3 transgenic narcoleptic mice across the disease onset. Exp Neurol, 2014. 261: p. 744-51.

Kawai, N., et al., The sleep-promoting and hypothermic effects of glycine are mediated by NMDA receptors in the suprachiasmatic nucleus. Neuropsychopharmacology, 2015. 40(6): p. 1405-16.

Xu, M., et al., Basal forebrain circuit for sleep-wake control. Nat Neurosci, 2015. 18(11): p. 1641-7.

Sagawa, Y., et al., Wake-promoting effects of ONO-4127Na, a prostaglandin DP1 receptor antagonist, in hypocretin/orexin deficient narcoleptic mice. Neuropharmacology, 2016. 110(Pt A): p. 268-276.

Depression in Elderly Patients

Barbara Sommer, MD
Profesor Emeritus

Dr. Sommer is interested in the long-term outcomes of elderly patients with depression for whom all treatments have failed. Although new and innovative antidepressant treatments become available each year, most are in need of further investigation prior to release to the general public. At this time the most definitive treatment for severe depression remains electroconvulsive therapy (ECT) from which around 90% of patients recover. We have become interested in the 10% who do not, and aim to perform long-term outcome evaluations as we advocate for raising the conversation on whether such patients, capable of making the decision, should have autonomy to continue or discontinue active treatment.

RECENT WORKS:

Sommer BR, Roybal JD. Treatment-resistant major depression and the capacity to terminate care. American Journal of Ethics in Mental Health 5(1):1-4, 2010.

Sommer BR, Raj K. Terminal mental illness and the right to terminate active treatment. In Rational Suicide in the Elderly, McCue R and Balasubramaniam M eds. Springer Science, 2017, pp 45-61.

Humanistic Principles to the Practice of Medicine and Psychiatry

Hans Steiner, MD
Professor Emeritus

Dr. Steiner's predominant interest is the application of Humanistic principles to the practice of Medicine and Psychiatry.

He is a founding member of the PEGASUS PHYSICIAN WRITERS at Stanford, a working group of Stanford physicians who write creatively. Dr. Steiner's research is based on developmental approaches to psychopathology which emphasize the conjoint study of normative and non-normative phenomena, and the complex interaction of biological, psychological and social variables in the etiology, pathogenesis, diagnosis and treatment of mental disorders.

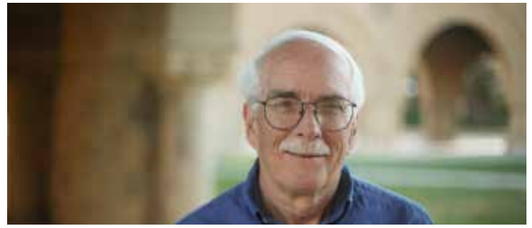
He is currently investigating the application of psycholinguistic methods to measure conscious and unconscious mental states, especially emotions and self regulation. He is using computerized text analytic techniques to characterize referential activity, emotional expression, event specific memories and the reconstituting and healing effects of oral and written emotional expression.

He is studying non-clinical and clinical populations with these methods. He is studying non-clinical adults and adolescents. He is studying clinical cohorts diagnosed with trauma related psychopathology, disruptive behavior and attention deficit, maladaptive aggression, eating disorders and other syndromes which present with complex combinations of psychosomatic and somatopsychic illness (e.g. pain disorders, anxiety disorders, medical traumatization, somatization disorders etc.)

RECENT WORKS:

Huemer, J., Nelson, K., Karnik, N., Völkl-Kernstock, S., Seidel, S., Ebner, N., Ryst, E., Friedrich, M., Shaw, R. J., Realubit, C., Steiner, H., Skala, K. Emotional expressiveness and avoidance in narratives of unaccompanied refugee minors. European Journal of Psychotraumatology, 7: 29163-?, 2016.

Huemer J, Plattner B, Planer N, Steiner H, Feucht M. Psychopathology in adolescents with TLE and FLE. European Journal of Paediatric Neurology. 2016; 20 (6): 880-887. 2017.



Laboratory for the Study of Behavioral Medicine

Craig Barr Taylor, MD
Professor Emeritus

Dr. Taylor's laboratory focuses on developing and evaluating accessible, affordable, technology and evidence-based prevention and treatment programs for anxiety, depression, and anxiety disorders. In partnership with Washington University and Palo Alto University, they are conducting a large NIMH funded controlled trial to determine if an online/app based intervention can improve treatment for eating disorders on college campuses. In parallel, they are participating in helping to develop an integrated eating disorder prevention and treatment programs for all public colleges and universities in Missouri. The laboratory has active collaborations with investigators in India (anxiety prevention and treatment in four Universities), China (middle school based healthy weight regulation programs), and Australia (automated programs to reduce psychosocial risk and risk factors in patients with heart disease, healthy weight regulation programs for middle schools), and many investigators in the U.S. Dr. Taylor serves as a chief scientific advisory to the iCare program, a multinational European research project designed to evaluate the benefit of technology to provide prevention and intervention for a variety of problems and settings throughout Europe.

RECENT WORKS:

Taylor CB, Kass A, Trockel ME, et al, Reducing eating disorder onset in a very high risk sample with significant comorbid depression: A randomized controlled trial. Journal of Consulting and Clinical Psychology 2016 May;84(5):402-14. doi: 10.1037/ccp0000077.

Purvis C, Jones M, Bailey JO, Bailenson J, Taylor CB. Developing a novel measure of body satisfaction using virtual reality. PLoS One. 2015 Oct 15;10(10):e0140158.

Oldenburg B, Taylor CB, O'Neil A, Cocker F, Cameron L. Using new technologies to improvethe prevention and management of chronic conditions in populations, Annual Review of Public Health, 2015 Mar 18;36:483-505.

Kass AE, Trockel M Safer DL, Sinton MM, Cunning D, Rizk MT, Genkin BH, Weisman HL,Bailey JO, Jacobi C,Wilfley DE, Taylor CB. Internet-based preventive intervention for reducing eating disorder risk: A randomized controlled trial comparing guided with unguided self-help.Behaviour Research and Therapy, 2014 Oct 2;63C:90-98.

Kuhn, E., Kanuri, N., Hoffman, J. E., Garvet, D.W., Ruzek, J. I., & Taylor, C. B. (in press). A randomized controlled trial of the PTSD Coach app with community trauma survivors. Journal of Consulting and Clinical Psychology, in press.

Advancing Science

Affiliated Faculty

Caregiver Research Lab

Dolores Gallagher Thompson, PhD, ABPP
Professor Emeritus

The Department's Caregiver Research Lab focuses on fostering research and innovative clinical care for family members who provide day to day support and assistance to an older relative with a neurodegenerative disease, such as Alzheimer's or Parkinson's. These family members typically experience significant stress in their role and over half are clinically depressed. CBT-based individual and small group intervention programs have been developed and empirically tested by Dr. Gallagher Thompson and colleagues for over 20 years. Her "Coping with Caregiving" program and the nationally-based REACH protocol (Resources for Enhancing Alzheimer Caregivers' Health) are both evidence based, and have been exported successfully to many other settings and communities. In particular, Dr. Gallagher Thompson's lab has focused on unique caregiving issues experienced by diverse communities including Hispanic/ Latino-, Chinese- and Persian- Americans. They have adapted these programs for use with Latinos with limited education both in East Palo Alto and in southern San Diego county, and her lab is currently working with Vietnamese colleagues to modify them for use with Vietnamese Americans both in San Jose and in southern CA. This body of work has resulted in international recognition: Dr. Gallagher Thompson is one of two Americans on a WHO-sponsored working group to develop and test a web-based caregiver stress reduction program designed to be offered to the global community after pilot testing is completed. Pilot testing is currently underway in Bangalore, India; results are expected by the end of 2017.

RECENT WORKS:

Gallagher-Thompson D, Alvarez P, Cardenas V, Tzuang M, Velasquez RE, Buske K, Van Tilburg L. (2015). From the ivory tower to the real world: Translating an evidence-based intervention for Latino dementia family caregivers into a community setting. In: Roberts LW, Reicherter D, Adelsheim A, and Joshi SV.(Eds.), Partnerships for mental health: Narratives of community and academic collaboration. New York: Springer (pp. 105-123).

Holland, J.M., Rozalski, V., Beckman, L., Rakhkovskaya, L.M., Klingspon, K.L, Donohue, B.,Williams, C., Thompson, L.W., and Gallagher-Thompson, D. (2016). Treatment preferences of older adults with substance use problems. Clinical Gerontologist, 39, 15-24. doi: 10.1080/07317115.2015.1101633.

Rider, K., Thompson, L.W. & Gallagher-Thompson, D. (2016). The California Older Persons Pleasant Events Scale (COPPES): A tool to help older adults increase positive experiences. Clinical Gerontologist, 39, 64-83. doi: 10.1080/07317115.2015.1101635.

Substance Use Disorders and Mental Health Treatment

Daniel Blonigen, PhD
Clinical Assistant Professor (Affiliated)

Dr. Blonigen's program of research focuses broadly on treatment of adults with substance use disorders (SUD) and co-occurring psychiatric disorders, particularly those with personality disorders, those who are repeatedly involved in the criminal justice system, and those who frequently utilize psychiatric emergency services. His current work in these areas focuses identifying factors that hinder or facilitate these individuals' engagement and retention in SUD and mental health treatment, as well as testing the effectiveness and implementation potential of behavioral interventions for criminal thinking.

RECENT WORKS:

Blonigen, D. M., Rodriguez, A.L., Manfredi, L., Nevedal, A., Rosenthal, J., McGuire, J.F., Smelson, D., & Timko, C. (in press). Cognitive-behavioral treatments for criminogenic thinking: Barriers and facilitators to implementation within the Veterans Health Administration. Psychological Services.

Blonigen, D. M., Rodriguez, A. L., Manfredi, L., Britt, J., Nevedal, A., Finlay, A. K., Rosenthal, J., Smelson, D., & Timko, C. (2016). The availability and utility of services to address risk factors for recidivism among justice-involved veterans. Criminal Justice Policy Review. [e-pub, Feb 10 , 2016]. DOI: 10.1177/0887403416628601

Blonigen, D. M., Bui, L., Britt, J. Y., Thomas, K. M., & Timko, C. (2016). Internalizing and externalizing personality subtypes predict differences in functioning and outcomes among veterans in residential substance use disorder treatment. Psychological Assessment, 28, 1186-1197.

Blonigen, D. M., Timko, C., Jacob, T., & Moos, R. H. (2015). Patient-centered feedback on the results of personality testing increases early engagement in residential substance use disorder treatment: A pilot randomized controlled trial. Addiction Science & Clinical Practice. DOI: 10.1186/s13722-015-0030-9.

Dissemation and Training Division of the National Center for PTSD

Eve Carlson, PhD
Clinical Professor (Affiliated)

Dr. Carlson is a clinical psychologist and a senior researcher with the Dissemination and Training Division of the National Center for Posttraumatic Stress Disorder which is located in the Palo Alto VA Health Care System. Dr. Carlson's research focuses on assessment, the psychological impact of traumatic experiences, early interventions after traumatic stress, and increasing access to care with online and mobile applications and peer support. Her recent projects included development of risk factor prediction measures for military, VA, and civilian populations, development of other trauma-related measures (dissociation, trauma exposure, emotion regulation, self-destructive behavior, and relationship impairment related to deployment or traumatic stress), study of noncombat trauma exposure in military veterans, collective contributions of variables that create vulnerability or resilience to traumatic injury, and research on intensive ("real time") assessment of responses to trauma. Her research has been funded by NIMH and the Department of Veterans Affairs. Current projects include study of trauma patients and family needs, early interventions following traumatic stress, and the combined effectiveness of peer support and non-stigmatizing online self-help programs to improve problem-solving and reduce anger and irritability.

RECENT WORKS:

Carlson, E. B., Palmieri, P., I., Spain, D. A. (in press). Development and preliminary performance of brief risk factor measures to predict posttraumatic psychological disorder after trauma exposure. General Hospital Psychiatry.

Carlson, E. B., Waelde, L., Palmieri, P., Smith, S., McDade-Montez, E., & Macia, K. (in press). Development and validation of the Dissociative Symptoms Scale. Assessment. DOI: 10.1177/1073191116645904

Carlson, E. B., Palmieri, P., Dalenberg, C. J., Macia, K., Spain, D. A. (2016). Contributions of risk and protective factors to prediction of posttraumatic psychological disorder after traumatic injury. Comprehensive Psychiatry, 69, 106-115. PMID: 27423351 DOI: 10.1016/j.comppsych.2016.04.022

Carlson, E. B., Field, N., Ruzek, J. I., Bryant, R., Dalenberg, C. J., Keane, T., & Spain, D. (2016). Advantages and psychometric validation of proximal intensive assessments of patient reported outcomes collected in daily life. Quality of Life Research, 25, 507-516. DOI: 10.1007/s11136-015-1170-9

Carlson, E. B., Spain, D.A., Muhtadie, L., McDade-Montez, L., & Macia, K. S. (2015). Care and caring in the ICU: Family members' distress and perceptions about staff skills, communication, emotional support. Journal of Critical Care, 30, 557-61.

Geriatric Mental Health

Christine Gould, PhD
Instructor (Affiliated)

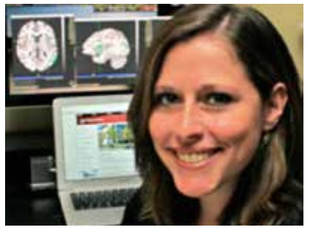
Dr. Gould's research program focuses on the development of technology-delivered and self-directed treatments for geriatric mental health problems. Teaching older adults skills with minimal provider time could address the shortage of geriatric mental health providers. She conducts careful assessments of older adults' interaction with technology in light of older adults' varied experience with technology, comorbid medical problems, and cognitive/sensory deficits. With her current research grants (NARSAD; VA Career Development Award) Dr. Gould is testing a video-delivered behavioral treatment called Breathing, Relaxation, and Education for Anxiety Treatment in the Home Environment (BREATHE) in older adults with anxiety disorders. She is also conducing a mixed methods investigation of older Veterans' preferences for technology platforms to be used to deliver self-directed treatments.

RECENT WORKS:

Gould, C. E., O'Hara, R., Goldstein, M. K., & Beaudreau, S. A. (2016). Multimorbidity is associated with increased anxiety in older adults in the Health and Retirement Study. International Journal of Geriatric Psychiatry, 31(10), 1105-1115.

Gould, C. E., Beaudreau, S. A., Gullickson, G., Tenover, J. L., Bauer, E. A., & Huh, J. W. (2016). Implementation and evaluation of a brief anxiety assessment in a geriatric primary care clinic. Journal of Rehabilitation Research and Development, 53(3), 335-344.

Gould, C. E., Gerolimatos, L. A., Beaudreau, S. A., Mashal, N., & Edelstein, B. A. (2017, in press). Older adults report more sadness and less jealousy than young adults in response to worry induction. Aging & Mental Health. Epub ahead of print doi: 10.1080/13607863.2016.1277975



Neural Circuits and Addiction

Claudia Padula, PhD
Instructor (Affiliated)

Dr. Padula's research program aims to understand neural circuits underlying addiction in order to predict risk of relapse and understand who may benefit from specific treatments based on their brain functioning. Through multidisciplinary collaborations between Stanford and the VA, she has been awarded a Career Development Award to lay the foundation for this research. The project will examine the relationship between brain circuits of emotion and reward and risk of relapse following standard residential treatment at the VA. Technological advances in brain imaging have revolutionized our capacity to understand the brain circuits that underlie complex behaviors, like addiction. It is her goal to utilize such technologies to create a more precise care model of treatment for Veterans. Findings from the proposed study will be the first to determine if brain circuits underlying alcohol use disorder can be used to predict relapse in this population. This study is a foundational first step and will lay the groundwork in using innovative neuroimaging technology to identify individuals at greatest risk who may need prolonged or more precise treatment strategies. This neuroscience based translational program of research will help vulnerable Veteran populations obtain more effective treatments and achieve better outcomes.

RECENT WORKS:

Padula, C.B., Anthenelli, R.M., Eliassen, J.C., Nelson, E. & Lisdahl, K.M. (2015). Alcohol dependence and gender: An fMRI pilot study examining affective processing. Alcoholism: Clinical and Experimental Research, 39 (2), 272-281. PMID: 25684049.

Padula, C.B., McQueeny, T., Lisdahl, K.M., Price, J.S. & Tapert, S.F. (2015). Amygdala volumes and craving in adolescent marijuana users. The American Journal of Drug and Alcohol Abuse, 41 (2), 127-132. PMID: 25668330.

Padula, C.B., Simmons, A.N., Matthews, S.C., Robinson, S.K., Tapert, S.F., Schuckit, M.A. & Paulus, M.P. (2011). Alcohol attenuates activation in the bilateral anterior insula during an emotional processing task: A pilot study. Alcohol & Alcoholism, 46, 547-552. PMID: 21665869.

McQueeny, T., Padula, C.B., Price, J.S., Logan, P., Medina, K.L. & Tapert, S.F. (2011). Amygdala morphometry and mood symptoms in adolescent marijuana users. Behavioural Brain Research, 224, 128-134. PMID: 21664935.

Padula, C.B., Schweinsburg, A.D. & Tapert, S.F. (2007). Spatial working memory performance and fMRI activation interactions in abstinent adolescent marijuana users. Psychology of Addictive Behaviors, 21 (4), 478-487. PMID: 18072830.

Down Syndrome and Alzheimer's Disease

Ahmad Salehi, MD, PhD
Clinical Professor (Affiliated)

Dr. Salehi's lab is focused on the relationship between Down syndrome and Alzheimer's disease. It has been known for decades that all adults with Down syndrome will develop Alzheimer pathology. However, the molecular basis of this close relationship remains unknown. Their extensive morphometric studies have revealed that, in addition to the cholinergic system, norepinephrine-ergic neurons in the locus coeruleus undergo significant age-dependent degeneration in mouse models of Down syndrome. Importantly, the overexpression of App gene (a critical player in Alzheimer's disease) plays a major role in the degeneration of locus coeruleus neurons.

Dr. Salehi's lab is currently working on the role of β2 adrenergic signaling in mouse models of neurodegeneration. They have found that improving β2 adrenergic signaling using a drug already in the market could significantly improve cognitive function in the Ts65Dn mouse model of Down syndrome. Currently, they are testing the effects of improving β2 adrenergic signaling in people with Alzheimer's disease. Through this double-blind placebo controlled clinical trial, Dr. Salehi's lab is using extensive proteomic and genomic methods to verify the effects of improving adrenergic signaling in individuals with mild to moderate dementia of Alzheimer type.

RECENT WORKS:

Salehi A, Delcroix J-D, Belichenko PV, Zhan K, Wu C, Valletta JS, Takimoto-Kimura R, Kleschevnikov A, Sambamurti K, Chung PP, Weiming X, Villar A, Campbell WA, Shapiro Kulnane L, Nixon RA, Lamb BT, Epstein CJ, Stokin GB, Goldstein LSB, Mobley WC. Increased App expression in a mouse model of Down syndrome disrupts NGF transport and causes cholinergic neuron degeneration, 2006, Neuron, 52 (1) 29-42.

Salehi A, Faizi M, Colas D, Valletta J, Laguna J, Takimoto-Kimura R, Kleschevnikov A, Wagner SL, Aisen P, Shamloo M, Mobley WC. Restoration of norepinephrine-modulated contextual memory in a mouse model of Down syndrome. Sci Transl Med 1(2009). Featured on the cover.

Dang V, Medina B, Das D, Moghadam S, Martin KJ, Lin B, Naik P, Patel D, Nosheny R, Wesson Ashford J, Salehi A. Formoterol, a long-acting β2 adrenergic agonist, improves cognitive function and promotes dendritic complexity in a mouse model of Down syndrome. Biol Psychiatry. 2014 Feb 1;75(3):179-88).
Featured on the cover.

Trillo L, Das D, Hsieh W, Medina B, Moghadam S, Lin B, Dang V, Sanchez MM, De Miguel Z, Ashford JW, Salehi A. Ascending monoaminergic systems alterations in Alzheimer's disease, translating basic science into clinical care. Neurosci Biobehav Rev. 2013 Sep;37(8):1363-79). PMID: 23707776. Featured on the cover.

Mental Health Services Research

Christine Timko, PhD
Clinical Professor (Affiliated)

Christine Timko, PhD, works in three main areas of mental health services research: (1) developing and implementing evidence-based practices to facilitate transitions between levels and types of health care, such as detoxification to substance use disorder treatment, (2) helping family and friends of individuals with unhealthy substance use, and (3) evaluating approaches to improve mental health and recidivism outcomes among Veterans involved in the criminal justice system or seeking legal aid. For example, she is currently implementing and evaluating Enhanced Telephone Monitoring as a telehealth intervention to facilitate the transition from inpatient detoxification to specialty substance use disorder treatment, aiming to improve patients' outcomes and decrease health care system costs. She is also evaluating a method to increase use of help resources, such as the 12-step groups of Al-Anon and Nar-Anon, by people concerned about another's alcohol and drug use; objectives are to improve functioning of both "Concerned Others" and persons in treatment for substance use. Finally, Dr. Timko is developing and conducting system-wide surveys of legal aid clinics to examine their potential as settings in which to intervene to increase health care access and utilization by clients.

