Lee and Wang named 2020 BBRF Young Investigator Grant recipients

October 2, 2020 - 2:40pm

Two UCSF Department of Psychiatry and Behavioral Sciences researchers — A. Moses Lee, MD, PhD [1], and Shuyu Wang, MD, PhD [2] — have been awarded 2020 NARSAD Young Investigator Grants [3] by the Brain & Behavior Research Foundation (BBRF) [4] in recognition of their work as promising young scientists conducting innovative, cutting-edge neurobiological and psychiatric research. The pair are among the five researchers at UCSF and 150 from around the world selected to receive a combined $10.3 million in grants to further their research.

The two-year awards will provide them each with up to $70,000 for the purposes of extending their research fellowship training or fostering a career as an independent research faculty member. In addition, they will be eligible for consideration to present at the foundation's annual scientific symposium.

"BBRF Young Investigators represent a new generation of scientists who will pioneer breakthroughs in mental health research," said BBRF President and CEO Jeffrey Borenstein, MD. "With these grants, outstanding researchers are able to pursue bold new ideas to answer important questions or help identify potentially game-changing targets for treatment. The awards function as seed funding for new directions that would otherwise be highly unlikely."

Funding to support research in basic science

Lee, a clinical and translational researcher and alum of the UCSF Psychiatry Research Resident Training Program [5] (RRTP), has noted that the anterior insular cortex is a critical node within a larger corticolimbic anxiety network, which mediates various dimensions of anxiety. He will use intracranial electrophysiological mapping with high-density recordings to study insular networks in the context of anxiety-related cognitive tasks and multimodal emotional assessments. These studies will be conducted in patients with medicatio-
refractory epilepsy implanted with intracranial electrodes for the clinical purpose of identifying their seizure foci and pre-surgical planning. The hope is to identify novel insular biomarkers of anxiety and definitively demonstrate a causal role for these circuits in generating symptoms of anxiety.

Wang, currently a third-year resident physician in the UCSF Adult Psychiatry Residency Training Program [6] and RRTP participant, observed that social attachment, which is impaired in autism, has been difficult to study because traditional models like mice do not display long-term social attachment behaviors. Prairie voles are among the few mammals known to exhibit social monogamy; separation from a partner provokes anxiety behaviors and activates the stress response. Using novel techniques, she will investigate how social attachment behaviors vary across developmental stages and genetic backgrounds in voles, in the hope of finding behavior patterns that are specifically linked with mutations associated with autism spectrum disorders or schizophrenia. Having these behavioral signatures would significantly advance our ability to study and to understand social deficits in mental illness.

**An investment in the careers of promising young scientists**

BBRF Young Investigator Grants are designed to help researchers launch their careers in neuroscience and psychiatric research and gather pilot data to apply for larger federal and university grants on research relevant to the understanding, treatment, and prevention of serious brain and behavior disorders such as schizophrenia, mood disorders, anxiety disorders, or child and adolescent mental illnesses. Since the program’s founding in 1987, grants to more than 6,000 scientists have been awarded totaling over $418 million in funding.

?BBRF Young Investigator Grants have led to groundbreaking and important new research that has improved the lives of people living with mental illness,? added BBRF Scientific Council President Herbert Pardes, MD. ?These scientists are making great strides in basic research, new technologies, next-generation therapies and early intervention techniques. This kind of out-of-the-box research offers the best hope for change.? This year, BBRF received 1,012 grant applications, and the selected recipients represent 110 institutions in 17 countries. Grant awardees were selected by the BBRF’s Scientific Council, comprised of 181 leading experts across disciplines in brain and behavior research, including one Nobel Prizewinner, three former directors of the National Institute of Mental Health, four recipients of the National Medal of Science, 11 members of the National Academy of Sciences, 16 National Institute of Health chiefs and directors, 41 chairs of psychiatry and neuroscience departments at leading medical institutions, 54 members of the National Academy of Medicine, and ten UCSF Psychiatry and Behavioral Sciences faculty members. The 2020 Young Investigator Grant Selection Committee was co-chaired by the University of Rochester’s Suzanne N. Haber, PhD, and UCSF’s Judith M. Ford, PhD [7].

Other 2020 BBRF Young Investigator Grant recipients from UCSF include Ali Mohebi, PhD [8], and Katlin Slim, PhD [9], from the Department of Neurology, and Madeline Andrews, PhD [10], of the Eli and Edythe Broad Center of Regeneration Medicine and Stem Cell Research.

**About UCSF Psychiatry and Behavioral Sciences**

The UCSF Department of Psychiatry and Behavioral Sciences [11] and the Langley Porter Psychiatric Institute are among the nation’s foremost resources in the fields of child,
adolescent, adult, and geriatric mental health. Together they constitute one of the largest departments in the UCSF School of Medicine and the UCSF Weill Institute for Neurosciences, with a mission focused on research (basic, translational, clinical), teaching, patient care, and public service.

UCSF Psychiatry and Behavioral Sciences conducts its clinical, educational, and research efforts at a variety of locations in Northern California, including Langley Porter Psychiatric Hospital and Clinics [12]; UCSF Medical Centers at Parnassus Heights, Mission Bay, and Mount Zion; UCSF Benioff Children’s Hospitals in San Francisco [13] and Oakland [14]; Zuckerberg San Francisco General Hospital and Trauma Center; the San Francisco VA Health Care System; UCSF Fresno; and numerous community-based sites around the San Francisco Bay Area.

About the UCSF Weill Institute for Neurosciences

The UCSF Weill Institute for Neurosciences [15], established by the extraordinary generosity of Joan and Sanford I. "Sandy" Weill, brings together world-class researchers with top-ranked physicians to solve some of the most complex challenges in the human brain.

The UCSF Weill Institute leverages UCSF’s unrivaled bench-to-bedside excellence in the neurosciences. It unites three UCSF departments?Neurology, Psychiatry, and Neurological Surgery?that are highly esteemed for both patient care and research, as well as the Neuroscience Graduate Program, a cross-disciplinary alliance of nearly 100 UCSF faculty members from 15 basic-science departments, as well as the UCSF Institute for Neurodegenerative Diseases, a multidisciplinary research center focused on finding effective treatments for Alzheimer’s disease, frontotemporal dementia, Parkinson’s disease, and other neurodegenerative disorders.

About UCSF

The University of California, San Francisco (UCSF) is exclusively focused on the health sciences and is dedicated to promoting health worldwide through advanced biomedical research, graduate-level education in the life sciences and health professions, and excellence in patient care. UCSF Health [17], which serves as UCSF’s primary academic medical center, includes top-ranked specialty hospitals [18] and other clinical programs, and has affiliations throughout the Bay Area.