

ANISHA S MENON

Email: anisha.ccmb@csir.res.in | Phone: 9946340473

PHD SCHOLAR IN NEUROSCIENCE, CSIR-CCMB



ACADEMIC QUALIFICATIONS

PhD in Neuroscience

CSIR-Centre for Cellular & Molecular Biology
Mentor: Dr. Ishwariya Venkatesh
(January 2023 – Present)

MSc in Zoology

St. Joseph's College Devagiri,
Kozhikode, Kerala
CGPA: 3.79 / 4.0

BSc in Zoology

Vimala College, Thrissur, Kerala
Under University of Calicut
CGPA: 5.73 / 6.0 |
First Rank in University |

RESEARCH HIGHLIGHTS

- Standardized thoracic spinal-cord crush model for routine axon-regeneration studies.
- Optimized Single-cell genomics pipelines; produced high-quality motor-cortex libraries for multiple projects.
- Established Hi-C workflow; independently generated numerous high-resolution chromatin maps.
- Developed India's first intra-cortical brain-injury model.
- Streamlined confocal/Apotome imaging for quantitative neurite-extension analysis.
- Proficient in R/Python bioinformatics for single-cell and epigenomic data (snRNA-seq, snATAC-seq, Cut&Run, Hi-C).

PUBLICATIONS

Menon, A.S., et al., PATZ1 Reinstates a Growth-Permissive Chromatin Landscape in Adult Corticospinal Neurons After Injury. [Under review: Cell Reports] (2025) <http://biorxiv.org/lookup/doi/10.1101/2025.05.14.654166>

Menon, A. S., et al., DNA Barcoding of Fish Fauna using Mitochondrial CO1 Gene. Mapana Journal of Sciences (2024), 23(1), 133-147.

Nuclear Receptor Transcription Factors promote axon regeneration in the Adult Corticospinal Tract
Yogesh Sahu, Soupayan Banerjee, Manojkumar Kumaran, Katha Sanyal, Meghana Konda, Shringika Soni, **Anisha S Menon***, Sneha Manjunath, Dhruva Kumar Kesireddy, Deepta Susan Beji, Prakash Chermakani, Arupam Biswas, Ishwariya Venkatesh (Under Review: Nature Communications)
bioRxiv 2025.06.19.660319; doi: <https://doi.org/10.1101/2025.06.19.660319>

AWARDS AND ACHIEVEMENTS

- Best Poster Award – Indian Academy of Neurosciences (IAN), 2023
- 2nd Prize for Best Poster – Cellular and Molecular Mechanisms of Development and Regeneration Conference, 2024
- All India Rank 6 – Joint CSIR-UGC Fellowship, 2022
- First Rank in BSc Zoology from the University of Calicut, 2018

CONFERENCE PRESENTATIONS

- Society for Neurochemistry Conference, 2025 – Poster Presentation
- Hyderabad Science Conference (HySci), 2024 – Poster Presentation
- Indian Academy of Neuroscience (IAN), 2024 – Poster Presentation
- Cellular and Molecular Mechanisms of Development and Regeneration (CMMDR), 2024 – Poster Presentation
- Indian Academy of Neuroscience (IAN), 2023 – Poster Presentation
- Hyderabad Science Conference (HySci), 2023 – Attended

RESEARCH SKILLS

- **Rodent microsurgeries:** Thoracic spinal cord crush, Intra-cortical injury, Stereotaxic injections, Anterograde and Retrograde tracing
- **Single-cell and epigenomic assays:** snRNA-seq, snATAC-seq, Cut&Run sequencing, Hi- C chromatin conformation capture
- **Molecular biology techniques:** PCR, molecular cloning, DNA/RNA/cDNA isolation, immunohistochemistry (IHC), flow cytometry, mammalian cell culture
- **Bioinformatics:** Data analysis for snRNA-seq, snATAC-seq, Cut&Run, and Hi-C using R and Python
- **Advanced microscopy:** Confocal (Zeiss/Nikon), Apotome (Zeiss)
- **Surgical & histological equipment operations:** Stereotaxic frame, Vibratome (Leica), Cryotome
- **Sequencing library platforms:** 10x Genomics Chromium Controller, Illumina-based library preparation workflows
- **Software and Tools**
- R, Python, ArchR, Seurat, Cell Ranger, GraphPad Prism, ImageJ/Fiji
- UCSC Genome Browser, IGV, FastQC, and basic Bash scripting
- **Organisational & Transferable Skills**
- SOP development and protocol optimisation
- Mentoring and training of students and interns in both wet lab and analytical methods
- Science communication and outreach: Contributor to CCMB’s SciTales; organiser and volunteer for Open Day (2023, 2024) and One Week One Lab (OWOL)
- Data interpretation, presentation, and stakeholder communication

SCIENCE COMMUNICATION AND OUTREACH

Authored two science communication articles on neuroscience for CCMB's SciTales platform:

- **"A Trail of Neurons: Finding New Connections for the Brain to Adapt and Recover"**
 - o Link: <https://scitales.ccmb.res.in/a-trail-of-neurons-finding-new-connections- for-the-brain-to-adapt-and-recover>
- **"Will Neurons Grow Through What They Go Through?"**
 - o Link: <https://scitales.ccmb.res.in/will-neurons-grow-through-what-they-go-through/>

Co-authored along with Research Guide

- **“From Concept to Creation: Lab Members Build Personal Websites”**
 - o Link: <https://scitales.ccmb.res.in/from-concept-to-creation-lab-members-build-personal-websites/>

REFERENCES

Dr Ishwariya Venkatesh Senior scientist CSIR-CCMB, Hyderabad ishwariya.ccmb@csir.res.in Contact: +91- 9789960856	Dr Shringika Soni SERB-nPDF Fellow CSIR-CCMB, Hyderabad shringika.soni90@gmail.com Contact: +91-9592912925	Dr Jisha Jacob Assistant Professor St Joseph’s College, Kozhikode, Kerala jisha13jacob@gmail.com Contact: +91- 9400654539
---	---	---