RECENT WORKS:

Timko, C., Gupta, S., Schultz, N., & Harris, A.H. (2016). Veterans' service utilization patterns after alcohol and opioid detoxification in VHA care. Psychiatric Services, 67(4), 460-464.

Timko, C., Schultz, N.R., Britt, J., & Cucciare, M.A. (2016). Transitioning from detoxification to substance use disorder treatment. Journal of Substance Abuse Treatment, 70, 64-72.

Timko, C., Schultz, N.A., Cucciare, M., & Garrison-Diehn, C. (2016). Retention in medication-assisted treatment for opiate dependence: A structured evidence review. Journal of Addictive Diseases, 35(1), 22-35.

Finlay, A.K., Stimmel, M., Blue-Howells, J., Rosenthal, J., McGuire, J., Binswanger, I., Smelson, D., Harris, A.H.S., Frayne, S.M., Bowe, T., & Timko, C. (in press). Use of Veterans Health Administration mental health and substance use disorder treatment after exiting prison: The Health Care for Reentry Veterans program. Administration and Policy in Mental Health and Mental Health Services Research.

Mental Health in Women

Julie Weitlauf, PhD
Clinical Professor (Affiliated)

Dr. Weitlauf's current work focuses broadly upon the intersection of physical and mental health in women across the lifespan. Notable projects include work related to the evaluation of cognitive behavioral therapy for menopausal hot-flashes in mid-life women with mood disorders and the development and implementation of a simulation based training protocol designed to teach interdisciplinary clinical teams (gynecology + mental health) to use cognitive behavioral therapy to treat sexual pain disorders (i.e., vaginismus) in women.

RECENT WORKS:

Weitlauf JC, Lacroix AZ, Bird CE, Woods NF, Washington DL, Katon JG, LaMonte MJ, Goldstein MK, Bassuk SS, Sarto G, Stefanick ML. Prospective Analysis of Health and Mortality Risk in Veteran and non-Veteran Participants in the Women's Health Initiative. Women's Health Issues, 2015, Nov-Dec25(6): 649-57. doi: 10.1016/j.whi.2015.08.006

Weitlauf JC, Jones S, Xu X, Finney JW, Moos RH, Sawaya GF, & Frayne SM. Receipt of Cervical Cancer Screening in Female Veterans: Impact of Posttraumatic Stress Disorder and Depression. Women's Health Issues, 2013, 23-3; e153-e159. doi: 10.1016/j.whi.2013.03.002

Rissling MB, Gray KE, Ulmer C, Martin J, Zaslavsky O, Gray SL, Hale L, Zeitzer JM, Naughton M, Woods NF, LaCroix A, Calhoun PS, Stefanick M, & Weitlauf JC.* Sleep Disturbance, Diabetes, and Cardiovascular Disease in Post-Menopausal Veteran Women. Gerontologist, 2016 Feb;56 Suppl 1:S54-66. doi: 10.1093/geront/gnv668.

a) EspeEspeland MA, Brinton RD, Hugenschmidt C, Manson JE, Craft S, Yaffe K, Weitlauf J, Vaughan L, Johnson KC, Padula CB, Jackson RD, Resnick SM; WHIMS Study Group. Impact of Type 2 Diabetes Mellitus and Postmenopausal Hormone Therapy on Incidence of Cognitive Impairment in Older Women. Diabetes Care. 2015 Dec;38(12):2316-24. doi: 10.2337/dc15-1385

Active Sponsored Research

Federal and State Funding

Abrams, Daniel	NIH	K01	Decoding Neural Systems Underlying Affective Prosody in Children with Autism
Agras, Stewart	NIH	R01	Implementation of evidence-based treatment for on-campus eating disorders (Co-PI)
Beier, Kevin	NIH	F32	Elucidating input-output relations of rewarding and aversive dopamine neurons in the mouse ventral midbrain
Beier, Kevin	NIH	K99	Investigating function of novel drug-induced synaptic changes in the VTA
Bennett, F. Christian	NIH	K08	Creation of new tools to study human microglia using blood cells
Bernert, Rebecca	Dept of Defense		A Behavioral Sleep Intervention for Suicidal Behaviors in Military Veterans: A Randomized Controlled Study
Bernert, Rebecca	NIH	K23	A Sleep-Oriented Intervention for Suicidal Behaviors
Bohon, Cara	NIH	K23	Neurochemical and functional neuroimaging of negative and positive valence systems in binge eating
Cai, Weidong	NIH	K01	Dynamic Brain Mechanisms of Proactive and Reactive Control in Childhood ADHD
Chang, Kiki D.	NIH	R01	2/2-Early Intervention for Youth at Risk for Bipolar Disorder
Christoffel, Dan	NIH	F32	Function of thalamic excitatory synapses in social reward processing
De Lecea, Luis	NIH	R01	Optogenetic Control of Vigilance State Transition
De Lecea, Luis	NIH	R01	Neuronal mapping of anxiety and panic
De Lecea, Luis	NIH	R01	Optogenetic interrogation of sleep circuits during aging
Dhabhar, Firdaus	Dept of the Navy		Biomarkers and Mechanisms of Resilience vs. Susceptibility to Stress
Etkin, Amit	NIH	R01	Mapping and Manipulating Circuits for Emotion and Cognition in Anxiety and Depression
Evans, Tanya	NIH	F32	Neurodevelopmental Basis of Persistent Mathematical Learning Disabilities
Fung, Lawrence	NIH	K08	GABAergic Neurophysiology in Autism Spectrum Disorder
Garrett, Amy Sue	NIH	K01	Brain Biomarkers of Clinical Response to Cognitive Treatment of PTSD in Youth
Gershon, Anda	NIH	K01	Sleep and Circadian Dysregulation in Pediatric Bipolar Disorder
Giardino, William	NIH	F32	Optogenetic studies of hypocretin in binge drinking and negative hedonic valence
Goldstein, Andrea	NIH	F32	Neuroimaging and Machine Learning to Redefine Anxiety and Depression
Hall, Scott	NIH	R21	Understanding severe disruptive behaviors in adolescents with fragile X syndrome

Federal and State Funding (cont.)

Hall, Scott	NIH	R01	Effects of Social Gaze Training on Brain and Behavior in Fragile X Syndrome
Hallmayer, Joachim	NIH	R01	Integrative Molecular and Phenotype Analysis of 22q11.2 Deletion Syndrome
Hallmayer, Joachim	CIRM		Induced pluripotent stem cells from children with autism spectrum Disorder
Hardan, Antonio	NIH	R21	Pivotal Response Treatment Package for Young Children with Autism
Hardan, Antonio	NIH	R21	Quantitative Measurements of Cortical Excitability in Neurodevelopmental Disorder
Hosseini, Hadi	NIH	K25	The influence of multi-domain cognitive training on large-scale structural and functional brain networks in MCI
Jo, Booil	NIH	R01	Heterogeneity in Prevention Intervention Effects on Substance Use: A Latent Variable Causal Modeling Approach
Kushida, Clete	NIH	R21	Predictive Adherence Modeling (PAM) Study
Kushida, Clete	PCORI		Sustainable Methods, Alogrithms & Research Tools for Delivering Optimal Care
Lazzeroni, Laura	NIH	R01	6/6-The Genetics of Endophenotypes and Schizophrenia
Levinson, Douglas	NIH	R01	Testing the Hypothesis of Somatic Cell Retrotransposition in Human Brain
Levinson, Douglas	NIH	R01	HLA and schizophrenia: a high-throughput sequencing study
Levinson, Douglas	NIH	U19	Multimodal analysis of high-risk psychosis mutations in induced neuronal cells
Lock, James	NIH	K24	Mentoring and Research in Adolescent Eating Disorders
Lock, James	NIH	R33	Optimizing Fidelity in Family-Based Treatment for Adolescent Anorexia Nervosa
Lock, James	NIH	R44	Title Optimizing a Smartphone Application for Individuals with Eating Disorders (Co-PI)
Lock, James	NIH	R34	Feasibility of Combining Family and Cognitive Therapy to Prevent Chronic Anorexia
Lyons, David	NIH	R01	Early social stress, novelty seeking, and impulsive behavior
McGovern, Mark	NIH	R01	Using NIATx Strategies to Implement Integrated Services in Routine Care
McGovern, Mark	NIH	R21	Integrating Combined Therapies for Persons with Co-occurring Disorders
Malenka, Robert	NIH	P50	Activity-Dependent Synaptic and Circuit Plasticity
Manber, Rachel	NIH	R01	The effectiveness of non-pharmacological treatment for perinatal insomnia
Menon, Vinod	NIH	R01	Longitudinal Neurocognitive Studies of Mathematical Disabilities

Federal and State Funding (cont.)

Menon, Vinod	NIH	R01	Interventions in Math Learning Disabilities: Cognitive and Neural Correlates
Menon, Vinod	NIH	R01	Learning and brain plasticity in children with autism: relation to cognitive inflexibility and restricted-repetitive behaviors
Menon, Vinod	NIH	R01	Methods for Dynamic Causal Interactions in Human Brain Function and Dysfunction
Menon, Vinod	NIH	R01	Novel Bayesian linear dynamical systems-based methods for discovering human brain circuit dynamics in health and disease
Mignot, Emmanuel	NASA		HERO Twin Astronaut Study Consortium (TASC): Immunome Changes in Space
Mignot, Emmanuel	NIH	T32	Multi-Institutional Training in Genetic/Genomic Approaches to Sleep Disorders
Mignot, Emmanuel	NIH	P50	Center for Narcolepsy and Related Disorders
Mourrain, Philippe	NIH	R01	Melanin-Concentrating Hormone: Ancestral Role in Feeding & Sleep Regulation
Nishino, Seiji	NIH	R21	Brain Mast Cells in Sleep and Behavioral Regulation
O'Hara, Ruth	NIH	R01	Neurocircuitry of Emotion: Distinguishing Late Life Anxiety and Depression
Ordaz, Sarah Jean	NIH	K01	Trajectories of Brain Connectivity, Depressive Symptoms, and Parenting in Puberty
Palesh, Oxana	NIH	R01	Prefrontal cortex abnormalities associated with breast cancer chemotherapy
Palesh, Oxana	NIH	R01	Brief Behavioral Intervention for Insomnia During Chemotherapy
Palesh, Oxana	NIH	R21	RCT for Mechanisms and Management of Sleep Utilizing Multicenter Clinical Oncology Network
Parker, Karen	NIH	R01	Early experience and emotional development in free ranging primates (Co-PI)
Parker, Karen	NIH	R21	The role of vasopressin in the social deficits of autism
Parker, Karen	NIH	R21	Epigenetic regulation of social impairments and treatment response in autism
Parker, Karen	NIH	R01	A monkey model of naturally occurring social impairments
Pasca, Sergiu	NIH	R01	Gaining insight into psychiatric disease by engineering piece by piece the human brain in vitro
Qin, Shaozheng	NIH	K99/R00	Brain Systems Underlying Episodic Memory for Social Stimuli in Childhood Autism
Rasgon, Natalie	NIH	R01	Insulin Resistance and Accelerated Cognitive Aging
Reiss, Allan	NIH	T32	Research Training for Child Psychiatry and Neurodevelopment
Reiss, Allan	NIH	R01	Longitudinal MRI Study of Brain Development in Fragile X
Reiss, Allan	NIH	R01	Gene, Brain and Behavior in Turner Syndrome

Federal and State Funding (cont.)

Reiss, Allan	NIH	R01	Type 1 Diabetes and the Brain in Children: Metabolic Interventions (Co-PI)
Rodriguez, Carolyn	NIH	R01	NMDAR Modulation As A Therapeutic Target and Probe of Neural Dysfunction in OCD
Rodriguez, Carolyn	NIH	K23	Novel Interventions for Adults with Obsessive-Compulsive Disorder
Rosenberg-Lee, Miriam	NIH	K01	Brain Systems Supporting Learning and Memory in Children with Autism
Rothwell, Patrick	NIH	K99/R00	Nucleus accumbens synaptic mechanisms of opiate reward and aversion
Ryali, Srikanth	NIH	K25	Methods for Dynamic Causal Interactions in the Developing Human Brain
Saggar, Manish	NIH	K99/R00	Quantifying the Fluctuations of Intrinsic Brain Activity in Healthy and Patient Populations
Schatzberg, Alan	NIH	T32	A Biobehavioral Research Training Program
Schatzberg, Alan	NIH	R25	Research Career Development Institute for Psychiatry (Co-PI)
Shah, Nirao	NIH	R01	Molecular and Neural Networks Underlying Social Attachment
Shah, Nirao	NIH	R01	Dissecting hypothalamic pathways that regulate sexually dimorphic behaviors
Shah, Nirao	NIH	R01	Characterization of Sexual Dimorphism in the brain
Singh, Manpreet	NIH	R56	Neurodevelopmental Features of Sexual Dimorphism in Pediatric Psychopathology
Singh, Manpreet	NIH	R01	Neurobehavioral Trajectories of Pediatric Depression and Insulin Sensitivity
Singh, Manpreet	NIH	R01	2/2-Mechanism of Antidepressant-Related Dysfunctional Arousal in High-Risk Youth
Spiegel, David	NIH	U01	Impact of Affect Reactivity and Regulation on Breast Cancer Treatment Decisions
Spiegel, David	NIH	R33	Use of Repetitive Transcranial Magnetic Stimulation to Augment Hypnotic Analgesia
Sudheimer, Keith	NIH	K01	Cortisol Receptor Polymorphisms And Cortisol-Induced Emotion Changes In Major Depression
Sullivan, Edith	NIH	R37	Cerebellar Structure and Function in Alcoholism
Sullivan, Edith	NIH	R01	Neuroimaging of Connectivity in Alcoholism/In Vivo Diffusion & Spectoscopic Brian Imaging in Alcoholism (Co-PI)
Sullivan, Edith	NIH	K05	Translational Studies of Brain Circuitry Disrupted by Alcoholism
Sullivan, Edith	NIH	U01	International Research Collaboration on Neuroimaging Studies of Alcoholism
Tinklenberg, Jared	CA Dept Public Health		California Alzheimer's Disease Centers
Urban, Alexander	NIH	DP2	Genomic and epigenomic effects of large CNV in neurons from iPSC

Federal and State Funding (cont.)

Walsh, Jessica	NIH	F32	Systems level investigation of di-synaptic circuit involved in panic disorder
Williams, Leanne	NIH	R01	Neural Dimensions of Threat Reactivity and Regulation for Understanding Anxiety
Williams, Leanne	NIH	UH2	Engaging self-regulation targets to understand the mechanisms of behavior change and improve mood and weight outcomes (Co-PI)
Wilson, Helen	NIH	R01	Exposure to violence and unsafe sex in late adolescent African American women
Wu, Di	NIH	K99/R00	Asynchronous Release in Synaptic Transmission
Zeitzer Jamie	NIH	R21	Treating sleep disruption in teens with millisecond light exposure during sleep

Industry-Sponsored Clinical Trials and Research

Adelsheim, Steven	Santa Clara County	Headspace Program
Ballon, Jacob	Vanguard Research Group	A Cluster Randomized, Multi-center, Parallel-group, Rater-blind Study Comparing Treatment with Aripiprazole Once Monthly and Treatment as Usual on Effectiveness in First Episode and Early Phase Illness in Schizophrenia
De Lecea, Luis	Boehringer Ingelheim Pharmaceuticals, Inc	Role of Hcrt neurons on Compulsive Behavior
De Lecea, Luis	Janssen Research & Development, LLC	Orexin receptor antagonists in stress and anxiety
De Lecea, Luis	Johnson and Johnson	Functional Connectivity of GPR-139-Expressing Neurons
De Lecea, Luis	Merck Sharp & Dohme Corp.	Hcrt/orexin circuit dynamics and memory consolidation
DeBattista, Charles	AssureRX Health, Inc.	A 12-Week, Randomized, Double-Blind, Controlled Evaluation Followed by an Open-Label 12-Week Follow-up Period of the Impact of GeneSight Psychotropic on Response to Psychotropic Treatment in Outpatients Suffering from a Major Depressive Disorder (MDD) and Having Had (Within the Current Episode) an Inadequate Response to at Least One Psychotropic Medication Included in GeneSight Psychotropic
DeBattista, Charles	BRC Operations Limited	International Study to Predict Optimised Treatment - in Depression
DeBattista, Charles	Pacesetter, Inc.	Continuing Access to SJM Totally Implantable Deep Brain Stimulation System using the BRIO Rechargeable System
DeBattista, Charles	St. Jude Medical Neuromodulation Division	A Long-term Follow-Up Study for the Evaluation of Patients who have a Deep Brain Stimulation System for the Adjunctive Treatment of Major Depressive Disorder
DeBattista, Charles	Quintiles, Inc.	A Multicenter, Randomized, Double-blind, Parallel Group, Placebo-controlled, Phase IIb Efficacy and Safety Study of Adjunctive AZD6765 in Patients with Major Depressive Disorder (MDD) and a History of Inadequate Response to Antidepressants

Industry-Sponsored Clinical Trials and Research (cont.)

Etkin, Amit	BRC Operations Limited	International Study to Predict Optimized Treatment in Depression
Hardan, Antonio	Edison Pharmaceuticals, Inc	Analysis of the Glutathione Cycle in Children with Autism
Hardan, Antonio	Forest Research Institute, Inc.	A Double Blind, Placebo-Controlled, Randomized Withdrawal Study of the Safety and Efficacy of Memantine in Pediatric Patients with Autism, Aspergers Disorder, or Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS) Previously Treated with Memantine
Hardan, Antonio	Forest Research Institute, Inc.	An Open-Label Extension of the Safety and Tolerability of Memantine in Pediatric Patients with Autism, Aspergers Disorder or Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS)
Hardan, Antonio	Roche TCRC, Inc.	A Multi-Center, Randomized, Double-Blind, 12-Week, Parallel Group, Placebo-Controlled Proof Of Concept Study To Investigate The Efficacy And Safety Of Ro5285119 In Individuals With Autism Spectrum Disorders (Asd)
Humphreys, Keith	BOTEC Analysis Corporation	Improving self-command in offender populations
Kushida, Clete	Jawbone Corporation	Comparison of Jawbone Devices to In-Lab Polysomnography
Kushida, Clete	Patient-Centered Outcomes Research Institute	Sustainable Methods, Alogrithms & Research Tools for Delivering Optimal Care
Kushida, Clete	Seven Dreamers Laboratories, Inc.	Nasal Airway Stent (NAS) study
Kushida, Clete	XenoPort, Inc.	A Multicenter, Open-Label, Single-Dose Pharmacokinetic and Safety Evaluation of HORIZANT (Gabapentin Enacarbil Extended-Release Tablets) in Adolescents Aged 13 to 17 Years Old with Moderate-to-Severe Primary Restless Legs Syndrome
Kushida, Clete	XenoPort, Inc.	A Multicenter Open-Label Extension Study to Evaluate the Efficacy and Safety of HORIZANT (Gabapentin Enacarbil) Extended-Release Tablets in Adolescents Aged 13 to 17 Years Old with Moderate-to-Severe Primary Restless Legs Syndrome
Kushida, Clete	XenoPort, Inc.	A Multicenter, Double-Blind, Placebo Controlled, Parallel Group, Efficacy and Safety Evaluation of HORIZANT (Gabapentin Enacarbil Extended-Release Tablets) in Adolescents Aged 13 to 17 Years Old with Moderate-to-Severe Primary Restless Legs Syndrome
Mignot, Emmanuel	Clinilabs, Inc.	A Randomized, Placebo-Controlled, Double-blind, Fixed Dose, Multiple Cohort, Multiple Crossover, Dose-Finding Study of Oral BTD-001 in Adults with Idiopathic Hypersomnia or Narcolepsy Type 2
Mignot, Emmanuel	GlaxoSmithKline	T Cell-Mediated Responses to H1N1 Vaccination and Narcolepsy
Mignot, Emmanuel	Jazz Pharmaceuticals	A Double-Blind, Placebo-Controlled, Randomized-Withdrawal, Multicenter Study of the Efficacy and Safety of Xyrem with an Open-Label Pharmacokinetic Evaluation and Safety Extension in Pediatric Subjects with Narcolepsy with Cataplexy
Mignot, Emmanuel	Jazz Pharmaceuticals	A Long-Term, Open-Label Safety and Maintenance of Efficacy Study of JZP-110 [(R)-2-amino-3-phenylpropylcarbamate hydrochloride] in the Treatment of Excessive Sleepiness in Subjects with Narcolepsy or Obstructive Sleep Apnea

Industry-Sponsored Clinical Trials and Research (cont.)

