

LUCIE A. L. DESCAMPS

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CURRENT POSITION

Doctoral Researcher - NTNU

September 2018 - Present

Kentros group, Kavli Institute for Systems Neuroscience

Trondheim, Norway

- Investigating how the anterior cingulate cortex is involved in object memory formation and consolidation in mice
- Main point of contact for researchers in the Kentros lab wishing to start a project using calcium imaging: help with the experimental design and the rig set-up. Providing training in surgeries, data acquisition and data analysis to other researchers in the lab
- Responsible for characterising and archiving the expression of transgenic mice lines produced in the lab with a payload for calcium imaging
- Organisation of weekly lab meetings in the Kentros lab

EXPERIENCE

Visiting Doctoral Researcher - Stanford University

March 2019 - May 2019

Schnitzer group

Stanford, USA

- Assisted Dr Thomas Rogerson with data acquisition

Research Assistant - University College London

September 2016 - July 2018

Häusser lab, Wolfson Institute for Biomedical Research

London, UK

- Assisted Dr Nick Robinson with data acquisition: stereotaxic surgeries, behavioural training of mice in virtual reality, 2P imaging and optogenetic, histology
- Trained other scientists from within and outside the lab to perform cortical aspirations to gain optical access to the hippocampus

Undergraduate Research Assistant - Université de Montpellier

June 2014

Behavioural ecology lab, CNRS-CEFE

Montpellier, France

- Validated an olfactometry apparatus using mice as discriminators

EDUCATION

NTNU - PhD programme in Medicine and Health Sciences

September 2018 - Present

Supervisor: Prof Clifford G. Kentros; Co-Supervisor: Prof Edvard I. Moser

Trondheim, Norway

Funded by the Marie Skłodowska-Curie ITN Fellowship through the M-GATE Project. Grant agreement No 765549

- Thesis title: Calcium imaging of long-term memory traces in anterior cingulate cortex

University College London - MSc Neuroscience

Graduated 2017 with Distinction

Supervisors: Prof Michael Häusser and Dr Nick Robinson

London, UK

- Thesis title: All-optical investigation of hippocampal function: Do specific place cells guide spatially associated behaviour?

Université de Montpellier - BSc in Biology

Graduated 2015 with first class honours

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Montpellier, France

- Majors: Neuroscience and Animal Physiology

PEER-REVIEWED PUBLICATIONS

Robinson NTM, **Descamps LAL**, ..., Häusser M: Targeted Activation of Hippocampal Place Cells Drives Memory-Guided Spatial Behavior. *Cell*. 2020. doi: 10.1016/j.cell.2020.09.061

Blankvoort S, **Descamps LAL**, Kentros C: Enhancer-Driven Gene Expression (EDGE) enables the generation of cell type specific tools for the analysis of neural circuits; *Neurosci Res.* 2020. doi: 10.1016/j.neures.2020.01.009

CONFERENCES ABSTRACTS

Descamps LAL, Maxey J, Rogerson T, Schnitzer M, Kentros C: Observing consolidation: Calcium imaging of long-term object memory traces in anterior cingulate cortex; 082.07 / Y4; SfN19 meeting

Descamps LAL, Kentros C: Calcium imaging of long-term memory traces in Anterior Cingulate Cortex; NRSN PhD conference 2018. Poster and Blitz presentation

Robinson NTM, **Descamps LAL**, Russell L, Schmidt-Hieber C, Häusser M: All-optical manipulation of place cells drives spatially associated behaviour; 604.12 / HHH44; SfN18 meeting

Robinson NTM, **Descamps LAL**, Russell L, Schmidt-Hieber C, Häusser M: All-optical manipulation of place cells during spatial navigation; F087; FENS2018 meeting scientific program

MENTORING

Mentoring of Master Students from the Master of Neuroscience program at NTNU. Providing direct supervision and training.

Elise Reppe Olsen - Thesis title: Exploring the neural activity of the anterior cingulate cortex during a social recognition memory task using calcium imaging *Expected Graduation: August 2021*

Jonas Østerhaug Andersen - *Expected Graduation: August 2022*

SERVICE

Data Club Coordinator January 2021 - Present
Kavli Institute for Systems Neuroscience *Trondheim, Norway*

The Data-Club at the Kavli Institute for Systems Neuroscience is a weekly, institute-wide internal meeting. Each week, a PhD candidate or a Post-Doc presents their research and latest results.

· Role: Meeting chair, scheduling speakers

WWNeuRise Organisation Committee December 2020 - Present
www.neurise.github.io *Online*

WWNeuRise is an online seminar series targeted at early career researchers (PhD candidates and Post-Doc). Every 2 weeks on Wednesdays at 17 CET, 2 researchers present their latest work in a 30 min talk. After the talks, participants have the opportunity to meet and discuss with the speakers in an informal Zoom meeting.

Role: Meeting chair and scheduling speakers (with other committee members), website maintenance.

SKILLS

In Vivo Calcium Imaging	Miniature head-mounted fluorescence microscope in freely-moving mice, 2-Photon in head-fixed mice
Stereotaxic Surgeries	Viral injections, optical access to cortical (window implant) and subcortical regions (prism implant, cortical aspiration)
Histology	Vibratome and cryostat cutting, immunohistochemistry, image acquisition using Zeiss Axioscan and Confocal systems
Programming	Basic skills in Matlab, Python, C++, HTML, CSS

OTHER INTERESTS

Mechanical keyboards	Firmware + hardware
Aerial sports	Aerial hoop instructor with NTNUI Dans Pole and Aerials section