

## Topics in Human Space Exploration and Medicine

## Towards Precision Space Medicine: Individual Responses to the Space Environment

## Speaker:

Graham B.I. Scott, Ph.D.

Associate Professor

Department of Molecular and Cellular Biology and

Center for Space Medicine

Vice President, Chief Scientist & Institute Associate Director

National Space Biomedical Research Institute (NSBRI)

Director, Translational Research Institute

Thursday, October 20, 2016 1:10 – 2:00 p.m. Kleberg Auditorium

- Graham Scott will highlight individual differences and phenotypic variability observed in astronaut crew members during spaceflight, as well as in analog environments.
- He will also discuss current and future opportunities to employ modern –omics techniques, such as next generation sequencing, as a key component of space biomedical research.
- Particular mention will be made of a flight study that recently occurred on the International Space Station involving a set of identical twin astronauts, namely Scott and Mark Kelly.
- Dr. Scott will also discuss the use of personalized medicine approaches to better enable a
  future flyby mission of the red planet, as proposed several years ago by the Inspiration Mars
  Foundation.