Agenda: “Exercise and the Brain” symposium
Friday December 1, 2017

8:30-9:00 Breakfast buffet
9:00-9:15 Greetings and Introductory Remarks
9:15-10:00 **Art Kramer, PhD**, Northeastern University
   “Exercising your Brain and Mind”
10:00-10:20 **Kathleen Welsh-Bohmer, PhD**, Duke University
   “Lifestyle Changes to Promote Brain Health: Lessons from the Cache County Utah Study”
10:20-10:40 **Christina L. Williams, PhD**, Duke University
   “Aerobic Exercise is Necessary and Sufficient for Improved Memory and Neuroplasticity“
10:40-10:50 **Zachary Zenko, PhD**, Duke University
   “Promoting Exercise Behavior in the 21st century: A Behavioral-Economic Approach”
10:50-11:10 Coffee break
11:10-11:50 **Henriette van Praag, PhD**, National Institute of Aging, NIH
   “Exercise, Brain Plasticity and Memory Function”
11:50-12:10 **Patrick Smith, PhD**, Duke University
   “Hearts and Minds: Lifestyle Interventions for Vascular and Cognitive Health”
12:10-12:30 **Daniel Pomp, PhD**, University of North Carolina, Chapel Hill
   “Born To Run: Genetic Predisposition to Voluntary Exercise in Mouse Models”
12:30-1:30 Lunch Buffet and Poster Session
1:30-2:10 **Monika Fleshner, PhD**, University of Colorado
   “Early Life Exercise Promotes Favorable Changes in Gut Microbial Ecology, Persistent Stress Robustness, and Metabolic Health”
2:10-2:30 **Deborah Muoio, PhD**, Duke University
   “Exercise and Metabolic Fitness in Skeletal Muscle and Beyond”
2:30-3:10 **Laura Baker, PhD**, Wake Forest University
   “Exercise as Medicine: How to Slow Cognitive Impairment and Reduce Alzheimer’s Pathology in Adults with Mild Cognitive Impairment”
3:10-3:25 **Kim Huffman, MD PhD**, Duke University
   “Overviews of the Molecular Transducers of Physical Activity Investigation (MoTrPAc) and a Proposed Neurocognitive Ancillary Study (MoTrPAc-MB)”
3:30-3:45 **Daniel Blazer, MD PhD**, Duke University
   “Exercise and Cognitive Impairment: Findings from two National Academy Reports”
3:45-4:15 Panel Discussion with Keynote Speakers
4:15-5:00 Reception and Poster Session
Speaker Affiliations:

Laura Baker, PhD, is an Associate Professor of Internal Medicine, Neurology, Public Health, and Gerontology and Geriatric Medicine at Wake Forest School of Medicine, Winston-Salem, NC and the Associate Director of the new Wake Forest Alzheimer’s Disease Center. Laura is a cognitive neuroscientist who is a nationally recognized leader in the area of aerobic exercise as a treatment for memory decline associated with pre-clinical and early stage Alzheimer’s disease.

Monika Fleshner, PhD, is a Professor in the Department of Integrative Physiology, a member of the Center for Neuroscience, and Director of the Stress Physiology laboratory at the University of Colorado in Boulder. Monika’s focus is on the impact of acute and chronic mental and physical stressors on behavior, neural, hormonal, and immunological function and the mechanisms of stress resistance and stress resilience produced by exercise.

Arthur Kramer, PhD, is Senior Vice Provost for Research and Graduate Education and a Professor of Psychology & Engineering at Northeastern University. He previously served as the Director of the Beckman Institute for Advanced Science & Technology and the Swanlund Chair and Professor of Psychology and Neuroscience at the University of Illinois. Art’s studies have spanned many levels and include clinical trials exploring the effects of aerobic fitness training and cognitive training on brain function and cognition throughout the lifespan.

Henriette van Praag, PhD, is Chief of the Neuroplasticity and Behavior Unit, Intramural Program, National Institute of Aging, Baltimore, MD. Henriette’s research uses mouse model systems to investigate the cellular and molecular mechanisms of exercise effects on brain, including hippocampal neurogenesis and circuitry reorganization, and she recently described the effects of exercise-induced Cathepsin B secretion from muscle on brain function and memory.

Daniel Blazer, MD PhD, is a Professor of Psychiatry and Behavioral Sciences and Geriatric Behavioral health in the Duke University School of Medicine. He has recently chaired a National Academy of Sciences committee on cognitive aging.

Kim Huffman, MD PhD, is an Associate Professor in the Department of Medicine, Division of Rheumatology at Duke University Medical Center.

Deborah Muolo, PhD, is an Associate Professor and Scientific Director of the Sarah W. Stedman Nutrition & Metabolism Center in the Duke University School of Medicine.

Daniel Pomp, PhD, is a Professor in the Departments of Genetics and Nutrition & Cell and Molecular Physiology and a member of the Carolina Center for Genome Science, the Clinical Nutrition Research Center, the Lineberger Comprehensive Cancer Center, and the Center for Environmental Health and Susceptibility at the University of North Carolina in Chapel Hill.

Patrick Smith, PhD, is an Assistant Professor in Psychiatry and Behavioral Sciences in the Duke University School of Medicine.

Kathleen Welsh-Bohmer, PhD, is a Professor of Psychiatry and Behavioral Sciences, Neurology, and Psychology and Neuroscience, the Director of the Duke Alzheimer’s Disease Research Center, and Chief of the Medical Psychology CPU in the Duke University School of Medicine, and a member of the Duke Institute for Brain Sciences.

Christina L. Williams, PhD, is a Professor in the Department of Psychology and Neuroscience at Duke University, and a member of the Duke Institute for Brain Sciences.

Zachary Zenko, PhD, is Postdoctoral Associate in the Center for Advanced Hindsight at Duke University.