

Luigi Petrucco

postdoc @ Iurilli lab
Italian Institute of Technology - IIT

DETAILS

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

EXPERIENCE

May 2022 - ongoing	Postdoc at Italian Institute of Technology (Rovereto, Italy) Supervisor: Dr. Giuliano Iurilli
Sept. 2017 – April 2022	Ph.D. in Neuroscience at Max Planck Institute of Neurobiology (München, Germany) Supervisor: Dr. Ruben Portugues
Oct. 2014 – Sept. 2016	Master Thesis at Scuola Normale Superiore (Pisa, Italy) Supervisor: Prof. Gian M. Ratto
Jul. – Sept. 2015	Internship at Harvard University (Cambridge, Massachusetts) Supervisor: Dr. Takao K. Hensch

EDUCATION

2016 – 2022	PhD at Graduate School in Systemic Neuroscience at LMU (München, Germany)
2014 – 2016	Master Degree in Neurobiology at University of Pisa/Scuola Normale Superiore (Pisa, Italy) 110/110 <i>cum laude</i>
2011 – 2014	Bachelor's Degree in Biology at University of Pisa/Scuola Normale Superiore (Pisa, Italy) 110/110 <i>cum laude</i>

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. [bioRxiv] Y Xiao, L Petrucco , LJ Hoodless, R Portugues, T Czopka (2022) Oligodendrocyte Precursor Cells Sculpt the Visual System by Regulating Axonal Remodeling. <i>Nature Neuroscience</i> 25, 280–284.
2021	DA Markov, L Petrucco , AM Kist, & R Portugues (2021) The cerebellum recalibrates a feedback controller involved in motor control. <i>Nature Communications</i> 12, 6694. F Claudi, AL Tyson, L Petrucco , TW Margrie, R Portugues, T Branco (2021) Visualizing anatomically registered data with brainrender. <i>eLife</i> , 10, e65751: doi.org/10.7554/eLife.65751.
2020	F Claudi [*] , L Petrucco [*] , AL Tyson [*] , T Branco, TW Margrie, R Portugues (2020) BrainGlobe Atlas API: a common interface for neuroanatomical atlases. <i>Journal of Open Source Software</i> 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. <i>PLoS computational biology</i> , 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

INVITED TALKS

- March 2022 | **Cosyne 2022**: A network that integrates heading direction in the larval zebrafish brain ([link](#))
- November 2020 | **Neuromatch 2020**: BrainGlobe: a Python ecosystem for computational (neuro)anatomy ([link](#))

SOFTWARE CONTRIBUTIONS

- Stytra**: a modular package for stimulus generation, online behavioral tracking and hardware control for zebrafish neuroscience experiments.
- BrainGlobe**: a python toolbox for morphological analyses in systems neuroscience.

ADVANCED TRAINING

- Jul. 2017 | Cajal Course - Interacting with Neural Circuits (Lisbon, Portugal)
- Aug. 2016 | Cajal Course - Computational Neuroscience (Lisbon, Portugal)

COMPUTER SKILLS

Proficiency with **Python**; **MATLAB**; fundamentals of **R** and **Julia**; C in Arduino applications; LabView; shell scripting; version control using GitHub and CI with Travis/GitHub actions

Image manipulation (Photoshop, Gimp), professional design (Illustrator, InDesign, Inkscape), 3D modelling (Blender), LaTeX.

AWARDS

- Jul 2015 | **Armenise-Harvard Fellowship** (*Armenise-Harvard Foundation*)
- Jun 2013 | **RISE Scholarship** (*German Academic Exchange Service - DAAD*)