

PhD position in Human Neuroscience, Biology, Psychology or related field (100%, 4 years)

Project description

The aim of the study project is to investigate the joint influence of caffeine and light on the internal clock in adolescents and adults. Currently it is known that caffeine can increase the influence of light in the evening and thus delay the biological night. However, caffeine is usually consumed in the morning. It is unknown whether it could also potentiate the effect of light at this time of day and which mechanism mediates such a potential effect. Answering these research questions is not only interesting from a basic science perspective but also for people who suffer from an endogenous delay of the internal clock, as is often the case in adolescents.

Therefore we will combine various methods (questionnaires, saliva samples for hormone measurement, electroencephalography, electrocardiography, pupillometry and cognitive tests) in a laboratory study with adults and adolescents. The project is fully funded by the Swiss National Science Foundation SNSF. It takes place at the Centre for Chronobiology (Director: Prof. C. Cajochen), which is part of the Psychiatric Hospital of the University of Basel and University of Basel.

Your tasks

- Experimental set-up of studies
- Recruitment of participants and data collection
- Data analyses and manuscript preparation, manuscript publication
- Presentation of results at national and international conferences

Your profile

- Strong interest in chronobiology and sleep research
- Experience and/or high willingness to work with teenagers and their parents
- Experience and/or high willingness to acquire and analyse EEG data
- A Master's degree (or equivalent) in psychology, neuroscience, biology, medicine, or a related field (at start of project)
- Organisational skills to independently manage a demanding multi-methodological project, including repeated measurements
- Good data analysis skills and experience with statistical methods and software (e.g., R, SPSS, SAS)
- Programming skills or strong interest in acquiring them (e.g., R, Python, Matlab)
- Strong academic writing skills
- Good German language skills to communicate with participants (at least B2 level in the common European framework of reference for languages)

We offer

- A timely and highly relevant research project, funded by SNSF after independent peer-review
- Joining a stimulating, interdisciplinary, and international research team
- Direct and continuous supervision and support of PhD thesis

- A 100% contract with a salary (before taxes) of CHF 56'065 (increasing after year 1 and 2)

Application procedure

Applications will be accepted until the position is filled. Suitable candidates will be invited for an interview.

Salary and employment conditions will be according to the terms of the University of Basel and the SNSF.

To apply for a position, please send the following as a single pdf to carolin.reichert@upk.ch and christian.cajochen@upk.ch

- a motivation letter
- your CV (including your skills and previous research experience)
- an example of your academic writing skills (e.g. a chapter of your thesis)
- two references (at least one should be related to your current or previous professional/academic work) whom we can contact

The start date is August 1, 2025. For further information, please contact: Prof. Cajochen and Dr. Carolin Reichert, Centre for Chronobiology (www.chronobiology.ch): christian.cajochen@upk.ch and carolin.reichert@upk.ch

In accordance with the values of the University of Basel, candidates will be considered regardless of their age, religion, gender identity, cultural background, sexual orientation, social status, or disability.