

COMPUTATIONAL NEUROSCIENCE LAB

M.Sc. Internships in Auditory Sensory Neuroscience

Have you wondered before how hearing works? How sound is turned into sensation, music and speech? Our main interest in the lab (www.englitz.nl) is to understand the neuronal basis of this process in the brain of mice. We perform cutting-edge neural recordings from the auditory cortex (imaging and electrophysiology) to study the basis of hearing, with a particular focus on predictable information, i.e. you might have heard of predictive coding, and we are at the forefront of understanding its representation in the brain. If you are interested in mechanisms, rather than only correlations, an internship in our lab could be for you. The internships involve working with chronically implanted animals, collecting recordings and analyzing them using both existing graphical programs as well as custom written analyses.



Internship Details:

- Integration into an active and diverse team of researchers
- Biological Methods:
 - Brain implant surgeries including transfection with calcium indicators & optogenetics
 - Collect recordings from the auditory cortex (2-photon & widefield imaging)
 - Behavioral monitoring of facial and body motion
 - Perform perfusion and histology
- Overall duration: 6+ months
- Depending on level of contribution, authorship in a high-level publication (as multiple previous interns have).

Candidate requirements:

- Highly motivated and interested in neuroscience
- Educational background in biology
- Ideally: Art.9 certification (Laboratory Animal Science course), but can also be performed in internship
- Ideally: An interest in quantitative analysis and programming, but can be deepened in internship

Contact: Associate Professor Bernhard Englitz (bernhard.englitz@donders.ru.nl)

Deadline: Contact us at any point!

Publications from the lab: see [here](#).

