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BODY AS LABORATORY: TOPICS IN SPACE MEDICINE FROM THE ARTIST PERSPECTIVE

Abstract

In this paper I cover several topics in space medicine, detailing proposed cybernetic exercises for astronauts, modifications to weightless training, and new sleeping architectures for the rebuilt ISS that is due to come online in the next decade. Based in personal experience of illness and recovery, research into flotation tanks, tests with human subjects of various ages and genders, and a literature review of various scientific studies focused on health and performance in space, including those involving animals, this paper delves into some uses of Traditional Chinese Medicine (TCM) in space from the artist perspective. TCM offers a new key into the design of successful space habitation environments by coupling imaginative and poetic descriptions of the body, ancient discoveries about "qi"—the energetic component of a living being's "inner space"—with daily practices of moving meditations that have real world impacts on health. This paper discusses pre-flight mental training that could borrow from TCM as well as take cues from performance art, contact improvisation, dance choreography, and expanded fields of sculpture. A range of weightless artworks created on parabolic flights serve as historical points of reference and are discussed from the art historical perspective. Several tools and objects proposed by artists and designers incorporating sensory perception as key to health in space are also reviewed. Following, a work of art in progress by the author is discussed in its current form, which involves activating states of rest with empathetic exercises that rehearse qi movements of other living beings. The paper's conclusion lands on the way that art languages of the body are not only relevant to human factors in astronautics but are insightful access points to discover many ways that bodily movement, cognition, and health are informed by the imagination.