

Stuart Matthew Clark Lee, Ph.D. Lead Research Scientist, Cardiovascular and Vision Laboratory D NASA Human Health and Performance Contract KBRwyle Science, Technology and Engineering Group

Stuart Matthew Clark Lee, Ph.D., has worked in human life sciences at NASA-Johnson Space Center (JSC) in Houston, TX since 1992. During his first 16 years at JSC, he supported research activities in the Exercise Physiology Laboratory, first as an Exercise Physiologist, later as Technical Lead, and finally as Senior Scientist. Currently, Lee is Lead Research Scientist for the JSC Cardiovascular and Vision Laboratory. Lee supports research and medical operations activities directed towards the human health and performance of astronauts prior to, during, and after returning from their spaceflight missions. His research activities are focused on improving our understanding of cardiovascular and musculoskeletal adaptations to space flight and the development of countermeasures to protect astronaut health and performance during spaceflight and during post-mission re-adaptation to Earth.

Lee serves as the principal investigator in two International Space Station studies: "Metabolomic and Genomic Markers of Atherosclerosis as Related to Oxidative Stress, Inflammation, and Vascular Function in the Twin Astronauts" (Cardio Ox Twins) and "Defining the Relationship between Biomarkers of Oxidative and Inflammatory Stress and the Risk for Atherosclerosis in Astronauts during and after Long-Duration Spaceflight" (Cardio Ox). Lee also has served as a co-investigator on 30 other NASA or NSBRI-funded research studies, 12 of which are currently active. He has been a recipient of 24 group achievement awards and has received over 20 individual career awards, including: Outstanding Performance and Achievement Recognition (OPAR) Award from the Biomedical Research and Countermeasures Project Office at JSC and the Silver Snoopy which is the Astronauts' Personal Achievement Award from NASA.

Lee's professional affiliations and activities include: membership in the American College of Sports Medicine and American Physiologic Society; lecturer for the JSC Aerospace Medicine Clerkship Program and Human Systems Academy; and reviewer for *Aerospace Medicine and Human Performance* (Official Journal of the Aerospace Medicine Association), the *Journal of Applied Physiology*, and *Medicine and Science in Sports and Exercise* (Official Journal of the American College of Sports Medicine).

Lee has authored or co-authored more than 50 peer-reviewed publications associated with spaceflight exercise and cardiovascular countermeasures, five book chapters, four NASA Human Research Program Evidence Books, 28 NASA technical publications, and more than 200 abstracts for presentation at scientific meetings. He also has contributed to numerous NASA committees supporting human health and research.

Lee received his Doctorate of Kinesiology in 2015 from the University of Houston, Houston, TX; a Master of Science in Education (Exercise Physiology) in 1992 and Bachelor of Science in Education, (Exercise Science) in 1987, both from Virginia Polytechnic Institute and State University, Blacksburg, VA