

Name of research institute or organization:

Institute of Physiology, University of Zurich

Title of project:

Applied physiology: "Physiological responses to high altitude exposure"

Project leader and team:

Prof. Dr. Jana Kohl, project leader
Prof. Dr. Heini Murer, PD Dr. Hugo Marti

Project description:

The yearly expedition to the Jungfraujoeh is organized for medical students in their 4th semester as part of their practical education in physiology. In self observation and self experiments as well as in experiments with their colleagues the students have the opportunity to experience the effects of hypoxia at different altitudes: Grindelwald 1'050 m.ü.M., Kleine Scheidegg 2'061 m.ü.M., Jungfraujoeh 3450 m.ü.M. The students measured various respiratory parameters, heart rate and analyzed urin to asses the changes in acide-base balance. They experienced shortage of breath, sleeplessness and headaches among other sensations. Their results were later discussed in physiological lessons and contributed substantially to the students understanding of physiological regulations. The visit of the HFSJG facilities is one of the most impressive parts of the expedition and the possibility to carry out physiological measurements is gratefully acknowledged. 52 participants have visited the "Forschungsstation" in 2002.

Key words:

Hypobaric hypoxia, hypoxia-induced respiratory and circulatory responses

Collaborating partners/networks:

The results from this expedition were solely used for teaching

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