Bio-data of Dr. Rakesh Kundu



Name: **Dr. Rakesh Kundu**

Designation: **Assistant Professor**

Department/Institute/University: **Cell Signaling Laboratory**
Department of Zoology
Visva-Bharati (a Central University)
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Date of Birth: **26.09.1978** Sex (M/F): **Male**

Education:

Sl. No.	Institution	Degree Awarded	Year	Subject
1.	The University of Burdwan	B.Sc.	2000	Zoology
2.	Banaras Hindu University	M.Sc.	2003	Zoology (Specialization Biochemistry)
3.	Visva-Bharati	Ph.D.	2009	Liver Biochemistry and Toxicology*

*Ph.D. under Prof. Samir Bhattacharya (FNA, FASc, FNASc, former Director CSIR-IICB, Kolkata), and Prof. Shelley Bhattacharya (FNASc) from the Department of Zoology, Visva-Bharati, Santiniketan.

Area of expertise/interest: ***Diabetes Type 2 | β cell Biology | Insulin signaling***

Positions

- ICMR-DHR International Fellow, visiting scientist, at the Centre for Biomolecular Interactions, University of Bremen, Germany from 05.05.2024 to 04.01.2025
- Vice-Principal, Siksha-Bhavana (Institute of Science), Visva-Bharati from 01.10.2021-28.02.2024
- Assistant Professor, Visva-Bharati since 21.12.2012-till date
- Dr. D.S. Kothari Post-doctoral Fellow at Visva-Bharati from 07.07.2012 to 20.12.2012
- CSIR-Research Associate at Visva-Bharati from 01.04.2011 to 30.06.2012
- Project Assistant level-I, CSIR-North East Institute of Science & Technology, Jorhat, Assam from 09.12.2010 to 31.03.2011
- Assistant Professor (temporary), Guru Ghasidas University, Bilaspur from 10.08.2009 to 30.06.2010
- Junior Research Fellow and Senior Research Fellow at Visva-Bharati, from 01.09.2004 to 09.08.2009
- Junior Research Fellow at Bose Institute, Kolkata from 23.09.2003 to 30.08.2004

Honors/Awards:

- **ICMR-DHR International Fellowship (Long-Term) for Young Biomedical Scientists 2023-24**, Govt. of India for high-end research training in the Centre for Biomolecular Interactions Bremen (CBIB), University of Bremen, Bremen, Germany, 2024
- **SIRE (SERB International Research Experience)** visiting scientist scheme from SERB, Govt. of India, for Visiting the University of Bremen, Germany, 2022 (not availed)
- **INSA Visiting Scientist**, Indian National Science Academy, 2021-22
- **ISE Travel Fellowship Award** from International Society of Endocrinology (ISE) to attend ICE-SEMDSA 2018 conference at Cape Town, South Africa, 2018.
- **Early Career Research Award (ECR Project grant)**, SERB, Govt. of India, 2017
- UGC-BSR Research Start-up-Grant, UGC, Govt. of India,2014
- **Dr. D.S. Kothari Post-doctoral** Fellowship from UGC, 2012
- **CSIR-Research Associate** from CSIR, Govt. of India 2011

- Best poster award in the international symposium of Asia & Oceania Society for Comparative Endocrinology (AOSCE) held in North Bengal University, Siliguri during Dec' 2007.
- CSIR-UGC NET-JRF, 2003 | ICMR- JRF, 2003 | GATE, 2003

Professional experience

Dr. Rakesh Kundu is presently working in the line of Type 2 diabetes. During his doctoral studies he has worked in the area of liver biochemistry and toxicology more specifically on a bilirubin metabolizing enzyme i.e. UDP-glucuronosyl transferase, its activity, regulation through Nrf2-Keap1 pathway, and significance in liver ailments (***J Ethnopharmacol,* 2008; *Biochem Pharmacol,* 2011**). His postdoctoral studies involved fatty acid mediated insulin resistance and insulin signaling defects in the skeletal muscle and liver (***BBA-Mol Basis Dis, 2009***). Additionally, he has screened phytochemicals and successfully isolated potential anti-diabetic compounds of which few were filed for Indian/US patents, awaiting patent award. He also worked in a team of investigators on the role of TLR4 in fatty acid mediated insulin resistance that resulted a breakthrough research outcome in the field of diabetes with publications in the journals, ***Nature Medicine, 2012 and J Biol Chem, 2013***. His present focus is on the role of intracellular lipid in impairing insulin secretory defects in beta cells, mediated by free fatty acid and Fetuin-A using *in vitro* insulinoma (MIN6, INS1) cells and HFD animal model (***BBRC, 2017; Mol Cell Endo, 2021; J Cell Sc, 2021 and J Cell Physiol, 2022***). **His group is currently targeting CD36, a transporter of long-chain fatty acids in cells, with library of compounds for anti-diabetic therapeutics**.

