

ISS and Human Research Project Office Highlights April 1, 2011

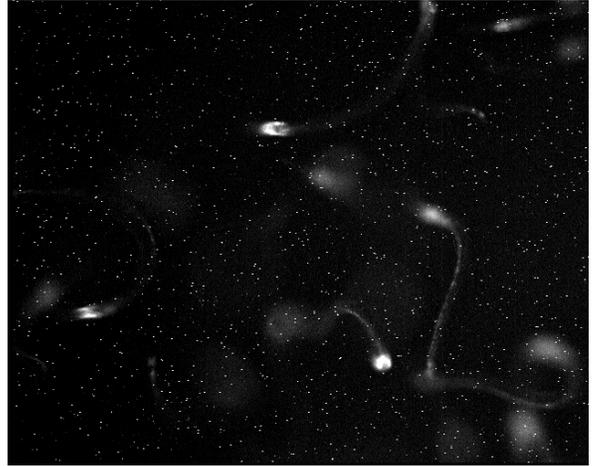
ISS Research Project

Light Microscopy Module (LMM) Bio-1 operations are completed on ISS.

All operations for the LMM-Bio-1 Technical Demonstration were successfully completed on March 28, 2011 with the optimized imaging of the fluorescent *c. elegans*. The filter (cube) and camera sensitivity were optimized to capture science images. This demonstrated a new capability for LMM to perform biological studies. Fluorescent “tagging” is a common technique used to isolate certain genes in the biological system being studied. Six samples were tested. Six additional samples (LMM-Bio-2) including *c. elegans*, planaria, and cell cultures are manifested on ULF-6. (POC: MAH/Ronald Sicker, (216) 433-6498)



The *c. elegans* understudy expresses a fluorescent gene which provides an excellent means for monitoring gene expression and protein localization. Processes Ground data shown above.



C. elegans raw flight data shown above.