

IAF/IAA SPACE LIFE SCIENCES SYMPOSIUM (A1)
Behaviour, Performance and Psychosocial Issues in Space (1)

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SMART DATABASE OF ENVIRONMENTAL AND MEDICAL TELEMETRY DURING ANALOG
MISSIONS TO IDENTIFY NEW HEALTH RELATED ISSUES OF ISOLATION USING NEURAL
NETWORK

Abstract

Analog Habitat LunAres Research Station” started operations in 2017. Until March 2021 it hosted 11 two-weeks analog missions that varied in research angle and scope. Depending on the scientific objectives, the crew was selected by the LunAres management team or other institutions/researchers in case of a private mission. The requirements for participants were determined based on the mission objectives, however, there was a general criteria regarding the crew structure - diversity. In terms of disciplinary, age, nationality, gender and personality, the variety was pursued. It resulted in clear and indicated gender parity both in crew composition and crew leadership. Such trends were both seemingly obvious and natural and there was no surprise with both the Artemis project and ESA 2021 astronaut selection criteria focusing on greater female representation. And yet it was not a common practice even in analog mission scenarios observed in the last decade. In this paper we will explain why such an occurrence happened in Polish analog habitat. At the same time ESA’s Parastronaut selection was announced. LunAres Research Station’s ICares 1 mission from 2017 under directory of Dr. Aleksander Waśniowski was the world’s first analog mission involving and focusing on movement impaired analog astronaut. The study had a noticeable impact in the extreme medicine stage. The study was featured two times as a keynote presentation during Extreme Medicine Expo in 2018 and 2019. In this presentation we would like to reiterate team findings and share project development since 2017. Analog research studies showed some examples of what the future might look like – it is imperative to share more of existing knowledge that is in line with current trends in astronaut selection criteria.