

Curriculum Vitae

Name: DR. SUTAPA MUKHERJEE*

Designation: Assistant Professor – Stage 3 (Academic Level 12)

Department of Zoology, Siksha Bhavana (Institute of Science),
Visva-Bharati (A Central University), Santiniketan – 731235, India

E-mail: sutapa.mukherjee@visva-bharati.ac.in;

ORCID ID: <https://orcid.org/0000-0002-5304-4598>

VIDWAN Profile: <https://visvabharati.irins.org/profile/154091>

Google Scholar: <http://scholar.google.co.in/citations?user=3HMTSkoAAAAJ&hl=en>



Fields of Specialization under the Subject/Discipline:

Biochemistry & Cellular Signaling; Endocrinology & Metabolism;
Reproductive Physiology; Environmental Toxicology

Position and Employment (starting with the recent):

| Position | Institution | Tenure |
|---|---|-----------------|
| Assistant Professor (Stage-3) / Level 12 | Visva-Bharati (A Central University) Santiniketan - 731235, West Bengal | 2020-Continuing |
| Assistant Professor (Stage-2) | Visva-Bharati (A Central University) Santiniketan - 731235, West Bengal | 2015-2020 |
| Assistant Professor (Stage-1) | Visva-Bharati (A Central University) Santiniketan - 731235, West Bengal | 2012-2015 |
| Research Associate (ICMR, Govt. of India) | West Bengal University of Technology, Kolkata (now Maulana Abul Kalam Azad University of Technology) | 2011-2012 |
| Research Associate (CSIR, Govt. of India) | West Bengal University of Technology, Kolkata (now Maulana Abul Kalam Azad University of Technology) | 2010-2011 |

Education:

| Examination | Name of the Board/University | Division/Class | Subjects |
|---------------|-------------------------------|--|---|
| AISSE | C.B.S.E. | First Division | English, Hindi, Mathematics, Science & Social Science |
| AISSCE | C.B.S.E. | First Division | English, Physics, Chemistry, Mathematics & Biology |
| B.Sc. (Hons.) | Utkal University, Bhubaneswar | First Class with Distinction | Zoology (Honours), Chemistry & Botany |
| M.Sc. | Utkal University, Bhubaneswar | First Class | Zoology (Special Paper: Biochemistry) |
| M.Phil. | Utkal University, Bhubaneswar | First Class | Zoology (Dissertation: Biochemistry) |
| Ph.D. | Utkal University, Bhubaneswar | Awarded for thesis entitled “Modulation of hepatic antioxidant defense system in adult rats by 3, 5, 3'-triiodo-L-thyronine” | |

Qualified CSIR-UGC NET in Life Sciences and awarded CSIR Junior Research Fellowship & Eligibility for Lectureship

* I, earlier known as SUTAPA CHATTOPADHYAY, have become SUTAPA MUKHERJEE vide Affidavit dated 15 Feb. 2010 from Notary Public, Kolkata.

Research Interests:

A Brief Overview of My Research Work at Visva-Bharati:

- **Exploring the molecular mechanisms involved in the pathogenesis of insulin resistance and type 2 diabetes, and its amelioration**
 - ❖ I have worked in a joint collaboration investigating the role of fetuin-A in adipose tissue inflammation [*Journal of Biological Chemistry (ASBMB)* 2013 & *Cellular Signalling (ELSEVIER)* 2018] and improving insulin sensitivity with administration of a small molecule insulin-mimetic [*Biochemical and Biophysical Research Communications (ELSEVIER)* 2018].
 - ❖ In recent past, my laboratory has focused on adipose tissue inflammation in obese diabetic mice [*Biochemical Journal (PORTLAND PRESS)* 2021 & *Bioscience Reports (PORTLAND PRESS)* 2023].
 - ❖ We are fascinated by complex signaling cross-talk between key insulin target tissues [*Biochimica et Biophysica Acta-Molecular Basis of Disease (ELSEVIER)* 2021 & *Journal of the Indian Institute of Science (SPRINGER NATURE)* 2023].
 - ❖ The causes inherent in male infertility associated with obesity-induced insulin resistance and type 2 diabetes are investigated [*Journal of Cellular Physiology (WILEY)* 2018].
 - ❖ Amelioration of the pathological changes observed in animal models of insulin resistance and type 2 diabetes is being actively pursued.
- **Evaluating the adverse effects, in particular, metabolic and reproductive toxicity from exposure to endocrine disrupting compounds, plasticizers**
 - ❖ We are deeply concerned about the toxicity of certain ubiquitous environmental chemicals viz. plasticizers etc. exposure to which has become unavoidable.
 - ❖ My laboratory has carried out in-depth molecular analyses of male reproductive toxicity after long-term exposure to phthalate ester [*Chemosphere (ELSEVIER)* 2019].
 - ❖ My team has studied metabolic toxicity of these compounds, examining how long-term exposure to such toxicants even at very low concentrations can potentially lead to the development of insulin resistance and type 2 diabetes [*Human & Experimental Toxicology (SAGE)* 2020 & *Journal of Biochemical and Molecular Toxicology (WILEY)* 2023].

Awards of Fellowships/Grants for Research:

| Sl. No. | Details of Honors/Awards | Year |
|---------|--|-----------|
| 6 | Early Career Research Award Science and Engineering Research Board (SERB), Govt. of India | 2018-2022 |
| 5 | UGC-FRPS Start-Up Grant for New Faculty University Grants Commission (UGC), Govt. of India | 2014-2016 |
| 4 | Research Associateship (RA-ICMR) Indian Council of Medical Research (ICMR), Govt. of India | 2011-2012 |
| 3 | Research Associateship (RA-CSIR-SCHEME) Council of Scientific & Industrial Research (CSIR), Govt. of India | 2010-2011 |
| 2 | Senior Research Fellowship (SRF-NET) Council of Scientific & Industrial Research (CSIR), Govt. of India | 2003-2006 |
| 1 | Junior Research Fellowship (JRF-NET) Council of Scientific & Industrial Research (CSIR), Govt. of India | 2001-2003 |

