

## Education

- **Massachusetts Institute of Technology** – Postdoctoral associate Oct. 2015 - present
- **University of Edinburgh, UK** – Postdoctoral associate Mar. – Sept. 2015
- **University of Edinburgh, UK** – PhD, Neuroscience 2010 - 2015
- **University of Bristol, UK** - BSc. Neuroscience 2007 - 2010
- **University of Central Lancashire, Preston, UK** - BSc. Computer Science 2006 – 2007

## Grants & Awards

- **PhD Scholarship, 4 years, funded by the BBSRC (Biotechnology and Biological Science Research Council)** – University of Edinburgh
- **Prize for best poster in the category Systems Neuroscience** - Edinburgh Neuroscience Day 2014
- **Neuroresearchers Fund Training Grant**
- **Wellcome Trust stipend for Summer Placement** – University College London

## Skill and Techniques

- **Laboratory Techniques:** quantitative behavioural data analysis; 2-photon calcium imaging, behavioural training of mice; tetrode and patch clamp data analysis; in vivo electrophysiology, *in vitro* extracellular recordings; perfusion; histology
- **Technical Skills:** Data analysis in Matlab, Python (SciPy, scikit-learn, statsmodels), R, Arduino, mbed, C/C++, Java; Electronic circuit design; 3D modelling in Autodesk® Inventor®

## Teaching and related Experience

- Problem based learning sessions for medical students, University of Edinburgh
- Supervised multiple masters, undergraduate and summer students.
- Ran postgraduate seminar series (2 years).
- Representative for postgraduate students in my department.

## Publications

- **Fischer, L.**, Mojica Soto-Albors, R., Buck, F., & Harnett, M. T. (2020). Representation of visual landmarks in retrosplenial cortex. *ELife*, 9, 811430. <https://doi.org/10.7554/eLife.51458>
- Pakan, J. M. P.\*, Currie, S. P.\*, **Fischer, L.\***, Rochefort, N. L. (2018). The Impact of Visual Cues, Reward, and Motor Feedback on the Representation of Behaviorally Relevant Spatial Locations in Primary Visual Cortex. *Cell Reports*, 24(10), 2521–2528.
- Tennant, S. A., **Fischer, L.**, Garden, D. L. F., Gerlei, K. Z., Martinez-Gonzalez, C., McClure, C., Wood, E. R., Nolan, M. F. (2018). Stellate Cells in the Medial Entorhinal Cortex Are Required for Spatial Learning. *Cell Reports*, 22(5), 1313–1324

## Conference Abstracts

- **Fischer, L.**, Mojica Soto-Albors R., Harnett M. T. Integration of Visual and Motor Information in Retrosplenial Cortex. Lisbon, Portugal: Cosyne 2019.
- **Fischer, L.**, Mojica R., Toloza E. H. S., Barnagian D., Harnett M. T. Encoding of spatial variables in retrosplenial cortex during landmark dependent navigation. San Diego, CA: Society for Neuroscience, 2018.
- **Fischer L.**, Harnett M. T. Landmark, Path Integration, and Trial Onset Encoding in A30 of Retrosplenial Cortex. San Diego, CA: Society for Neuroscience, 2017.

## Invited Talks

- Title: Development of a Virtual Reality Task to Test Path Integration in Mice, Institut de Biologie Paris-Seine, Pierre and Marie Curie University, June 2015
- Title: Development of a Virtual Reality Task to Test Path Integration in Mice, MRC Laboratory of Molecular Biology, University of Cambridge, May 2015