



Does melatonin suppression see motion?

Testing whether visual dynamics matter for a physiological response to light.

Tübingen / Munich · English · Master's thesis · Research internship · Erasmus+ research placement

The question

Light can influence melatonin, but does it matter whether a visual scene moves? This question connects visual processing with the pathways through which light affects circadian physiology.

The project

Investigate visual dynamics in a controlled human photobiology study. Work may connect documented light stimulation with melatonin measurements and analysis of individual physiological responses. The advert does not specify the experimental stimulus design.

What you will do

- Review visual motion processing and the measurement of melatonin responses.
- Contribute to preparation, quality assurance and supervised data collection, subject to approvals and training.
- Develop a reproducible analysis that addresses measurement variability and uncertainty.

Possible scope

A thesis could combine experimental delivery and analysis. A shorter research placement could focus on measurement quality or an agreed analytical component. Careful laboratory work and interest in quantitative physiology are valuable.

Suitable backgrounds

Neuroscience · Psychology · Health science · Biomedical engineering

General expectations

You should be able to analyse data in R or Python, use Git and GitHub, and work reproducibly. Independent reading, careful documentation and increasing responsibility are expected. Previous sleep or circadian research experience is not generally required.

Funding

No salary or stipend from the research group unless explicitly stated. Master's theses are generally unpaid. Mention external funding or mobility programmes when applying.

Suggested backgrounds are not formal programme approval. Confirm requirements with your home institution.

How to apply

Send a short motivation, CV, relevant skills, preferred project, dates, format and location. Mention external funding. Contact Prof. Manuel Spitschan using the address below.

Munich: manuel.spitschan@tum.de

Tübingen: manuel.spitschan@tuebingen.mpg.de