PhDs and fellows:

Research fellows working: 1 JRF and 2 SRFs | Ph.D. awarded: 5 | M.Sc. dissertation supervised: 43

International Fellow trained – Dr. O.C. Ejelonu, Department of Biochemistry, Ekiti State University Ado-Ekiti, Nigeria (worked under RTF-DCS fellowship scheme by NAM S&T, Ministry of Science & Technology, GoI, in 2016)

- **Dr. Chandan Malick** (Ph.D.-2017, UGC-NET) | Thesis entitled, "Studies on chemoreception in *Tenualosa ilisha* Hamilton 1822" | Assistant Professor, Kalna College, Burdwan, WB, 2018; SERB-TARE fellow 2022 at Visva-Bharati

- **Dr. Alpana Mukhuty** (Ph.D.-2021, UGC-NET) | Thesis entitled, "Role of Fetuin-A in pancreatic beta cell dysfunction" | Assistant Professor, Rampurhat College, WB, 2022 | Former DBT-RA at Burdwan University | EASD Travel Grant Award for presentation of poster in the EASD Annual Meeting in 2019, in Barcelona, Spain

- **Dr. Chandrani Fouzder** (Ph.D.-2022, CSIR-NET-JRF) | Thesis entitled, "Nrf2 signaling in Non-small cell lung cancer" | CSIR-RA at KNU, Asansol

- **Dr. Snehasish Nag** (Ph.D.-2024, UGC-NET-JRF) | Thesis entitled, "Regulation of Dipeptidyl peptidase-4 expression in pancreatic beta cells" | Postdoctoral Research Associate, Indiana University School of Medicine, USA | EASD Travel Grant Award 2022 for presentation of poster in the EASD Annual Meeting on September 19-23, 2022, in Stockholm, Sweden | Best Poster Award American Chemical Society & International Conference on Molecular Signaling (ICMS), March 19-20, 2023, IICB, Kolkata | EASD Travel Grant Award 2023 for presentation of Short Oral lecture in EASD Annual Meeting on October 2-6, in Hamburg, Germany | EASD Travel Grant Award 2024 for presentation of Oral lecture in the EASD Annual Meeting on September 9-13, 2024, in Madrid, Spain

- **Ms. Samanwita Mandal** (Ph.D.-2025, DST-Inspire Fellow) | Thesis entitled, "Role of CD36 in lipid accumulation, islet inflammation and pancreatic beta cell dysfunction"| EASD Travel Grant Award 2023 for presentation of poster in the EASD Annual Meeting on October 2-6, 2023, Hamburg, Germany | EMBO Travel Grant Award for poster presentation in the EMBO Meeting on Liver and Pancreas in Metabolic Disease: From Pathways to Therapies, April 2-4, 2025, Girona, Spain | EASD Travel Grant Award 2025 for presentation of poster in the EASD Annual Meeting on September 15-18, 2025, Vienna, Austria

- **Ms. Oindrila Mukherjee** - SRF (UGC-NET-JRF) | Thesis entitled, "Role of EGFR in lipid accumulation, inflammation and proliferation of pancreatic beta cells" | EASD Travel Grant Award 2024 for presentation of Oral lecture in EASD Congress on September 9-13, in Madrid, Spain | EASD Travel Grant Award 2025 for presentation of poster in the EASD Annual Meeting on September 15-18, 2025, Vienna, Austria

- **Ms. Nandita Das** - SRF (CSIR-NET-JRF) | Thesis entitled, "Implication of lipid-induced endoplasmic reticulum stress in pancreatic beta cells" | EASD Travel Grant Award 2025 for presentation of poster in the EASD Annual Meeting on September 15-18, 2025, Vienna, Austria

- **Mr. Soumendu Bag** - JRF (CSIR-NET-JRF) | Best Paper Award from 7th Regional Science and Technology Congress 2024-25 Region 3 Burdwan Division

- **Mr. Kartick Mal** – ANRF Project Fellow (JRF)

Publications:

1. A Kumar, G Nagar, P Bhowmik, G Kumari, R Muduli, M Das . Protocol for designing a peptide-based multi-epitope vaccine targeting monkeypox using reverse vaccine technology. ***STAR protocols*** (Cell Press) 6 (1), 103671, 2025

2. S. Mandal, S. Nag, O. Mukherjee, N. Das, P. Banerjee, T. Majumdar, S. Mukhopadhyay, K. Maedler, R. Kundu. CD36 inhibition corrects lipid-FetuinA mediated insulin secretory defects by preventing intracellular lipid accumulation and inflammation in the pancreatic beta cells. ***Biochimica et Biophysica Acta (BBA) - Molecular Basis of Disease***, 1871 (2), 167580, 2025.