Mignot, Emmanuel	Jazz Pharmaceuticals	A Twelve-Week, Double-Blind, Placebo-Controlled, Randomized, Parallel Group, Multicenter Study of the Safety and Efficacy of JZP-110 [(R)-2-amino-3-phenylpropylcarbamate hydrochloride] in the Treatment of Excessive Sleepiness in Subjects with Obstructive Sleep Apnea (OSA)
Mignot, Emmanuel	Jazz Pharmaceuticals	A Twelve-week, Double-blind, Placebo-controlled, Randomized, Parallel-group, Multicenter Study of the Safety and Efficacy of JZP-110 [(R)-2-amino 3-phenylpropylcarbamate hydrochloride] in the Treatment of Excessive Sleepiness in Subjects with Narcolepsy
Mignot, Emmanuel	Jazz Pharmaceuticals	PSG polygraphic markers of narcolepsy/hypocretin
Mignot, Emmanuel	Jazz Pharmaceuticals	Consulting Agreement: Global Lead Investigator for the Jazz Pharmaceuticals Pediatric Narcolepsy Study
Mignot, Emmanuel	Merck Sharp & Dohme Corp.	Are Insomnia Symptoms Associated With Increased CSF Hypocretin-1 Levels? - A Retrospective Pilot Study
Mignot, Emmanuel	National Space Biomedical Research Institute	Markers of Susceptibility to Nerurobehavioral Decrements In Space Flight
Mignot, Emmanuel	Sunovion Pharmaceuticals Inc.	A Double-blind, Placebo-controlled, Randomized, 3-period, 3-treatment Crossover Study to Evaluate the Effect of Multiple Oral Dose Administration of SEP-363856 in Male and Female Adult Subjects with Narcolepsy-Cataplexy
Mignot, Emmanuel	Technische Universitat Munchen	Genotyping of Individuals with of Movement and Sleep Disorders.
Miller, Shefali	Merck Sharp & Dohme Corp.	Adjunctive suvorexant for treatment-resistant insomnia in patients with bipolar disorder
Miller, Shefali	Sunovion Pharmaceuticals Inc.	Longer-Term Effectiveness of Lurasidone in Bipolar Disorder in a Clinical Setting
Nishino, Seiji	Airweave	Effect of high rebound mattress toppers on sleep and sleep related symptoms
Nishino, Seiji	Airweave	Evaluation of Effects of a High Rebound Mattress Pad on Sleep and Athletic Performance
Nishino, Seiji	Ajinomoto Co., Inc.	Changes in Amino Acid Metabolism Associated with Sleep Changes
Nishino, Seiji	Daiichi Sankyo Company, Limited	Drug discovery research targeting the epigenome: focus on SIRT6 and SIRT7 longevity genes
Nishino, Seiji	Ono Pharmaceutical Co., Ltd.	Sleep and behavioral characterizations of mouse models of Alzheimer's disease (AD) and Dementia with Lewy Bodies (DLB)
Nishino, Seiji	Sanofi-Aventis Group	Evaluation of hypocretin-1 levels in CSF
Nishino, Seiji	SK Biopharmaceuticals	Characterization of the wake-promoting effects of SKN-N07 in the narcoleptic mouse model

Industry-Sponsored Clinical Trials and Research (cont.)

Noordsy, Douglas	Janssen Research & Development, LLC	A Prospective, Randomized, Matched Control, Open-Label, Rater-Blinded, Flexible-Dose Study in Subjects with Recent-Onset Schizophrenia or Schizophreniform Disorder to Compare Disease Progression and Disease Interception Following Treatment with Paliperidone Palmitate Long-Acting Injection or Oral Antipsychotics
Rasgon, Natalie	Magceutics, Inc.	The use of Magnesium L-Threonate for the Enhancement of Learning and Memory in People with Family History of Dementia
Schatzberg, Alan	Janssen Research & Development, LLC	A Prospective, Longitudinal, Observational Study to Evaluate Potential Predictors of Relapse in Subjects With Major Depressive Disorder Who Have Responded to Antidepressant Treatment

Foundation and Non-Profit Funding

Adelsheim, Steve	The Robert Wood Johnson Foundation	Headspace in the US: Creating a National Culture of Adolescent Health
Adelsheim, Steve	The Robert Wood Johnson Foundation	National PEPPNET Coordination and Implementation Program
Cao, Michelle	American Sleep Medicine Foundation	Name of Project: A National Survey on Sleep Medicine Education in Medical Schools and Primary Residency Programs
Carrion, Victor	The Tipping Point Foundation	Early Life Stress Research Program
Cosgrove, Victoria Eileen	American Psychological Association	Understanding the Climate of a Cognitive Behavioral Therapy Group for Adolescents with Mood Disorders
De Lecea, Luis	United States-Israel Binational Science Foundation (BSF)	Functional connectivity in hypothalamic circuits
De Lecea, Luis	France-Stanford Center for Interdisciplinary Studies	A new role for hypocretin nerurons in mood regulation
Dhabhar, Firdaus	University of California, Davis	Quantifiable Constituents of Spiritual Growth
Etkin, Amit	Cohen Veterans Bioscience Inc.	Biomarker Establishment for Superior Treatment of PTSD
Etkin, Amit	New York University	The Steven and Alexandra Cohen Veterans Center for Post-Traumatic Stress and Traumatic Brain Injury
Etkin, Amit	Stanford Neurosciences Institute (SNI)	NEUROCIRCUIT: Neuro-Circuit Interventional Research Consortium for Understanding the Brain and Improving Treatment
Fitzpatrick, Kathleen Kara	Children's Hospital of Philadelphia	CRT for Adolescents with AN

Foundation and Non-Profit Funding (cont.)

Fung, Lawrence	American Academy of Child and Adolescent Psychiatry	Developmental Pathodynamics of Structural and Connectional Neuroanatomy in a Mouse Model of Fragile X Syndrome
Gallagher Thompson, Dolores	World Health Organization	Development of iSupport for Dementia Family Caregivers
Gyurak, Anett	Brain & Behavior Research Foundation	Trial of a nationwide cognitive-affective remediation training intervention in depression
Hall, Scott	The John Merck Fund	Treatment of Disruptive Behaviors in Fragile X Syndrome
Hardan, Antonio	The Simons Foundation Autism Research Initiative	Randomized Controlled Pilot Trial of Pregnenolone in Autism
Hosseini, Hadi	Brain & Behavior Research Foundation	Integrating NIRS-based Neurofeedback and Cognitive Rehabilitation for Improving Executive Function Network in Patients with Attention Deficit Hyperactivity Disorder (ADHD)
Humphreys, Keith	Santa Clara County	Designing a Social Impact Bond-Funded Mental Health Evaluation
Humphreys, Keith	Society for the Study of Addiction	Americas Editorial Office for Addiction
Kawai, Makoto	American Sleep Medicine Foundation	Cortical Activation and Oxygenation During Sleep and Cognition: Window to Cognitive Impairment and Neurodegeneration in Aging
Ketter, Terence	American Psychiatric Association	The From Affective Illness to Recovery: Student Access to Rapid Treatment (FAIR START) program
Lembke, Anna	American Board of Addiction Medicine Foundation	Next Generation Award for Adolescent Substance Use Prevention
Levinson, Douglas	Cohen Veterans Bioscience Inc.	Danish and Military PTSD Analyses - CVB 2016 Project
Malenka, Robert	The Simons Foundation Autism Research Initiative	Neural mechanisms of social reward in mouse models of autism
Menon, Vinod	The Simons Foundation Autism Research Initiative	Decoding Affective Prosody and Communication Circuits in Autism
Menon, Vinod	Stanford Office of International Affairs	OIA - Vinod Menon International Collaboration
Mignot, Emmanuel	Cincinnati Children's Hospital Medical Center	A Multicenter Retrospective and Prospective Follow-up Study of Early Onset Childhood Narcolepsy: Recent Cases and Post Infection Human Subjects
Mignot, Emmanuel	Kleine-Levine Syndrome Foundation	GWAS and Exome Sequencing in Kleine Levin Syndrome (KLS)"
Mourrain, Philippe	The John Merck Fund	Pharmacological and genetic solutions for FXS and related intellectual disabilities

Foundation and Non-Profit Funding (cont.)

O'Hara, Ruth	Bay Area Autism Consortium	Reduced Rapid Eye Movement Sleep in ASD Reflects Misalignment of the Circadian Clock
O'Hara, Ruth	The Simons Foundation Autism Research Initiative	Sleep Disordered Breathing, Microparticles and Proinflammation in ASD
Ordaz, Sarah	Brain & Behavior Research Foundation	Neural Functional Connectivity as a Mediator of the Effects of Parenting on Clinical Course in Adolescent Depression
Ordaz, Sarah	The Klingenstein Third Generation Foundation	Neural Functional Connectivity in Adolescent Depression: Mediating the Effects of Parental Warmth on Clinical Course
Parker, Karen	The Simons Foundation Autism Research Initiative	Detecting and Treating Social Impairments in a Monkey Model
Parthasarathy, Srinivas	Human Frontier Science Program Organization	Unbiased identification of new mediators of sex hormone signalling and transport
Pasca, Sergiu	MQ: Transforming Mental Health	Identifying cellular mechanisms of disease and novel therapeutic targets in neurons derived from patients with schizophrenia
Pasca, Sergiu	PCDH19 Alliance	Using iPSC derived neurons to understand PCDH19-related encephalopathy
Phillips, Jennifer	University of California, San Francisco	Characterization of Minimally Verbal Adults with ASD
Rasgon, Natalie	Alzheimer's Association	Sex Specific Interactions of Modifiable & Non-modifiable Risk Factors of AD
Rasgon, Natalie	American Diabetes Association, Inc.	Effects of Liraglutide on hippocampal structure and function in aging adults with prediabetes
Robakis, Thalia	Brain & Behavior Research Foundation	Epigenetic Profile of Attachment Insecurity in Postpartum Depression
Rodriguez, Carolyn	Brain & Behavior Research Foundation	Pilot Study of the NMDAR Modulator GLYX-13 in Obsessive-Compulsive Disorder
Rodriguez, Carolyn	The Robert Wood Johnson Foundation	Neural Mechanisms Underlying Fast-Onset OCD Treatment Across Molecules, Physiology, and Circuits
Saggar, Manish	Brain & Behavior Research Foundation	Quantifying the Fluctuations of Intrinsic Brain Activity in Healthy and Patient Populations
Schatzberg, Alan	University of Michigan	Pritzker Neuropsychiatric Disorders Research Consortium 2016 allocation
Singh, Manpreet	Brain & Behavior Research Foundation	Neurobehavioral response during antidepressant-related dysfunctional arousal in high-risk youth
Steinberg, Elizabeth	A.P. Giannini Foundation	Anatomical, physiological and behavioral dissection of an amygdala-dopamine circuit

Foundation and Non-Profit Funding (cont.)

Supekar, Kaustubh Satyendra	Brain & Behavior Research Foundation	Behavioral, Cognitive, and Neural Signatures of Autism in Girls: Towards Big Data Science in Psychiatry
Suppes, Patricia	The Stanley Medical Research Institute	Multi-site clinical trial: Infliximab Study
Urban, Alexander	March of Dimes Birth Defects Foundation	Multilevel genomics analyses of models of neuronal and cardiovascular symptoms in 22q11-Deletion-Syndrome using induced pluripotent stem cells
Urban, Alexander	Stanford Neurosciences Institute (SNI)	Creating a transgenic monkey model of autism
Urban, Alexander	Yale University	Somatic Mosaicism in autism spectrum disorders
Williams, Leanne	International Mental Health Research Organization	Anxiety App Rating Study
Williams, Nolan	Brain & Behavior Research Foundation	Interrogating the Opioid System to Understand the Mechanism of Action Underlying the Antidepressant Effects of Ketamine
Yesavage, Jerome	Weill Medical College of Cornell University - Qatar	Medical Risk Factors for Perinatal Depression
Yoon, Jong	The Charles A. Dana Foundation	Improving the early detection of schizophrenia and outcomes with a novel method of precisely measuring subtansianigra activity
Zalpuri, Isheeta	American Psychiatric Association	SAMHSA's Minority Fellowship

Subcontracts

Albucher, Ronald	University of Michigan	Electronic Bridge to Mental Health (eBridge) for College Students
Debattista, Charles	Massachusetts General Hospital	Double-Blind, Placebo-Controlled Proof-of-Concept (POC) Trial of Ketamine Therapy in Treatment-Resistant Depression (TRD)
Etkin, Amit	New York University	Prevention of PTSD III - Neurobehavioral Training of Emotional Regulation
Gallagher Thompson, Dolores	Photozig, Inc.	Webnovela for Hispanic Dementia Family Caregivers
Hardan, Antonio	Boston Children's Hospital	Developmental Synaptopathies Associated with TSC, PTEN, and SHANK3 Mutations
Humphreys, Keith	Baystate Health	Impact of health reform on outpatient substance abuse treatment programs
Jo, Booil	Palo Alto Veterans Institute for Research	Clinical Trial of yoga as a therapeutic intervention for chronic pain in gulf war illness
Jo, Booil	The Johns Hopkins University	Longitudinal Assessment of Manic Symptoms

Subcontracts (cont.)

Joshi, Shashank	SRI International	An Efficacy Study of the Cognitive Behavioral Intervention for Trauma in Schools (CBITS) Program
Kushida, Clete	Palo Alto Veterans Institute for Research	Treatments for Insomnia, Mediators, Moderators, and Quality of Life
Levinson, Douglas	University of California, San Diego	Psychiatric Genomics Consortium for PTSD
Levinson, Douglas	University of California, San Diego	Psychiatric GWAS - Genomic Follow Up Next-Gen Sequencing & Genotyping
Lock, James	Recovery Record, Inc.	Title Optimizing a Smartphone Application for Individuals with Eating Disorders
Lock, James	University of California, San Francisco	1/2-Adaptive Family Treatment for Adolescent Anorexia
Malenka, Robert	Mt. Sinai School of Medicine	Molecular Neurobiology of Drug Addiction
Manber, Rachel	National Jewish Health	Stepped-care management of insomnia co-occurring with sleep apnea
Schatzberg, Alan	Palo Alto Veterans Institute for Research	Emotion Regulation in Anxiety & Depression: A Novel Neurobehavioral Intervention
Sullivan, Edith	SRI International	CNS Deficits - Interaction of Age and Alcholism
Sullivan, Edith	SRI International	INIA: Imaging Core
Sullivan, Edith	SRI International	Tracking HIV Infection and Alcohol Abuse CNS Comorbidity with Neuroimaging
Sullivan, Edith	SRI International	National Consortium on Alcohol and NeuroDevelopment in Adolescence (N-CANDA): Data Core
Trockel, Mickey	Washington University in St. Louis	Technology to Improve Eating Disorders Treatment
Urban, Alexander	Yale University	Genomic mosaicism in developing human brain
Urban, Alexander	Yale University	Somatic Mosaicism in the Brain of Tourette Syndrome

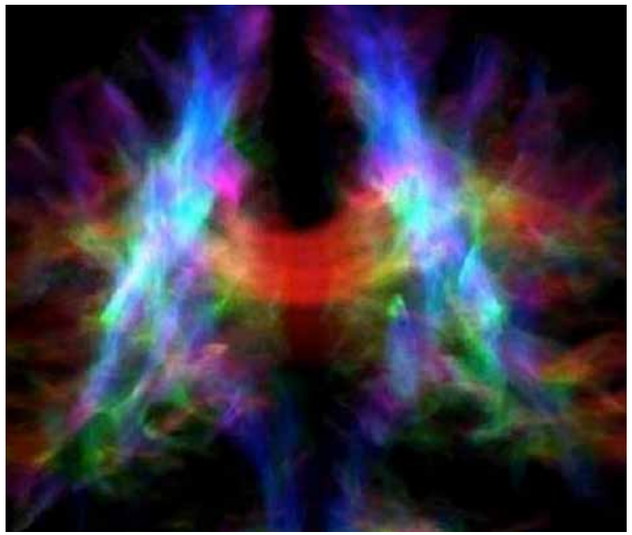
Advancing Science

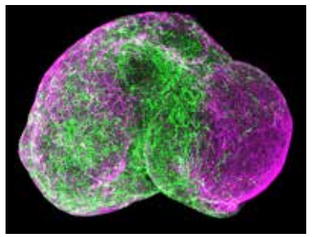
2016 Brain & Mind Summit

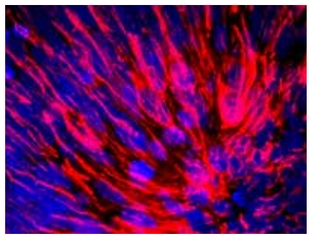
In September 2016, The Department of Psychiatry and Behavioral Sciences and Stanford Neurosciences Institute, in partnership with the Stanford Medical Development Center, hosted the two-day Brain-Mind Summit exploring the human brain -- the three pounds of matter gives rise to our mental life and behavior. In the same way that quantum physics and breaking the genetic code transformed the 20th century, neuroscience will transform the 21st century.

Over 120 philanthropists, entrepreneurs, and executives invited by two partner organizations gathered to engage with Stanford scientists and clinicians around the extraordinary complexity and power of the human brain. Faculty showcased how we are developing tools, new paradigms, and findings that are transforming our notions of disease and health. The NeuroLab demonstrations provided “hands on” experience with the human brain, virtual reality, transcranial magnetic stimulation, and more.

The dialogue and excitement at the Summit demonstrated the power of bringing many disciplines and fields of expertise together to accelerate our understanding, create novel solutions for brain disorders, and promote brain health and performance throughout the lifespan. The two days were like reading the first chapter of a very inspiring and thought-provoking book. We continue to engage and learn with a wide community interested in neuroscience and mental health.







Stanford Speakers:

Karl Deisseroth, MD, PhD, Amit Etkin, MD, PhD, Jaimie Henderson, MD, Bill Newsome, PhD, Sergiu Pasca, MD, Marc Tessier-Levine, PhD, David Spiegel, MD

Department Small Grants Program

Program Overview

The Department of Psychiatry and Behavioral Sciences Small Grant Program, launched in 2015, was designed to promote research and collaborative scholarly projects advancing the academic interests of our faculty and the strategic themes of our department.

Projects across the full spectrum of science and scholarship were encouraged and we are very pleased to announce that 14 applications to the 2017 Small Grant Program in the Department of Psychiatry and Behavioral Sciences have been selected for funding. A large number of highly meritorious applications were received, far exceeding the amount of funding available. The 14 selected projects represent those most highly rated by reviewers and recognized for salience and balance across department missions, and include 8 pilot studies and 6 small scholarly projects. In 2016 21 applications were selected, including 6 pilot studies and 15 small scholarly projects. Information about each of these projects is noted on the following pages.