Teaching Activities at Visva-Bharati: [Undergraduate, Post-Graduate & Ph.D. Course Work]

- ❖ B.Sc. (Hons.) in Zoology and Four-Year Undergraduate (NEP) syllabus Odd and Even Semesters: Biochemistry, Metabolism, Cell Biology, and Molecular Biology
- ❖ M.Sc. in Zoology Odd Semester: Biochemistry, Metabolism Cell Biology and Molecular Biology
- ❖ M.Sc. in Zoology Even Semester: Special Elective Paper - Molecular Cell Biology and Genetics
- ❖ M.Sc. in Zoology Semester-IV Dissertations: Supervising every year on an average ~3 students
- ❖ Ph.D. Course Work in Zoology: units in Research Methodology and Advanced Zoology
- ❖ Ph.D. Course Work in Zoology Review of Literature: Supervising as required depending on the intake
- ❖ Five-Year Integrated M.Sc. at the Integrated Science Education & Research Centre (ISERC), Visva-Bharati: I have been extending voluntary cooperation regularly since joining Visva-Bharati in teaching specific units in Cell Biology, Biochemistry & Endocrinology in the Odd and Even Semester Programs at ISERC as a Guest Teacher in Life Sciences.

Research Supervision:

- **Ph.D. Awarded – 04; Current Ph.D. students – 04**
- **M.Sc. Dissertations guided – 21**
- **Ph.D. Course Work Reviews guided – 08**

Doctoral Theses Guided:

| Sl. No. | Details |
|---------|--|
| 1 | "Testicular impairment and oxidative status of adipose tissue in relation to insulin resistance: Amelioration through olive oil based diet", Songita Ghosh, Visva-Bharati (13/12/2019) |
| 2 | "Involvement of diethyl phthalate in insulin resistance, type 2 diabetes and reproductive impairment in male mice", Shirsha Mondal, Visva-Bharati (11/01/2021) |
| 3 | "Lipid induced impairment of energy homeostasis in mice skeletal muscle and adipose tissue during insulin resistance", Snehasis Das, Visva-Bharati (18/02/2022) |
| 4 | "Fetuin-A induced adipose tissue inflammation and macrophage recruitment in obese insulin resistant mice, and its amelioration", Dipanjan Chattopadhyay, Visva-Bharati (29/09/2022) |

Details of Ph.D. Students:

| Sl. No. | Names of the Ph.D. Students | Status | Placement |
|---------|---|-------------------------|---|
| 1 | Songita Ghosh (National Fellow – JRF & SRF) | Ph.D. Awarded (2019) | D.S. Kothari Post-Doctoral Fellow University of Calcutta, Kolkata, India |
| 2 | Shirsha Mondal (UGC-NET-JRF & SRF) | Ph.D. Awarded (2021) | Assistant Professor, Govt. College Dhimarkheda (Rani Durgavati Vishwavidyalaya), Madhya Pradesh, India |
| 3 | Snehasis Das (UGC-NET-JRF & SRF) | Ph.D. Awarded (2022) | Post Doctoral Fellow Harold Hamm Diabetes Research Centre, University of Oklahoma, U.S.A. |
| 4 | Dipanjana Chattopadhyay (Project JRF & SRF) | Ph.D. Awarded (2022) | Research Manager – In vitro Biology Sun Pharma Advance Research Centre, Vadodara, Gujarat, India; Presently Post Doctoral Fellow University of Oklahoma, U.S.A. |
| 5 | Soumyadeep Basu (Fellow in DST sponsored Project) | Working | --- |
| 6 | Suktara Guria (CSIR-NET-JRF & SRF) | Working | --- |
| 7 | Anupama Hoory (RGNJRF & RGNSRF) | Working | --- |
| 8 | Partha Chakrobarty (UGC NET-JRF) | Working | --- |

Awards won by my Ph.D. students for doctoral research work under my supervision :

- ❖ Shirsha Mondal recognized for prestigious **Prof. S.S. Guraya Young Scientist Award - 2024** by the Indian Society for the Study of Reproduction and Fertility for research contributions of her Ph.D. thesis.
- ❖ Shirsha Mondal awarded **Best Poster Presentation Award** in the “*International Conference on Reproductive Healthcare (ISSRF-2022)*” organized by the Indian Society for the Study of Reproduction and Fertility through online mode during February, 11-13, 2022.
- ❖ Soumyadeep Basu awarded **Best Paper Presentation Award** in the *National Seminar on “Overcoming the Challenges: Role of Science & Technology” on the occasion of the 2nd Odisha Bigyan ‘O’ Paribesh Congress* organized jointly by the Odisha Environmental Society, Bhubaneswar and Ravenshaw University, Cuttack, Odisha in hybrid mode during November 20-21, 2021.
- ❖ Shirsha Mondal awarded **Prof. Hiralal Chaudhury Medal for Excellence in Innovative Research Award (Post-Doctoral Level)** in the “*National Seminar on Advancement of Biology in the 21st Century*” organized by the Department of Zoology, Visva-Bharati in collaboration with The Zoological Society, Kolkata during February 28-29, 2020.
- ❖ Shirsha Mondal awarded **Best Poster Award** in the “*19th All India Congress of Genetics and Genomics and International Special Symposium on “Air Pollution and Its Impact on Human Health”*” jointly organized by the CSIR-Indian Institute of Chemical Biology, Kolkata and Archana Sharma Foundation of Calcutta during December 2-4, 2019.

