

Kirthana Kunikullaya U



MBBS, MD (Physiology), DNB,
PostDoc (Neuroscience)

About

I am a Physician, trained in Medicine and specializing in Human Physiology. After being an Assistant Professor in a Medical College & Teaching hospital in India for 10 years, I shifted to France as a postdoc in Neuroscience. I am **interested to design sex-specific treatment and prevention strategies for neurological and neuroendocrinological problems.**

EXPERIENCE

2022-Present
1.5 years



Postdoctoral Researcher | Institut de recherche en santé, environnement et travail (IRSET), University of Rennes 1

(Postdoc - Based on research experience post MD) - Stratégie d'Attractivité Durable - Region Bretagne Postdoctoral Funding (2022-24)

Studying the effect of anthropogenic stimuli on neurosteroids and neuroplasticity. **Ongoing & Completed Projects:**

- Prenatal exposure to neonicotinoids in mice and zebrafish
- Developmental neurotoxicity by exposure to Ethinyl Estradiol
- Neurological changes in an AroKO model of zebrafish

2019-Present
4 years



PhD | University of Maastricht, Netherlands (External)

Thesis: Short-term impact of anthropogenic environment on neuroplasticity – a study among humans and animals

- Advisors: Harry Steinbusch, Theirry Charlier, Jodi Pawluski

2010-2021
10.9 years



Assistant Professor, Physiology | Rajiv Gandhi University of Health Sciences (RGUHS), India

- Involved in teaching, research, patient care, and admin roles.
- Investigated the effect of music as an acoustic stimulus on the cardiovascular and nervous systems (using HRV, ERP and EEG-based approaches).

2007-2010
3 years



Postgraduate - MD Physiology | RGUHS, India

In India, MD is considered equivalent to a doctoral degree

- MD Thesis - Comparative study of autonomic functions between day and night shift workers.

SKILLS

Animal models in neuroscience - Molecular Biology Techniques

- Rat brain tissue brain slice preparation, mounting, IHC, immunofluorescence, confocal microscopy, bacterial culture, behavioral tests.
- Zebrafish fish models – DNA, RNA extraction, Genotyping, PCR, qRT-PCR, brain inclusion, slicing, IF, ISH Immunostaining for different markers in the brain, cell counting, cortisol assay (ELISA).
- Physiology & Pharmacology of rabbit heart and rat intestine, amphibian heart, neuromuscular junctions (Physiograph)

Human Physiology - Electrophysiology Techniques

- Holter monitoring of blood pressure, electrocardiography, heart rate variability (autonomic function),
- Neurophysiology - event-related potentials (ERP), electroencephalography (EEG), sleep polysomnography recordings, emotional, anxiety, stress, health scales and questionnaires, cognitive functions; analysis of biomarkers in serum and saliva (ECLIA, ELISA, RIA).

Others - Softwares

SPSS, Statistica, R, Graphpad, Adobe Photoshop, Image J

Looking forward to a life full of learning and contributing to Neuroscience.

CONTACT



+33-7660 24942
+91-97423 34950



kirthana.rguhs@gmail.com



<https://orcid.org/0000-0001-6150-5975>



<https://twitter.com/KKunikullaya>



<https://kirthanaku.github.io/>

Teaching Experience

- 2010 - 2021 - Assistant Prof in Dept of Physiology - teaching courses - Undergraduate medical (MBBS), dental (BDS), Physiotherapy (BPT), B.E Medical Electronics, B.Sc Nursing and MD (Physiology), MDS postgraduate students. I was always rated >4.5/5 in the student feedback and >4/5 in peer feedback.
- Mentored 10 medical students every year (2010-2021).

ACHIEVEMENTS

- Prof. N. Padmanabhan Memorial Award - best paper by any PG student (2009)
- University Topper in MD Physiology (2010)
- Principal Investigator of 3 Nationally Funded Projects, India - ~65k€ (2012-2021)
- Siri research award – best research paper in the area of stress (2019)
- Prof. R.C. Shukla Oration Award for the best paper in Cardiovascular Physiology (2021)