Six Projects Funded to Build Aging Science at Columbia University

A Research Program to Explore the Modifiability of Aging

NEW YORK (June 7, 2016)—The Robert N. Butler Columbia Aging Center announced the recipients of its second cohort of Faculty Research Fellowships, competitive awards to foster and extend understanding of aging. Around the globe, people are living longer and longer lives. With this funding, the Center seeks to expand knowledge about how to improve human aging and optimize these additional years of life.

“The increased number, the elevated level, and the diversity of the proposals we received demonstrates the excellence of research on aging at Columbia,” says Ursula M. Staudinger, PhD, the Robert N. Butler Professor of Sociomedical Sciences and professor of psychology who directs the Columbia Aging Center. “Each of the selected proposals stands to make a significant contribution to understanding how aging may be positively modified, whether it be through a prescribed high dose of exercise prior to a surgery to improve recovery speed in older patients, or through understanding how memories are stored in the brain normally to be better equipped in cases of dementia with new targets and treatments to improve and reverse the decline.”

The Faculty Research Fellowship program launched in 2014 and is open to researchers across the entire Columbia campus to reflect the university’s dedication to investing in aging science in light of global demographic trends. The program’s purpose is to enable interdisciplinary study of the biopsychosocial nature of the aging process and its modifiability. Housed at Columbia’s Mailman School of Public Health, the university-wide Center awarded a total of $180,000 this year. Joining the five fellows selected in 2015, this year’s Faculty Research Fellows’ work explores topics such as how hormones produced by bone change muscle function with age, how curiosity contributes to longevity, how to understand environmental impacts better to promote healthy aging, and how to keep older patients from failing after discharge from intensive care units.

The 2016 recipients are:

• Matthew Baldwin, MD, MS
  Assistant Professor of Medicine, Department of Pulmonary and Critical Care Medicine, Columbia University Medical Center
  “Latent phenotypes of weakness and trajectories of recovery in older survivors of critical illness”
• Christine Denny, PhD
   Assistant Professor of Clinical Neurobiology in Psychiatry, Division of Integrative Neuroscience, Department of Psychiatry, Columbia University Medical Center
   “Identification and optogenetic manipulation of individual memories following age-related cognitive decline”

• Julie Herbstman, PhD
   Associate Professor, Department of Environmental Health Sciences, Mailman School of Public Health, Columbia University
   “Environmental influences on longitudinal changes in biomarkers of healthy aging”

• Gerard Karsenty, MD, PhD
   Paul A. Marks Professor of Genetics and Development, Professor of Medicine and Chair, Department of Genetics and Development, Columbia University
   “Bone regulation of muscle function and its implication for aging”

• Daphna Shohamy, PhD
   Associate Professor Department of Psychology, Zuckerman Institute, Columbia University
   “Understanding the effects of aging on curiosity and learning: Neural and cognitive mechanisms”

• Richard P. Sloan, PhD
   Nathaniel Wharton Professor of Behavioral Medicine, Division Chief of Behavioral Medicine, Department of Psychiatry, Columbia University Medical Center
   “Plasticity in recovery from surgery: The effects of exercise ‘prehabilitation’ on cognitive and functional recovery after surgery in older adults”

These Columbia Aging Center Fellows will come together semi-annually to discuss new research and exchange with the Center’s in-house faculty and visiting scholars. Over the coming years, the work of these Fellows will enhance an already rich body of Columbia aging research, positioning the university at the top of the field.

The next call for proposals will be announced late this year. For more information about the successful proposals and the next call, please contact the Columbia Aging Center’s Senior Science and Strategy Officer, Caitlin Hawke: cmh2197@columbia.edu or visit the Columbia Aging Center’s website: aging.columbia.edu.