Research Publications in National & International Peer-Reviewed Journals:

Maximum Impact Factor: 8.1

| | All | Since 2020 |
|------------------|-----|------------|
| Citations | 652 | 356 |
| h-index | 15 | 11 |
| i10-index | 15 | 12 |

(Source: Google Scholar as on 16 January, 2025)

List of Published Papers (Starting with the recent):

| | Article Details | Journal Details | Year |
|---|--|---|-------------|
| * | <p>Title: 'Diethyl phthalate, a plasticizer, induces adipocyte inflammation and apoptosis in mice after long-term dietary administration'</p> <p>Vol. 38; Issue 1; e23561</p> <p>Authors: Mondal, S., Basu, S., Ghosh, S., Guria, S., & Mukherjee, S.</p> <p>https://doi.org/10.1002/jbt.23561</p> | <p>Journal of Biochemical and Molecular Toxicology (WILEY)</p> <p>Print ISSN: 1095-6670; EISSN: 1099-0461; Impact Factor (Clarivate Analytics, 2024): 3.2</p> | 2023 |
| * | <p>Title: 'Inflammatory overtones of organokines in metabolic syndrome and type 2 diabetes'</p> <p>Vol. 103; Issue 1; pp. 103–121 [Invited Article]</p> <p>Authors: Guria, S., Basu, S., Hoory, A., Mukherjee, S. & Mukhopadhyay, S.</p> <p>https://doi.org/10.1007/s41745-023-00391-8</p> | <p>Journal of the Indian Institute of Science (SPRINGER NATURE)</p> <p>Print ISSN: 0970-4140; EISSN: 0019-4964; 5-year Impact Factor (Clarivate Analytics, 2024): 2.3</p> | 2023 |
| * | <p>Title: 'Adipose tissue macrophages and their role in obesity-associated insulin resistance: an overview of the complex dynamics at play'</p> <p>Vol. 43; Issue 3; BSR20220200; pp.1-19 [Invited Article]</p> <p>Authors: Guria, S., Hoory, A., Das, S., Chattopadhyay, D., & Mukherjee, S.</p> <p>https://doi.org/10.1042/BSR20220200</p> | <p>Bioscience Reports (PORTLAND PRESS)</p> <p>Print ISSN: 0144-8463; EISSN: 1573-4935; Impact Factor (Clarivate Analytics, 2024): 3.8</p> | 2023 |
| * | <p>Title: 'Fetuin-A regulates adipose tissue macrophage content and activation in insulin resistant mice through MCP-1 and iNOS: involvement of IFNγ-JAK2-STAT1 pathway'</p> <p>Vol. 478; Issue 22; pp. 4027-4043</p> <p>Authors: Chattopadhyay, D., Das, S., Guria, S., Basu, S., & Mukherjee, S.</p> <p>https://doi.org/10.1042/BCJ20210442</p> | <p>Biochemical Journal (PORTLAND PRESS)</p> <p>Print ISSN: 0264-6021; EISSN: 1470-8728; Impact Factor (Clarivate Analytics, 2024): 4.4</p> | 2021 |
| * | <p>Title: 'Male fertility concerns during COVID-19 pandemic'</p> <p>Vol. 2; Supplement 1; pp. 55-58 (Invited Article for a Special Issue on COVID-19 & ART)</p> <p>Authors: Mukherjee, S.</p> <p>https://dx.doi.org/10.25259/JRHM_52_2_020</p> | <p>Journal of Reproductive Healthcare and Medicine (Scientific Scholar on behalf of the Indian Society for the Study of Reproduction and Fertility)</p> <p>Print ISSN: 2768-1106; Online ISSN: 2768-1114</p> | 2021 |

Contd.

| | Article Details | Journal Details | Year |
|---|---|---|-------|
| * | <p>Title: 'Increase in PPARγ inhibitory phosphorylation by Fetuin-A through the activation of Ras-MEK-ERK pathway causes insulin resistance'</p> <p>Vol. 1867; Issue 4; pp.166050-166063</p> <p>Authors: Das, S., Chattopadhyay, D., Chatterjee, S. K., Mondal, S. A., Majumdar, S. S., Mukhopadhyay, S., Saha, N., Velayutham, R., Bhattacharya, S., & Mukherjee, S.</p> <p>https://doi.org/10.1016/j.bbadis.2020.166050</p> | <p>Biochim Biophys Acta – Molecular Basis of Disease (ELSEVIER)</p> <p>Print ISSN: 0925-4439; EISSN: 1879-260X; Impact Factor (Clarivate Analytics, 2024): 4.2</p> | 2021 |
| * | <p>Title: 'Long-term dietary administration of diethyl phthalate triggers loss of insulin sensitivity in two key insulin target tissues of mice'</p> <p>Vol. 39; Issue 7; pp. 984-993</p> <p>Authors: Mondal, S., & Mukherjee, S.</p> <p>https://doi.org/10.0960327120909526</p> | <p>Human and Experimental Toxicology (SAGE JOURNALS)</p> <p>Print ISSN: 0960-3271; EISSN:1477-0903 Impact Factor (Clarivate Analytics, 2024): 2.7</p> | 2020 |
| * | <p>Title: 'Chronic dietary administration of lower levels of diethyl phthalate induces murine testicular germ cell inflammation and sperm pathologies: Involvement of oxidative stress'</p> <p>Vol. 229; pp. 443-451</p> <p>Authors: Mondal, S., Ghosh, S., Bhattacharya, S., & Mukherjee, S.</p> <p>https://doi.org/10.1016/j.chemosphere.2019.05.017</p> | <p>Chemosphere (ELSEVIER)</p> <p>Print ISSN: 0045-6535; EISSN:1879-1298; Impact Factor (Clarivate Analytics, 2024): 8.1</p> | 2019 |
| * | <p>Title: 'Testicular germ cell apoptosis and sperm defects in mice upon long-term high fat diet feeding'</p> <p>Vol. 233; Issue 10; pp. 6896-6909</p> <p>Authors: Ghosh, S., & Mukherjee, S.</p> <p>https://doi.org/10.1002/jcp.26581</p> | <p>Journal of Cellular Physiology (WILEY)</p> <p>Print ISSN: 0021-9541; EISSN: 1097-4652; Impact Factor (Clarivate Analytics, 2024): 4.5</p> | 2018 |
| * | <p>Title: 'Attenuation of macrophage accumulation and polarisation in obese diabetic mice by a small molecule significantly improved insulin sensitivity'</p> <p>Vol. 233; Issue 10; pp. 6896-6909</p> <p>Authors: Mukherjee, S., Das, S., Chattopadhyay, D., Sarkar, S., Chatterjee, S. K., Talukdar, D., Mukherjee, S., Majumdar, S. S., Mukhopadhyay, S., Chaudhuri, M. K., & Bhattacharya, S.</p> <p>https://doi.org/10.1016/j.bbrc.2018.05.068</p> | <p>Biochemical and Biophysical Research Communications (ELSEVIER)</p> <p>Print ISSN: 0006-291X; EISSN:1090-2104; Impact Factor (Clarivate Analytics, 2024): 2.5</p> | 2018 |
| | | | Contd |

