

PIONEERS IN BIOMEDICAL RESEARCH SEMINAR

Presented by the Fralin Biomedical Research Institute and co-sponsored by the institute's Center for Exercise Medicine Research



HENRIETTE van PRAAG, Ph.D.

Associate Professor
Department of Biomedical Science
Charles E. Schmidt College of Medicine
Florida Atlantic University

The Role of Exercise in Memory Function

Evidence from human and animal studies that exercise benefits brain function, and may delay or prevent the onset of neurodegenerative conditions. In particular, the hippocampus, a brain area essential for learning and memory, is modulated by exercise training. In rodents, new neuron number in the dentate gyrus of the hippocampus is substantially increased by voluntary wheel running. Enhanced adult hippocampal neurogenesis is associated with changes in synaptic plasticity, neurotrophins, neuronal connectivity, learning and memory. Recent research indicates that factors secreted from peripheral organs convey running-induced changes in the brain. Dr. van Praag's group identified lysosomal enzyme Cathepsin B as a novel myokine that influences memory function. Her research aims to understand the cellular mechanisms underlying muscle-brain interactions and to further our understanding of effects of exercise on the brain.

FRIDAY, MAY 23, at 11 a.m.

Room G101 A/B, 4 Riverside Circle
Watch live via Zoom at <https://FralinBioMed.info/PBR-Join>.



FRALIN BIOMEDICAL
RESEARCH INSTITUTE AT VTC
VIRGINIA TECH.