2017 Funded Pilot Studies

Sarah Adler, PsyD	Analysis of Measurement Based Care Data to Inform Clinical Decision-Making: Building the Model
Cara Bohon, PhD	Abnormal Perceptual Processing as a Maintaining Mechanism of Body-Image Disturbance in Adolescents with Anorexia Nervosa: Identifying a Novel Treatment Target
Weidong Cai, PhD	Dynamic Brain States and Connectivity in Children with Attention-Deficit/Hyperactivity Disorder and Its Relation to Intra-Individual Variability and Clinical Symptoms
Erin Cassidy-Eagle, PhD	Activate! Training Primary Care Providers in Behavioral Activation Therapy for Older Adults with Depression
Grace Gengoux, PhD	Parent Training to Enhance Social Success for Children with Autism Spectrum Disorder
Hadi Hosseini, PhD	Integrating Virtual Reality and NIRS Neurofeedback for Improving Executive Function in ADHD
Debra Safer, MD	Assessing the Feasibility and Acceptability of a Parent-Based Intervention to Reduce the Risk of Obesity in Children of Weight Loss Surgery Patients
Ranak Trivedi, PhD	Determining the Interdependence of Stress and Physical Activity Among Patients and Their Informal Caregivers

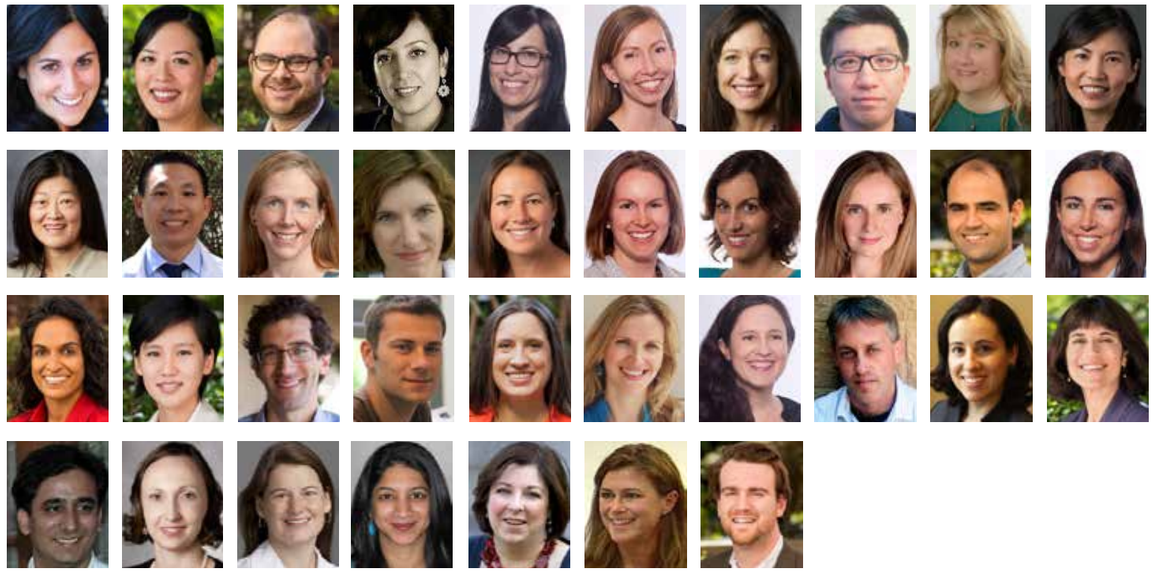
2017 Funded Small Scholarly Projects

Sepideh Bajestan, MD, PhD	Patient-Centered Clinical Neuroscience Training to Facilitate the Communication with Challenging Neuropsychiatric Patients
Victoria Cosgrove, PhD	Assessing Need for Psychosocial Support in Families with a Child Undergoing Treatment in the Bass Center for Childhood Cancer and Blood Diseases at LPCH
Christina Tara Khan, MD, PhD	Integrating Mental Health into Primary Care in Rural Guatemala Through Task Shifting to Public Health Clinic Physicians
Philippe Mourrain, PhD	Pharmacological and Genetic Interrogation of Circuit Dynamics in the Parkinsonian Brain
Oxana Palesh, PhD, MPH Ingrid Oakley-Girvan, PhD, MPH	Does Improving Sleep Modify Potentially Relevant Clinical Biomarkers Among Breast Cancer Patients Undergoing Chemotherapy?
Jennifer Phillips, PhD	Development of a Measure of Social Motivation in Autism

2016 Funded Pilot Studies

Jacob Ballon, MD	Open Label, Flexible-Dose, Adjunctive Bromocriptine for Patients with Schizophrenia and Metabolic Dysfunction
Michele Berk, PhD & Moira Kessler, MD	Pilot Test of a DBT Parenting Intervention for Youth Who Have Recently Attempted Suicide
Kim Bullock, MD	Virtual Reality for Functional Neurological Symptom Disorder
Tamar Green, MD	The Brain in Noonan Syndrome: a Pilot Study
Manish Saggar, PhD	Deciphering “Ongoing” Cognition Using Concurrent Multimodal Neuroimaging and Continuous Multitask Paradigm
Nolan Williams, MD	Comparison of the Clinical Efficacy and Change in Resting State Functional Connectivity of Transcranial Magnetic Stimulation versus Theta-Burst Stimulation over Left DLPFC in Resistant Depression

2016 and 2017 Funded Project Awardees



Listed Alphabetically:
1) Adler, Alexander, Ballon, Bajestan, Berk, Bohon, Bullock, Cai, Cassidy-Eagle, Cao 2) Chen, Cheung, Cosgrove, Dunn, Eisen, Gengoux, Green, Hardy, Hosseini, Kessler 3) Khan, Kim, Mason, Mourrain, Naranjo, Palesh, Phillips, Reicherter, Rodriguez, Safer 4) Saggar, Sher, Sullivan, Trivedi, Weitlauf, E Williams, N Williams

2016 Funded Small Scholarly Projects

Amy Alexander, MD	An Educational Intervention Program for Decreasing Mental Health Stigma and Barriers to Treatment for Veterinarians and Veterinary Students
Sarah Adler, PsyD	Addressing Perceived Barriers to Implementation of Measurement Based Care: A Pilot Feasibility and Acceptability Study
Erin Cassidy Eagle, PhD & Laura Dunn, MD	Older Adults Access to Quality Mental Health Services
Angie Chwen-Yuen Chen, MD	Safe Reduction of Chronic High Dose Opioid and Benzodiazepine Prescribing in the Primary Care Setting: Physician Support and Needs Assessment
Joseph Cheung, MD	Applying Wearable Technology and Genetics to Study Extreme Long Sleepers
Kate Hardy, ClinPsychD	Pilot Study Investigating the Impact of a Group-Based Worry Intervention Trial on Attenuated Psychotic Symptoms, Worry, and Distress in Adolescents At-Risk of Developing Psychosis
Christina Khan, MD, PhD	Improving Pediatric Behavioral Health Integration at a Federally Qualified Community Health Center in East Palo Alto, CA
Jane Kim, PhD	Development of Tailoring Guidelines for Personalizing Behavioral Intervention Technologies
Daniel Mason, MD & Katherine Eisen, PhD	Reading and Recovery Expectations: Developing a Bibliotherapy Group for an Acute Inpatient Psychiatric Unit
Diana Naranjo, PhD	Training Mental Health Care Providers in Diabetes Distress to Address Psychosocial Need in Youth and Young Adults with Type 1 Diabetes
Daryn Reicherter, MD & Ellie Williams, MD	Bringing Care to New Moms: Collaboration between the Gardner Packard Children’s Health Center and the Stanford Department of Psychiatry for the Evaluation and Treatment of Postpartum Depression
Carolyn Rodriguez, MD, PhD	Building Community-Academic Partnerships for Evidence-Based Treatment of Hoarding Disorder
Yelizaveta Sher, MD	Quality Improvement Project on Screening, Monitoring and Timely Treatment of Delirium Immediately Post Lung Transplantation
Shannon Sullivan, MD & Michelle Cao, DO	Survey of Sleep Education Offered by US Medical Residency Training Program
Ellie Williams, MD & Julie Weitlauf, PhD	Women’s Health and Wellness Advanced Clinical Didactic Workshop: Assessment and Treatment of Genito-Pelvic Pain/Penetration Disorder in Women with Interpersonal Trauma Exposure

Educational Excellence

7 and 3

subspecialty physician fellowships and NIH T32 training programs

100%

of ACGME and APA training programs with maximum years of accreditation

2016

best national residency matching program results in our history

Educational excellence is an essential mission of the Department of Psychiatry and Behavioral Sciences. We are committed to nurturing the development of each of our learners through personalized education - an approach that fosters independent thinking and the pursuit of specialized interests. We are also committed to producing leaders - individuals whose work will bring about change in our world through their influence and impact.

Our department engages with over 6,000 learners each year, ranging from students in high school to clinicians in practice. We offer learners individual mentoring across a range of disciplines, including the clinical neurosciences, psychiatry, psychology, and other behavioral sciences, and strive to be an inclusive, supportive, and open-minded learning community. Interprofessional and transdisciplinary collaborations between the Department and all of the Schools of Stanford University (e.g., Business, Earth Sciences, Education, Engineering, Humanities & Sciences, Law) are promoted by being located on the same campus.

In sum, ours is a personalized and inclusive model of education. In keeping with the culture of Stanford University, we seek to foster individualism and innovation in supporting our learners to advance as leaders, engaged in critical thinking and creativity and bringing about transformative change in society.

Alan Louie, MD
Professor
Associate Chair - Education

Department Education Programs

Stanford Undergraduate Education in Psychiatry and Behavioral Sciences

Alan Louie, MD, Director

Many faculty members of the Department of Psychiatry and Behavioral Sciences also teach Stanford undergraduate students in a variety of courses and educational activities, ranging from small Freshman and Sophomore Seminars to large, lecture-based courses. Numerous research opportunities are available by enrolling in psychiatry research courses. Faculty also serve as mentors in the Pre-Major Advising Program.

We recently enrolled approximately 1,400 undergraduates in educational activities in the Department. Forty-two members of the Department's faculty taught undergraduate courses.

High School Education in Psychiatry and Behavioral Sciences: CNI-X

Laura Roberts, MD, MA, Co-Director
Alan Louie, MD, Co-Director

The Clinical Neuroscience Internship Experience (CNI-X) is an intensive, weeklong summer program following the sophomore, junior, or senior years in high school that introduces students to the amazing breadth of research found in our Department of Psychiatry and Behavioral Sciences.

The week is packed with small group sessions on topics ranging from miniature human brains in petri dishes, to cognition studies in flight simulators, to treating addiction in adolescents, to human rights of torture victims with PTSD. Experiential learning, self-directed study, and self-reflection are emphasized.

CNI-X launched in 2015 with 18 students and 20 faculty members. In its second year it grew to enroll 120 students, who also worked on team research projects.

Medical School Education in Psychiatry

Charles DeBattista, MD, DMH, Director of Medical Student Education
Yasmin Owusu, MD, Pre-Clerkship Director
Divy Ravindranath, MD, MS, Site Director VA PAD
Margaret May, MD, Assistant Site Director VA PAD

Psychiatry and behavioral sciences are taught during both the pre-clerkship and clerkship parts of medical school. Pre-clerkship instruction is offered to first and second year students and explores the psychological effects of physical diseases, the doctor-patient relationship, ethical issues in medicine, and human development; offers patient interviewing apprenticeships; and examines the major psychiatric disorders including psychotic, mood and anxiety, eating, somatoform and dissociative, and substance use disorders.

Elective courses are also offered in topics like careers in psychiatry and child and adolescent psychiatry. Clerkships in the third and fourth years of medical school offer clinical instruction in inpatient and outpatient interdisciplinary settings, designed to teach students how to conduct a diagnostic assessment and to use standardized diagnostic criteria and psychiatric treatments. Advanced psychiatric clerkships offer specialized experiences in child and adolescent, geriatric, sleep, psychosomatic, addiction, trauma, or research psychiatry.

RECENT HIGHLIGHTS:
Developed clinical experience for first-year medical students, continuity clinic for third and fourth year students, and subinternships in psychiatry.

Psychiatry Residency Training Program

Chris Hayward, MD, MPH, Director of Residency Training
Sallie DeGolia, MD, MPH, Associate Director of Residency Training
Belinda Bandstra, MD, MA, Assistant Director of Residency Training
Mark Freeman, MD, PhD, Site Director, VA PAD
Malathy Kuppuswamy, MD, Site Director, VA PAD
Cecylia Nowakowska, MD, PhD, Site Director, VA MPD

The ACGME-accredited Psychiatry Residency offers a unique blend of clinical and research opportunities, coupled with a sense of collegiality, cohesiveness, and deep care about residents' individual development in the context of a wealth of resources at Stanford University.

Clinical training competencies are systematically defined across services with emphasis in combining the application of biological therapeutics, psychotherapies, social interventions, and a transdisciplinary attitude. Clinical care is approached with critical thinking and innovation. The curriculum features a scholarly concentration program that allows residents to pursue their interests with individualized training and research. Residents are supported in cultivating careers that involve leadership, specialization, and academic growth. We strongly promote resident involvement in program improvement and prioritize resident well-being during training.

RECENT HIGHLIGHTS:
The Psychiatry Residency Training Program was ranked #11 in the country by U.S. News/Doximity.

Subspecialty Clinical Fellowships

Addiction Medicine Fellowship

Anna Lembke, MD, Training Director

The ABAM-accredited Addiction Medicine Fellowship is a one-year fellowship open to physicians who have completed an ACGME-accredited residency in any specialty. The fellowship provides state-of-the-art training in the treatment of patients with addiction. The program is tailored to the individual background and interests of the applicant, and our goal is to train physicians in all aspects of treating patients with substance use disorders, behavioral addictions, and co-occurring psychiatric and medical disorders. We also hope to promote future leaders, policy-makers, and researchers in the field of Addiction Medicine.

The Addiction Medicine Fellowship has become a model of cross-specialty training, represented at the White House Symposium on "Medicine Responds to the Need for Addiction Expertise" (2015). The fellowship also published the online, enduring CME course "Prescription Drug Abuse – Compassionate Care for a Complex Problem," funded by the Stanford Center for Continuing Medical Education, and received the Next Generation Award (2014-2016) for Adolescent Substance Use Prevention, American Board of Addiction Medicine/Conrad N. Hilton Foundation.

Geriatric Psychiatry Fellowship

Laura Dunn, MD, Geriatric Psychiatry Program Director

The goal of the ACGME-approved VA/Stanford Geriatric Psychiatry Fellowship is to train psychiatrists to assume leadership roles in clinical and academic geriatric psychiatry. Fellows develop clinical expertise in assessing and treating the wide range of psychiatric disorders in the elderly. Fellows have a wide range of research opportunities--e.g., at the intersections of geriatric psychiatry with sleep medicine, dementia neuroscience, ethics/forensics, and psycho-oncology. Fellows also develop skills in scholarly activities and administration that are required of leaders in clinical practice, community work, and/or academia.

The faculty currently includes seven faculty members who are ABPN-certified in geriatric psychiatry, with an eighth recruited to join soon. The number of fellows has been increased to two per year.

Child and Adolescent Psychiatry Fellowship

Shashank Joshi, MD, Training Director
Glen Elliott, MD, PhD, Associate Training Director
Michelle Goldsmith, MD, MA, Assistant Training Director

The highest priority of the ACGME-approved Child and Adolescent Psychiatry Fellowship is to prepare trainees for leadership roles in academic child and adolescent psychiatry, clinical practice, and public service. All fellows are thoroughly trained as clinicians and scholars. The training program is based on the principles of developmental sciences and developmental psychopathology. This theoretical framework views human development and its disturbances as flowing from the complex and reciprocal interactions between the family, broader social and physical environments, and biological factors. This framework integrates information from the social and behavioral sciences, developmental psychology, neuroscience, molecular biology and human genetics, developmental biology, and epidemiology.

The fellowship has recently been approved by the GME office to expand from seven to nine fellows per year, for a total of 18 fellows over the two-year training.

Neuropsychiatry Fellowship

John Barry, MD, Training Director
Sepideh Bajestan, MD, PhD, Associate Training Director

The UCNS-accredited Neuropsychiatry Fellowship is a one-year fellowship designed to provide requisite skills and resources that will allow the fellow to practice independently as a neuropsychiatrist. The fellowship is open to both psychiatry and neurology residents who have fulfilled their ACGME requirements in their respective fields.

Training occurs in both inpatient and outpatient settings and on psychiatric and neurological services. The fellowship allows for research and specialization, including a traditional neuropsychiatry track and an interventional psychiatry track that emphasizes transcranial magnetic stimulation, electroconvulsive therapy, vagus nerve stimulations, and deep brain stimulation.

We recently increased from one to two fellows and to seven faculty who are UCNS-certified in "Neuropsychiatry and Behavioral Neurology."

Psychosomatic Medicine Fellowship

Jose Maldonado, MD, FAPM, FACFE, Training Director
Yelizaveta Sher, MD, Associate Training Director

The ACGME-accredited Psychosomatic Medicine Fellowship is a one-year fellowship that includes the evaluation and management of the psychiatric complications of medical illness and/or its treatment, in both the inpatient and ambulatory care settings. This fellowship offers abundant didactic, clinical, and cutting-edge research opportunities. The program is designed to allow each fellow to develop his or her unique strengths and interests. Every year fellows are mentored in various aspects of academic medicine, from research design to grant writing, to manuscript writing and publishing, to presentations at local, national and international scientific meetings. Our fellows' participation in clinical research have contributed to the development of various clinical tools currently used world-wide for the psychosocial assessment of solid organ transplant candidates, to the prediction of patients at risk for complicated alcohol withdrawal, to the assessment of delirium in medically ill individuals. They have also been instrumental in the development of treatment protocols and algorithms.

We have increased our program to two fellows and to five faculty who are ABPN-certified in "Psychosomatic Medicine."

Student Mental Health Fellowship

Amy Alexander, MD, Training Director

The Student Mental Health Fellowship is one of only a few in the U.S. that focuses on training in college and university mental health delivery, the mental health of transitional and young adults, and systems-based practice with stakeholders in a major university. Fellows work with undergraduate and graduate students, in both outpatient psychotherapy/pharmacotherapy and inpatient consults.

The fellowship includes administrative and systems aspects of student mental health, outreach efforts to undergraduates on campus, didactics, and a scholarly project. Flexibility exists to customize the curriculum to include the fellow's particular areas of interest (e.g., eating disorders, mood disorders, first episode psychosis, adult ADHD, addiction) and to work with special populations (e.g., first generation college students, athletes, people of color, survivors of sexual assault).

The first fellow will start in 2017 and will work within Stanford Health Care, Vaden Health Center, and Stanford University.

Sleep Medicine Fellowship

Anstella Robinson, MD, Training Director
Scott Kutscher, MD, Assistant Training Director

The ACGME-accredited Sleep Medicine Fellowship is viewed internationally as the world's leading training program for sleep disorders medicine and thereby draws trainees from across the United States as well as from around the globe. It is also the first fellowship program accredited by the American Sleep Disorders Association.

This one-year clinical fellowship at the Stanford Sleep Medicine Center at Stanford Hospital and Clinic covers multiple aspects of sleep medicine including the pharmacology of sleep, sleep disordered breathing, insomnia, narcolepsy, pediatric sleep, parasomnias, restless legs syndrome, neurodegenerative disorders, and orthodontics involving both children and adults. Fellows have opportunities to pursue research and to be educators.

The Sleep Medicine Fellows are quite active in public education about sleep and in scholarly/research endeavors.

Clinical Psychology Training

Child and Adolescent Pre-doctoral Psychology Internship

Michelle Brown, PhD, Director

The Predoctoral Psychology Internship in child clinical/pediatric psychology, accredited by the American Psychological Association, is one-year long at the Lucile Packard Children's Hospital at Stanford and the Children's Health Council. The program seeks to train highly skilled and sensitive clinicians capable of functioning in a variety of multidisciplinary clinical settings and using a variety of treatment methods and conceptual perspectives, with a range of child and family problems.

The internship year is the capstone experience in the overall professional development and ultimate professional identities of PhD clinical psychologists-in-training and is tailored to the individual needs of interns. The program trains high-quality clinicians with a realistic sense of their professional capabilities.

PGSP-Stanford PsyD Consortium

Kimberly Hill, PhD, Co-Director of Clinical Training
Robert Holaway, PhD, Co-Associate Director of Clinical Training
Allison Thompson, PhD, Co-Associate Director of Clinical Training

The PGSP-Stanford PsyD Consortium is a full-time, five-year, practitioner-scholar program intended for those seeking careers devoted to the direct delivery of clinical psychological services. Students in the program, which has been continuously accredited by the American Psychological Association since 2006, are taught by an outstanding faculty drawn from the Stanford University School of Medicine, Department of Psychiatry and Behavioral Sciences, and Palo Alto University. The program provides a generalist education in clinical psychology, emphasizing evidenced-based practice and incorporating supervised clinical training. Students complete three full years of practicum training in settings that include the Department before completing a full-time, year-long, pre-doctoral internship.

In 2017, we matched 100% of graduates into American Psychological Association-accredited internships. Over the last four years, the APA-Accredited internship match rate has averaged 99% in the PGSP-Stanford Psy.D.Consortium compared to 56% for PsyD students nationally. In the 2016 US News & World Report ranking of clinical psychology graduate programs, the PGSP-Stanford Psy.D. Consortium was ranked 3rd among Psy.D programs.

Clinical Psychology Post-doctoral Fellowships

Kate Corcoran, PhD, Training Director, Clinical Psychology (Adult)
Sharon Williams, PhD, Training Director, Clinical Psychology (Child)

The Clinical Psychology Fellowship at Stanford, accredited by the American Psychological Association, is a one-year post-doctoral fellowship serving as the culmination of training in psychology and is guided by the scientist-practitioner model. Fellows are offered diverse clinical experiences in assessment and treatment utilizing evidence-based treatments, rich didactics based on current empirical literature, opportunities for scholarly inquiry, and supervision by Stanford faculty.

Fellows are trained in one of two programs.
1. Clinical Child and Adolescent Psychology
2. Clinical Psychology

In 2013, the Clinical Psychology Post-doctoral Fellowship Program achieved accreditation from the American Psychological Association. This initial accreditation for the program was for seven years, the longest term possible, which is rarely confirmed for a new program. The Adult Program now offers 6 positions in the Psychosocial Treatment Clinic, up from 4 when we first applied for accreditation. The Child and Adolescent Program continues to be 1 of 8 programs in the country with this accreditation.

100%

PGSP-Stanford PsyD Consortium internship match rate in 2013, 2014, 2016, and 2017

Advanced Research Training Programs

T32 Biobehavioral Research Training Program

PI: Alan Schatzberg, MD
Co-PIs: Rachel Manber, PhD and W. Stewart Agras, MD

Funded by the National Institute of Mental Health, T32MH019938: A Biobehavioral Research Training Program is designed for those who plan to pursue careers in clinical research with a specialization in adult disorders including mood, anxiety, and eating disorders and related areas such as insomnia.

This program aims to help clinically trained MD and PhD fellows develop skills and experience in research to enable their investigative careers. Research in the program is conducted under the direction of faculty mentors. The core aspect of the program is the mentoring relationship that will eventually enable an independent program of research. The training program offers didactic courses to promote research and professional development.

Continuously funded by NIMH since 1994, this program has supported fellows in the last five years, who have produced over 40 publications in top journals, and won career development grants from NIH. All the 2016 graduates currently have academic appointments -- two are Instructors in our department and have K08 awards and another is a MIRECC fellow and was awarded a NARSAD Young Investigator Award.

T32 Multi-Institutional Training in Genetic/ Genomic Approaches to Sleep Disorders

PI: Emmanuel Mignot, MD, PhD
Co-PI Ruth O'Hara, PhD

This multi-institutional T32 training grant is the first multi-site training program to be funded by NHLBI. It involves the University of Pennsylvania, Stanford, Johns Hopkins, and the University of Michigan and provides three years of post-doctoral fellowship training. A full complement of fellows are now recruited to this T32. Trainees have co-mentors at their home institution: one expert in sleep research and one in genetics/genomics.

