



Does vestibular state influence the human response to light?

Exploring the meeting point of balance, sensory context and photobiology.

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

The question

We usually study the response to light as a problem of the eye. Could signals associated with balance and bodily orientation also matter for how the human body responds?

The project

Explore the relationship between vestibular state and physiological responses to light in a controlled human study. The work brings multisensory neuroscience into photobiology, combining supervised experimental measurements with careful treatment of variability and potential confounding.

What you will do

- Review evidence connecting vestibular, visual and physiological processes.
- Support study preparation and supervised measurements, subject to approvals and training.
- Check data quality and develop a reproducible analysis of physiological responses.

Possible scope

A thesis could combine experimental work and analysis. A shorter placement could focus on measurement reliability or an agreed dataset. Interest in human sensory physiology and quantitative methods is useful. Specific experimental arrangements are discussed individually.

Suitable backgrounds

Neuroscience · Psychology · Medicine · 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.

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