| | Article Details | Journal Details | Year |
|---|--|--|-------------|
| * | <p>Title: 'Impairment of energy sensors, SIRT1 and AMPK, in lipid induced inflamed adipocyte is regulated by fetuin-A'</p> <p>Vol. 42; pp. 67-76</p> <p>Authors: Chattopadhyay, M., Mukherjee, S., Chatterjee, S. K., Chattopadhyay, D., Das, S., Majumdar, S. S., Mukhopadhyay, S., Mukherjee, S., & Bhattacharya, S.</p> <p>https://doi.org/10.1016/j.cellsig.2017.10.005</p> | <p>Cellular Signalling (ELSEVIER)</p> <p>Print ISSN: 0898-6568; EISSN:1873-3913; Impact Factor (Clarivate Analytics, 2024): 4.4</p> | 2018 |
| * | <p>Title: 'Supplementation of T₃ recovers hypothyroid rat liver cells from oxidatively damaged inner mitochondrial membrane leading to apoptosis'</p> <p>Vol. 2014; Article ID 590897; 12 pages</p> <p>Authors: Mukherjee, S., Samanta, L., Roy, A., Bhanja, S., & Chainy, G. B. N.</p> <p>http://dx.doi.org/10.1155/2014/590897</p> | <p>BioMed Research International (WILEY)</p> <p>Print ISSN: 2314-6133; Online ISSN: 2314-6141; Impact Factor (Clarivate Analytics, 2024): 2.6</p> | 2014 |
| * | <p>Title: 'Adipocyte fetuin-A contributes to macrophage migration into adipose tissue and polarization of macrophages'</p> <p>Vol. 288; Issue 39; pp. 28324-28330</p> <p>Authors: Chatterjee, P., Seal, S., Mukherjee, S., Kundu, R., Mukherjee, S., Ray, S., Mukhopadhyay, S., Majumdar, S. S., & Bhattacharya, S.</p> <p>https://doi.org/10.1074/jbc.C113.495473</p> | <p>Journal of Biological Chemistry (ASBMB)</p> <p>Print ISSN 0021-9258; Online ISSN 1083-351X; Impact Factor (Clarivate Analytics, 2024): 4.0</p> | 2013 |
| * | <p>Title: 'The multiple faces of calcineurin signaling in <i>Caenorhabditis elegans</i>: Development, behaviour and aging'</p> <p>Vol. 38; Issue 2; pp. 417-431</p> <p>Authors: Lee, J. I.,* Mukherjee, S.,* Yoon, K., Dwivedi, M., & Bandyopadhyay, J. (*Authors with equal contribution)</p> <p>https://doi.org/10.1007/s12038-013-9319-6</p> | <p>Journal of Biosciences (SPRINGER NATURE with Indian Academy of Sciences, Bangalore)</p> <p>Print ISSN: 0250-5991; EISSN:0973-7138; Impact Factor (Clarivate Analytics, 2024): 2.1</p> | 2013 |
| * | <p>Title: 'T₃ fails to restore mitochondrial thiol redox status altered by experimental hypothyroidism in rat testis'</p> <p>Vol. 169; Issue 1; pp. 39-47</p> <p>Authors: Chattopadhyay, S., Choudhury, S., Roy, A., Chainy, G. B. N. & Samanta, L.</p> <p>https://doi.org/10.1016/j.ygcen.2010.07.014</p> | <p>General and Comparative Endocrinology (ELSEVIER)</p> <p>ISSN 0016-6480; Impact Factor (Clarivate Analytics, 2024): 2.1</p> | 2010 |
| | | | Contd. |

| | Article Details | Journal Details | Year |
|---|---|---|-------------|
| * | <p>Title: 'Thiol redox status critically influences mitochondrial response to thyroid hormone-induced hepatic oxidative injury: A temporal analysis' Vol. 28; Issue 2; pp. 126-134</p> <p>Authors: <u>Chattopadhyay, S.</u>, Sahoo, D. K., Roy, A., Samanta, L., & Chainy, G.B.N. https://doi.org/10.1002/cbf.1631</p> | <p>Cell Biochemistry and Function (WILEY) Print ISSN: 0263-6484, eISSN: 1099-0844; Impact Factor (Clarivate Analytics, 2024): 2.8</p> | 2010 |
| * | <p>Title: 'Differential expression profiles of antioxidant enzymes and glutathione redox status in hyperthyroid rats: A temporal analysis' Vol. 146; Issue 3; pp. 383-391</p> <p>Authors: <u>Chattopadhyay, S.</u>, Sahoo, D. K., Subudhi, U., & Chainy, G. B. N. https://doi.org/10.1016/j.cbpc.2007.04.010</p> | <p>Comparative Biochemistry and Physiology. Part C: Toxicology and Pharmacology (ELSEVIER) Print ISSN: 1532-0456; eISSN:1878-1659; Impact Factor (Clarivate Analytics, 2024): 3.9</p> | 2007 |
| * | <p>Title: 'Effect of T_3 treatment on glutathione redox pool and its metabolizing enzymes in mitochondrial and post-mitochondrial fractions of adult rat testes' Vol. 45; Issue 4; pp. 338-346</p> <p>Authors: Sahoo, D. K., Roy, A., <u>Chattopadhyay, S.</u>, & Chainy, G. B. N.</p> | <p>Indian Journal of Experimental Biology (CSIR-NIScPR) Print ISSN 0019-5189; Online ISSN 0975-1009; Impact Factor (Clarivate Analytics, 2024): 0.7</p> | 2007 |
| * | <p>Title: 'Effects of hypothyroidism induced by 6-n-propylthiouracil and its reversal by T_3 on rat heart superoxide dismutase, catalase and lipid peroxidation' Vol. 41; Issue 8; pp. 846-849</p> <p>Authors: <u>Chattopadhyay, S.</u>, Zaidi, G., Das, K., & Chainy, G. B. N.</p> | <p>Indian Journal of Experimental Biology (CSIR-NIScPR) Print ISSN 0019-5189; Online ISSN 0975-1009; Impact Factor (Clarivate Analytics, 2024): 0.7</p> | 2003 |