Each fellow also has a mentorship committee with experts in sleep research and genetics from the various institutions in this program, as well as others, when appropriate, having currently funded training programs in sleep research (e.g., Harvard, Penn, Pittsburgh). Trainees who pursue genetic/genomic research at these other institutions will also be considered part of this national effort. Trainees take a core curriculum using video-based IT technology including lectures on genetics/genomics of sleep and its disorders by faculty at all participating institutions, and attend career development training, and grants workshop, journal club, and research-in-progress talks by trainees. Dr. Mignot is a regular contributor to the monthly didactics on the genetics of sleep, and the monthly national grant writing seminar is led by Dr. Ruth O'Hara at Stanford University. This is a relatively new fellowship and has not had any graduates yet.

Continuing Education

T32 Research Training for Child Psychiatry and Development

PI: Allan Reiss, MD

Positions are available for two to three years of training in clinical or basic research for MD and PhD fellows. This program is particularly intended for beginning researchers who seek to improve or expand their ability to conduct interdisciplinary investigation in brain and behavioral sciences.

Candidates will have the opportunity to participate in research projects of their mentors and/or will develop their own research projects. Weekly seminars and formal training in research methods and ethics are an integral part of the program.

Continuously funded by NIMH since 1993, this program has produced fellows who have been highly productive and continued on in academia. The two graduates in 2016 took on academic positions at Stanford, one as a MIRECC fellow and the other as a postdoctoral trainee in Neurobiology.

War Related Illness and Injury Study Center (WRIISC) Post-doctoral Fellowship

Ansgar Furst, PhD, Fellowship Director

The War Related Illness and Injury Study Center at the Veterans Affairs Palo Alto Health Care System provides a two-year post-doctoral fellowship affiliated with Stanford for MD and PhD fellows in advanced neuroimaging, neuroscience, mental health and neuroscience, and complementary and alternative medicine. The fellowship is sponsored by the Office of Academic Affiliations, Department of Veterans Affairs.

The training program offers didactic courses to promote research and professional development and has attracted strong applicants from across the nation. Since its inception in 2012 more than a dozen fellows successfully completed their training and subsequently launched careers in healthcare, high tech, or government.

Amongst the 2016 WRIISC graduates, one has an academic position at another university and the other has a staff position at the Palo Alto VA.

Mental Illness Research, Education, and Clinical Center (MIRECC) Advanced Fellowship

Ruth O'Hara, PhD National Director
Kaci Fairchild, PhD, Director (Psychology), VISN 21
Michael Ostacher, MD, MPH, MMSc, Director (Psychiatry), VISN 21

The Sierra Pacific Mental Illness Research, Education, and Clinical Center (MIRECC) at Veterans Affairs Palo Alto Health Care System provides a two-year post-doctoral fellowship affiliated with Stanford for MD and PhD fellows.

The Sierra Pacific MIRECC fellowship is an integrated system of clinical, research, and educational efforts designed to improve the clinical care for aging veterans with dementias and with PTSD. Dementia and PTSD share common clinical symptoms including cognitive difficulties, sleep disorders, and agitation and the Sierra Pacific MIRECC aims to evaluate current approaches and develop new treatments for these clinical problems. The training program offers didactic courses to promote research and professional development.

Amongst the 2016 MIRECC graduates, two have academic positions as Instructors in our department and one is a VA psychologists and Associate Director of the National VA Advanced Fellowship Program in Mental Health Research and Treatment.

National Center for Posttraumatic Stress Disorder (NCPTSD) Advanced Fellowship

Marylene Cloitre, PhD, Fellowship Director

The National Center for Posttraumatic Stress Disorder (NCPTSD), Division of Dissemination and Training at the Veterans Affairs Palo Alto Health Care System provides a two-year post-doctoral fellowship affiliated with Stanford University for MD and PhD fellows in PTSD. The fellowship is sponsored by the Office of Academic Affiliations, Department of Veterans Affairs.

The training program is mentorship-based with a focus on guiding and supporting the fellow to an independent research career. The fellowship focuses on research regarding engagement, assessment, and treatment of traumatized populations and extending reach of care both within VA and to national and global communities. The fellowship is in its fifth year. Thus far all graduates have obtained academic or VA research positions in line with our training mission.

One 2016 graduate of the NCPTSD is now a research psychologist in our department.

Continuing Medical Education (CME)

Alan Louie, MD, Director

Multiple educational activities are sponsored the Department of Psychiatry and Behavioral Sciences. The target audiences are usually psychiatrists, clinical psychologists, behavioral and neuroscientists, non-psychiatric physicians, allied health professionals, and trainees, but several are also open to the general public. Many offer CME credit through the Stanford Center for Continuing Medical Education. Examples of these activities are as follows:

- CME Conferences: Innovations in Psychiatry and Behavioral Health, Managing Sleep Health in the Primary Care Setting
- Grand Rounds: Psychiatry and Behavioral Sciences Grand Rounds, Sleep Medicine Grand Rounds, Geriatric Psychiatry and Neuroscience Grand Rounds
- Joint Sessions of the Psychiatry and Behavioral Sciences Grand Rounds and the Stanford Neuroscience Institute
- Regularly Scheduled Series (other than Grand Rounds): VA Interdisciplinary Mental Health CME Series, Closing the Gap: Moving towards Best Practices in Psychiatry
- Online CME courses: "Prescription Drug Misuse and Addiction: Compassionate Care for a Complex Problem," "Screening and Assessing Depression in Primary Care Settings: Clinical and Ethical Considerations," "Dementia and Diversity in Primary Care: A Primer – Guidelines, Ethnic Differences, and Assessments"

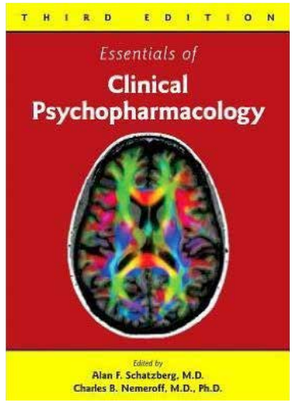
Stanford Geriatric Education Center (SGEC)

Dolores Gallagher-Thompson, PhD, ABPP, Director

The Stanford Geriatric Education Center (SGEC) is a nationally recognized leader in the field of ethnogeriatrics, health care for elders from diverse populations. Since SGEC was funded by the Bureau of the Health Professions in the Health Resources and Services Administration in 1987, hundreds of resources have been developed, and over 1600 trainings have been conducted with over 32,000 faculty and health care providers from a variety of disciplines, including medicine, nursing, social work, psychology, occupational therapy, pastoral counseling, and related fields.

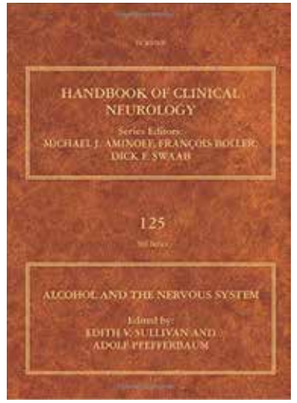
Featured Works

Recent Texts



Essentials of Clinical Psychopharmacology:
Third Edition

Co-Editor
Alan Schatzberg, MD



Handbook of Clinical Neurology:
Alcohol and the Nervous System, 1st Edition

Co-Editor
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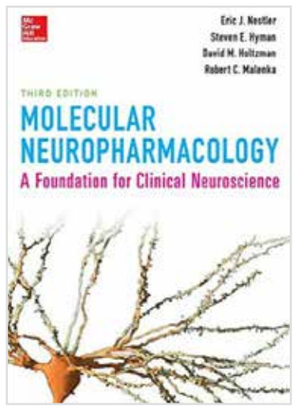
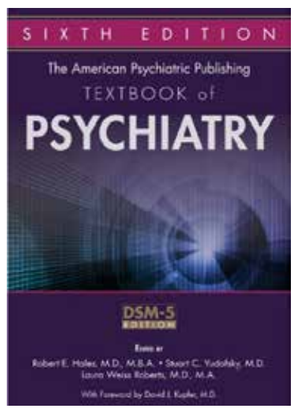


Molecular Neuropharmacology:
Third Edition

Co-Editor
Robert Malenka, MD, PhD



The American Psychiatric Publishing
Textbook of Psychiatry: Sixth Edition

Co-Editor
Laura Roberts, MD, MA

Featured Works

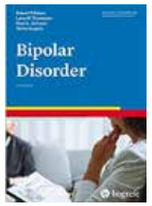
Recent Books

American Psychiatric
Association Publishing
Textbook of
Psychopharmacology

Co-Author and Co-Editor
Alan Schatzberg, MD

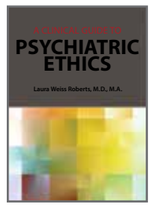
The Associate Professor
Guidebook: Continuing the
Journey to Professor

Editor
Laura Roberts, MD, MA



Bipolar Disorder, 2nd
edition, a volume
in the Advances in
Psychotherapy: Evidence-
Based Practice series 2nd
Edition

Co-Author
Larry W Thompson, PhD

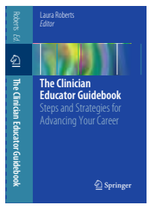


A Clinical Guide to
Psychiatric Ethics

Author
Laura Roberts, MD, MA

Clinical Medical Ethics:
Landmark Works and the
Legacy of Mark Siegler,
MD.

Co-Editor
Laura Roberts, MD, MA



The Clinician Educator
Guidebook: Steps and
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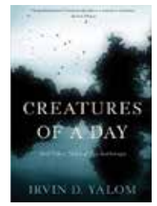
Your Career

Editor
Laura Roberts, MD, MA

Connect Core Concepts
in Health

Co-Author
Walton Roth, MD

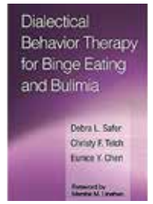


Creatures of a Day:
And Other Tales of
Psychotherapy

Author
Irvin Yalom, MD

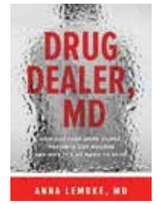
Dement's Sleep
and Dreams, Second
Edition

Co-Authors
William Dement, MD
Rafael Pelayo, MD



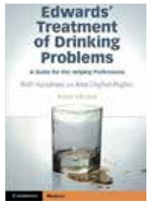
Dialectical Behavior
Therapy for Binge Eating
and Bulimia

Co-Author
Debra Safer, MD



Drug Dealer, MD: How
Doctors Were Duped,
Patients Got Hooked,
and Why It's So Hard to
Stop 1st Edition

Author
Anna Lembke, MD



Edwards' Treatment of
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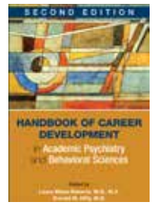
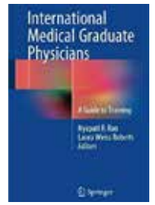
Professions 6th Edition

Co-Author
Keith Humphreys, PhD



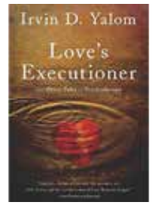
The Handbook of
Career Development in
Academic Psychiatry
and Behavioral
Sciences, 2nd Edition

Co-Editor
Laura Roberts, MD, MA



International Medical
Graduate Physicians: A
Guide to Training

Co-Editor
Laura Roberts, MD, MA



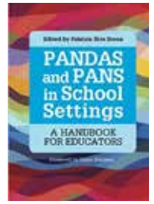
Love`s Executioner:
& Other Tales of
Psychotherapy

Author
Irvin Yalom, MD

Recent Books (cont.)

Medical Computer Vision: Algorithms for Big Data

Co-Editor
Weidong Cai, PhD

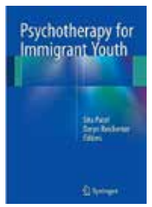


PANDAS and PANS in School Settings: A Handbook for Educators

Contributor
Margo Thienemann, MD

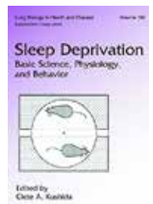
Psychiatric Aspects of Critical Care Medicine, An Issue of Critical Care Clinics, 1e (The Clinics: Internal Medicine)

Editor
José Maldonado, MD, FAPM, FACFE



Psychotherapy for Immigrant Youth

Co-Editor
Daryn Reicherter, MD



Sleep Deprivation: Basic Science, Physiology and Behavior (Lung Biology in Health and Disease)

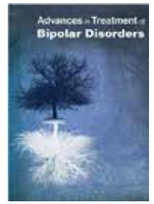
Editor
Clete Kushida, MD, PhD

ASCP Model Psychopharmacology Curriculum - Ninth Edition

Co-Editor
Ira Glick, MD

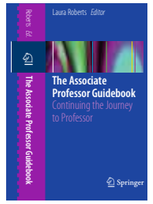
The Academic Medicine Handbook: A Guide to Achievement and Fulfillment for Academic Faculty

Editor
Laura Roberts, MD, MA



Advances in Treatment of Bipolar Disorders

Editor
Terence Ketter, MD

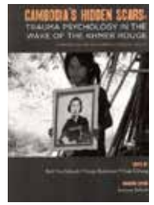


The Associate Professor Guidebook: Continuing the Journey to Professor

Editor
Laura Roberts, MD, MA

Autism Spectrum Conditions: FAQs on Autism, Asperger Syndrome, and Atypical Autism Answered by International Experts

Co-Editor
Joachim Hallmayer, MD, Dr med



Cambodia's Hidden Scars: Trauma Psychology in the Wake of the Khmer Rouge

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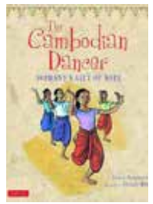

The Cambodian Dancer: Sophany's Gift of Hope

Author
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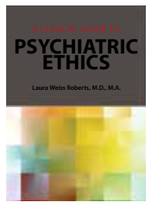

A Clinical Guide to Psychiatric Ethics

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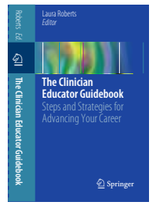
Laura Roberts, MD, MA



The Clinician Educator Guidebook: Steps and Strategies for Advancing Your Career

Editor
Laura Roberts, MD, MA

Cognitive-Behavioral Therapy for Late-Life Depression

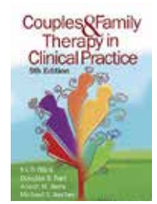
Presenter
Dolores Gallagher-Thompson, PhD, ABPP

Community-Based Participatory Research for Improved Mental Healthcare: A Manual for Clinicians and Researchers

Author
Laura Roberts, MD, MA

Connect Core Concepts in Health

Co-Author
Walton Roth, MD



Couples and Family Therapy in Clinical Practice

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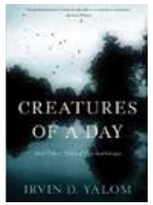

Creatures of a Day: And Other Tales of Psychotherapy

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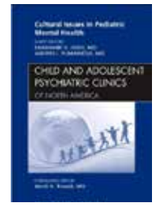
Irvin Yalom, MD

Cue-Centered Therapy for Youth Experiencing Posttraumatic Symptoms: A Structured Multi-Modal Intervention, Therapist Guide

Author
Victor Carrion, MD



Cultural Issues in Pediatric Mental Health, An Issue of Child and Adolescent Psychiatric Clinics of North America

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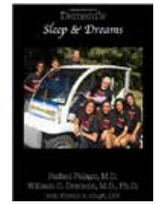

Dement's Sleep and Dreams

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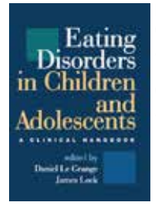
Rafael Pelayo, MD



Eating Disorders in Children and Adolescents: A Clinical Handbook

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Encyclopedia of Sleep

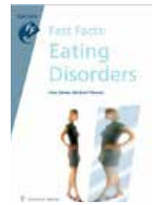
Editor
Clete Kushida, MD, PhD

Ethnicity and the Dementias

Co-Editor
Dolores Gallagher-Thompson, PhD, ABPP

Evaluation of Sleep Complaints, An Issue of Sleep Medicine Clinics

Editor
Clete Kushida, MD, PhD



Fast Facts: Eating Disorders

Co-Author
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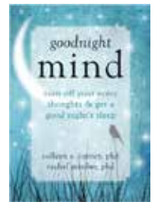
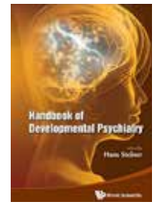
Focus Patient Management Exercises in Psychiatry

Co-Author
Ronald Albucher, MD



Goodnight Mind: Turn Off Your Noisy Thoughts and Get a Good Night's Sleep

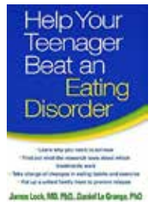
Co-Author
Rachel Manber, PhD



Handbook of Developmental Psychiatry

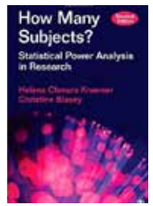
Co-Author and Editor
Hans Steiner, MD

Recent Books (cont.)



Help Your Teenager Beat an Eating Disorder

Co-Author
James Lock, MD, PhD

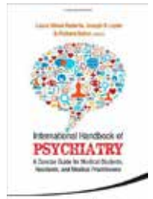


How Many Subjects?: Statistical Power Analysis in Research

Co-Author
Helena Chmura Kraemer, PhD

Impulse Control Disorders

Co-Editors
Elias Aboujaoude, MD
Lorrin Koran, MD



International Handbook of Psychiatry - A Concise Guide for Medical Students, Residents, and Medical Practitioners

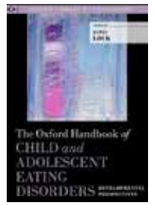
Co-Author and Co-Editor
Laura Roberts, MD, MA

Manual of Clinical Psychopharmacology

Co-Authors
Alan Schatzberg, MD
Charles DeBattista, DMH, MD

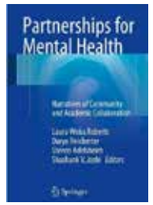
Mental Health in the Digital Age: Grave Dangers, Great Promise

Co-Editor
Elias Aboujaoude, MD



The Oxford Handbook of Child and Adolescent Eating Disorders: Developmental Perspectives

Editor
James Lock, MD, PhD

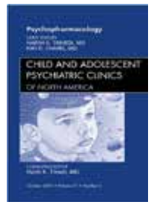


Partnerships for Mental Health: Narratives of Community and Academic Collaboration

Co-Editors
Laura Roberts, MD, MA
Daryn Reicherter, MD
Steven Adelsheim, MD
Shashank Joshi, MD

Professionalism and Ethics in Medicine: A Study Guide for Physicians and Physicians-in-Training

Co-Editors
Laura Roberts, MD, MA
Daryn Reicherter, MD



Psychopharmacology, An Issue of Child and Adolescent Psychiatric Clinics of North America

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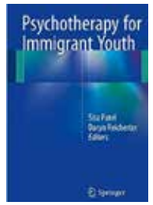

Psychotherapy for Immigrant Youth

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The Spinoza Problem: A Novel

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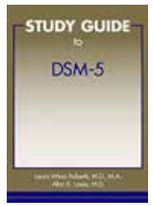

Study Guide to DSM-5

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The Treatment of Drinking Problems: A Guide to the Helping Professions

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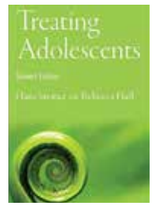

Treating Adolescents

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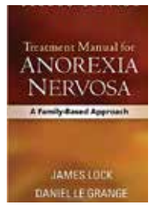
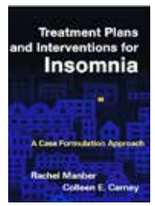
Hans Steiner, MD



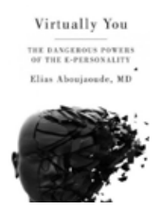
Treatment Manual for Anorexia Nervosa, Second Edition: A Family-Based Approach

Co-Author
James Lock, MD, PhD



Treatment Plans and Interventions for Insomnia: A Case Formulation Approach

Co-Author
Rachel Manber, PhD



Virtually You: The Dangerous Powers of the E-Personality

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Elias Aboujaoude, MD

Featured Works

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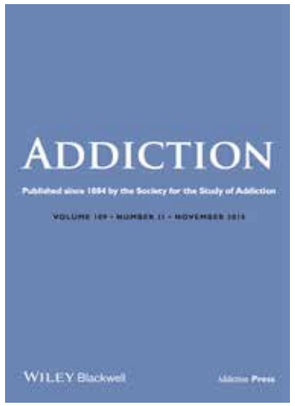

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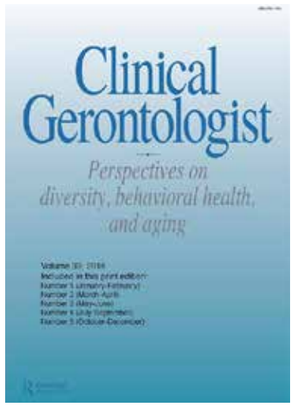

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Clinical Innovation and Service

The preeminence of Stanford Medicine's Department of Psychiatry and Behavioral Sciences is predicated on exceptional clinical care for individuals and families across the age spectrum who live with mental disorders and related conditions. The need for exceptional care – care that is richly informed by expertise, evidence, compassion, and attunement – is urgent. One-in-five adults and one-in-eight children in the US experience an episode of mental illness each year, and one life is lost every 15 minutes to suicide in this country. Our community is especially hard hit, with a suicide rate far greater than national averages. Addressing the mental health needs of children, transitional age youth, adults, and elders is a priority for Stanford Medicine in serving the Bay Area and in serving as a model academic program across the country.

