

INTERNATIONAL SPACE STATION MEDICAL PROJECTS – FULL SERVICE TO MARS

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The International Space Station Medical Projects (ISSMP) Element provides planning, integration, and implementation services for HRP research studies for both spaceflight and flight analog research. Through the implementation of these two efforts, ISSMP offers an innovative way of guiding research decisions to meet the unique challenges of understanding the human risks to space exploration.

Flight services provided by ISSMP include leading informed consent briefings, developing and validating in-flight crew procedures, providing ISS crew and ground-controller training, real-time experiment monitoring, on-orbit experiment and hardware operations and facilitating data transfer to investigators.

For analog studies at the NASA Human Exploration Research Analog (HERA), the ISSMP team provides subject recruitment and screening, science requirements integration, data collection schedules, data sharing agreements, mission scenarios and facilities to support investigators. The ISSMP also serves as the HRP interface to external analog providers including the :envihab bed rest facility (Cologne, Germany), NEK isolation chamber (Moscow, Russia) and the Antarctica research stations.

Investigators working in either spaceflight or analog environments requires a coordinated effort between NASA and the investigators. The interdisciplinary nature of both flight and analog research requires investigators to be aware of concurrent research studies and take into account potential confounding factors that may impact their research objectives. Investigators must define clear research requirements, participate in Investigator Working Group meetings, obtain human use approvals, and provide study-specific training, sample and data collection and procedures all while adhering to schedule deadlines. These science requirements define the technical, functional and performance operations to meet the research objectives.

The ISSMP maintains an expert team of professionals with the knowledge and experience to guide investigators science through all aspects of mission planning, crew operations, and research integration.

During this session, the ISSMP team will discuss best-practices approaches for successfully preparing and conducting studies in both the flight and analog environments. Critical tips and tricks will be shown to greatly improve your chances of successfully completing your research aboard the International Space Station and in Spaceflight Analogs.