

# From Spaceflight to Oncology: The Protective Properties of Exercise Training

## March 12

Tuesday, 12:30 pm

Weekly Colloquium

Billings Building  
Rosedale Conference Room



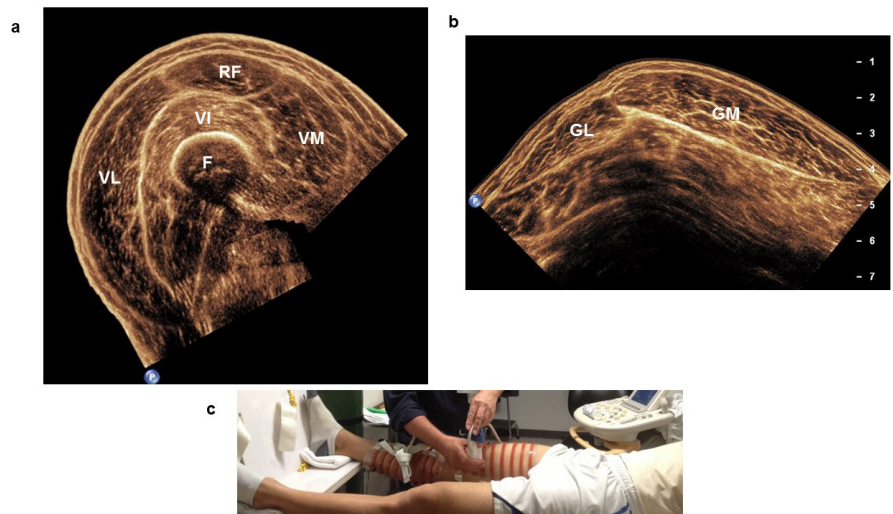
**Jessica Scott, Ph.D.**  
Assistant Attending Physiologist,  
Exercise Oncology Service,  
Memorial Sloan Kettering Cancer Center  
Assistant Professor,  
Weill Cornell Medical College  
New York, NY

For more information,  
please contact  
**Darlene White**  
daw9085@med.cornell.edu

**Burke Neurological Institute**  
Academic Affiliate of Weill Cornell Medicine  
785 Mamaroneck Avenue  
White Plains, NY 10605  
burke.weill.cornell.edu

## Abstract

Jessica Scott, Ph.D., is an Assistant Member in the Exercise Oncology Service at Memorial Sloan Kettering (MSK) Cancer Center and an Assistant Professor at Weill Cornell Medical College. She received her MSc and PhD in Exercise Cardiovascular Physiology at the University of British Columbia in Vancouver, Canada, and completed her Post-Doctoral Fellowship at NASA Johnson Space Center (JSC) in Houston, Texas. She joined MSK in 2017 after 5 years as a Senior Scientist in the Exercise Physiology and Countermeasures Laboratory at JSC. Her research is focused on: (1) characterization of multisystem toxicity using exercise testing, imaging, and biomarker techniques, and (2) the efficacy of exercise training to prevent and/or reverse toxicity. Dr. Scott is the recipient of NASA's Human Research Program Peer Award, NASA's Innovation Achievement Award for the design and implementation of a novel ultrasound technique to measure muscle mass in microgravity, and NASA's Group Achievement Award as a member of the One Year Mission Operations Team.



Scott JM, Zabor EC, Schwitzer E, Koelwyn GJ, Adams SC, Nilsen TS, Moskowitz CS, Matsoukas K, Iyengar NM, Dang CT, Jones LW. Efficacy of Exercise Therapy on Cardiorespiratory Fitness in Patients with Cancer: A Systematic Review and Meta-Analysis. *J Clin Oncol.* 2018 Jun 12. PMID: 29894274

Scott JM, Li N, Liu Q, Yasui Y, Leisenring W, Nathan PC, Gibson T, Armenian SH, Nilsen TS, Oeffinger KC, Ness KK, Adams SC, Robison LL, Armstrong GT, Jones LW. Association of Exercise with Cause-Specific Mortality in Adult Survivors of Childhood Cancer. *JAMA Oncol.* 2018 Jun 3. PMID: 29862412

Scott JM, Martin DS, Ploutz-Synder R, Matz T, Caine T, Downs ME, Hackney K, Buxton R, Ryder J, Ploutz-Synder LL. Panoramic Ultrasound: a Novel and Valid Tool for Monitoring Change in Muscle Mass. *J Cachexia Sarcopenia Muscle.* 2017; 8(3):475-481. PMID: 28052593