Book Chapters & Invited Contributions in Edited Volumes:

| | Chapter/Article Details | Book/Edited Volume Details | Year |
|---|--|--|---------------------------|
| * | <p>Title: 'Obesity-mediated insulin resistance in target tissues: role of adiponectin, fetuin-A, and irisin' Chapter 43; pp. 511-525</p> <p>Authors: <u>Mukherjee, S.</u>, Das, S., Chattopadhyay, D. & Mukhopadhyay, S.</p> | <p>Metabolic Syndrome From Mechanisms to Interventions (Prof. S. Mukhopadhyay and Dr. S. Mondal, eds.), Academic Press. ELSEVIER, ISBN: 978-0-323-85732-1</p> | 2023 |
| * | <p>Title: 'Reproductive toxicity of phthalates: An inflammatory perspective' Issue 32, September 2023, pp. 23-25</p> <p>Authors: Chakrobarty, P., & <u>Mukherjee, S.</u></p> | <p><i>Immunology and Reproduction: An Interlinking Paradigm</i> – ISSRF Newsletter, A Publication of the Indian Society for the Study of Reproduction and Fertility (Prof. N.K. Lohiya and Dr. A. Jerome, eds.), ISSN: 2395-2806</p> | 2023 Contd. |

| | Chapter/Article Details | Book/Edited Volume Details | Year |
|---|--|--|-------------|
| * | Title: 'Proteomics approaches in assisted reproduction: An overview' Issue 32, September 2023, pp. 23-25 Authors: Basu, S., Das, P., & <u>Mukherjee, S.</u> | <i>OMICS in Reproductive Health Research</i> – ISSRF Newsletter, A Publication of the Indian Society for the Study of Reproduction and Fertility (Prof. N.K. Lohiya and Dr. A. Jerome, eds.), ISSN: 2395-2806 | 2021 |
| * | Title: 'Male factor infertility and phthalate esters' Issue 24, September 2019, pp. 98-100 Authors: Mondal, S., & <u>Mukherjee, S.</u> | <i>Translational Research in Reproductive Health</i> – ISSRF Newsletter A Publication of the Indian Society for the Study of Reproduction and Fertility (Prof. N.K. Lohiya and Dr. R.K. Srivastava, eds.), ISSN: 2395-2806 | 2019 |
| * | Title: 'The link between obesity and male reproductive impairment' Issue 23, February 2019, pp.109-111 Authors: Ghosh, S., & <u>Mukherjee, S.</u> | <i>Empowering Reproductive Health through Basic Research</i> – ISSRF Newsletter, A Publication of the Indian Society for the Study of Reproduction and Fertility (Prof. N.K. Lohiya, Prof. S.K. Chaube and Dr. M. Tiwari, eds.), ISSN: 2395-2806 | 2019 |
| * | Title: 'Mobile phones and Wi-Fi: Looming Threat to Male Reproductive Health' Issue 18, February 2016, pp. 73-76 Authors: <u>Mukherjee, S.</u> | <i>Environmental Impacts on Reproductive Health</i> – ISSRF Newsletter, A Publication of the Indian Society for the Study of Reproduction and Fertility (Prof. N.K. Lohiya, Dr. P.K. Mishra, Dr. R.S. Sharma and Dr. S. Kumar, eds.), ISSN: 2395-2806 | 2016 |

Research Projects:

| Sl. No. | Role of Self | Name of the Project | Sanctioning Authority | Duration & Status |
|---------|-----------------------------|---|---|---------------------|
| 1 | Principal Investigator (PI) | 'To study lipid induced changes in adipocyte antioxidant response and the role of NADPH oxidase in obesity mediated insulin resistance' | University Grants Commission (UGC), Govt. of India | 2014-2016 Completed |
| 2 | Principal Investigator (PI) | 'To investigate whether lipid induced fetuin-A from adipocytes could link insulin resistance and immunity' | Science & Engineering Research Board (SERB), Govt. of India | 2014-2018 Completed |
| 3 | Principal Investigator (PI) | 'To elucidate the mechanisms regulating testicular germ cell apoptosis in high fat diet induced obesity leading to insulin resistance' | Science & Engineering Research Board (SERB), Govt. of India | 2018-2022 Completed |

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|---|--------------------------------|--|---|---------------------|
| 4 | Co-Investigator (Co-PI) | 'Assessment of endocrine disruption in fish reproduction' [A Multi-Institutional Project with Visva-Bharati as Lead Centre in collaboration with ICAR-CIFRI, Kolkata and ICAR-CIFA, Odisha] | Department of Biotechnology (DBT), Govt. of India | 2019-2022 Completed |
|---|--------------------------------|--|---|---------------------|

Invited Lectures in National/International Seminars/Conferences:

