



Master position:

Investigating the effect of electromagnetic fields (5G) on human brain functions

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Topic / Project:

Communication via mobile phones results in emission of electromagnetic fields (EMF) in the radiofrequency (RF) range. Although subjective symptoms such as sleep problems after a RF-EMF exposure are frequently reported, the objective effects of RF-EMF, in particular those of the newest generation (5G) of mobile communication, on human brain functions during sleep and wakefulness are unclear.

This study aims at investigating the influence of 5G RF-EMF emitted by mobile phones on sleep in the context of genetic variability. It will further gain the understanding of possible molecular mechanisms underlying the effects of 5G-EMF on neurophysiological functions (high-density EEG) in waking and sleep, as well as on cognitive performance.

Your tasks:

- Literature research
- Contribution to sleep recordings and the preparation of study participants
- Processing of sleep and EEG data
- Data analysis (combination of genetic analysis with electrophysiology in wakefulness and sleep)
- Writing your thesis

Your opportunities/gains:

- Various experimental skills in human research such as sleep recordings, EEG-data handling, insights into genetic analysis, programming in Matlab/R, and a lot more
- Development of time and responsibilities management
- Working within a supporting and international team
- Improving oral and written scientific communication skills

You should bring with you:

- Currently enrolled in a (Biology-) Master's program, basic knowledge in Neuroscience is a plus
- 1-year thesis period in 2019/2020
- Fluent in English, German is a plus
- Team player
- Motivation

Are you interested?

Contact: Prof. Dr. Hans-Peter Landolt (landolt@pharma.uzh.ch)
Please attach a short motivation letter, CV and grades.