Luigi Petrucco

postodoc @ Iurilli lab

Center for Neuroscience and Cognitive Systems
Istituto Italiano di Tecnologia (Rovereto, Italy)

DETAILS

birth 22/11/1992, Italy
email lpetrucco@iit.it
github github.com/vigji
website vigji.github.io

EXPERIENCE

May 2022 – present
Postdoc at **Italian Institute of Technology** (Rovereto, Italy)
Supervisor: Dr. Giuliano Iurilli
Topics: in vivo two-photon and electrophysiology, rodents, respiration, hunting

Sept 2017 – Apr 2022
Ph.D. at **Max Planck Institute of Neurobiology** (München, Germany)
Supervisor: Dr. Ruben Portugues
Topics: lightsheet and electron microscopy, zebrafish, navigation, hindbrain

Oct 2014 – Sept 2016
Thesis at **Scuola Normale Superiore** (Pisa, Italy)
Supervisor: Prof. Gian M. Ratto
Topics: in vivo two-photon and electrophysiology, rodents, epilepsy

Summer 2015
Internship at **Harvard University** (Cambridge, Massachusetts)
Supervisor: Dr. Takao K. Hensch
Topics: two-photon imaging, voltage imaging, slice, rodents, cortex

Summer 2013
Internship at **Max Planck Institute for Chemical Ecology** (Jena, Germany)
Supervisor: Dr. Ewald Grosse-Wilde
Topics: FISH, confocal microscopy, insects, olfaction

EDUCATION

2016 – 2022
Ph.D. in Systemic Neuroscience at **LMU** (München, Germany)

2014 – 2016
M.S. in Neurobiology at **University of Pisa/Scuola Normale Superiore** (Pisa, Italy) - 110/110 *cum laude*

2011 – 2014
B.S. in Biology at **University of Pisa/Scuola Normale Superiore** (Pisa, Italy) - 110/110 *cum laude*

ADVANCED TRAINING

Jul 2017
Cajal Course - Interacting with Neural Circuits (Lisbon, Portugal)

Aug 2016
Cajal Course - Computational Neuroscience (Lisbon, Portugal)

SOFTWARE CONTRIBUTIONS

Stytra: a Python package to run open- and closed-loop behavioral experiments.

BrainGlobe: a Python ecosystem for morphological analyses in systems neuroscience.

TEACHING

Apr 2022
Teaching Assistant at **ELSC - TUM Imaging Course** (Prof. Ruben Portugues, TUM)

Mar-Jul 2021
Teaching Assistant at the course **Large Scale Modelling and Large Scale Data Analysis** (Prof. Ruben Portugues, TUM)

AWARDS & FUNDING

Dec 2022	**Postdoc Fellowship** (*European Molecular Biology Organization - EMBO*)
Sept 2021	**Kavli Seed Grant** for Stytra to NWB data format conversion (*Kavli Foundation*)
Jul 2015	**Armenise-Harvard Fellowship** (*Armenise-Harvard Foundation*)
Jun 2013	**RISE Scholarship** (*German Academic Exchange Service - DAAD*)

COMPUTER SKILLS

Operative Systems	Familiarity with Windows, Mac, and Linux
Programming Languages	**Python** (proficiency) MATLAB (repented)**;** fundamentals of **R** and **Julia**; Arduino applications with C; LabView. VCS/CI with GitHub/Travis/GitHub Actions
Others	LaTeX, Photoshop, Gimp, Illustrator, InDesign, Inkscape, Blender and 3D printing,

PUBLICATIONS

2022	**L Petrucco***, H Lavian*, YK Wu, F Svara, V Štih, R Portugues (2022) Neural dynamics and architecture of the heading direction circuit in a vertebrate brain [*accepted in Nature Neuroscience*] preprint at doi.org/10.1101/2022.04.27.489672
	Y Xiao, **L Petrucco,** LJ Hoodless, R Portugues, T Czopka (2022) Oligodendrocyte Precursor Cells Sculpt the Visual System by Regulating Axonal Remodeling, *Nature Neuroscience* 25, pages 280–284, doi.org/10.1038/s41593-022-01023-7
2021	F Claudi, AL Tyson, **L Petrucco**, TW Margrie, R Portugues, T Branco (2021) Visualizing anatomically registered data with brainrender. *eLife, 10, e65751*: doi.org/10.7554/eLife.65751
	DA Markov, **L Petrucco**, AM Kist, & R Portugues (2020) The cerebellum recalibrates a feedback controller involved in motor control. *Nature Communications* 12 (6694) https://doi.org/10.1038/s41467-021-26988-0
2020	F Claudi*, **L Petrucco***, AL Tyson*, T Branco, TW Margrie, R Portugues (2020) BrainGlobe Atlas API: a common interface for neuroanatomical atlases. *Journal of Open Source Software* 5 (54), 2668 doi.org/10.21105/joss.02668
2019	V Štih*, **L Petrucco***, AM Kist, & R Portugues (2019). Stytra: an open-source, integrated system for stimulation, tracking and closed-loop behavioral experiments. *PLoS computational biology,* 15(4), e1006699.
2018	S Landi, **L Petrucco**, F Sicca, & GM Ratto (2019). Transient cognitive impairment in epilepsy. *Frontiers in molecular neuroscience*, 11, 458.
2017	**L Petrucco***, E Pracucci*, M Brondi, GM Ratto, & S Landi (2017). Epileptiform activity in the mouse visual cortex interferes with cortical processing in connected areas. *Scientific reports*, 7(1), 1-12.

*authors contributed equally