- ❖ **November 22-23, 2024:** *7th International Symposium on Minor Fruits, Medicinal & Aromatic Plants* organized by the Institute of Agriculture (Palli Siksha Bhavana), Visva-Bharati, India.
- ❖ **November 15-17, 2024:** *International Conference on Reproductive Sciences and Molecular Medicine: Innovations in Therapeutics and Technologies" (ICRSMM-2024)* at Miranda House, University of Delhi (North Campus), Delhi, India.
- ❖ **February 05-07, 2024:** *International Conference on Environmental Toxicogenomics: Ecosystem Health and Sustainability - Challenges and Way Forward* at Dr. Triguna Sen Auditorium, Jadavpur University, Kolkata, India.
- ❖ **September 14-17, 2023:** *International Conference on Molecular Medicine, Reproduction and Endocrinology (ICMMRE-23)* at the School of Science, Navrachana University, Vadodara, Gujarat, India.
- ❖ **March 07-08, 2022:** *2nd World Congress on Diabetes and Endocrinology (WCDE'2022)* organized by the Genvio Conferences, Genvio Group, Honolulu, Hawaii, U.S. through online mode.
- ❖ **February 28-29, 2020:** *National Seminar on Advancement of Biology in the 21st Century* organized by the Department of Zoology, Visva-Bharati, Santiniketan in collaboration with The Zoological Society, Kolkata, India.
- ❖ **March 23-24, 2019:** *Two Days' Workshop-cum-National Seminar on Trends in Modern Biology: Techniques and Applications* jointly organized by the Department of Zoology, Visva-Bharati, Santiniketan and the National Institute of Pharmaceutical Education & Research (NIPER), Kolkata, India..
- ❖ **November 08, 2015:** *International Seminar on Current Thoughts in Cell Sciences* organized by the Department of Zoology, University of Calcutta, Kolkata, India.
- ❖ **October 01-03, 2015:** *National Symposium on Comparative Endocrinology and Reproductive Biology (CERB 2015)* organized by the Department of Zoology, Visva-Bharati, Santiniketan, India.
- ❖ **March 27, 2014:** *Science Seminar Lecture Series (2014)* organized by the Adhyaksha, Siksha Bhavana, Visva-Bharati, Santiniketan, India.

Research Paper presentations in National/International Seminars/Conferences:

- ❖ **February 11-13, 2022:** *International Conference on Reproductive Healthcare (ISSRF-2022)* organized by the Indian Society for the Study of Reproduction and Fertility through online mode.
- ❖ **November, 20-21, 2021:** *National Seminar on Overcoming the Challenges: Role of Science & Technology on the occasion of the 22nd Odisha Bigyan 'O' Paribesh Congress* organized jointly by the Odisha Environmental Society, Bhubaneswar and Ravenshaw University, Cuttack, Odisha.
- ❖ **December 2-4, 2019:** *19th All India Congress of Genetics and Genomics & International Special Symposium on Air Pollution and Its Impact on Human Health* jointly hosted by the CSIR-Indian Institute of Chemical Biology (IICB) and Archana Sharma Foundation of Calcutta, India.
- ❖ **February 08-10, 2018:** *6th International Conference on Molecular Signaling (ICMS 2018)* organized jointly by the University of Hyderabad and the National Institute of Animal Biotechnology, Hyderabad, Telangana, India.

- ❖ **February 01-03, 2018:** *International Conference to Celebrate 100 Years of Excellence INTZOOCON 2018* organized by the Department of Zoology, University of Calcutta at the Ramakrishna Mission Institute of Culture, Golpark, Kolkata, West Bengal, India.
- ❖ **December 28-31, 2017:** *11th Global Healthcare Summit-2017* organized by the American Association of Physicians of Indian Origin (AAPI) at the J.W. Marriott, Kolkata, West Bengal, India.
- ❖ **March 30-31, 2017:** *National Symposium on Oxidative Stress in Health and Disease* organized by the Department of Biochemistry and Biophysics, University of Kalyani, Kalyani, West Bengal, India.
- ❖ **February 17-18, 2017:** *National Conference on Advances of Life Sciences & Radiation Biology* organized by the Department of Zoology, University of Burdwan, Burdwan, West Bengal, India.
- ❖ **January 31, 2015:** *National Seminar on Molecular Aspects of Human Diseases* organized by the Department of Zoology, University of Calcutta, Kolkata, West Bengal, India.
- ❖ **November 08-12, 2012:** *81st Annual Meeting of the Society of Biological Chemists (India) and National Symposium on Chemistry and Biology: Two Weapons against Diseases* held at Science City Auditorium Complex, Kolkata West Bengal, India.

Chaired Sessions/Reviewer in National/International level Seminars/Conferences:

- ❖ **December 21-22, 2023:** Reviewer of abstracts for the *6th Regional Science and Technology Congress 2023-24 Region 6* jointly organized by the Department of Science and Technology and Biotechnology, Govt. of West Bengal and University of Calcutta, Kolkata.
- ❖ **March 08, 2024:** Chaired a special scientific session commemorating International Women's Day in the *National Seminar on 'Recent Advances in Animal Science RAASVB-2024'* organized by the Department of Zoology, Visva-Bharati, Santiniketan.

Participation in Workshops/Trainings/Faculty Development Programs:

- ❖ **June 12-17, 2023:** 'Six days Academic/Research Skill Development Programme' organized by the Visva-Bharati Library Network, Visva-Bharati, Santiniketan.
- ❖ **October 17-30, 2022:** 'Refresher Course on Life Sciences' organized by the UGC-HRDC, University of Hyderabad, Hyderabad, Telangana.
- ❖ **July 8-9, 2022:** '48th Annual Conference of Indian Immunology Society Infections, Vaccines and Immuno-Innovations for Human Health' organized by the Department of Molecular and Human Genetics, Banaras Hindu University, Varanasi.
- ❖ **October 03-09, 2020:** Participated in the *7 Days' National e-Workshop on 'Contemporary Methodologies and Tools in Research'* organized by the A K Dasgupta Centre for Planning and Development, Visva-Bharati, Santiniketan.
- ❖ **August 13, 2020:** *National Webinar on 'Freshwater Fish Diversity in India'* organized by the Zoological Survey of India, Hyderabad.
- ❖ **July 31-August 04, 2020:** '3^d National Webinar' organized by the Visva-Bharati Library Network, Visva-Bharati, Santiniketan.
- ❖ **July 10, 2020:** 'NAAC Webinar' organized by the National Assessment and Accreditation Council
- ❖ **June 16-29, 2020:** '2nd National Webinar' organized by the Visva-Bharati Library Network, Visva-Bharati, Santiniketan.
- ❖ **June 23, 2020:** *Online Training on 'Fundamentals of Light Microscopy: Concepts Simplified'* organized by the Zeiss Research Microscopy Solutions, Carl Zeiss India (Bangalore) Pvt. Ltd.
- ❖ **November 04-08, 2019:** *Training Programme on 'New Approaches & Changing Perspectives in Fisheries Biology'* organized by the Central Inland Fisheries Research Institute (ICAR-CIFRI), Barrackpore, Kolkata.
- ❖ **September 14-23, 2019:** *National Workshop on 'Application of "R" in Research & Development'* organized by the A K Dasgupta Centre for Planning and Development, Visva-Bharati, Santiniketan.