Over the past five years, the Department has recruited many new faculty who have brought novel areas of expertise, deepened our existing areas of strength, and advanced innovative clinical approaches and models of care. In partnership with our affiliated hospitals, Stanford Health Care, Stanford Children's Health, and Palo Alto Veterans Affairs Health Care System, we have greatly expanded our portfolio to include new and more intensive clinical services and programs. In FY2016, our Quarry Road clinics will have nearly 67,000 outpatient visits and our faculty as a whole has doubled the clinical productivity as measured by wRVU's since 2010. Many more patients are seen at other sites, such as El Camino Hospital, Santa Clara Valley Medical Center, and the Palo Alto and Menlo Park VA. We work side by side with physicians in every clinic and service line of our affiliated hospitals, providing state-of-the-art care for cancer, cardiovascular disease, neurological and neurosurgical conditions, and general medical, surgical, and emergency care.

Through enriched community-based partnerships, including engagement with local schools and federally qualified health centers, we are able to provide needed expertise and greater presence to our neighbors seeking mental health services. Through technological innovation, we are able to provide needed expertise and greater presence in the care of special populations, e.g., veterans with trauma-related syndromes, and individuals at risk for eating disorders. Working intensively with Stanford University, we have expanded our services to students, staff, faculty, and their loved ones, on our campus. We are excited to have improved capacity and access, better serving the patients of the Stanford community, Stanford Medicine, the Bay Area, and beyond. Through integration with our translational, clinical, and implementation science activities, as well as our clinical training programs, we are able to have optimal impact in real-time and in the future.

For additional information please see http://med.stanford.edu/psychiatry/patient_care.html.

University Engagement

Student Health and Wellbeing

The Department of Psychiatry and Behavioral Sciences works in close collaboration with colleagues across Stanford University to foster and support the wellbeing and overall health of our students. Our efforts fall along the five missions of advancing science, clinical innovation, educational excellence, community commitment and engagement, and leadership and professionalism. We have endeavored to be good citizens and outstanding partners in addressing the hardest challenges faced on every university campus across the country: enhancing mental health and combatting the phenomena of sexual violence and of discrimination associated with identity. Our retreat in June 2017 will focus on social justice as one of its primary themes.

In the undergraduate programs, we have made intensive, comprehensive, and expanding efforts to address student well-being and mental health in specific areas including increased focus on well-being of each student, strengthened positive care, community resources across the campus, further integration of self-care in the curriculum, more coordinated, comprehensive mental health services, new prevention, identification, and early-intervention approaches, and preparation for the needs of future students. In addition, for years we have partnered with others in the School of Medicine and Stanford Health Care to develop new services for physicians-in-training as well as other health professionals to promote self-care and strengthened programmatic approaches ensuring health of trainees and their mentors and teachers.

In 2016, James Jacobs, M.D., Ph.D., FACEP joined us as the Associate Vice Provost for Student Affairs, Executive Director of Vaden Health Center and Associate Professor, Department of Psychiatry and Behavioral Sciences and Emergency Medicine (by courtesy).

Vaden Health Center is an accredited, multidisciplinary ambulatory clinic serving the 16,300 undergraduate, graduate, and professional students of Stanford University. Vaden departments include medical services, psychiatric and counseling services, the Confidential Support Team (soon to be located at Kingscote Gardens) for survivors of sexual and relationship abuse, some wellness services, and administrative operations. Additional clinical services available at Vaden include nutrition, radiography, laboratory, injection and immunization clinics, travel medicine, pharmacy, and physical therapy, plus specialty clinics staffed by School of Medicine faculty. Vaden also administers the Cardinal Care health insurance program, which serves more than half of the student body. All of Vaden's physicians, the director of the Confidential Support Team, and increasing numbers of psychologists are Clinician Educators in the School of Medicine, primarily in the Department of Psychiatry and Behavioral Sciences and in the Department of Internal Medicine. Vaden also hosts a training program for pre- and post-doctoral psychologists and serves as a rotation site for Stanford Psychiatry and Internal Medicine resident physicians.

92%
satisfaction with therapists in 2016 (up 20% from 2015)

6 days
to schedule an in-person appointment (down from 10 days in 2015)

$2.7M
University increase to prevent and resolve sexual assault

New Collaborations Across Campus

Creation of the Confidential Support Team

Directed by our Department's own Dr. Helen Wilson, the Confidential Support Team (CST) provides rapid-response confidential support services for students who are affected by sexual assault and relationship violence, including domestic abuse, intimate partner abuse, stalking, and sexual or gender-based harassmant. CST services include brief emotional support and ongoing individual counseling. CST Counselors can be reached 24 hours a day and they offer information about rights and reporting options, and support throughout the reporting process to faculty, staff, and student organizations. Counselors provide one-to-one response for students who want to talk, need urgent and/or safety assistance, and access to medical help. These professionals provide connection to resource support, including referral for longer-term health services, information about campus resources, and legal reporting options.

Other Examples of New Collaborations

- Creation of several new psychotherapy groups to address and support needs of special student groups/interests
- Introduction of new models of short- and medium-term multidisciplinary therapies
- Expanded services for underrepresented students
- Expanded services for at-risk students
- Expanded services for student athletes
- New University Mental Health Fellowship for physicians

Stanford WellConnect

Stanford WellConnect is a confidential mental health referral and consultation for residents and fellows, and it is a program that helps support institutional programs with necessary educational activities and policies related to trainee health and wellbeing. For physicians-in-training, stressors can get in the way of balancing the demands of professional and personal life, and without help, problems can intensify, having an effect on emotional and physical well-being and professional success. Although emotional distress often manifests in obvious ways, the symptoms can be subtle. WellConnect is a way to help our students stay healthy and resilient, even as they face the many challenges that come with modern medical training.

Student Athletes

The Sport Psychology Service offers confidential personal counseling, performance psychology counseling, psychological rehabilitation from injury, medication evaluation and management and specialized care referrals. Team centered workshops for varsity teams, crisis intervention and consultation with coaches and athletic department staff are also available. The services are provided by two licensed psychologists who specialize in sport performance and in student-athlete mental health. Medication evaluation and treatment is provided by physician specialists of the Department.

Community Commitment and Engagement

Community commitment and engagement is a fundamental academic mission of the Department and continues to grow and expand over time. Our community mission is defined broadly and flexibly to include our dedication to expanding our intensive local, state, and national community partnerships, ultimately extending these efforts to support novel behavioral health systems for providing mental health care around the world. In addition, we focus on building academic collaboration and support among our faculty, learners, and staff across the Stanford community and family. Our view is that community commitment and engagement will have the greatest impact when informed by and combined with the other missions of science, clinical care, education, and leadership.

The Department has had a long tradition of great efforts in our community – sharing expertise and working on site at our local schools, serving on multidisciplinary care teams in Santa Clara County, supporting shared clinical training programs in San Mateo County, providing care for individuals with mental illness from historically underrepresented communities throughout our area, and working shoulder to shoulder with clinicians in federally qualified health centers to the north and the south of our campus. Our faculty have partnered with local agencies and advocacy groups to bring greater focus to the public health impact and specific needs of people living with mental disorders, ranging from autism to schizophrenia. We have worked tirelessly to address the issue of suicide that has threatened the lives of our young people and the heart of our neighborhood.

In each of these efforts, we bring the unique strengths of an academic partner. Collaborations between community and academic partners can have far greater impact than the work of either entity alone. As described in the 2015 book titled Partnerships for Mental Health: Narratives of Community and Academic Collaboration, co-edited by faculty members Drs. Laura Roberts, Daryn Reicherter, Steven Adelsheim, and Shashank Joshi, these partnership efforts tend to be successful by combining the collective wisdom and expertise of the community with the research, clinical, and educational skillsets of the academic center. While this collaborative process requires additional time, communication, and coordination, inevitably the results lead to better outcomes for all communities involved.

Because it is so important for us to address these critical mental health issues, the community mission is valued by every member of our Department, whether laboratory scientist or front-line community-based clinician. Our community engagement and collaboration mission remains an area of ever-increasing focus as a key component of the vision and within our 10-year plan aspiration for the Department of Psychiatry and Behavioral Sciences of Stanford Medicine. Numerous groups of faculty, trainees and staff have come together to support these community efforts, including the monthly Community Psychiatry and Behavioral Sciences Workgroup, the faculty Community Engagement Advisory Committee, and the trainee community interest group. The dialogues within these workgroups and with our community partners have led to numerous community-based activities in training, research and program development.

This past year has led to a greater expansion of partnerships for youth through our Center for Youth Mental Health and Wellbeing. Our department extended its partnerships to more school districts across the region, and in collaboration with Stanford Children's Health, spearheaded our first, bi-annual regional adolescent mental health conference, attended by over 400 people from across the Bay Area and nation. We have also widened our community outreach with the Chinese, South Asian and Muslim communities, and we continue to move forward in our suicide prevention efforts with Santa Clara and San Mateo Counties.

Our department continues to expand the community experiences for our trainees in county and local agency settings. We continue to integrate our community behavioral health efforts with an ever-increasing number of county and community agencies and partners. Many of our department's faculty serve in leadership roles with local community collaboratives, including Project Safety Net, the Santa Clara County Suicide Prevention Task Force and EPI-AID CDC Suicide Report Team, and the San Mateo County Chinese Health Initiative to just name a few.

We continue to develop and expand our programs and laboratories to support communities of people with early psychosis, children and adults who have experienced trauma, the US Muslim community, people with Alzheimer Disease, veterans living with co-occurring disorders, international victims of torture and others. And through the development of new partnerships, we seek to expand our community engagement efforts to increase broad access to culturally appropriate, cutting-edge mental health care.

Over this next year we plan to partner with Santa Clara County on two "headspace-like" sites within the county, expand our community forensic partnerships via new training opportunities with Santa Clara and San Mateo Counties, work to build on Muslim mental health partnerships with the Bay Area Muslim community, and support the expansion of the very popular CHIPAO parent-child communication workshops. We will continue to directly address and challenge the issue of stigma that prevents delays access to critical mental health care and leads to difficulty in advocating for expanded community resources for mental health care. Further, by expanding on current efforts to create a cadre of trainees equipped to serve as community mental health leaders and team members, providing education and consultative support for our community-based partners across a range of settings and disciplines, and reaching out to offer clinical expertise in community-based clinics. In doing so, we hope to strengthen our relationships and community capacity, to give rise to better mental health outcomes for the communities, people and populations we serve.

33

primary locations

Community Outreach Efforts: Exemplars

Regional and National Collaborations

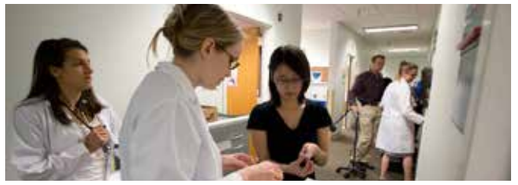
Adolescent Wellness Conference

In August of 2016, the Stanford Psychiatry Center for Youth Mental Health and Wellbeing co-sponsored the first regional adolescent mental wellness conference with Lucile Packard Children's Hospital (LPCH). Held in South San Francisco, the conference had over 70 speakers and was unique in bringing together youth, parents, educators, clinicians, and policymakers to focus on youth mental health issues and needs. The conference was attended by over 400 people from across the Bay Area and received rave reviews. The next conference is planned for the spring-summer of 2018.

American Psychiatric Association Minority HIV Fellowship

The APA offers fourth year medical students the opportunity to spend one month at Stanford's Positive Care Clinic and Santa Clara Valley Medical Center's PACE Clinic working with Dr. Lawrence McGlynn in HIV psychiatry. The fellowship provides a stipend for housing, as well as a fully-funded 3-day HIV training program in Washington D.C.

Arbor Free Clinic: Stanford Medicine's Free Clinic



Founded in 1990, the ongoing mission of Arbor Free Clinic is to provide culturally appropriate, high quality transitional medical care for an underserved patient population and to educate and empower a new generation of healthcare leaders to proactively address health disparities and improve access to care in their communities. Dr. Daryn Reicherter is Faculty Advisor and an Attending Physician for the Mental Health Chapter of the Arbor Free Clinic. This serves as a training experience for Resident Psychiatrists, Medical Students, and Pre-medical Undergraduates.

The California Student Mental Health Policy Workgroup

State Superintendent of Public Instruction (SSPI) Tom Torlakson convened the Student Mental Health Policy Workgroup (SMHPW) to bring together individuals with diverse expertise to develop innovative policy recommendations to address the mental health challenges facing vulnerable youth. This work group is composed of teachers, school counselors, school social workers, school psychologists, school nurses, and school administrators, as well as state and county mental health professionals. This diverse group of experts has reviewed the current mental health needs of California students as well as the existing student mental health practices, and its first recommendation is that educators—including administrators and teachers—need more training in student mental health. Dr. Shashank Joshi and Dr. Steven Adelsheim are members of this policy workgroup.

American Psychiatric Association Office of HIV Psychiatry

The APA Office of HIV Psychiatry coordinates the many HIV/AIDS-related educational, training, and support activities within the American Psychiatric Association and the American Psychiatric Foundation. The office provides information on the spectrum of clinical, neuropsychiatric, and psychosocial aspects of HIV disease and AIDS, and offer a myriad of trainings and services for various audiences including psychiatrists, psychiatric residents, physicians, physician assistants, nurses, social workers, substance abuse professionals, mental health providers, case managers and individuals living with HIV. Lawrence McGlynn serves in the Office of HIV Psychiatry as a member of the Steering Committee and Faculty.

American Psychiatric Association College Mental Health Caucus

Dr. Amy Alexander is also currently serving as one of the Co-Chairs of the APA's (American Psychiatric Association's) College Mental Health Caucus, which advocates for mental health issues that are important to the college student population. She is also one of the APA's representatives to HEMHA (Higher Education Mental Health Alliance), a consortium of 9 national organizations which actively serve in the field of college mental health. Amy was also elected as Treasurer in the Association for Women Psychiatrists (AWP), which meets yearly at the APA meeting. This is a group which advocates for women's issues in the field of psychiatry.

Center for Survivors of Torture, Asian Americans for Community Involvement

Since its inception in 2000, Center for Survivors of Torture (CST) has provided specialized services, including individual and group psychotherapy, psychiatry, psychological and medical evaluations for political asylum cases, medical, social and legal services to more than 800 victims of torture and family members from 64 countries. Dr. Daryn Reicherter has become the medical director and provides clinical services for victims of political torture from around the world. He also helped develop rotations there to enhance exposure to community psychiatry for education at Stanford School of Medicine. AACI now has a robust resident training program and PsyD training from Stanford and from Stanford/PAU programs (respectively). AACI is developing an integrated behavioral health program to compliment its growing primary care program as well.

Center for Youth Wellness

CENTER FOR YOUTH WELLNESS
health begins with hope

The Center for Youth Wellness (CYW) is an innovative, public-private initiative working to provide a full spectrum of services under one roof for San Francisco's most vulnerable children. Dr. Victor Carrion is a founding member and past Chair of the Scientific Advisory Committee. Dr. John Rettger provides ongoing support in yoga and mindfulness practices for CYW staff.

Early Psychosis/ CBT for Psychosis Training

Dr. Kate Hardy has led departmental efforts in early psychosis training for regional and state partners. With First Hope, in Contra Costa County Dr. Hardy has been training community clinicians in CBT for individuals at risk of developing psychosis with 6-month weekly consultation and tape review to ensure clinicians provide fully competent CBT for this population. She also works with Contra Costa Behavioral Health, training team members in Positive Practices for working with Psychosis (a CBTp informed approach) for clinicians working with adults with psychotic disorders in the community plus ongoing group consultation. On the state level, Dr. Hardy collaborates with the Department of State Hospitals, training 25 clinicians in Cognitive Behavioral Therapy for psychosis plus 9-month weekly consultation to support provision of this model within the state forensic system.

Gardner Family Health Network

Dr. Daryn Reicherter is a Consulting Psychiatrist working to develop Integrated Behavioral Health for Gardner Primary Care. Three of Gardner's 7 sites have operational behavioral health, including Packard/Gardner Children's Health Center. Gardner has an operational 1st Five Program operating at several sites. The program is growing with the goal of having behavioral health available at all its sites.

Headspace Program Development

With funding from the Robert Wood Johnson Foundation and Santa Clara County's Behavioral Health Board, Stanford Psychiatry's Center for Youth Mental Health & Wellbeing is leading the effort to bring the headspace model to the US by establishing stand-alone, integrated care sites for young people ages 12-25 to access early mental health support. Under the direction of Dr. Steven Adelsheim, the Center is in the process of creating infrastructure and partnerships to pilot the very first US-based implementation of the headspace model in the San Francisco Bay Area with the goal of national replication.

El Camino Women's Medical Group

El Camino Women's Medical group provides comprehensive women's health care in Mountain View and San Jose. It is the largest OB/GYN practice that caters to the Muslim community and holds a community partnership affiliation with the Department of Psychiatry and Behavioral Sciences to offer women's mental health care to its diverse population. Dr. Rania Awaad serves as its Psychiatric Director.

The Khalil Center- Bay Area

The Khalil Center works to address the clinical needs of local Muslim populations using faith-based approaches rooted in Islamic theological concepts, while integrating the science of psychology towards addressing psychological, spiritual and communal health. There are currently offices in both the South Bay and East Bay. Dr. Rania Awaad teaches Khalil Center interns and trainees and provides leadership, vision, and capacity building through her role as the Khalil Center's Clinical Director.

Muslim American Mental Health Leadership

Dr. Rania Awaad continues to be recognized for her national leadership in Muslim mental health. In April of 2016, by invitation of President Obama, the Secretary of Health and Human Services, Sylvia Burwell and SAMHSA leadership, she represented the Stanford Muslims and Mental Health Lab at a convening at the Department of Health in DC to discuss matters relating to Muslim Mental Health.

One East Palo Alto Neighborhood Improvement Initiative

One East Palo Alto (OEPA) is a youth-focused, community-based nonprofit established as a comprehensive community change initiative. OEPA's mission is to develop resident leadership, broker resources and services, build the capacity of individuals and organizations, and advocate for change for East Palo Alto youth. In a project supported by a Spectrum Grant for Population Health Sciences, Dr. Ryan Matlow and Dr. Flint Espil provide consultation and training for OEPA's Behavioral Health Advisory Group Ambassador Team to inform support services provided to youth and families at Ronald McNair Academy. In addition, Dr. Matlow participates and consults on OEPA's Youth Empowerment and Strategies for Success (YESS) collaborative.

PACE (Partners in AIDS Care and Education) Clinic, Santa Clara Valley Medical Center

The PACE Clinic is the largest provider of comprehensive HIV care in Santa Clara County. The patient population represents the diversity of the community it serves, including over 50% Hispanic and significant numbers of Asians and immigrants from Africa. Dr. Lawrence McGlynn serves as the PACE Clinic's Director of Mental Health Services. In addition to primary and psychiatric care, the clinic also offers substance abuse counseling and treatment, pain management, Hepatitis C treatment, case management, and outreach.

National Prodrome/Early Psychosis Programs Network (PEPPNET)

In partnership with many national experts, academic institutions and government agencies, Dr. Steven Adelsheim, Dr. Kate Hardy and Dr. Douglas Noordsy work with clinical high risk and first episode psychosis programs across the country in supporting a national network (PEPPNET) to link training efforts, evidence-based treatment and outcomes tracking.

Project Safety Net and the HEARD Alliance

For the past 7 years, many department members have been involved in local, regional and state suicide prevention efforts. Through partnerships with Palo Alto's Project Safety net and the regional HEARD Alliance of health and mental health professionals, departmental faculty, staff and trainees have lent support to local efforts to expand suicide prevention programs, including efforts focused on lethal means restriction. Drs. Joshi and Adelsheim continue to be involved in the leadership of these initiatives. In addition, Dr. Joshi has been a leading partner in the efforts to expand the HEARD Alliance's highly acclaimed Suicide Prevention Toolkit and is working with others to transform it into a state guide. This effort has been linked with our team's contribution to the passage of California AB 2246, The Student Suicide Prevention Bill, signed into law in the Fall of 2016. Members of our team have also led statewide webinars in suicide prevention designed specifically for school districts to implement the provisions of the bill.

Ravenswood Family Health Center

Ravenswood Family Health Center is a nonprofit federally qualified community health center based in East Palo Alto. RFHC provides healthcare for the underserved, uninsured and most vulnerable low-income residents of communities in southeastern San Mateo County. Drs. Christina Khan and Ryan Matlow provide services for Ravenswood Family Health Center.

