



International Space Medicine Summit 2011

Discussion Group A

Cooperative and collaborative integrated international research initiatives and requirements for space exploration beyond Earth Orbit

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The group agreed that there are good cooperative and collaborative mechanisms in place to promote and support research for human space exploration (e.g., ISLSWG, JWG).

Nevertheless, there is room for improvement. Research initiatives and requirements discussed by the group include the following (list not prioritized):

- Agreement at the level of the joint heads of agencies that a coordinated international effort for space biomedical research (aboard ISS) is important and needs to involve all partner nations
- Establishment of an international leadership group of scientific directors/governmental program managers (e.g., institute director, NGO director), representing at the minimum all partner nations, to collectively prioritize, coordinate, integrate and direct major research initiatives for ISS and human space exploration activities beyond low earth orbit
 - Work with agencies regarding allocation of resources
 - Augment international solicitations with directed international projects of high scientific and technical merit
- An increase in crew involvement earlier in research project design and implementation, and re-institution of in-flight communication opportunities between crew and investigators on the ground
- Enhancement of international scientific and crew participation in multi-national research studies

In addition to the above recommendations, the group prepared a list of high priority research areas which were communicated to NASA Administrator Bolden. The areas (not prioritized) are:

- Cardiovascular
- Life support systems
- Radiation
- Sensorimotor
- Telerobotics
- On-board medical support systems
- Vehicle in-space propulsion
- Short-radius centrifuge