## IAF/IAA SPACE LIFE SCIENCES SYMPOSIUM (A1) Interactive Presentations - IAF/IAA SPACE LIFE SCIENCES SYMPOSIUM (IP)

Author: Mr. Tuncay Isgenderli Azerbaijan State Oil and Industry University (ASOIU), Azerbaijan

Ms. Arzu Mirzabayova Azerbaijan State Oil and Industry University (ASOIU), Azerbaijan

EXPLORING THE HUMAN ELEMENT OF SPACE EXPLORATION

## Abstract

Since stretched out openness to microgravity and other space-related conditions can cause major physiological changes, space investigation presents extraordinary challenges to the human body. This abstract investigates the complicated effects of both short-and long-haul spaceflight on human physiology, remembering reads up for immunological reaction, neurovestibular versatility, cardiovascular wellbeing, outer muscle respectability, and mental prosperity. Our article will talk about their outcomes on the cardiovascular framework, taking a gander at what microgravity means for vascular elements, heart capability, and blood stream. Besides, research on outer muscle wellbeing will examine the cycles basic muscle decay, bone demineralization, and strength misfortune that space travelers experience on space missions. We'll discuss experiences into resistant capability, like varieties in safe cell movement, weakness to contaminations, and potential strategies for protecting invulnerable capability in space. Article will likewise cover neurovestibular variation, with specific consideration on movement ailment, tangible engine anomalies, and spatial confusion — which are all habitually experienced in space explorers. The mental features of spaceflight will likewise be investigated, including intercessions pointed toward advancing strength and emotional well-being as well as stressors related with constrainment, separation, and the brutal climate of room. Also, article will talk about advancements in moderating procedures intended to keep up with space traveler execution and wellbeing in circle. Practice regimens, drug medicines, dietary enhancements, and state of the art innovations planned to recreate Natural circumstances or make physiological changes strong of space travel are a couple of instances of these countermeasures. In outline, article will offer an exhaustive survey of the physiological troubles related with spaceflight and the momentum drives to address these hardships through multidisciplinary research, creative innovation, and proof-based techniques. We can ensure the wellbeing, security, and prosperity of space explorers all through delayed space missions by growing our insight into human physiology in space and making down to earth countermeasures. This will open the entryway for future investigation past Earth circle.