Santa Clara County Epi-Aid Epidemiological Partnership

Our faculty have been consulted statewide and nationally to provide recommendations on both upstream and downstream suicide prevention measures. Dr. Rebecca Bernert, a suicidologist in our department, recently received a grant from the Stanford Center for Clinical and Translation Research and Education to create a formalized infrastructure to support monitoring of youth self-directed violence in Palo Alto and comparator districts/counties. In addition, the Santa Clara County Behavioral Health Division is supporting Dr. Bernert's efforts to develop an initial fatality statistics database along the Caltrain railway corridor to support epidemiological monitoring of youth suicides and their prevention. This project will continue partnership with the CDC/SAMHSA to build upon the 2016-2017 Epi-Aid Investigation of local suicide clusters.

San Jose AIDS Education and Training Center

The San Jose AIDS Education and Training Center (SJ AETC), under the medical directorship of Dr. Lawrence McGlynn, provides training, clinical consultation and technical and capacity building assistance for health care professionals at no cost utilizing expert faculty on topics related to HIV/AIDS and Hepatitis C prevention and care in the counties of Santa Clara, Santa Cruz, San Benito, Monterey and San Luis Obispo. SJ AETC provides customized presentations tailored to specific provider audiences and offers capacity building support for the development and implementation of routine HIV testing in primary care practices. Training and coaching services are also available for primary care clinics interested in transforming into a Patient Centered Health/Medical Home.

School Mental Health District Partnerships

The Stanford / Lucile Packard Children's Hospital (LPCH) School Mental Health Program has worked extensively with elementary, middle and high schools in Palo Alto, East Palo Alto, Mountain View, San Francisco, and San Jose since 2000, and provides a variety of mental health services, engages in community-based participatory research, builds capacity through ongoing professional development of school staff, promotes leadership among our trainees and community partners, and disseminates findings in multiple venues (academic journals, national meetings, and popular media). Our program is led by Dr. Shashank Joshi, with clinical care and consultation by Drs. Moira Kessler, Steven Sust, and Steven Adelsheim with staff partnership from Jasmine Lopez and Vicki Harrison

Through these partnerships, we have learned about the specific mental health factors that may impact a student's learning, such as trauma, loss, depression, anxiety, and emotional distress in general. Many stakeholders have been engaged in these community efforts focused not only on mental health treatment and wellness promotion, but also on suicide prevention (see below).

Some school mental health research efforts focus on the interaction of culture, stigma, and help-seeking among diverse youth and their families. We have also implemented and evaluated peer-led (and adult-mentored) culturally adapted mental health interventions for several communities affected by suicide clusters. These interventions have led to more students being able to name trusted adults they would go to when seeking help for themselves or for peers. Recently, we received funding to study classroom teacher self-efficacy in student mental health, by utilizing a virtual classroom interaction platform.

Stanford Health and Wellness Study in Local Schools

Stanford Health and Wellness Study, led by Drs. Victor Carrion and Ryan Matlow, is a three-year longitudinal, multi-method neuroscience-based research evaluation of a yoga- and mindfulness-based health and wellness curriculum being implemented in local school districts. It is a partnership between Pure Edge Inc. (formerly The Sonima Foundation), Ravenswood City School District, Alum Rock Unified School District, Orchard School District and Stanford's Early Life Stress and Pediatric Anxiety Program.

Stanford Positive Care Clinic

The Stanford Positive Care Clinic was founded in 1994 to provide support and treatment for those living with HIV/AIDS. Today the clinic has expanded its mission, providing primary and mental health care to the LGBT population, as well as those seeking Pre-Exposure Prophylaxis (PrEP), an effective method to reduce the transmission of HIV. The faculty and staff of the Positive Care Clinic are also active in outreach and education of the HIV and LGBT community. International research continues to be an important component of the Positive Care Clinic's work.

Stanford Psychiatry Forensics Team

The Stanford Psychiatry Forensics team provides clinical support and collaboration with juvenile and adult court systems in San Mateo and Santa Clara Counties, with their expanding community partnerships the team works to "Bring medicine to crime" in an effort to support the mental health needs of those involved with the justice system. They also provide training to agencies, courts, and community partners on mental health assessment, needs, and issues of those in the justice system.

Support for Families Facing Dementia

The Caregiver Research and Practice Lab (CARP), led by Dr. Dolores Gallagher-Thompson, focuses on studying, and providing, evidence-based psychological interventions to reduce distress in family caregivers of persons with Alzheimer's disease or other forms of dementia. The program partners with a variety of community-based organizations in San Mateo and Santa Clara counties including Rosener House (Menlo Park), Avenidas comprehensive senior services and referral program and San Mateo County Aging and Adult Services. Several of these programs have been translated into Spanish, Chinese, and Farci. Currently CARP members are focusing minority outreach and intervention efforts on nearby Latino communities, in collaboration with the Stanford Alzheimer's Disease Research Center. Future goals include offering our family skill-training workshops in Spanish in collaboration with interested partners in San Mateo and Santa Clara county, and increasing knowledge about why Latinos are needed in dementia research, along with reducing barriers.

South Bay Project Resource

Dr. Doug Noordsy collaborates with South Bay Project Resource by providing a family education program as well as identifying & inviting other teachers. He will also support SBPR's development of a web-based education resource by identifying & interviewing experts in psychosis.

Tipping Point Mental Health Initiative

Tipping Point Community's Mental Health Initiative began a partnership with Stanford's Early Life Stress and Pediatric Anxiety Program in 2012 to develop comprehensive wellness services and mental health supports at community-based organizations in the South Bay. Dr. Victor Carrion, Dr. Daryn Reicherter, Dr. Ryan Matlow, and Dr. John Rettger are engaged in ongoing collaboration with Tipping Point Community and their grantees at JobTrain and Aspire's East Palo Alto Charter School. Mental health clinicians Veronica Alvarez and Cristina Cortez serve as Wellness Educators providing psychoeducation, mental health consultation, and service linkage and coordination at grantee sites.

Trauma Treatment Training for Community Partners

Dr. Victor Carrion, Dr. Ryan Matlow, and Dr. Hilit Kletter provide training on Stanford's Cue Centered Therapy for Youth Experiencing Posttraumatic Symptoms (CCT) for therapists and counselors at behavioral and mental health care service organizations. In 2016 and 2017, CCT training was provided to members of partner organizations including the Center for Youth Wellness, Counseling and Support Services for Youth, Ravenswood City School District, Stanford Youth Solutions, One East Palo Alto, and Ponce Health Sciences University in Puerto Rico. Current plans are to hold annual 1-2 day CCT trainings for program and department partners.

Community Outreach Efforts: Exemplars

Cultural and International Collaborations

The Bay Area Muslim Mental Health Community Advisory Board

In partnership with the Muslim Community Association (MCA), the largest Muslim community center in the Bay Area, the Stanford Muslims and Mental Health Lab was awarded a 2016 pilot grant from the Stanford Center for Clinical and Translational Research and Education (Spectrum). The overall goal of this project was to develop a community advisory board with key stakeholders that could address the mental health needs of the Muslim community. This CAB meets monthly under the leadership of Dr. Rania Awaad and is working to develop a community based model that facilitates utilization of formal mental health services among American Muslims in the Bay Area. At the 15th Annual Community Health Symposium in January 2017, the community-university partnership between the Stanford Department of Psychiatry and the Muslim Community Association was awarded the Outstanding Community Partnership Award.

The Bay Area Muslim Mental Health Crisis Response Team

Dr. Rania Awaad is the co-chair of a crisis response team that services the Muslim community in the Bay Area. This team is comprised of therapists who volunteer their time for emergency consultations when the local Muslim community faces a crisis. Examples of emergency response efforts have been in the aftermath of the Muslim Travel Ban, Chapel Hill, UC Merced, San Jose Shootings and Santa Cruz drownings.

The Bay Area Muslim Mental Health Professionals

The Stanford Muslims and Mental Health Lab hosts and helped develop a monthly meeting at Stanford for the Bay Area Muslim Mental Health Professionals network. This meeting has drawn mental health professionals and trainees from all over the Bay Area who work with Muslim populations. Since its inception, this network of Muslim Bay Area mental health professionals has grown from a handful to over 100 interdisciplinary mental health providers and trainees. The monthly meeting facilitates networking, peer support, and mentorship opportunities for those interested in Muslim Mental Health. The lab also helps organize the monthly didactic sessions and competency pre/post evaluations for these monthly trainings.

Building Capacity for Mental Health in Rural Guatemala

Dr. Christina Khan leads a global health partnership in the department to address stigma and build capacity for mental health care and research in rural Guatemala. Through collaboration with ALAS Pro Salud Mental and other partners in Guatemala, this partnership offers training opportunities for Stanford residents and fellows as well as Guatemalan students, community health workers, and clinicians to learn mental health outreach, promotion and treatment in low-resource settings. The lab has recently received funding to deliver a WHO mental health curriculum to public health physicians in Sololá province, Guatemala.

Chinese Health Initiative

Steven Sust, MD is the Co-Chair of San Mateo County's Chinese Health Initiative (CHI). The CHI is dedicated to community education and outreach for general wellness of the Chinese population and the corresponding services available. In addition, CHI advocates for culturally and linguistically appropriate community services given the shortage of available community resource.

Stanford CHIPAO

In 2015, youth suicides among Palo Alto teenagers again made national news. To be responsive to the community, the department chose to expand a focus on supporting Asian students and families across the region. Nationally, Asian-American youth are at higher suicide risk, citing family acculturation mismatches as especially stressful. As the Stanford Psychiatry department responded with interventions for teens, we also talked with parents, whose upbringing may have stigmatized emotional issues. At a 2015 symposium, Asian parents discussed cultural differences, but also requested role-modeling and guidance on parent-child communication. We immediately planned a series of theatrical "vignettes" and started performing them in Bay Area middle and high schools.

Stanford faculty and trainees, under the leadership of faculty member Rona Hu, wrote scripts and became actors, depicting scenarios like arguing about grades, dating someone "unsuitable", and embarrassment over a parent's accent, drawing on our academic backgrounds, clinical work, and our own lives. The team performed each scene first one way, paused for questions, and then performed the scene again, using audience input.

The response: coverage from front page news, television and radio, to national and international invitations to perform for schools, communities, and professional meetings. Even more gratifying has been the response from parents who realize that they are not alone, and talk openly about their struggles. Responding to requests, the program is now expanding: vignettes for South Asians and Latinos, outcomes research, and video programs supplementing our live performances. As clinicians, we have found a "treatment" with lasting effects and no side effects, that the team hopes can save lives.

Global Caregiving: iSupport for Dementia Family Caregivers

Dr. Dolores Gallagher-Thompson and colleagues have teamed up with the World Health Organization to develop an interactive web-based caregiver support tool (iSupport) that is accessible via computer, tablet and mobile phone. The pilot study is taking place in Bangalore, India where internet penetration is high and collaboration is secured with the NIMHANS Alzheimer's research center. The study will determine if English speaking dementia family caregivers in India will use this website and if they benefit from the resources. Following that, the website and accompanying technological information will be released to countries globally, on request with modifications as necessary to ensure that it is culturally relevant and likely to be used in their countries.

The Human Rights in Trauma Mental Health Laboratory

The Human Rights in Trauma Mental Health Laboratory, led by Dr. Daryn Reicherter, is a Stanford based, multidisciplinary program, committed to advancing and applying research on the physical and psychiatric impact of trauma on survivors of human rights abuses with an eye towards informing transitional justice and judicial processes. The lab focuses on the science of the psychological changes and mental health pathology caused by trauma on individuals, their families, and their communities, over time and between generations. Lab affiliates, trainees, and colleagues analyze and build upon the rich data available in the interdisciplinary scientific literature and developed in specific conflict situations to clearly identify the impact on human psychology of various forms of mass trauma, including genocide, mass killings, rape, and torture. This analysis is used to clarify the science and/or advocate for the survivors' human rights and mental health in a whole range of settings, including criminal trials, civil suits for money damages, and asylum proceedings by providing expert testimony, reports and consulting with the legal teams prosecuting perpetrators or representing victims.

Muslim American Society- Social Services Foundation (MAS-SSF)

Muslim American Society-Social Services Foundation (MAS-SSF) is a non-profit based in Sacramento, CA that aims to aid families in general and the Muslim community in particular with their culturally sensitive social and mental health service needs. The Stanford Muslims and Mental Health Lab has assisted MAS-SSF in applying for and successfully receiving a Capacity Building Pilot Project grant that is offered by California Department of Public Health (CDPH) California Reducing Disparities Project (CRDP). This grant will provide technical assistance to MAS-SSF to further develop their infrastructure and improve their ability to apply to larger state or federal grants. Later, the lab's role will be to evaluate the efficiency and the impact of their community based mental health practices.

Pediatric Mental Health Training in Africa

The department has a partnership with University of Zimbabwe to build child psychiatry efforts in Zimbabwe. There are training opportunities for residents and fellows to learn about mental health care provision in settings with few trained mental health professionals. Dr. Christina Khan is partnering with faculty at U of Z, Stanford, NextGen University, and others around the globe to create online training opportunities in pediatric mental health.

Refugee Mental Health

In collaboration with colleagues from CPR-Alalusi Foundation, Dr. Rania Awaad has traveled to Amman, Jordan to provide refugee mental health aid and help develop a "train the trainers" curriculum for clinicians working with Syrian and Iraqi refugees in Jordan. To date, the annual conference sponsored by the Alalusi Foundation has trained over 100 clinicians, therapists and social workers who work with refugee populations in Jordan.

Department Locations

Selected Sites

401 Quarry - Psychiatry and Behavioral Sciences Building
Stanford, CA

VAPAHCS
Palo Alto, CA

1520 Page Mill
Palo Alto, CA

213 Quarry Road
Stanford, CA

Clark Center
Stanford, CA

CCSR
Stanford, CA

Grant Building
Stanford, CA

SIM1
Stanford, CA

Stanford Medicine Outpatient Center
Redwood City, CA

3165 Porter
Palo Alto, CA

Hoover Pavillion
Stanford, CA

321 Middlefield Road
Palo Alto, CA

Beckman Center
Stanford, CA

Alway Building
Stanford, CA

Lucas Center (MSLS)
Stanford, CA

Ravenswood Family Health Cener
Palo Alto, CA

AchieveKids
Palo Alto, CA

Palo Alto Unified School District
Palo Alto, CA

Canary Center
Palo Alto, CA

1070 Arastradero
Palo Alto, CA

CJ Huang Building
Stanford, CA

VAPAHCS - Menlo Park Division
Menlo Park, CA

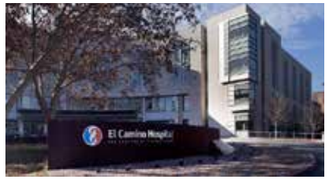
California Pacific Medical Center
San Francisco, CA

Khalil Center
Santa Clara, CA

Santa Clara Primary Care
Santa Clara, CA

San Mateo Unified School District
San Mateo, CA

Sequoia Unified School District
Redwood City, CA



El Camino Medical Center
Mountain View, CA

El Camino Women's
Medical Group
Mountain View, CA

Mountain View/Los Altos
Unified School District
Mountain View, CA

Los Altos Unified School District
Los Altos, CA

Santa Clara Valley
Medical Center
San Jose, CA

Asian Americans for
Community Involvement
San Jose, CA

Gardner Family Health Network
San Jose, CA

Sacred Heart Schools
Atherton, CA

Stanford Children's Health
Specialty Services
Sunnyvale, CA

Special Initiatives of the Chair

The Belonging Project at Stanford

A sense of belonging is deeply important to emotional health and personal wellbeing. Individuals develop a sense of belonging when they feel that they are part of a larger community that they believe in - a community that welcomes them, a community that respects and represents their values, and a community that helps them to fulfill their aspirations. Individuals develop a sense of belonging when they feel connected to other people, especially those who share their distinct life experiences, interests, or goals. University activities that foster a sense of belonging promote mental and physical health and help individuals to flourish in all aspects of their lives.

The importance of the feeling of belonging has been demonstrated through empirical work on human resilience and identity formation and on factors that protect emotional health and personal wellbeing, even in the context of adversity and trauma. Studies focused on risk factors giving rise to poor health outcomes have also shown how crucial the experience of belonging can be. Individuals who feel marginalized are more likely to experience significant health problems over the course of their lives. Moreover, clear evidence has shown that individuals in distress who feel that they are disconnected and are not part of a larger community ("thwarted belongingness") are especially vulnerable to poor outcomes, including impulsive or self-harmful behavior.

For all of these reasons, we are launching "The Belonging Project at Stanford" - a broadly-engaged, multidimensional effort to promote emotional health and personal wellbeing through connection with the communities of our campus. This program is directed by Laura Roberts, MD.

The Bike Beyond Project

The Bike Beyond Project is aimed to advance a community-academic partnership to foster resilience and improved physical and mental health among at-risk transitional age youth (ages 12-22) of the Central Valley through a novel pilot program in which intermediate, high school, and community college students are taught mechanics of bicycle repair, bicycle safety, and positive self-care skills while engaging in service that supports leadership and community-building skills.

The pilot program will apply the community-based model for children, adolescents, and young adults pioneered by Green Ways To School in Santa Cruz County, in which student participants help identify needs for safer, ecologically sustainable routes to school while also developing longitudinal engagement with local organizations and small businesses. The pilot program will build upon the experience and remarkable success of a nationally-recognized intervention project originating in the Department of Psychiatry and Behavioral Sciences at Stanford University that was created to strengthen emotional wellbeing, academic performance, mental health, and family outcomes among impoverished youth by teaching mindfulness, yoga, and positive health practices. For this novel pilot project, an initial retreat will bring together Stanford researchers with cycling advocates and educators from California's central valley and beyond. Together the convened group will lay the plans and identify best-practices for the Bike Beyond anchor project. Annual half-day retreats will be held to ensure cohesion of the project going forward. The partnership will engage: 1) local non-profit bicycle coalitions in the Central Valley; 2) classroom-based bike skills classes in Central Valley public intermediate and high schools and community colleges, and 3) academic faculty of Stanford University's Department of Psychiatry and Behavioral Sciences.

The project is led by Laura Roberts, MD, Victor Carrion, MD, and Kyle McKinley, MFA, of Stanford University in collaboration with diverse community partners, Tawn Kennedy, who serves as the director of Green Ways to School, Jackie Musick, who serves as an instructor for Geared Up! Bicycle Technology Program, and teachers and students of Central Valley public schools.

Brainstorm: The Stanford Laboratory for Entrepreneurship in Mental Health

Brainstorm is a special initiative of the Chair aimed at accelerating innovation and entrepreneurship in behavioral health and neuroscience. Our mission is to create practical solutions that improve outcomes in health and opportunity for all. We foster innovation that reflects our core values - effective, measurable, collaborative, sustainable, and affordable. Our vision is build a multi-site community that works together to transform healthcare by turning idealism into impact.

Brainstorm is directed by Dr. Nina Vasan and a team from Stanford and partnering peer institutions. It is guided by a Board that is chaired by Dr. Laura Roberts. Committed to fostering interdisciplinary efforts, Brainstorm engages with students and faculty across the University (the Graduate School of Business, School of Engineering, School of Law, Graduate School of Education, and School of Medicine) and unites academia with innovators in government, businesses, startups, and NGOs.

EDUCATE
We are teaching the first university course in the US on mental health innovation, “Leadership and Innovation in Mental Health”. We are developing educational offerings for a range of audiences, including executives, high school students, and international students.

CREATE
Brainstorm is an incubator and accelerator for rapid translation; we nurture ideas and ventures by investing in them with mentorship, education, funding, and collaboration opportunities with our community. We are launching the department’s first Innovation Lab at the Stanford CME Innovations in Psychiatry and Behavioral Health Conference, in coordination with Dr. Alan Louie.

COLLABORATE
We are building a think tank for innovation and entrepreneurship. We are developing an ethical business model for faculty and affiliates to consult for entities including businesses, startups, governments, and organizations. We aim to foster meaningful collaboration among stakeholders by positioning clinicians to lead progress in our field and ensure that efforts are based in evidence, ethical treatment, and optimal patient-centered care.

Clinical Neuroscience Internship Experience (CNI-X)

Co-directed by Dr. Laura Roberts and Dr. Alan Louie, the Clinical Neuroscience Internship Experience (CNI-X) at Stanford University is an intensive two-week summer program following the sophomore, junior, or senior years in high school. Interns are introduced to the amazing breadth of research found in the Stanford Department of Psychiatry and Behavioral Sciences.

Packed back-to-back are sessions and lab trips which demonstrate how creativity is visualized with brain waves, miniature human brains are grown in dishes, apps and virtual reality are treating eating disorders, cognition is studied in flight simulators, psychiatric testimony supports human rights at the World Court, and more.

Interactive seminars introduce the students to the principles of neuroscience, neuropsychiatric diagnosis, neuropsychological testing, and psychiatric epidemiology. An adaptive and agile mind is encouraged as one session plumbs the intricacies of neuroscience, while the next involves diagnosis of a neuropsychiatric syndrome from a video, and then the following inspires one to find “flow” in one’s life.

Much of the material is clearly at a collegiate or higher level. These hours of experiential and interactive learning with highly acclaimed faculty and researchers are complemented by homework assignments including written reflections on 13 relevant TED talks, the reading of scholarly articles, and attendance at a Stanford scientific poster session.

