Genetic Bases of Hypoxic Pulmonary Hypertension and Acute Mountain Sickness
(ref. SFP-981866)

Beginning in May 2006, investigators from the Kyrgyz Republic and the United Kingdom have worked together on a clinical approach to high-altitude pulmonary hypertension, as encountered by servicemen and others with acute mountain sickness. A major objective has been to determine the usefulness of ECG and Doppler-Echo techniques in diagnosing the illness. The study also aims to examine the role of nitric oxide and other biochemical entities on the pathogenesis of the syndrome. Since the start of the project, expeditions have been conducted to villages 2,500–4,000 meters above sea level, and medical examinations have been carried out on some 800 subjects. In expeditions to the Ak-Say valley, the effects of hypoxia on pulmonary hemodynamics in 42 healthy servicemen were studied. Doppler-Echo assessment of the heart, combined with measurement of exhaled nitric oxide, appeared to be an effective way of identifying people with pulmonary hypertension. In the coming months, the researchers will perform additional analyses of biomarkers in plasma samples taken from these subjects.

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