

# PIONEERS IN BIOMEDICAL RESEARCH SEMINAR

Presented by the Fralin Biomedical Research Institute at VTC and co-sponsored by the Center for Exercise Medicine Research



## **Ben Levine, M.D.**

Clinical Heart and Vascular Center

Distinguished Professorship in Exercise Sciences

UT Southwestern Medical Center

## ***The Effects of Aging and Physical Activity on Cardiovascular Structure and Function***

Presenting a range of data regarding the effects of aging and physical activity on cardiovascular structure and function, Dr. Levine will discuss how the heart exhibits substantial morphologic and functional plasticity in response to physical activity. The heart atrophies/stiffens with age and physical inactivity, such as with bedrest or spaceflight; some aspects of this process may be prevented by life-long training at the right dose. The heart of the senior athlete, with a life-long pattern of intensive training, is equivalent to healthy 30 year-olds, and their large blood vessels have a biological age ~30 years younger than their chronological age. There is a “sweet spot” in late middle age during which the heart and large blood vessels may still retain plasticity to respond to training. This is the ideal time to intervene especially in high-risk patients, and may be a useful strategy to prevent age related diseases such as HFpEF.

**FRIDAY, APRIL 10, 11 a.m.**

Room G101 A/B, 4 Riverside Circle

Watch live via Zoom at <https://fralinbiomed.info/PBR-Join>



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