Self-reflection and self-directed learning are emphasized with independent inquiry assignments asking for students to write about their learning objectives and career goals and to draft a curriculum vitae. Each student creates a project, often in a team, to self-express some lesson taken from the internship that is verbally presented at a final capstone session for themselves and their families. The experience is fast-paced, intense, challenging, creative, and creates lasting bonds between students.

Community Outreach Activities

Community engagement and commitment is a core pillar of the Department’s mission. For us, community is defined broadly, ranging from our shared commitment to building academic collaboration and support among our own faculty and staff, to partnerships with international colleagues, to building behavioral health care systems for those with mental health needs across the globe.

Our department has recently expanded community experiences for our own trainees in county and local agency settings, while also welcoming experts in community psychiatry administration to Stanford to build understanding and collaboration. Our Department’s faculty have served as leaders in response to local community crises and provided guidance on developing new behavioral health systems of care for county, state, and regional partners. This past year our departmental faculty have developed new programs and labs to support communities of people with early psychosis, children and adults who have faced trauma, the United States Muslim community, people with Alzheimer’s Disease, and international victims of torture, just to name a few areas of expansion. In partnership with others, we continue to expand our community engagement efforts to increase broad access to culturally appropriate, cutting-edge mental health care.

By integrating community engagement strategies throughout the Department’s efforts, we create opportunities for co-learning and collaboration within the Department, across Stanford University, and beyond. Our partners have years of experience developing a wide variety of treatment, education, and ingenious services for those they serve. Faculty and trainees in the department feel privileged to have the opportunity to contribute to their ongoing efforts. Community engagement effectively aligns the mission of the department with the surrounding area, our nation, and the world, thereby reinforcing opportunities for partnership for decades to come.

Editor in Chief, Books: American Psychiatric Association

Dr. Laura Roberts is the Editor in Chief, Books for the American Psychiatric Association. In this capacity she works with the Publisher, Associate Publisher, Editorial Board, and other APA staff in overseeing the editorial development of print books and electronic products, preparing and implementing book program strategy and policy, driving content direction, soliciting and reviewing book proposals and manuscripts, reviewing backlist publications, and preparing new frontlist titles.

Other responsibilities include networking with key researchers, clinicians, and academics in mental healthcare to acquire new books proposals and manuscripts, as well as screening book proposals and judging their appropriateness for publication, and identifying topics and authors for new books.

As Editor in Chief, Books she is also responsible for overseeing and ensuring the rigorous and equitable peer review of book manuscripts – selecting reviewers, monitoring modifications of revised and resubmitted manuscripts, and making disposition recommendations.

Editorial Office: Academic Psychiatry

Academic Psychiatry is a bi-monthly, international academic medical journal that publishes original papers on innovations in psychiatric education and professional development. Dr. Laura Roberts has served as Editor in Chief of the Journal since 2002, and has since been joined by Dr. Alan Louie as a Deputy Editor. Other members of the Department of Psychiatry and Behavioral Sciences of Stanford serve as editorial team members and as frequent contributors of research and of content to the Journal.

Academic Psychiatry features original, scholarly work focused on academic leadership and innovative education in psychiatry, behavioral sciences, and the health professions at large. The Journal's mission supports work that furthers knowledge and stimulates evidence-based advances in academic medicine in six key domains: education, leadership, finance and administration, career and professional development, ethics and professionalism, and health and wellbeing.

The Journal, which publishes full and brief empirical reports alongside educational columns, commentaries, and original artwork and poetry, has grown as an international resource, with contributors, reviewers, and readers hailing from over 50 countries across the globe.

Forensic Psychiatry

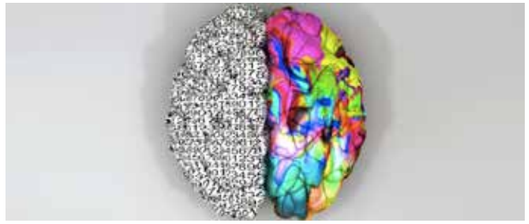
Forensic Psychiatry is a subspecialty of psychiatry that encompasses the interface between the law and psychiatry. A forensic psychiatrist can provide evaluations for numerous legal purposes, including competency to stand trial and mental state opinions among others.

The Program in Psychiatry and the Law at Stanford comprises a multidisciplinary team of world-class faculty who combine clinical experience and specialized knowledge and experience in medicine, mental health, and ethics. They are able to work on queries related to mental health issues that arise in criminal or civil law, on an individual, corporate, or government level.

Our mission is to provide the highest level of ethical, comprehensive, unbiased, and evidence-based forensic assessments possible. We embrace the core values of integrity, excellence, and professionalism in all of our cases. We review all pertinent information and apply clinical expertise to each case to ensure that we are providing the most objective psychiatric assessments and expert opinions.

We work to ensure that all evaluations and/or assessments address clinical and forensic considerations. Our program's faculty members are nationally recognized in their respective fields for high quality clinical care, research, education, and evaluation. As such, we are able to provide expert testimony in many areas of specialization and have considerable experience with depositions and trial testimony in both civil and criminal proceedings.

Humanities and Medicine: Growing the Heart and Mind of Medicine



Medicine is the most human of the sciences. The physician-patient relationship is at the heart of medical practice. Developments in science, technology, and the economics of health care, while essential to medicine and the delivery of care, also pose significant challenges to the nature, quality, and maintenance of this relationship and to medicine as a discipline. Evidence suggests that clinical outcomes, satisfaction (for both patients and physicians), and costs are negatively affected when the human side of medicine is neglected, marginalized, or otherwise disregarded. In addition, medicine is a cultural force that wields powerful effects on knowledge and values and promotes actions in broader society that are often underappreciated and poorly understood. Stanford Medicine sets itself apart from most medical schools by being located in an active university campus with scholars in humanities and social sciences at the doorstep, giving rise to an opportunities to promote interdisciplinary work at the interface of medicine and the humanities at an exceptionally high level. Many historians, anthropologists, philosophers, and literary scholars at Stanford have intellectual and academic commitments to enlightening these aspects of medicine. Their insights and wisdom seldom find their way to the medical campus, however.

The Humanities and Medicine initiative is based in the Chair's Office and entails identifying key stakeholders and collaborating with them to learn about their interests and priorities related to humanities and medicine campus wide; developing a working group of thought leaders committed to the importance of growing humanities/medicine to provide stimulus and leadership for these types of academic and clinical efforts; identifying key opportunities for enhancing the relationship between medicine and the humanities; developing a 3-5 year plan for enhancing/growing the academic and clinical interface between the medicine and the humanities at Stanford.

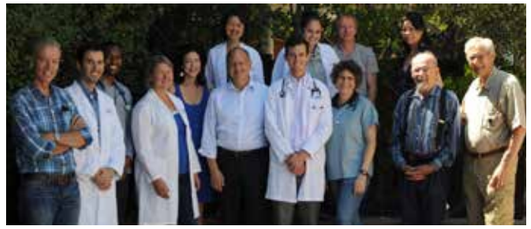
Lyme Disease Working Group

Lyme Disease is a serious and prevalent condition with physical, cognitive, and affective consequences. This condition and other tick-borne conditions are poorly understood and have received insufficient scientific attention. With the encouragement of a number of Lyme Disease organizations, we have initiated philanthropically focused efforts to support current research and clinical projects and catalyze new work.

Our Lyme Disease Working Group is interested in developing more accurate diagnostic tests, improving medical understanding of the course of illness, evaluating the effectiveness of innovative therapies, expanding clinical services, and building greater knowledge and awareness of how to prevent illness. Participating colleagues represent expertise in basic sciences, translational sciences, and clinical care. Basing this effort at Stanford University will build upon the advantages of working within an institution that strongly supports academic freedom while also encouraging interdisciplinary collaboration. This exceptional interdisciplinary group also values collaboration with other academic institutions, and a number of collaborations are underway.

Such a model is optimal in this context for its potential to produce major breakthroughs in knowledge and improve medical practice—perhaps even more so in the context of Lyme Disease where bringing together diverse views is greatly needed to advance the science and inform practice.

Pegasus Physician Writers at Stanford



The Pegasus Physician Writers at Stanford are a group of academic and private practice physicians in various stages of career development who also are creative writers. The group was founded in 2008 by Audrey Shafer, MD (Anesthesia), Hans Steiner, MD (Psychiatry and Human Development), Irvin Yalom, MD (Psychiatry), and Larry Zaroff, MD, PhD (Cardiac Surgery).

This independent group closely collaborates with the Medicine & the Muse, an arts and humanities program at the Stanford School of Medicine. The group currently has some eighty members from all branches of medicine participating in monthly meetings, workshops, and annual events. Members write poetry, fiction, fictionalized memoirs, op-ed pieces, and educational texts for the public with the intent to broaden public understanding of the science and art of medicine. Other goals of the group are to bring the insights of humanistic arts to the practice of medicine, to inform creative writing by the practice of medicine, to educate medical students and young physicians in the humanistic dimensions of medical practice, and to celebrate the lives of patients through their writing.

Recently, the Pegasus group was featured in a SciArt in America blog post, a Psychology Today post, two Stanford Medicine SCOPE blog posts, and on Ernst Schmiederer. Dr. Yalom was featured in The Huffington Post. The Pegasus Physician Writers at Stanford also participated in a Café Scientifique event, reading short stories and poems on using blood products as life-saving interventions. The group has been featured in an article about the arts, humanities and medicine programs that allow Stanford School of Medicine students to explore their artistic passions in conjunction with their medical studies. They have also published several pieces in The Intima, A Journal of Narrative Medicine.

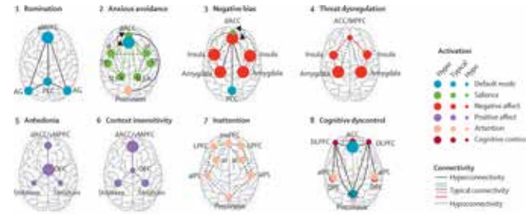
Project Catalyst for Mental Health

Mental disorders are the second leading cause of disability and premature mortality throughout the world and the first leading cause in economically established countries, and yet the profound consequences of these conditions remain underrecognized.

Project Catalyst for Mental Health is a new center to be launched in 2016 as a special initiative of the Chair. The intent of Project Catalyst for Mental Health is to foster innovation to address and lessen the impact of mental disorders and related conditions.

Bringing to bear the insights of diverse disciplines, Project Catalyst seeks to improve health outcomes through scholarly work conducted initially in six areas: 1) suicide; 2) co-occurring disorders, including physical, mental, and addiction-related conditions; 3) grief and survivorship; 4) computational neuroscience; 5) social and economic determinants and consequences of mental disorders and related conditions; and 6) health disparities and health policy.

Precision Mental Health



Mental wellbeing is fundamental to human health. The biomedical revolution, led by Stanford Medicine, will change the trajectory and impact of the biomedical sciences through precision health for individuals and for populations. Precision psychiatry is part of this revolution.

Depression, anxiety disorders, cognitive disorders, addiction, and other conditions are common. Though treatment is remarkably effective in improving quality of life and reducing the burden of symptoms and impairment, stigma and insufficient resources are a dramatic barrier to appropriate care. Moreover, mental disorders may complicate and worsen the risks associated with other health conditions. For examples, depression increases the risk of cardiovascular-related deaths threefold.

Mitigating such mental health statistics will require the best cutting-edge prediction, prevention, and preemption that population science can possibly provide. Stanford University is uniquely positioned to spearhead this effort. The Department of Psychiatry and Behavioral Sciences in the School of Medicine has launched two major initiatives to advance precision health.

In addition, in 20 we initiated a new unit, the Division of Public Mental Health and Population Sciences, to harness the tremendous academic resources of Stanford University, encompassing computer science and biomedical data, biomedical sciences, and engineering, coupled with renowned schools of medicine, business and economics, law, education, statistics, social sciences and ethics, and design.

Advances in these fields hold the promise of revolutionizing the diagnosis and treatment of mental illness with greater precision – personalized for special populations and eventually individuals.

Reimagining Mental Healthcare

“Reimagining Mental Healthcare” challenges us to put aside what we know about mental healthcare and to start from scratch – to reimagine mental healthcare.

This special initiative of the Department of Psychiatry and Behavioral Sciences seeks to dream into the future of mental healthcare. Participants bring to bear on this task theories, tools, and expertise from fields outside mental healthcare – in particular, from information technology, design thinking, and implementation science.

By **information technology**, we mean the broad spectrum of possible applications including but not limited to m-health applications and biometrics, virtual and augmented reality, serious computer games, web-based interventions, big data and machine learning. Additionally, direct applications to treatment with telemental health, measurement-based care and electronic medical records, virtual extenders, and technological adjuncts to treatment, and technology-assisted medical education with simulations, online and blended learning, and more. We are setting out to discover and create information technologies targeted at improving human mental health.

Design thinking is inspired by Stanford’s Hasso Plattner Institute of Design, or “d.school,” and our reimagining will be catalyzed by many of the d.school tenets, like need-focused approach, user-centered design, and techniques to harness a creative mindset, including brainstorming, and rapid prototyping. By infusing design thinking throughout, we may truly understand the mental health needs of our patients and the myriad array of providers and craft solutions required to meet those needs.

Implementation science is the study of the dissemination and actualization of research findings for the benefit of patients, in the real world. This science will be core to introducing and integrating discoveries into clinical practices and the care of populations, here and globally.

This special initiative brings together people and resources to reimagine mental healthcare through social networks, learning communities, and educational venues and forums. It also serves as an incubator and accelerator of ideas and projects. We incubate ideas, iterate and refine their solutions, and accelerate their translation (T1 through T4) into improved mental healthcare. Participants bring different expertise to collaborations, and meetings with members of other Stanford Schools (e.g., Stanford School of Engineering) and Silicon Valley industries are additional resources for consultation and joint ventures.

Small Grant Program

The Department of Psychiatry and Behavioral Sciences Small Grant Program, launched in 2015, promotes research and collaborative scholarly projects that advance the academic interests of our faculty and the strategic themes of our department. Projects across the full spectrum of science and scholarship are encouraged.

The Small Grant Program has two offerings: Pilot Studies in novel scientific areas that have high potential to lead to competitive grant applications and Small Scholarly Projects related to areas including education, clinical care, community and health systems, and professional development. Pilot Study applications are systematically evaluated by senior faculty who assess significance of the scientific question, strengths of the investigator(s), degree of innovation, methodological approach, salience to departmental missions, and likelihood of leading to future funding. Small Scholarly Projects are systematically evaluated for overall quality, salience to the departmental missions, and feasibility. Assessments by individual faculty raters are kept separate and confidential and are submitted as guidance to the Chair.

In its inaugural year, 38 applications were submitted for consideration and 21 projects were awarded full or partial funding. The Small Grant Program occurs annually, with applications due on November 15 each year.

Stanford Center for Youth Mental Health and Wellbeing

The Stanford Center for Youth Mental Health and Wellbeing recognizes that we are in the midst of a national public mental health crisis among US youth and is committed to spearheading a new national vision for adolescent and young adult wellness and mental health support. The clinical and research experts within the Department of Psychiatry and Behavioral Sciences have laid the groundwork for the creation of a national initiative for youth through their expertise in early mental health support, development of self-regulation tools, school mental health, and suicide prevention. By creating an innovative health system, and a new culture of health for the adolescent and young adult population, Stanford hopes to create a model for the country in how to better support our young people to navigate the transition to adulthood and realize their full potential as adults.

The Center supports the development of clinical programs, community partnership efforts, as well as community research collaborations. Recent research efforts include focus groups with young people and families in the San Mateo and Santa Clara Counties assessing both mental health service needs and issues within the community. In addition, the focus groups considered the impact of stigma on access to mental health services for young people and their families. In addition, several focus groups specifically focused on cultural issues related to accessing early mental health services for the Asian community.

The Center is also working to address the mental health needs of young people in local school districts. Current research areas include the development of computer based screening tools to help identify young people at risk for mental health problems and the creation of programs to link these students to early mental health supports. In addition, partnerships are underway with several high schools to survey students about their perceptions of student mental health needs and how they might best access services through home, school, and community.

In partnership with the Lived Experience Workgroup of the national Prodrome and Early Psychosis Network (PEPPNET), which is also directed through the Center, data is being collected and reviewed on the experiences of young people and families facing first hospitalizations for psychotic illness. It is hoped that by collecting and sharing this critical information, we all might contribute to the potential to improve the experience of those facing their first psychiatric hospitalization.

Technology and Mental Health

Stanford Psychiatry and Behavioral Sciences continues to be on the cutting edge of innovation in the field of technology and mental health. Positioned in the heart of Silicon Valley, and with the vast array of technology partners across the Stanford campus, our Department brings cutting edge technological science together with clinical expertise to create an array of unique and innovative solutions for those facing mental health challenges. Departmental members are utilizing technology to provide support for people of all age groups and diagnostic categories with interventions ranging from web-based tools and telehealth models to mental health apps and virtual reality. In addition, our Department is fortunate to have a close collaboration with Psychiatry and Behavioral Science faculty partners from the VA Palo Alto Health Care System.

For example, departmental faculty are studying the use of web-based treatments using acceptance and commitment therapy (ACT) for those facing challenges with bipolar disorder. A new adaptive behavioral intervention for the Recovery Record app, developed with Telepsychiatry efforts are under way to support distant patients with child mental health issues through a partnership with the Pediatrics Group of Monterey and the Department. In this model, the use of televideo technology also provides back-up support and education for primary care providers in environments with little local access to cutting edge psychiatric care. Actigraphy studies within the department provide valuable information through the monitoring of movement/ resting state activity with changes in treatment and environment for individuals having difficulty with sleep, psychosis, mood issues and other psychiatric disorders. In addition, departmental faculty and trainees are partnering with local high school and college students, state partners and national organizations, such as the American Psychiatric Association on training in innovation thinking related to mental health, to build the cadre of young people and clinicians ready to creatively take on the next wave of mental health challenges.

In partnership with the VA Palo Alto Health Care System, the Psychiatry Department also houses the Behavioral Telehealth and Technology (B-THAT) Workgroup, co-chaired by Eric Kuhn, PhD and Steven Adelsheim, MD. This group brings together experts working across the VA and the Department in the technology and mental health field in a collaborative effort to share research ideas, support technology solutions, and create opportunities for expanding partnership efforts.

WellConnect

Stanford WellConnect is a confidential mental health referral and consultation program for residents and fellows that was created by Dr. Laura Roberts in 2011 in response to significant needs identified among clinical trainees on our campus.

This program was established to address three main objectives:
1) mental health and wellbeing of residents and fellows, 2) educational needs that align with of the Accreditation Council for Graduate Medical Educatio requirements, and 3) administrative support and guidance associated with health issues.

At times stressors experienced by resident and fellow physicians can get in the way of balancing the demands of professional and personal life, and without help, problems can intensify, affecting emotional and physical wellbeing and professional success.

Although emotional distress often manifests in obvious ways, the symptoms of many psychological problems can be subtle.

Services for residents and fellows include the following:
- Individual counseling
- Couples counseling
- Substance abuse assessment and counseling
- Medication evaluation
- Medication management

Services for program directors, faculty, and staff include consultation to assist in recognizing mental health concerns of residents and fellows and serving as a resource for decision making that balances the needs of trainees and programs.

Stanford WellConnect also offers wellness curriculum consultations and provides lectures and workshops on the following topics:
- Work-life balance
- Sleep hygiene
- Stress and anger management
- Team building and interpersonal effectiveness
- Accepting and giving feedback
- Identifying the signs of burnout, anxiety, and depression

Five Interdependent Academic Missions of the Department of Psychiatry and Behavioral Sciences

The vision of leaders is often touted as their greatest value to organizations, and perhaps that is true. The ability to imagine a better future, to articulate it clearly, and then to bring others forward in building and attaining that vision is certainly an essential quality of effective leaders. Leaders with extraordinary vision are thus creative, well spoken, and influential, and generate a sense of cohesiveness among individuals who, together, exert purposeful effort toward a foreseen objective.

In academic psychiatry, leaders are people who can help our field generally, and departments of psychiatry specifically, to fulfill their commitments in multiple mission areas. Most traditional academic organizations define three core missions, but I believe we actually assume responsibility for five overlapping areas.

The first two areas encompass education, preparing the next generation of physicians-in-training and developing innovative specialty and subspecialty initiatives, as well as research and scholarship, the generation, translation, and application of new knowledge for the benefit of society.

A third mission area is clinical advancement and practice, which involves creating new diagnostic and therapeutic approaches and providing state-of-the-art clinical care for patients from all backgrounds and walks of life. We are also responsible for community engagement—working to partner with, serve, and improve the health of our communities, locally and globally. We are charged with fostering professionalism and the companion endeavors of supporting professional development and ensuring the ethical expression of our profession in everyday life.

Taken together, these commitments support the growth of expertise and skill among faculty and trainees. What is more, they strengthen the ability of today's early career leaders to carry the duties to our profession and its stakeholders moving forward. A leader with vision in academic psychiatry, in my view, is one who is able to recognize the interdependent nature of these mission areas and to yoke them together to bring about a better future.

From Roberts LW: "Leadership in Academic Psychiatry: The Vision, the "Givens," and the Nature of Leaders." Acad Psychiatry 2009;33:85-8.

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