Curriculum Vitae

Vaibhav Tiwary
Nationality: Indian — Gender: Male
Email: vaibhavtiwary1397@gmail.com
Address: Rostock, Germany
LinkedIn: linkedin.com/in/vaibhavtiwary
ORCID: 0000-0002-5337-5565

—

Research Interests

Epigenetics, aging biology, mitochondria, stress resilience and epigenetic rejuvenation.

—

Education and Training

- Ph.D. in Metabolism and Aging, University of Rostock / Leibniz Institute of Farm Animal Biology (FBN), Dummerstorf, Germany Sept 2021 – Aug 2025
  Website: https://www.uni-rostock.de/en/, FBN Lab Website
- M.Sc. Biotechnology, Vellore Institute of Technology, Vellore, India July 2018 – June 2020
  CGPA: 8.6, Website: https://vit.ac.in/
- B.Sc. Biotechnology (Hons.), St. Xavier's College, Ranchi, India July 2015 – June 2018
  CGPA: 7.92, Website: https://sxcran.ac.in/

—

Work Experience

- **Ph.D. Researcher**, Leibniz Institute of Farm Animal Biology, Germany / University of Rostock Sept 2021 – Aug 2025
  Focus: Characterization of light-activated proton pump in *Drosophila melanogaster* and its implications on aging.
- **Project Trainee**, CSIR–Centre for Cellular and Molecular Biology (CCMB), Hyderabad, India July 2020 – March 2021
  Focus: Transgenerational epigenetic inheritance via male germ line in *Drosophila melanogaster* induced by heat-stress.
- **Intern**, ICMR–National Institute for Cancer Prevention and Research (NICPR), Noida, India May 2019 – June 2019
  Focus: Screening of cervical samples for HPV detection in the context of cervical cancer prevention.

—

Publications

1. Tiwary, V., Trakooljul, N., Peleg, S. (2025). *Reserpine prolongs lifespan but compromises heat-stress resilience in Drosophila melanogaster.* bioRxiv 2025.08.20.671049.
2. Tiwary, V., Galow, A. M., Wojtovich, A. P., Peleg, S. (2023). *Using light to drive energy transduction in metazoan aging.* Trends in Biochemical Sciences.
3. Kumarasamy, C., Tiwary, V., et al. (2021). *Prognostic Utility of Platelet-Lymphocyte Ratio, Neutrophil-Lymphocyte Ratio and Monocyte-Lymphocyte Ratio in Head and Neck Cancers: A PRISMA Systematic Review and Meta-Analysis.* Cancers, 13(16), 4166.
4. Kharat, P., Sarkar, P., Mouliganesh, S., Tiwary, V., et al. (2020). *Ellagic acid prolongs the lifespan of Drosophila melanogaster.* GeroScience, 42(1), 271–285.
5. Tiwary, V., Sarkar, P., & Thirumurugan, K. (2020). *Naringenin and ellagic acid reduce tetrazolium salt in the absence of cells.* The Natural Products Journal, 10.

—

Conferences and Seminars

- Gordon Research Conference (GRC) - Systems Aging, Barcelona, 02–07 June 2024
  Focus: Systems Modeling, Aging Biomarkers, and Longevity Interventions
  Link
- Gordon Research Seminar (GRS) - Systems Aging, Barcelona, 01–02 June 2024
  Focus: Integrative Omic Methods to Measure Stochastic and Programmed Aspects of Aging
  Link
- 43rd Annual Conference of Environmental Mutagen Society of India (EMSI), VIT, India, 2019
  Poster: Effect of ellagic acid on HeLa & HEK 293 cells
- International Conference on Science, Engineering and Technology (ICSET), VIT, India, 2019
  Presentation: Cytotoxic effect of bioaccessible fractions of phytochemicals on breast cancer cells.
- International Conference on Science, Engineering and Technology (ICSET), VIT, India, 2018
  Poster: Effect of cobalt chloride on development of zebrafish embryos.

—

Projects

- Master Thesis (Dec 2019 – June 2020): Role of Polycomb (PcG) and Trithorax (TrxG) proteins in transgenerational inheritance of epigenetic memory induced by heat-stress. Guide: Dr. Rakesh Mishra, CSIR-CCMB.
- Cytotoxic effect of bioaccessible fraction of combined Piper nigrum, Zingiber officinale, Phyllanthus emblica, Ocimum sanctum against MCF-7 cells. (July – Nov 2019) Guide: Dr. Gothandam K.M., VIT.

- Gene expression in lifespan extension of Drosophila treated with ellagic acid. (Jan – Apr 2019) Guide: Dr. Kavitha Thirumurugan, VIT.
- Effect of Cobalt Chloride on development of ZebraFish embryos. (Aug – Nov 2018) Guide: Dr. Everette Remington N., VIT.
- XRCC1 Arg399Gln polymorphism in Chronic Kidney Disease. (May – June 2017) Guide: Dr. Sabitha Kotra, NTHRYS Lab, Hyderabad.

—

Workshops and Training

- Attended multiple workshops on molecular biology and bioinformatics during M.Sc. at VIT.
- Training in advanced Drosophila genetics and behavior assays during Ph.D.
- Participated in international summer schools on aging and metabolism.

—

Skills

- **Molecular Biology:** PCR, qPCR, Western blotting, DNA/RNA extraction, mRNA data analysis, gene expression analysis.
- **Cell Biology:** Cell culture, viability assays, fluorescence microscopy.
- **Model Systems:** *Drosophila melanogaster*, Zebrafish embryos, mammalian cell lines.
- **Bioinformatics & Data Analysis:** R, GraphPad Prism, statistical analysis, omics data interpretation.
- **Visualization:** BioRender, scientific figure preparation.
- **Imaging & Optogenetics:** Light-activated proton pumps, confocal microscopy.
- **Scientific Writing:** Peer-reviewed publications, grant writing, reviews.
- **Clinical Screening:** Cervical cancer prevention assays, HPV detection methods.

—

Language Skills

- Hindi (Mother tongue)
- English: C2 (Listening, Reading, Speaking, Writing)
- German: A1.1 (Beginner)

—

Management and Leadership

- Organizer: 8th International Bio Summit, 2019, VIT, Vellore
- Coordinator: 43rd Annual EMSI Conference, 2019, VIT, Vellore
- Coordinator: 7th International Bio Summit, 2018, VIT, Vellore

—

References

Available upon request.