

PROFILE



Name : Dr. Simi.S
Designation : Assistant Professor and HOD
Department : Zoology
Email : simscanary@gmail.com,
Mobile : 9947138263
Educational Qualifications : M.Sc, M.Phil, B.Ed, Ph.D.
Area of Interest : Physiology, Endocrinology, Immunology,
Molecular Biology, Biochemistry, Genetics,
Evolution, Ecology, Integrative Biology,
Developmental Biology
Field of Research : Stress Physiology, Endocrinology, Immunology
Experience : 4.9 years
Subjects Handled : Genetics, Endocrinology, Physiology,
Reproductive Biology, Immunology, Biostatistics, Fisheries

Major Research Project Handled:

Name of the project	Role	Funding Agency	Scheme	Amount sanctioned	Status
ANALYSIS OF IMMUNE-ENDOCRINE INTERACTION IN SPLENOCYTES OF STRESSED MICE - ROLE OF ADAPTIVE AND INNATE COMPONENTS	Principal Investigator	DST-SERB	POWER-Level II	Rs. 28,87,940/- only	Completed

Research Experience

[Engaged in Research Projects funded by Govt. of India since 2013]

1. Identification and functional analysis of acid-base regulators during stress response in fish funded by **DST, New Delhi**, for INR 35.50lakhs (2013-2016).
2. Age related physiological response of mice to acute restraint stress, **Higher Education Department, Govt. of Kerala**.

3. Integrative Neuro-Immunology: Interaction of immune and stress responses in fish and mice. **iCEIB Project, University of Kerala**, for INR 232.30 lakhs (2013-2018).
4. Iron Translational Project, **KSCSTE, Govt. of Kerala**, for INR 8.40 lakhs (2015).
5. Ion signaling in mice during stress response. **Innovative Project by iCEIB, University of Kerala**, for INR 340.00 lakhs.

Recognition and Awards received

- Recipient of best oral presentation award, Post Satellite symposium on Integrative Stress/Ease Physiology and Endocrinology (STRESS 2017), Dec 4-5.
- Recipient of UGC-BSR-RFMS Fellow, UGC-New Delhi (2013-2015).
- Recipient of UGC-SAP-DRS-II Fellow, UGC-New Delhi (2015-2018).
- Recipient of University Merit Scholarship, University of Kerala (2003-2008).
- 2nd prize winner of Inter Collegiate Zoology Quiz Competition, Dr. K.S. Padmanabha Iyer Memorial 35th Inter Collegiate Zoology Quiz, 2008.

Professional Affiliations

- Member, Society for Evolutionary and Integrative Biology (SEIB), University of Kerala.
- Member, International Association of Stress Physiology (IASP), University of Kerala.
- Member, Indian Society for Comparative Endocrinology (ISCE), Banaras Hindu University (BHU).
- Trained and involved in innovative project of Inter University Centre for Evolutionary and Integrative Biology (iCEIB) funded by Higher Education Department, Govt. of Kerala.

Administrative responsibilities undertaken

Sl.No	Type of Responsibility/Duty	Role Performed
1	DST-SERB-POWER Project	Principal Investigator
2	DBT-STAR Scheme	Department Co-ordinator
3	IQAC	Working Member
4	Audit Course	Co-ordinator
5	Research and Publications Committee	Department Co-ordinator
6	Research and Development Committee	Member
7	Purchase Committee	Member
8	Fine Arts Club	Member

Academic Responsibilities Undertaken

Sl.No	Type of Responsibility/Duty	Role Performed
01	Evaluation of University B.Sc and M.Sc Examinations	Additional Examiner
02	University B.Sc and M.Sc Practical and Viva Voce Examinations	External Examiner
03	University B.Sc and M.Sc Examinations	Invigilator
04	Public Service Commission Examinations	Assistant Superintendent

Organized seminars/ conferences/ workshops, other college/university activities

Sl.No	Type of Responsibility/Duty	Role Performed
1.	Workshop on Forensic Science	Coordinator
2.	Workshop on Crime File Analysis	Coordinator
3.	Workshop on Ornamental Fish Farming	Co-ordinator
4.	Workshop on Aquascaping	Co-ordinator
5.	Hands on Training in Bee Hive Management and Maintenance	Co-ordinator
6.	Parampara Multidisciplinary Lecture Series	Department Co-ordinator
7.	SciFusion 2025 (National Workshop)	Department Coordinator
8.	Workshop on DBT-STAR Scheme Mentoring	Department Co-ordinator
9.	Build and Behold (I, II and III)- Workshop series	Department Co-ordinator
10.	Aids Awareness Program	Committee Member
11.	Workshop on Exploring Dung Beetle Diversity in Campus	Committee Member
12.	Science Day Celebration	Committee Member

Papers Published :

1. Peter, MCS., Gayathry R., **Simi, S.**, Peter, VSP., (2023). Melatonin integrates multidimensional regulation of Na^+/K^+ -ATPase in ionocytes and promotes stress and ease response in hypoxia-induced air-breathing fish: Lessons from integrative approach. Front Physiol-Aqua Physiol.13.1012729. DOI 10.3389/fphys.2022.1012729.

2. **Simi,S.**, Manish, K., Peter, M. C. S., (2019). Rapid action of triiodothyronine on mitochondrial H^+ , Ca^{2+} and Mg^{2+} -dependent ion transporters in cortex, hippocampus and cerebellum of restraint mice. ***J. Endocrinol. Reprod.* 23.(1), 24-35.**IF: 1.00.
3. Peter, M.C.S., **Simi, S.**, Peter, V.S, (2018). Short-term *in vivo* melatonin activates thyroid axis but deactivates interrenal axis in climbing perch (*Anabas testudineus* Bloch). ***J. Endocrinol. Reprod.* 22(1): 1-10.**IF: 1.00.
4. Peter, M.C.S., **Simi. S.**, (2017). Hypoxia stress modifies Na^+/K^+ -ATPase, H^+/K^+ -ATPase, Na^+/NH_4^+ -ATPase and $nk\alpha 1$ isoform expression in the brain of immune-challenged air-breathing fish. ***J. Exp. N. Sci.* 11, 1-18.** IF:1.35.
5. **Simi,S.**, Peter, V. S., Peter, M. C. S., (2016). Zymosan-induced immune challenge modifies the stress response of hypoxic air-breathing fish (*Anabas testudineus* Bloch): Evidence for reversed patterns of cortisol and thyroid hormone interaction, differential ion transporter functions and non-specific immune response. ***Gen. Comp. Endocrinol.* 251, 94-108.**IF: 2.85.