- ❖ **April 06-07, 2018:** *1st Brainstorming Session on 'Fish Reproduction Biotechnology: Current Status and Future Prospects'* organized by the Department of Zoology, Visva-Bharati, Santiniketan sponsored by the Department of Biotechnology (DBT), Govt. of India..
- ❖ **November 26, 2014-December 23, 2015:** *'59th Orientation Program'* organized by the UGC-HRDC, Jadavpur University, Kolkata.
- ❖ **June 12-July 02, 2014:** *'Special Summer School 2014 for Science & Technology groups (Thrust area: Biomedical Engineering and Environmental Issues)'* organized by the UGC-Academic Staff College, University of Calcutta, Kolkata.
- ❖ **August 23-24, 2013:** *'Sensitization and Awareness Workshop'* for the National Fund for Basic, Strategic and Frontier Application Research in Agriculture (NFBSFARA) organized by ICAR at the National Institute of Research on Jute and Allied Fibre Technology (NIRJAFT), Kolkata.
- ❖ **October 14-17, 2012:** *'13th Indo-US Workshop on Advanced Flow Cytometric Techniques'* organized by the Centre for Research in Nanoscience and Nanotechnology, University of Calcutta, Kolkata.
- ❖ **February 15-17, 2012:** *'Workshop on Bioinformatics (WBI'12)'* organized by the Centre for Soft Computing Research, Indian Statistical Institute, Kolkata.
- ❖ **December 27-28, 2011:** *'Continued Medical Education (CME)-cum-Workshop on Stem Cell Therapy and Research'* organized by the Netaji Subhash Chandra Bose Cancer Research Institute, Kolkata.
- ❖ **March 15-16, 2011:** *'National Hands-on Workshop on Genomics and Proteomics'* organized by the DBT-BIF Centre, Department of Bioinformatics, West Bengal University of Technology, Kolkata.
- ❖ **February 04-07, 2003:** *'National Workshop on Application of Bioinformatics and Statistics in Aquaculture'* organized by the Central Institute of Freshwater Aquaculture, Bhubaneswar.
- ❖ **November 26, 2002:** *'Continued Medical Education (CME) Programme in Immunology'* organized by the Regional Medical Research Centre, Bhubaneswar and Utkal University, Bhubaneswar.
- ❖ **March 11-18, 2002:** *'National Workshop on DNA Isolation and Amplification for Typing Forensic Markers'* organized by the Central Forensic Science Laboratory, Kolkata.

Participation in Education and Career Counselling Programs:

- ❖ Participated in the **'Professional Development Programme on NEP2020 and Education 4.0'** organized by the National Institute of Educational Planning and Administration, New Delhi from May 06-10, 2024.
- ❖ Participated in the **7 Days' National e-Workshop on 'Planning and Development of Massive Open Online Courses (MOOCs)'** organized by the A K Dasgupta Centre for Planning and Development, Visva-Bharati, Santiniketan from December 10-16, 2020.
- ❖ Participated in the **14 days' 'Introduction to Online Pedagogy Course'** organized by the International Institute of Information Technology (IIIT)-Hyderabad from August 17-30, 2020.
- ❖ Presentation on **'Semester System in Indian Higher Education: Is It Fulfilling Its Purpose?'** in the **National Symposium on Quality Assurance in Higher Education** organized by the UGC-Human Resource Development Centre, Jadavpur University Salt Lake Campus, Kolkata on March 30, 2017.
- ❖ Invited Panelist in a Panel Discussion on **'Sustained Promotional Avenues: Problems and Remedies'** in the **Sensitization Program on Technological Empowerment of Women through the SoRF Scheme of the Department of Science and Technology (DST)** in collaboration with the National Academy of Sciences India (NASI) held at Lipika Auditorium, Visva-Bharati, Santiniketan on May 14, 2014.
This is related to Societal Research Fellowship for Women Scientists having break in career due to family commitments and enabling them to return back to mainstream research. The participants were made aware of the various initiatives undertaken by DST, Govt. of India and motivated to work for projects involving not just only laboratory bench work but social welfare for reviving their research career.

Organizing Seminars/Conferences/Workshops at Visva-Bharati:

- ✓ **07-08 March, 2024: Organizing Secretary** of the *National Seminar on Recent Advances in Animal Science RAASVB-2024* organized by the Department of Zoology, Visva-Bharati, Santiniketan.
- ✓ **25 March, 2022: Member of the Organizing Committee** of *One-Day Webinar on Understanding Genes to Ecosystems Ecology through Modern Research* in honour of the superannuation of Prof. Santanu Ray organized by the Department of Zoology, Visva-Bharati, Santiniketan.
- ✓ **25 February, 2022: Member of the Organizing Committee** of *One-Day Webinar on Parasites: A Way of Life* in honour of the superannuation of Prof. Santi Prasad Sinha Babu organized by the Department of Zoology, Visva-Bharati, Santiniketan.
- ✓ **28-29 February, 2020: Member of the Organizing Committee** of the *National Seminar on Advancement of Biology in the 21st Century* organized by the Department of Zoology, Visva-Bharati, Santiniketan in collaboration with The Zoological Society, Kolkata.
- ✓ **23-24 March, 2019: Joint Secretary** of *Two Days' Workshop-cum-National Seminar on Trends in Modern Biology: Techniques and Applications* organized by the Department of Zoology, Visva-Bharati, Santiniketan and the National Institute of Pharmaceutical Education & Research (NIPER), Kolkata.
- ✓ **06-07 April, 2018: Organizing Secretary** of the *Brainstorming Session on 'Fish Reproduction Biotechnology: Current and Future Prospects'* sponsored by DBT, Govt. of India and organized by the Department of Zoology, Visva-Bharati, Santiniketan.
- ✓ **01-03 October, 2015: Joint Treasurer** of the *National Symposium on Comparative Endocrinology and Reproductive Biology (CERB 2015)* organized by the Department of Zoology, Visva-Bharati, Santiniketan.
- ✓ **24-26 February, 2014: Member of the Organizing Committee** of the *'International Conference on Environmental Biology and Ecological Modelling (ICEBEM-2014)'* in the Department of Zoology, Visva-Bharati, Santiniketan.
- ✓ **18-21 February, 2013: Member of the Organizing Committee** of the *'International Symposium on Molecular Signaling'* in the Department of Zoology, Visva-Bharati, Santiniketan.

