



## **SYMPOSIUM: APPLYING ARTIFICIAL GRAVITY FROM SPACE TO MEDICAL APPLICATIONS**

### **Organizers**

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### **Short description**

Space research agencies have conducted long-term research in order to investigate whether artificial gravity and human centrifugation could be employed as a robust tool for ameliorating the detrimental effects of weightlessness in astronauts. Although there is concrete scientific evidence about the efficacy of the countermeasure, there is still lack of research regarding optimal training dosage and equipment setup.

An important goal of space industry and academia is how to transfer its knowledge regarding artificial gravity in terrestrial medical applications like neuroplasticity, rehabilitation and active and healthy ageing. Despite there is a stable hypothesis linking lack of gravity with sedentary lifestyle profiles there is much progress that should be done before capitalizing the space research into clinical medical practice.

## **Objectives and Outline**

The current symposium aims to enhance the scientific knowledge of the application of artificial gravity to medical applications by addressing the impact of centrifugation into the cardiovascular and the nervous system. We also welcome studies investigating gender issues and how ageing and physical status modulate the intervention parameters.

## **Keywords**

Artificial Gravity, Human Centrifuge, Rehabilitation, Training