

Subject: This week's FISO colloquium (April 2): "Critical Risks for Extended Human Spaceflight"

Date: Mon, 31 Mar 2014 15:17:26 +0000

From: Thronson, Harley A. (GSFC-6600) <harley.a.thronson@nasa.gov>

Folks,

Next week's Future In-Space Operations (FISO) telecon colloquium will be Wednesday, April 2, when we will host Mark Shelhamer (NASA JSC), who will speak on "Critical Risks for Extended Human Spaceflight."

As always, the colloquium will be at 3pm ET and will use our regular FISO telecon number. The speaker's presentation will be posted on the FISO server at the University of Texas by noon the day of the colloquium: <http://spirit.as.utexas.edu/~fiso/telecon.htm> .

And please note that we are now audio-recording the colloquia and archiving the recordings with the presentation materials. Have a good week,

Harley

Mark Shelhamer , Sc.D.: mark.j.shelhamer@nasa.gov

Chief Scientist, NASA Human Research Program

Associate Professor

Department of Otolaryngology – Head & Neck Surgery

Department of Biomedical Engineering

The Johns Hopkins University, School of Medicine

Dr. Shelhamer joined the NASA Human Research Program in June of 2013, on a two-year rotation while on leave from his academic position at Johns Hopkins where he started as a postdoctoral fellow in 1990. He has bachelor's and master's degrees in electrical engineering from Drexel University, and a doctoral degree in Biomedical Engineering from MIT. At MIT he worked in the laboratory of Dr. Larry Young on sensorimotor physiology and modeling, including the study of astronaut adaptation to space flight and participation in two sets of Spacelab experiments (SL-1 and D-1). He then moved to Johns Hopkins where he continued the study of sensorimotor adaptation with an emphasis on the vestibular and oculomotor systems. Having temporarily put aside space research to acquire a firmer background in neurobiology at Johns Hopkins, he was then invited to participate in the Neurovestibular Adaptation team of the National Space Biomedical Research Institute (NSBRI) when it started in 1997. Since then he has had support from both NSBRI and NASA to study various aspects of sensorimotor adaptation to space, amassing a fair amount of parabolic flight time in the process. He has also served as an advisor to the commercial spaceflight industry on the research potential of suborbital space flight. In parallel with these activities, he has applied nonlinear dynamical analysis to the control of eye movements, including the functional implications of fractal activity. He is the author of *Nonlinear Dynamics in Physiology: A State-Space Approach*, has published over 70 scientific papers, and has had research support from NIH, NSF, NASA, NSBRI, and the Whitaker Foundation. He gave up his NASA grant and his modest career as a musician to come to Houston to serve as Chief Scientist.