Dr. Thomas Biederer arrives this month to assume a position as associate professor in the Department of Neuroscience. Dr. Biederer completed his PhD at the Humboldt University of Berlin and performed postdoctoral research with Dr. Thomas Südhof at UT Southwestern Medical Center before taking a faculty position at Yale. His research interests are focused on roles of SynCAMs and other synapse-organizing molecules in synapse development and plasticity.

Dr. Dong Kong will join the Neuroscience Department in January to assume a position as assistant professor. Dr. Kong completed his PhD at Nanjing University in China and comes to us from Harvard Medical School and Beth Israel Deaconess Medical Center. His research focuses on using multidisciplinary approaches, including mouse genetic tools, electrophysiology, optogenetic/pharmogenetic methods, and 2-photon laser scanning microscopy, to understand the neurocircuits in the hypothalamus controlling metabolism.

AstraZeneca Partners with Tufts on Neuroscience Research

AstraZeneca, TUSM, and the Sackler School are collaborating as part of a three-year agreement to perform cutting-edge research into biological targets in the field of neuroscience. A team of postdoctoral researchers is being established to advance understanding of diseases and disorders of the brain, including Alzheimer’s disease, Parkinson’s disease, neurodevelopmental and autism spectrum disorders. Stephen Moss, PhD, professor of neuroscience, serves as principal investigator for the project. This group is an effort of the AstraZeneca Neuroscience Innovative Medicines Unit, which is a small team that advances neuroscience discovery research and early development exclusively via external partners.

Welcome New Faculty

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New Service Scholars Pathway Program

Ten first-year medical students have been selected for the inaugural class of the Service Scholars Pathway Program, TUSM’s new initiative to train selected medical students to work in medically underserved areas and equip them with the tools to help patients and communities overcome barriers to health.

“Many students go to medical school because they want to change the world, but interested students don’t always gain the experiences or skills they need to specialize in serving the underserved,” said Randy Wertheimer, MD, Jaharis Family chair in family medicine at TUSM, who developed and oversees the new program. “The new Service Scholars Program at Tufts will give these medical students the tools and the ability to go out and make a difference by helping those most in need.”

Tufts Service Scholars will receive specialized training in community medicine and will work with Boston-area communities over the course of their medical education to develop a complex understanding of the needs, challenges, and opportunities facing underserved populations. Students will also learn from one-on-one and group mentoring with physicians currently practicing in underserved settings, and a longitudinal project oriented towards community-based research, intervention, or advocacy.

Generous gifts from the Bingham Trust and an anonymous donor fund curriculum development and student scholarships for the Service Scholars Pathway Program.

Notable News

Bree Aldridge, PhD, assistant professor of microbiology, has received a 2013 National Institutes of Health Director’s New Innovator Award, which supports creative new scientists working on innovative biomedical research projects. Aldridge has been awarded a five-year, $1.5 million grant for her research focused on improving drug treatments for tuberculosis.

Diana W. Bianchi, MD, founding executive director of the Mother Infant Research Institute (MIRI) at Tufts MC; Vice Chair for Pediatric Research at Floating Hospital; and Natalie V. Zucker Professor of Pediatrics was named to the Institute of Medicine (IOM) at the organization’s 43rd annual meeting. All IOM members commit to donating their time and expertise to boards, committees and other IOM advisory bodies.

Andrew Levey, MD, chief of the Division of Nephrology at Tufts MC and professor of medicine at TUSM, has been named as the 2013 recipient of the American Society of Nephrology’s Belding H. Scribner Award. This award is presented annually to individuals who have made outstanding contributions that have a direct impact on the care of patients with renal disorders or have substantially changed the clinical practice of nephrology.

Christine Wanke, MD, Honorine Ward, MBBS, and Gangandeep Kang, MD, PhD, are recipients of a global health innovation grant from the NIH’s Fogarty International Center. TUSM, in collaboration with Christian Medical College in Vellore, India, will create a postdoctoral training platform to provide instruction in translational research related to non-communicable and infectious diseases affecting resource-poor areas of India.

Research at TUSM

- A study led by Rob Jackson found that the rhythmically produced proteins that make up the circadian clock are produced mostly during two intervals of the circadian cycle, the middle of the day or middle of the night.

- Leon Reijmers was lead author on a study that found exposure therapy, a common treatment for anxiety disorders, remodels an inhibitory junction in the mouse brain. The findings may aid in the development of more effective treatments for anxiety.

- A study of mice led by Rajendra Kumar-Singh identified a potential topical treatment for age-related macular degeneration; this treatment shows promise for clinical use.

- Led by Joan Mecsas, TUSM researchers identified how one type of bacteria, Yersinia, immobilizes the immune system in order to grow in the organ tissues of mice. The technique used by the researchers could be applied to the study of other bacteria that use the same or similar means of infection.

- Professor of Public Health and Community Medicine Doug Brugge visited Tanzania in October to share his research on the serious health risks associated with uranium mining.