3. S Mukherjee, R Kundu, M Vidaković. Metaflammation in obesity and diabetes. ***Frontiers in Endocrinology***, 15, 1540999, 2025

4. C. Fouzder, A. Mukhuty, D. Chattopadhyay, S. Das, S.K. Hira, R. Kundu. Silencing Nrf2 in cisplatin resistant non-small cell lung cancer cells augments sensitivity towards EGFR inhibitor. ***Toxicology in Vitro***, 101, 105921, 2024.

5. T. Samanta, S. Mandal, A. Karmakar, A. Pramanik, R. Kundu, N Ara Begum. An insight into the role of ESIPT/TICT-based antioxidant flavone analogues in fluoro-probing diabetes-induced viscosity changes: a unified experimental and theoretical endeavor. ***Photochemical & Photobiological Sciences***, 23, 1771–1782, 2024.

6. A. Kaur, A. Kumar, G. Kumari, R. Muduli, M. Das, R. Kundu, S. Mukherjee, T. Majumdar. Rational design and computational evaluation of a multi-epitope vaccine for monkeypox virus: Insights into binding stability and immunological memory. ***Heliyon***, 10 (16), e36154, 2024.

7. A. Mukhuty, S. Mandal, C. Fouzder, S. Das, D. Chattopadhyay, T. Majumdar, R. Kundu. Nrf2 inhibition regulates intracellular lipid accumulation in mouse insulinoma cells and improves insulin secretory function, ***Molecular and Cellular Endocrinology***, 581, 112112, 2024.

8. S. Nag, S. Mandal, O. Mukherjee, T. Majumdar, S. Mukhopadhyay, R. Kundu, Vildagliptin inhibits high fat and fetuin-A mediated DPP-4 expression, intracellular lipid accumulation and improves insulin secretory defects in pancreatic beta cells, ***Biochimica et Biophysica Acta (BBA) - Molecular Basis of Disease***, 1870 (3), 167047, 2024.

9. S. Mani, A. Kaur, K. Jakhar, G. Kumari, S. Sonar, A. Kumar, S. Das, S. Kumar, V. Kumar, R. Kundu, A.K. Pandey, U.P. Singh, T. Majumdar. Targeting DPP4-RBD interactions by sitagliptin and linagliptin delivers a potential host-directed therapy against pan-SARS-CoV-2 infections. ***International Journal of Biological Macromolecules***, 245, 125444, 2023.

10. S. Nag, S. Mandal, O. Mukherjee, S. Mukherjee, R. Kundu. DPP-4 Inhibitors as a savior for COVID-19 patients with diabetes. ***Future Virology*** 18 (5), 321-333, 2023.

11. S. Nag, S. Mandal, T. Majumdar, S. Mukhopadhyay, R. Kundu. FFA-Fetuin-A regulates DPP-IV expression in pancreatic beta cells through TLR4-NFkB pathway. ***Biochemical and Biophysical Research Communications,*** 647: 55-61, 2023.

12. O.C. Ejelonu, O.O. Elekofehinti, I.G. Adanlawo, R. Kundu. TGR5 potentiates GLP-1 secretion and cause pancreatic islet regeneration in response to Tithonia diversifolia saponin-rich extract in diabetic model mice. ***Phytomedicine Plus,*** 2 (1), 100203, 2022.

13. A. Karmakar, T. Mallick, C. Fouzder, A. Mukhuty, S. Mondal, R. Kundu, N. A. Begum (2022). Understanding the Role of Flavonoid Based Small Molecules in Modulating the Oncogenic Protein-Protein Interactions: A Quest for Therapeutic Arsenal. ***Journal of Molecular Structure***, 1248:131511, 2022.

14. A. Mukhuty, C. Fouzder, R. Kundu. Fetuin-A secretion from β-cells leads to accumulation of macrophages in islets, aggravates inflammation and impairs insulin secretion. ***Journal of Cell Science***, 134 (21):1-14, 2021.