Other Activities (administrative, department- and student-related):

- **Nodal Officer, Visva-Bharati of the Centralized Public Grievance Redress and Monitoring System (CPGRAMS)** of the Department of Administrative Reforms & Public Grievances (DARPG) under the Ministry of Personnel, Public Grievances & Pensions, Govt. of India.
- **Member, Departmental Student Grievance Redressal Committee (DSGRC)**, Department of Zoology, Visva-Bharati.
- **Member, Departmental Quality Assurance Cell (DQAC)**, Department of Zoology, Visva-Bharati.
- **Member of Departmental Committee (DC)** of Zoology, Visva-Bharati.
- **Member of Board of Studies (BoS)** in Zoology, Visva-Bharati.
- **Member of Departmental Research Committee (DRC)** of Zoology, Visva-Bharati
- **External Paper-Setter** upon invitation by the Department of Zoology, University of Burdwan, Bardhaman; Department of Molecular Biology & Human Genetics, University of Burdwan, Bardhaman; Department of Animal Science, Kazi Nazrul University, Asansol, West Bengal; Department of Zoology, Ramakrishna Mission Vivekananda Centenary College, Rahara, Kolkata.

Prizes won in Competitions/Recognition:

- ❖ **Best Oral Presentation** on *'Semester System in Indian Higher Education: Is It Fulfilling Its Purpose?'* in the *National Symposium on Quality Assurance in Higher Education* organized by the UGC-HRDC, Jadavpur University Salt Lake Campus, Kolkata on March 30, 2017.
- ❖ **Prof. N.J. Chinoy Prize for Best Oral Presentation** in the XXIII National Symposium on Reproductive Biology & Comparative Endocrinology, 2005.

- ❖ **Second Prize in the Seminar Competition for Research Scholars (Odisha level)** on “50 years of DNA- 25 years of IVF- the Blueprint of Life” organized by the Institute of Life Sciences, Bhubaneswar on 27.02.2003 as part of National Science Day celebration activities.
- ❖ **Third Prize in English Essay competition** during M.Phil.
- ❖ **Second Prize in Quiz competition** during M.Sc. Part II.
- ❖ **First Prize in Debate competition** during M.Sc. Part II..
- ❖ **Satya Narayan Behera Memorial Shield for standing second in Seminar Presentation** during M.Sc. Part I & during M.Sc. Part II at the Department of Zoology, Utkal University, Bhubaneswar.
- ❖ **Second Prize in Science Lecture competition** during M.Sc. Part I organized by the Plant Lover's Association, Bhubaneswar.
- ❖ **First Prize in Debate competition** during M.Sc. Part I.
- ❖ **Seminar Secretary** during B.Sc. at Rama Devi Women's College, Bhubaneswar.
- ❖ **Sixth Rank in the Merit List** of National Scholarship Scheme, Ministry of Human Resource Development, Govt. of India for +3 Final Degree in Zoology (Hons.) examination.
- ❖ **First position in Annual Elocution & Essay competitions** organized by the Central Government Employees Welfare Coordination Committee, Bhubaneswar.
- ❖ **School Captain** during Class XII at Kendriya Vidyalaya No. 1, Bhubaneswar
- ❖ **Prizes in various intra-school competitions throughout schooling** such as recitation, song & dance, storytelling, elocution, calligraphy, essay writing, painting and debate etc. throughout school period at Kendriya Vidyalaya, Farakka & Kendriya Vidyalaya, No. 1 Bhubaneswar.

Editorial Assignments in Scientific Journals:

- ❖ **Guest Editor of Frontiers in Endocrinology journal** (Impact Factor 3.9, Clarivate Analytics 2024) for a Research Topic entitled “Hormonal Imbalance-Associated Oxidative Stress and Protective Benefits of Nutritional Antioxidants” Link: <https://www.frontiersin.org/research-topics/39555/hormonal-imbalance-associated-oxidative-stress-and-protective-benefits-of-nutritional-antioxidants/overview>
- ❖ **Review Editor of Frontiers in Cell and Developmental Biology journal** (Impact Factor 4.6, Clarivate Analytics 2024)
- ❖ **Member of the Editorial Board, Scientific Reports journal**, published by Nature Portfolio (Impact Factor 3.8, Clarivate Analytics 2024)

Membership of Scientific Societies:

Life Member of:

- ❖ Indian Science Congress Association (**ISCA**)
- ❖ Society for Reproductive Biology & Comparative Endocrinology (**SRBCE**)
- ❖ Indian Society for the Study of Reproduction and Fertility (**ISSRF**)
- ❖ Society of Biological Chemists (India) **SBC(I)**

Hobbies:

- ❖ Reading & Writing
- ❖ Singing
- ❖ Cooking
- ❖ Making Artworks
- ❖ Spending quality time with family and friends

I do hereby declare that the information given here is true to the best of my knowledge and belief.

(*Sutapa Mukherjee*)

Place: Santiniketan