

# Chronobiology, Sleep, and Caffeine

## **The effects of caffeine in sleep-restricted teenagers on sleep, reward processing, risk-taking, and underlying cerebral mechanisms.**

For a study at the Centre for Chronobiology (University Psychiatric Clinics Basel and University of Basel Transfaculty Research Platform Molecular and Cognitive Neurosciences (MCN) at the Faculty of Psychology). The earliest start date is **September 1, 2022**.

The project targets two prominent factors in adolescents' daily life: sleep restriction (i.e., too little sleep) and caffeine intake. Despite their prevalent co-occurrence, the combined effects of these two factors on the adolescent brain and behaviour have never been investigated systematically. We will combine several techniques (fMRI, EEG, behavioural tasks, and questionnaires) to address not only the typical effects expected by consumers (e.g., sleep and subjective sleepiness) but also the influences on reward processing and risk-taking. Our data will shed light not only on the efficacy and safety of caffeine in teenagers but also on the benefits and disadvantages of this frequently consumed psychostimulant in youth.

Participation in this ambitious and interdisciplinary project is a unique chance to gain insight into modern techniques and mechanisms regarding sleep and neuroscientific research. The position involves the experimental set-up of studies, recruitment of participants and data collection. Internship engagement should be at least 4 months. Please note, that this is an unpaid position. The measurements will mainly take place in the evening and on weekends. Therefore, the candidate should be flexible regarding working hours.

### **Your profile**

- An interest in working with teenagers and their parents
- An interest to learn how to acquire EEG and/or MRI data
- Good organisational skills
- Enthusiasm and friendliness
- An interest in acquiring programming skills
- Good German and English language skills

### **Contact Details**

To apply, please send the following to [sleepforscience@unibas.ch](mailto:sleepforscience@unibas.ch):

- A letter of motivation
- CV (including your skills and previous research experience)

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. Suitable candidates will be invited for an interview. Applications will be accepted until the position is filled. Feel free to contact Lina Lane or Noëmi Capdevila at [sleepforscience@unibas.ch](mailto:sleepforscience@unibas.ch) with any questions relating to the position.

Further information about the working group can be found at: [www.chronobiology.ch](http://www.chronobiology.ch)