15. T. Mallick, A. Karmakar, A. Mukhuty, C. Fouzder, J. Mandal, S. Mondal, A. Pramanik, R. Kundu and N. A. Begum. Exploring the Propensities of Fluorescent Carbazole Analogs toward the Inhibition of Amyloid Aggregation in Type 2 Diabetes: An Experimental and Theoretical Endeavor. ***Journal of Physical Chemistry B***, 125(37):10481–10493, 2021.

16. A. Mukhuty, C. Fouzder, R. Kundu. Fetuin-A excess expression amplifies lipid induced apoptosis and β-cell damage. ***Journal of Cellular Physiology***, 237:532-550, 2021.

17. A. Mukhuty, C. Fouzder, R. Kundu. Blocking TLR4-NF-κB pathway protects mouse islets from the combinatorial impact of high fat and fetuin-A mediated dysfunction and restores ability for insulin secretion. ***Molecular and Cellular Endocrinology***, 532, 111314, 2021.

18. C. Fouzder, A. Mukhuty, R. Kundu. Kaempferol inhibits Nrf2 signalling pathway via downregulation of Nrf2 mRNA and induces apoptosis in NSCLC cells. ***Archives of Biochemistry and Biophysics*** 697, 108700, 2021.

19. C. Fouzder, A. Mukhuty, S. Mukherjee, C. Malick, R. Kundu. Trigonelline inhibits Nrf2 via EGFR signalling pathway and augments efficacy of Cisplatin and Etoposide in NSCLC cells. ***Toxicology in Vitro***70, 105038, 2021.

20. A. Karmakar, T. Mallick, C. Fouzder, A. Mukhuty, S. Mondal, A. Pramanik, R. Kundu, D. Mandal, N.A. Begam. Unfolding the Role of a Flavone-Based Fluorescent Antioxidant towards the Misfolding of Amyloid Proteins: An Endeavour to Probe Amyloid Aggregation. ***Journal of Physical Chemistry B*** 124, 11133-11144, 2020.

21. D. Roy, A. Mukhuty, C. Fouzder, N. Bar, S. Chowdhury, R. Kundu, P. Chowdhury. Multi-emissive biocompatible silicon quantum dots: Synthesis, characterization, intracellular imaging and improvement of two fold drug efficacy. ***Dyes and Pigments*** 186, 109004, 2020.

22. A. Sarkar, C. Fouzder, S. Chakraborty, E. Ahmmed, R. Kundu, S. Dam, P. Chattopadhyay, K. Dhara. A Nuclear-Localized Naphthalimide-Based Fluorescent Light-Up Probe for Selective Detection of Carbon Monoxide in Living Cells. ***Chemical Research in Toxicology*** 33 (2), 651-656, 2020.

23. C. Malick, S.K. Chatterjee, S. Bhattacharya, V.R. Suresh, R. Kundu, S.K. Saikia. Gustatory ultrastructures of an amphihaline migratory fish hilsa Tenualosailisha, ***Microscopy Research and Technique*** 83(5), 507-513, 2020.

24. S.K. Chatterjee, C. Malick, S. Bhattacharya, V.R. Suresh, R. Kundu, S.K. Saikia. Ectopic expression of olfactory receptors and associated G-protein subunits in the head integument of the amphihaline migratory fish hilsa *Tenualosailisha*. ***Journal of Fish Biology*** 95 (1), 324-334, 2019.

25. R. Kundu. Islet inflammation and beta cell dysfunction by fat and Fetuin-A. ***Diabetologia*** 62 (1), 1-600, 2019.

26. D. Roy, C. Fouzder, A. Mukhuty, S. Pal, M. K. Mondal, R. Kundu, P. Chowdhury. Designed synthesis of dual emitting silicon quantum dot for cell imaging: Direct labeling of Alpha 2-HS-Glycoprotein. ***Bioconjugate Chemistry*** 30(5): 1575-1583, 2019.

27. A. Karmakar, T. Mallick, C. Fouzder, A. Mukhuty, R. Kundu, N.A. Begum. Antioxidant flavone functionalized fluorescent and biocompatible metal nanoparticles: Exploring their efficacy as cell imaging agents. ***Nano-Structures and Nano-Objects*** 18, 100278, 2019.

