IAA Study Group Status Report

**Responsible Commission:** 2 Space Life Sciences

**Study Number and Title:** SG 2.14 Medical Support for an International Human Expedition to Mars

**Short Study Description** (repeat from Study Group Proposal):

**Overall Goal:**
( Expected scientific or practical benefit of the study group's efforts)
To define and agree internationally the basic principles of medical support for future manned deep space exploration missions including flight to Mars

**Intermediate Goals:**
1. Identification of system of risks of piloted flights in deep space in comparison with flights in Earth orbit
2. Describe the potential medical-physiological problems menacing to health of astronauts and success of a performance of the mission
3. Identification of new components of system of medical support in comparison with operating one and the description of their main characteristics.
4. Development of basic design of medical support system for deep space manned missions and main requirements for space systems development.
5. Identify differences of national agencies' approach and clarify rationales for them.
6. Develop a strategic road map of creation of system of medical support of deep space manned missions and the offer to cooperation of agencies in this work

**Progress in past six months:**
The study group team met in Moscow January 20, 2014. The decision was made to ask two writers to draft the study group content – Professor Charles Doarn (USA) and Dr. Jennifer Law (USA). Both authors accepted this assignment. In addition, a technical editor was added to the team, Ms. Elizabeth Richard. Chuck Doarn and Jennifer Law have now begun to establish the outline and first draft of the study to which the other members will contribute.

Taking into account the wide experience on international coordination of medical support for the ISS missions, the presentation of the SG 2.14 project at the ISS Multilateral Medical Policy Board (MMPB) meeting (January 24, 2014) was initiated by the Co-Chairs of SG 2.14. MMPB members agreed that the experience of ISS medical support must be used. They promised to provide SG 2.14 with the needed support.

SG 2.14 Co-Chairs had additional meeting in San Francisco on February 20, 2014. It was discussed that not only the issues of operative medical support should be concerned but also more wide range of issues connected with the creation of biomedical support systems for exploration missions. It was decided to ask IBMP participants to draft the study group content on this issue.
These two SG contents are supposed to be presented to the SG 2.14 members via e-mail. And the general face-to-face meeting is planned to be held in Toronto (September-October, 2014)

Additional team participants were recruited and added:

Charles Doarn – USA  
Jennifer Law – USA  
Volker Damann – ESA (Germany)  
Jean-Marc Comtois – (Canada)  
Elizabeth Richard – USA  
James Vanderploeg – USA  
Richard Jennings – USA  
Arthur Saniotis – Australia  
Yinghui Li - China  
Mark Belakovskiy – Russia  
Valery Bogomolov – Russia  
John Charles – USA  
Hanns-Christian Gunga – Germany  
Boris Morukov – Russia  
Oliver Ullrich – Switzerland/Germany  
Arthur Suvorov - Russia

**Website Study Information up to date?** (Study Group Membership, Study Plan and Schedule): No

Additional study group members have been recruited and proposed as above. The report information should be updated.

**Issues requiring resolution?** (recommend approach): None

**Product Deliveries on Schedule?** (If modified explain rationale): Yes

**Study Team Member Changes?** (List any Study Team Members that you wish to discontinue, and provide names plus contact coordinates of any Members you wish to add on the second page of this Study Update form.) Note: Complete contact information including email, tel. and fax must be provided for all additions. Only Members with complete contact information will be listed and receive formal appointment letters from the IAA Secretariat.) Yes (See below)

**Name of person providing Study Group Status** (Study Group Chair or Co-Chair):

Co-chairs - Jeffrey R. Davis, MD, Oleg Orlov, MD; Secretary - Anna Kussmaul, PhD

**Status Report Date:** March 14, 2014
Study Team Membership Changes
Effectivity Date: March 14, 2014

Discontinue: None

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