

# Vasika Venugopal

2nd year PhD Student at MAP Team, Interdisciplinary Institute for Neuroscience, France under Dr. Mathieu Letellier





#### **EDUCATION**

2021-23 M2 International Neuroscience

University of Bordeaux (UB), France

Grade: 16.87/20, Rank: 1/38, Mention très bien

M1 Bordeaux International Masters in Neuroscience

Grade: 15.96/20, Rank: 2/8, Mention bien

2018-21 **Batchlors in Science Biology** 

SRM University—AP, India

CGPA: 9.68/10.00, Rank: 1/82, Passed with Distinction

## RESEARCH EXPERIENCES

2023 M2 Research Internship (6 months)

Neurogenesis and Pathophysiology Team, NM, France

Supervisor: Dr Emilie Pacary

Project: Influence of temporal origin on dendritic spine and synapse

properties of mouse dentate granule neurons.

Extended through Assistant Research Engineer

position (2 months)

2022 M1 Research Internship (6 months)

Planar Cell Polarity Team, NM, France

Supervisor: Dr Nathalie Sans

Project: Spatiotemporal role of PCP protein Vangl2 in aging at

the hippocampus.

2019-21 **Project Oriented Biology Education Summer** 

Research Internship (7 months)

INCASR, India

Project: Bioinformatics study of various SNPs on the functioning of human AD-related proteins on autophagy in S. cerevisiae

2021 Research Internship (3 months, virtual)

IIT Indore, India

Project: Bioinformatics study of EBV infection on sphingosine

pathway in modulating neurodegenerative diseases

**TEACHING** 

2025 CAJAL Instructor, The Brain Prize Course: Advanced

Techniques for Synapse Biology (Upcoming)

Bordeaux Neurocampus, Bordeaux

Organised by FENS, IBRO

2024-25 Teaching Assistant (12 months)

> Mission Complémentaire d' Enseignent (32H), UB Classes taught: M2 Cellular and Molecular Neuroscience, 8H

micro-internship, L3 Scientific communication

2020 Communicative English Teaching Assistant (6

months)

Minerva Platform, SRM University

Instructor - Dr R. Vennela

**TRAINING** 

2025 Python Training, Université de Bordeaux, France

2024 Paris NeuroCourse, Université Paris Descartes, France

12-day residential workshop on Optical Imaging and

### AWARDS AND GRANTS

2023-26 **EUR PhD Grant,** French Ministry of Higher Education and Research, France

Jury award for Best Presentation of M2 research project, Neuroscience

Bordeaux Association, France

2022 Region Nouvelle-Aquitaine Merit fellowship, France

2018-21 **Gold Medal** for outstanding academic performance, SRM University-AP

2018-21 Merit-based scholarship, SRM

University-AP, India

Jawaharlal Nehru Centre for 2019 Advanced Scientific Research Summer

Fellowship, India

## **CONFERENCES**

2024 **Poster Presentation,** Workshop Biophysics, molecular organization & regulation of postsynaptic domains: 'Bridging Synaptic Molecular Architecture to Function: a Correlative Multimodal Approach to study Synapse Heterogeneity

2024 **Poster Presentation,** IINS Poster session: 'Bridging Synaptic Molecular Architecture to Function: a Correlative Multimodal Approach to study Synapse Heterogeneity

2020 **Poster Presentation**, 11th Berlin-Brandenburg School for Regenerative Therapies Symposium: 'Effect Endogenous Electric Fields on metabolites on NSC growth in AD microenvironment'

2022 **Attendee**, 19th Synapse and Network Day, France

2022 Attendee, Neurocentre Magendie Symposium, France

2020 Attendee, RIKEN and UCSF Neuroscience Symposium, Virtual

Bioinformatics: Basics of R and Python, IMARIS, Metamorph and ImageJ

Languages: Tamil (Native), English (Fluent), Hindi (Beginner), French (DELF A2), German (Beginner)

Electrophysiological Recording in Neuroscience

**35 lectures** (180 mins each) in electrophysiological methods, optical microscopy and imaging, and data analysis; **10 afternoons** of hands-on experiments in electrophysiology, CCD imaging, photolysis and practical optics.

2022 Bordeaux Summer School, Bordeaux Neurocampus, France

Theme: Introduction to experimental neurosciences

Techniques: In-vivo calcium imaging basics, chemogenetic inactivation, Y-maze social memory test, fibre photometry analysis

via Python, brain fractionation, synaptosome extraction, western blot

2022 Formation Applicateur Experimentation Animale: Rodents et Lagomorphs, UB, France

2021 IBRO-RIKEN CBS Summer Program, Japan

Poster: Exploring the relationship between variable 4N soluble tau pathology and endocytic vesicular dynamics

#### LEADERSHIP AND MEMBERSHIP

2025-now	PhD Seminar Co-organiser, Bordeaux Neurocampus, France
2025	Bordeaux Open Science Workshop (OSW) Co-organiser (Upcoming), BordeauxTea, France
2023-now	IINS Social Science Committee, IINS, France
2023-now	Direction Committee of Neuroscience Bordeaux Association (NBA), France
2021-now	Member of NBA, France
2018-21	Co-founder of Arts, Culture and Technology Society, President of Literary Club, Captain of Woman's Basketball team, SRM University-AP, India
2019-20	Student Council, Environmental Action Committee, Chairperson of Nutrition Committee, SRM University-AP, India

#### **PUBLICATIONS**

- 1. Liouta K, Lubas M\*, **Venugopal V\***, Chabbert J, Jeannière C, Diaz C, Munier M, Tessier B, Claverol S, Favereaux A, Sainlos M, de Wit J, Letellier M, Thoumine O, Chamma I. LRRTM2 controls presynapse nano-organization and AMPA receptor sub-positioning through Neurexin-binding interface. Nat Commun. 2024 Oct 11;15(1):8807. doi: 10.1038/s41467-024-53090-y. PMID: 39394199; PMCID: PMC11470055 (\*equal contribution from authors)
- 2. Depret N,\* Gleizes M\*, Moreau MM, Poirault-Chassac S, Quiedeville A, Carvalho SDS, **Venugopal V**, Abed ASA, Ezan J, Barthet G, Mulle C, Desmedt A, Marighetto A, Racca C, Montcouquiol M, Sans N. The correct connectivity of the DG-CA3 circuits involved in declarative memory processes depends on Vangl2-dependent planar cell polarity signaling. Prog Neurobiol. 2025 Feb 15;246:102728. doi: 10.1016/j.pneurobio.2025.102728. Epub ahead of print. PMID: 39956311 (\*equal contribution from authors)
- 3. Student Journal Brainstorm: MicroRNAs in neuronal development and function, Short Review