Internship Opportunity in Neuroscience Research
Donders Centre for Neuroscience, Nijmegen
We are offering an internship for Master students in neuroscience interested in exploring the neural mechanisms of social learning and emotional memory.

Project Overview
Understanding danger is essential for survival. It is often beneficial to not only learn from one's own experiences, but to additionally learn by observing others. For example, a mouse may avoid an area after seeing another mouse receive a foot shock there—an instance of social learning and emotional contagion. Despite its importance, the neural processes that integrate these experiences into memory are not fully understood.

Our research aims to investigate how the brain's social-affective circuitry connects with spatial representation networks to store emotional episodic memories. We focus on how external environmental cues are combined with internal emotional states within the brain.

What You Will Do
As an intern on this project, you will have the opportunity to:

- **Two-Photon Calcium Imaging**: Learn and assist with imaging techniques to observe neuronal activity.
- **Spatial light modulation**: learn and assist with manipulation techniques.
- **Behavioral Training**: Participate in experiments involving mice to study learning and memory.
- **Histology**: Gain experience in tissue preparation and analysis to examine brain structures.
- **Data Analysis**: Work with data collected from imaging and behavioral experiments using Python.
- **Surgeries**: practice and observe surgical procedures.

Who Should Apply

- Master students in neuroscience or related fields
- Students interested in neural circuits, learning, and memory
- Basic laboratory experience is a plus, but not required
- Basic coding knowledge is a plus, but not required

How to Apply
If you're interested in this internship, please send your CV and a brief motivation letter to Francesco Battaglia (francesco.battaglia@donders.ru.nl).