28. R. Kundu, A. Mukhuty. Fetuin A—A Major Player in Lipid-Induced Islet Dysfunction and ß-Cell Apoptosis. ***Diabetes*** 67 (Supplement 1), 2466-PUB, 2018. (Conference paper published by the *American Diabetes Association*, USA in its 2018 meeting)

29. C. Malick, S.K. Chatterjee, S. Bhattacharya, V. R. Suresh, R. Kundu and S.K. Saikia. Structural organization of the olfactory organ in an amphihaline migratory fish Hilsa, *Tenualosa ilisha*. *Microscopy Research and Technique* 81(5), 2018.

30. C. Malick, S.K. Chatterjee, S. Bhattacharya, V.R. Suresh, R. Kundu, S.K. Saikia. Evidence of putative sensory receptors from snout and tongue in an upstream amphihaline migratory fish hilsa *Tenualosa ilisha*. *Ichthyological Research* 65:42-55, 2017.

31. A. Mukhuty, C. Fouzder, S. Mukherjee, C. Malick, S. Mukhopadhyay, S. Bhattacharya, R. Kundu. Palmitate induced Fetuin-A secretion from pancreatic β-cells adversely affects its function and elicits inflammation. ***Biochemical Biophysical Research Communication*** 491: 1118-1124, 2017.

32. S. Das, Md. N. Alam, S. Batuta, G. Ahamed, C. Fouzder, R. Kundu, D. Mandal, N. A. Begum. Exploring the efficacy of *Basella alba* mucilage towards the encapsulation of the hydrophobic antioxidants for their better performance. ***Process Biochemistry*** 61C: 178-188, 2017.

33. S. Das, S. Batuta, Md. N. Alam, C. Fouzder, R. Kundu, D. Mandal, N. A. Begum. Antioxidant flavone analog functionalized fluorescent silica nanoparticles: Synthesis and exploration of their possible use as biomolecule sensor. *Colloids and Surfaces B*. 157: 286-296, 2017.

34. P. Chatterjee, S. Seal, S. Mukherjee, R. Kundu, M. Bhuyan, N. C. Barua, P. K. Baruah, S. P. Sinha Babu and S. Bhattacharya. A carbazole alkaloid deactivates mTOR through the suppression of rictor and that induces apoptosis in lung cancer cells. ***Molecular and Cellular Biochemistry*** 405: 149-158, 2015.

35. S. Chatterjee, A. Ray, S. Mukherjee, S. Agarwal, R. Kundu, S. Bhattacharya. Low concentration of mercury induces autophagic cell death in rat hepatocytes. *Toxicology and Industrial Health* 30(7): 611-620, 2014

36. P. Chatterjee, S. Seal, S. Mukherjee, R. Kundu, S. Mukherjee, S. Ray, S. Mukhopadhyay, S.S. Majumdar and S. Bhattacharya. Adipocyte fetuin-A contributes to and their polarization macrophage migration into adipose tissue. ***Journal of Biological Chemistry*** *288: 28324-28330*, 2013.

37. S. Seal, P. Chatterjee, S. Bhattacharya, D. Pal, S. Dasgupta, R. Kundu, S. Bhattacharya, M. Bhuyan, P. R. Bhattacharyya, G. Baishya, N. C. Barua, P. K. Barua, P. G. Rao and S. Bhattacharya. Vapor of volatile oils from *Litsea cubeba* seed induces apoptosis and causes cell cycle arrest in lung cancer cells. ***PLoS One*** *7(10): e47014*, 2012.

38. Pal, S. Dasgupta, R. Kundu, S. Maitra, S. S. Majumder, S. Mukhopadhyay, S. Ray, G. Das, S. Bhattacharya. Fetuin-A acts as an endogenous ligand of TLR4 to promote lipid-induced insulin resistance. ***Nature Medicine*** 18(8): 1279-1285, 2012.

39. S. Bhattacharya, R. Kundu, S. Dasgupta, S. Bhattacharya. Mechanism of lipid induced insulin resistance: An overview. ***Endocrinology Metabolism*** 27(1): 12-19, 2012.

40. R. Kundu, S. Dasgupta, A. Biswas, S. Bhattacharya, B.C. Pal, Sh. Bhattacharya, P.G. Rao, N.C. Barua and S. Bhattacharya. Carlinoside decreases liver bilirubin accumulation by augmenting UGT1A1 expression by inducing Nrf2 gene expression. ***Biochemical Pharmacology*** 82: 1186-1197, 2011.

41. Biswas, S. Bhattacharya, S. Dasgupta, R. Kundu, S.S. Roy, B.C. Pal and S. Bhattacharya. Insulin resistance due to lipid induced signaling defects could be prevented by mahanine. ***Molecularand Cellular Biochemistry*** 336: 97-107, 2010.

