

## HIGH-TECH ACUPUNCTURE NETWORK

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This project within a successful Sino-Austrian cooperation on high-tech acupuncture deals with clinical transcontinental teleacupuncture measurements in healthy volunteers and patients with fatigue. Heart rate (HR) and heart rate variability (HRV) measurements should be performed under standardized conditions in Wuhan, China, and the data analyses should be performed in Graz, Austria. Similar to previous test measurements, the electrocardiograms (ECGs) should be recorded by an HRV Medilog AR12 (Medical University of Graz, Austria) during acupuncture and/or moxibustion. The values during and after stimulation of total HRV, of the low-frequency (LF) and high-frequency (HF), and those of LF/HR ratio should be compared to baseline values and values of healthy volunteers. Together with the results of previous studies, the present results can serve as a solid basis for further development of acupuncture stimulation and moxibustion equipment for complementary use in treating fatigue. Both institutions have experts in this kind of experiments.

### Brief of objectives of the Austrian project partners

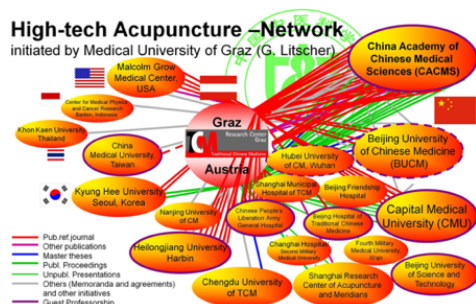
Technical support concerning the HRV, data analyses in Graz, transfer of data analyses via Internet to Wuhan, joint statistical analysis, joint preparation of a manuscript for a publication.

### Brief of objectives of the foreign project partners

Selection of suitable patients, randomization, implementation of measurements, transfer of data via Internet to Graz, joint statistical analysis, joint preparation of a manuscript for publication.

Background: Fatigue induced by prolonged exercise not only leads to the decrease of exercise capacity, but also might be the cause of many diseases. Acupuncture can be applied for treatment of exercise Fatigue. Using innovative methods like new analyses of heart rate variability, it is possible to investigate diseases like exercise fatigue.

Objective: The main objective of this project is to perform research on the relationship of exercise fatigue syndrome and heart rate and HRV.



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