



Search for volunteers:

Mountaineers wanted for MyoCardioGen study

Myocardial regeneration through hypoxia in humans

Location: German Aerospace Center, Cologne, Germany

Wanted: Mountaineers aged 50 and over

Patient Subject:

- Male or female
- Heart attack that occurred at least 12 months ago
- Very good physical resilience

Period:

14 days acclimatization in the mountains, 35 days Research Center in Cologne, Germany, while the period August to October 2020

The exact dates will be communicated to you by mail if you are interested

Compensation: 250 € per study day

Cardiovascular diseases are the most common cause of death in highly developed industrial countries. A current research priority, known as regenerative medicine, is therefore intensively investigating whether and how it might be possible to induce heart muscle cells to divide (regenerate) in order to replace diseased tissue with new healthy tissue.

Researchers at the University of Texas have been able to show in animal experiments on mice that a severe oxygen deficiency of 7% oxygen over a period of two weeks, compared to the normal 21%, leads to heart muscle cells dividing again and that heart function in these mice improves significantly after two weeks of oxygen deficiency (hypoxia).

The aim of this study is to show the feasibility of such a measure in humans. In addition, we want to show that the patient's heart function improves in the long term. For this purpose, two patients who have suffered a heart attack in the past (patient-subjects) will be placed in an oxygen-reduced environment for overall seven weeks (14 days in the mountains, 35 days in Research Center of DLR in Cologne, Germany).

If you are interested, please contact us by e-mail:

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Further information regarding the experiments and the exact procedures will be provided in detail during the study introduction meeting.