42. P. Burma, S. Bhattacharya, A. Bhattacharya, R. Kundu, S. Dasgupta, A. Biswas, S.S. Roy, Sh. Bhattacharya and S. Bhattacharya. FFA induced overexpression of NF-kB in skeletal muscle cells is linked to insulin resistance. ***BBA-Molecular Basis of Disease*** 1792: 190-200, 2009.

43. R. Kundu, S.Dasgupta, A.Biswas, A.Bhattacharya, B.C. Pal, D. Bandyopadhyay, Sh. Bhattacharya and S. Bhattacharya. *Cajanus cajan* Linn. (Leguminosae) prevents alcohol induced rat liver damage and augments cytoprotective function. ***Journal of Ethnopharmacology*** 118: 440-447, 2008.

Detail of patents:

1. Synergistic pharmaceutical composition useful for the treatment of lung cancer. M. Bhuyan, P. R. Bhattacharyya, P. K. Baruah, N. C. Barua, P. G. Rao, S. Bhattacharya, **R. Kundu**, P. Chatterjee, S. Seal, S. Mukharjee, S. Dasgupta, S. Maitra, S. Bhattacharya, S. Bhattacharya. 9622987, Application No. 14/410,844, Award date 18/04/2017, US Patent.

2. UDP-Glucuronosyl transferase (UGT) expression stimulant to reduce bilirubin accumulation in liver and pharmaceutical compositions thereof. **R. Kundu**, S. Dasgupta, A. Biswas, B. C. Pal, S. Bhattacharya, S. Bhattacharya, N. C. Barua, P. G. Rao. (0136DEL2010, 2010), INDIA.

3. Mahanine arrests growth and induces apoptotic death of lung cancer cells by targeting mTORC1 and mTORC2 complexes. Bhuyan, M; Barua, NC; Baruah, PK and Rao, PG, Chatterjee, P; Seal, S; **Kundu, R**; Mukherjee, S; Bhattacharya, S. (0275NF2013, 2013), INDIA.

Projects (Sanctioned/Ongoing):

Title of the project and Reference number	Duration	Cost (lakhs)	Funding Agency	Remarks
Elucidating the role of CD36 and its association with Fetuin-A-TLR4 pathway in promoting pancreatic beta cell inflammation, lipid accumulation and insulin secretory defects in diabetic mice models File No. CRG/2022/007004	16.10.2023-15.10.2026 (3 years)	Rs. 53.97676	DST-SERB	Ongoing
PI: Dr. Rakesh Kundu, "To investigate the role of Fetuin-A in lipotoxicity induced beta-cell dysfunction and inflammatory injury to the pancreatic islets", DST-SERB,Govt. of INDIA, Ref. No. ECR/2017/001028	07.08.2018-06.11.2021 (3 years)	Rs. 42.10186	DST-SERB	Completed
PI: Dr. Rakesh Kundu, "Understanding the role of Nrf2-Keap1 pathway in developing drug resistance in lung cancer cells" Ref. UGC-FRPS Research Start-Up-Grant	2014-2016 (1 year)	Rs. 6.0	UGC	Completed

Co-Investigator in the project entitled, "Stock Characterization, captive breeding, seed production and culture of Hilsa (*Tenualosailisha*)", ICAR, Govt. of INDIA, Ref. No. NFBSFARA/3021/2012-13	2012-2017 (5 years)	Rs. 159.00	ICAR	Completed

Member of Society and Reviewers:

- **Member of Endocrine Society (ENDO), USA (2017, 2018)**
- Indian Science Congress Association, Kolkata, India (ISCA)
- Society of Biological Chemists, Bangalore, India (SBC)
- Society for Reproductive Biology and Comparative Endocrinology, India (SRBCE)
- Reviewer of the projects from DST-SERB, Govt. of India
- **Topic Editor** – Frontiers in Mol Med; Frontiers in Endocrinology.
- Reviewer of the Journal PLoS ONE, Mol Cell Endocrinol (Elsevier), Archives of Biochem Biophys (Elsevier), Clin Exp Pharmacol Physiol (Wiley), Lett Drug Des Discov (Bentham Sc.), Experimental and Therapeutic Medicine, International Journal of Molecular Medicine (Spandidos), Cancer Biotherapy and Radiopharmaceuticals, Oncology Letters (Spandidos), Oncology Reports (Spandidos), Toxicology and Industrial Health (SAGE).