

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

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DEVELOPING EXPONENTIAL TECHNOLOGIES FOR SPACE TELEANESTHESIA, SPACE
TELESURGERY AND MENTAL HEALTH TO MAINTAIN AND SUPPORT ANALOG ASTRONAUTS
DURING SIMULATION MISSIONS IN ISOLATED, CONFINED ENVIRONMENTS (I.C.E) AND
FUTURE SETTLEMENT ON MARS.

Abstract

Our team from Mars Academy USA, will present our current research on innovating exponential technologies for space teleanesthesia, space telesurgery and mental health protocols and operational procedures for extreme environments and long duration Spaceflight. we will discuss the integration of cutting-edge exponential technologies, such as, Virtual Reality and Augmented Reality (VR/AR)for training non-medical analog astronauts living in auster extreme environments, 3D printing of surgical tools for telesurgery procedures to support future long-duration spaceflight to Mars and near-term human settlements on Moon. We will discuss the pioneering Mars Academy USA Mars Medics training analog astronaut missions conducted at California deserts, Nepal and Everest analog simulations and potential for outcomes and data obtained to potentially change current paradigms for space medicine operational deployment and new spin-off benefits to improve life on Earth for billions of people with little or no access to healthcare and basic medical care.