

Curriculum Vitae

Alejandro Pan-Vazquez, Ph.D.

Sir Henry Wellcome Postdoctoral Fellow

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Education

- 2014 to 2019 Ph.D. in Neuroscience – IoPPN, King’s College London, University of London (UK)
Graduate advisor: Prof. Juan Burrone
Award date: March 1st, 2019
Thesis Title: “The emergence and plasticity of synapses at the axon initial segment”
- 2010 to 2014 MSci in Neuroscience, University of Nottingham (UK)
Grade: First Class Honours
- 2008 to 2010 A - Levels, The Braga International School (Portugal)
Mathematics, Chemistry, Biology and Spanish (Cambridge International Examinations)

Graduate courses and other education

- 2018 Biobit: Introductory lectures in information theory and bayesian inference (4 sessions).
Centre for developmental neurobiology, IoPPN, King’s College London (London, UK)
- 2016 Okinawa Computational Neuroscience Course (3 weeks).
Okinawa Institute of Science and Technology (Okinawa, Japan)
- 2014 to 2015 Graduate course in quantitative skills in bioscience (1 year)
SYSMIC (<https://sysmic.ac.uk/>) (remote learning)

Research Experience

- 2019 (Ongoing) Witten Lab & International Brain Laboratory - Princeton University (Princeton, USA)
Postdoctoral Fellow
- 2015 to 2019 Burrone Lab – Centre for Developmental Neurobiology, King’s College London (London, UK)
Ph.D Student
- 2014 to 2015 PhD Rotations - Centre for Developmental Neurobiology, King’s College London (London, UK)
Rotation student in: Houart Lab, Sahara Lab and Burrone Lab.
- 2013 to 2014 Toledo-Rodriguez Lab - Queen’s Medical Center, University of Nottingham (Nottingham, UK)
Undergraduate Researcher
- 2012 to 2013 Molecular Biology, Pfizer Inc. (Cambridge, UK)
Molecular biology Industrial Trainee

Teaching and mentoring

- 2019 to 2022 Supervision of Laura Haetzel (Research Assistant), Akhil Bandi (Research Assistant) and Yoel Sanchez-Araujo (PhD student), Brenna McMannon (Research Assistant).
Princeton University,
- 2016 to 2018 Teaching Assistant in Neuroanatomy for year 2 medical students (MBBS).
GKT School of Medicine, King's College London

Grants & Awards

- 2020 Sir Henry Wellcome Postdoctoral Fellowship (\$ 420,000)
- 2017 Travel award from The Guarantors of Brain (\$ 840)
- 2016 Travel award from The British Society for Developmental Neurobiology (\$ 700)
- 2016 Travel award from The Guarantors of Brain (\$ 910)
- 2016 Travel award from the King's College Graduate School (\$ 350)
- 2014 Accepted in 4-year MRC funded PhD program at the Centre for Developmental Neurobiology, King's College London (Undisclosed amount)
- 2011 Kupcinet-Getz program scholar at the Weizmann Institute of Science (\$600)

Publications

- 2023 Biderman, D., ..., **Pan-Vazquez, A.**, ..., et al., 2023 Lightning Pose: improved animal pose estimation via semi-supervised learning, Bayesian ensembling, and cloud-native open-source tools. bioRxiv. <https://doi.org/10.1101/2023.04.28.538703> (under review at Nat. Methods)
- 2022 International Brain Laboratory, ..., **Pan-Vazquez, A.**, ..., et al., 2022 Reproducibility of in-vivo electrophysiological measurements in mice. bioRxiv. <https://doi.org/10.1101/2022.05.09.491042> (under review at Cell)
- 2021 International Brain Laboratory, ..., **Pan-Vazquez, A.**, ..., et al., 2021. A standardized and reproducible method to measure decision-making in mice. eLife. <https://doi.org/10.7554/eLife.63711>
- 2020 **Pan-Vazquez, A.***, Wefelmeyer, W.*, Gonzalez Sabater, V., Neves, G., Burrone, J., 2020. Activity-Dependent Plasticity of Axo-axonic Synapses at the Axon Initial Segment. Neuron. <https://doi.org/10.1016/j.neuron.2020.01.037>
- NRN Highlight: Lewis, S., 2020. Held in the balance. Nat. Rev. Neurosci. 1–1. <https://doi.org/10.1038/s41583-020-0295-1>
- 2017 Thomas-Jinu, S., ..., **Pan-Vazquez, A.**, ... et al., 2017. Non-nuclear Pool of Splicing Factor SFPQ Regulates Axonal Transcripts Required for Normal Motor Development. Neuron 94, 322-336.e5. <https://doi.org/10.1016/j.neuron.2017.03.026>
- 2015 **Pan-Vazquez, A.***, Rye, N., Ameri, M., McSparron, B., Smallwood, G., Bickerdyke, J., Rathbone, A., Dajas-Bailador, F., Toledo-Rodriguez, M., 2015. Impact of voluntary exercise and housing conditions on hippocampal glucocorticoid receptor, miR-124 and anxiety. Mol. Brain 8, 40. <https://doi.org/10.1186/s13041-015-0128-8>

* First author / First co-author / Task Force Member

Task Forcer Member: Publications from the International Brain Laboratory list authors alphabetically and have no first authors. However, The production of all IBL Platform Papers is led by a Task Force, which defines the scope and composition of the paper, assigns and/or performs the required work for the paper, and ensures that the paper is completed in a timely fashion.

Conference presentations and invited talks

2023	IBL Annual Meeting (New York, USA) - Talk
2022	GRC Basal Ganglia (Ventura, USA) - Poster
2019	Society for Neuroscience Annual Meeting (Chicago, USA) - Poster
2019	Simons Collaboration on the Global Brain (New York, USA) – Poster
2018	Witten Lab, Princeton University (Princeton, USA) - Invited Talk
2018	Yuste Lab, Columbia University (New York, USA) - Invited Talk
2018	Frank Lab, University of California San Francisco (San Francisco, USA) - Invited Talk
2017	MRC Centre for Neurodevelopmental Disorders Symposium (London, UK) - Poster
2017	GRC Inhibition in the CNS (Les Diablalets, Switzerland) - Poster
2016	Society for Neuroscience Annual Meeting (San Diego, USA) – Talk (Nanosymposium)
2014	Zebrafish circuits and imaging (Paris, France) – Poster

Academic Service

2021	Princeton Neuroscience Institute Retreat Co-Organizer (Princeton, USA)
2016-2018	Founding member of Neureka! A student/postdoc association which organizes neuroscience seminars and events for fostering scientific collaboration in the London area. (London,UK)
2018	Organized and hosted seminar by Prof. Thomas Klausberger, Medical University of Vienna. (London, UK)
2017	Organized and hosted seminar by Prof. Claudia Clopath, Imperial College London. (London, UK)
2017	Organized and hosted seminar by Prof. Natalia de Marco, Weill Cornell Medical School (London, UK)
2016	PhD Representative - Centre for Developmental Neurobiology (London, UK)
2016	Organized and hosted seminar by Prof. David Nutt, Imperial College. (London, UK)

Miscellaneous

Languages: English, Spanish and Portuguese

Programming languages: Python, Stan and MATLAB

Nationality: Spanish and British