

IAF/IAA SPACE LIFE SCIENCES SYMPOSIUM (A1)  
Medical Care for Humans in Space (3)

Author: Ms. Katie Samoil  
Canada, katie.samoil@gmail.com

Dr. Adam Sirek  
Western University, Canada, adam@drsirek.ca

## DEVELOPING A COMPETENCY MAP FOR SPACE MEDICINE EDUCATION

**Abstract**

**INTRODUCTION:** Aerospace medicine has developed as a sub-specialized field of diverse practitioners with operational experiences. Since the inception of aerospace medicine, several educational programs have been developed to prepare new practitioners with varying degrees of success. The modern focus for training programs surrounding competency-based medicine provides a novel lens to critically review the areas of focus required for aerospace medicine practitioners. Our study sought to define the competencies required of a terrestrially based aerospace medicine practitioner to support healthcare delivery for exploration class space missions. **METHODS:** A literature review was performed to evaluate the current state of space medicine educational opportunities. The CanMEDS framework was then adapted to develop a survey of critical competencies for aerospace medicine practitioners. This survey was distributed to experts in the aerospace medicine field. **RESULTS:** The survey data was correlated and analyzed for themes. Statistical analyses were performed and a map of provisional competencies for terrestrial based aerospace medicine professionals was developed. **CONCLUSION:** The CanMEDS framework provided a set of accessible themes for the development of an aerospace medicine educational curriculum. The competency map can be used by educational programs to focus resources and implement changes in current or future educational processes.