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# Spaceflight and Aging

## Preventing bedrest induced deconditioning

The company is led by Prof. Nandu Goswami, from the Medical University of Graz, and it addresses an important issue in medical care: bedrest induced deconditioning, which can lead to falls and fall-related injuries. The main concept revolves around using an innovative intervention that is currently used for maintaining astronauts' health in spaceflight (resistive vibration exercise, RVE, device) as a tool in geriatric care. The project extends the space agency's concept of "Life in Space for Life on Earth". The company aims at developing devices that improve muscle strength and the cardiovascular system, thus leading to better health and reduction in falls. Their main customer targets are hospitals and older persons at home. The device is easy to use and can be mounted on a hospital bed or as a portable device on any bed at home. Its advantages are related to reductions in cost of care, improve recovery and reduce deaths arising due to complications of falls, as well as to improvements in the quality of life of senior citizens.

### USP

The device offers a unique selling proposition both in quantitative (less time in bed, less costs of care, etc) but also qualitative (easy to use either hospitals and at homes, cheap, assured safety) ways. No similar device exists in the market.

### Target market

Hospitals & older persons at home

### Space connection

An innovative intervention that is currently used for maintaining astronauts' health in spaceflight (resistive vibration exercise, RVE, device) is proposed as a tool in Geriatric care. The project extends the space agencies concept of "Life in Space for Life on Earth".



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