

SASMITA SAMAL

Institute of Life Sciences, Nalco Square, Bhubaneswar-751023, India

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EDUCATION:

Qualification	Institute/ Organization	Board / University	Year of	%/CGPA
			Passing	
PhD	Institute of Life Sciences	DBT-ILS , BBSR	2018 to	
			Present	
M.Phil.	PG Department of	Utkal University,	2018	72.5%
	Zoology, Utkal	BBSR		
	University			
M.Sc.	PG Department of	Utkal University,	2017	81%
	Zoology, Utkal	BBSR		
	University			
B.Sc.	College of Basic	OUAT, BBSR,	2015	76%
	Sciences and Humanities	Odisha		
+2	M.P.C. Junior college,	CHSE, Odisha	2011	78%
	Baripada			
1 Oth	M.K.C. High School,	HCC O.E.L.	2000	9/0/
10 th	Baripada	HSC , Odisha	2009	86%
	Σαπρασα			

AWARDS AND OTHER RECOGNITIONS:

- 1. Bagged first prize in seminar competition during M.Sc. (2015- 2017).
- 2. Qualified CSIR-JRF, 2016, GATE, 2017, NET-LS, 2017.
- 3. Participated in group discussions and debates.
- 4. Presented poster during M.Sc.

DISSERTATION AND RESEARCH EXPERIENCE:

Type of Work	Title of Project	Supervisor	Institution	Year
M.Phil. thesis	A Comparative Study on	Dr. Sudhansu Sekhar	PG Department of	2017- 2018
	The Effect of Plant Extracts	Nishank, Assistant	Zoology, Utkal	
	and Urea on Regenerative	professor	University	
	Capacity of Earthworm			
	Eisenia fetida (Savingy,			
	1826).			
M.Sc. Dissertation	Phylogenetic Analysis of	Dr. Sudhansu Sekhar	PG Department of	December
	CFTR (Cystic Fibrosis	Nishank, Assistant	Zoology, Utkal	2016- April
	Transmembrane	professor	University	2017
	Conductance Regulator) In			
	Vertebrates.			

CONFERENCES and OTHER ACTIVITIES:

- Participated in oral presentation at International Conference on Technological Innovations in Animal Science Research and Social Transformation (TIASRST) organized by Utkal University, Bhubaneswar, from 25th -26th February 2023.
- 2. Participated in Bajpai Saha student award oral presentation at the International Conference on Biomaterials, Regenerative Medicine, and Devices: **BIORemedi** organized by IIT Guwahati, Guwahati, from 15th -18th December **2022**.
- 3. Participated in oral presentation in the symposium "Insights into the key trends in Biomaterial Research", organized by Institute of Life Sciences, Bhubaneswar, from 27th -28th September 2022.
- 4. Presented a poster at Laboratory Animal Scientists' Association (**LASA**) 10th International Conference organized by ICAR-NAARM, Hyderabad, from 3rd -4th June **2022**.
- 5. Participated in Virtual Training on Design of Experiments (**VTDOE**) online workshop organized by Bharathiar University, Coimbatore, from 4th -5th March **2022**.
- 6. Presented a poster at the Annual poster evaluation at Institute of Life Sciences, Bhubaneswar, 2022.

- 7. Attended international conference on Chemistry For Future (CFF)- Virtual mode, 2021.
- 8. Attended **ICBMI** Virtual conference, **2020**, Bharatihar University, Tamilnadu. Presented a poster entitled "Investigating exosomes as a potential biomaterial for bone regeneration".
- 9. **BioTERM-2019**. International Conference on Biomaterial-Based Therapeutic Engineering and Regenerative Medicine, 28th Nov-1st Dec 2019, IIT Kanpur. Presented a poster entitled "Exploring the role of exosomes as biomaterials to target bone disorders"
- 10. Participated in 4th Orientation Workshop on Laboratory Animal Sciences (**OWLAS**), **2019** at NISER, Bhubaneswar.

Ph.D. MENTOR:

Dr. Mamoni Dash, Ph.D.

Scientists- C, Institute of Life Sciences, Nalco Square, Bhubaneswar- 751023, India.

AREA OF RESEARCH

BROAD AREA: Biomaterials in bone therapeutics.

AREA OF SPECIALIZATION: Isolation, characterization, and cargo investigation of cell-derived exosomes in bone regeneration, and targeted drug delivery to osteosarcoma tumor site. Synthesis of biomaterials for use in bone tissue engineering.

PUBLICATIONS:

- P. Dash, S. Samal, G. Panda, AM Piras, M. Dash, Polymeric Nanoformulation of Zoledronic Acid Rescues Osteoblasts from the Harmful Effects of its Native Form: An In Vitro Investigation of Cytotoxic Potential on Osteoblasts and Osteosarcoma Cells. Macromolecular Bioscience, 2023, 2300211.
- 2. **S. Samal**, D. Barik, S. Jena, Post craniotomy pain management in Copenhagen rat by intraperitoneal or oral dosage of tramadol: A comparative evaluation. Scientific Reports, Article under Revision, Reference number: Submission ID: 96104a3f-03a7-4bbf-b11d-ba3fcfe9771e.
- 3. M. Dash, **S. Samal**, D. Barik, A 3D-EXTRACELLULAR MATRIX SCAFFOLD AND METHOD OF PREPARATION THEREOF, 2023, Patent application no.: 202331001486.

- 4. **S. Samal**, M. Dash, Biomimetic via exosome mimetics in regenerative medicine and therapeutics, M. Dash (Ed.), *Springer Nature*, ISBN: 978-981-16-4565-5 (2021).
- 5. **S. Samal**, P. Dash, M. Dash*, Drug Delivery to the Bone Microenvironment Mediated by Exosomes: An Axiom or Enigma. International Journal of Nanomedicine, 2021, *16*, 3509-3540.

PERSONAL DETAILS:

PRESENT ADDRESS: Room no.- A6, Institute of Life Sciences, Campus II, Niladrivihar,

Bhubaneswar, Odisha, India-751021

PERMANENT ADDRESS: C/O- Gopal Chandra Samal, At- Purnachandrapur, W. No.- 15,

PO-Baripada, Mayurbhanj, Odisha. PIN-757001

SKILLS & EXPERIENCES:

- Hard working and sincere
- Confident
- PowerPoint Presentation skills
- Languages- Odiya, English, Hindi, Bengali
- Westen Blotting, RT-qPCR, Ultracentrifugation, Cell culture, Electron microscopy,
 Dynamic light scattering (DLS), Flow cytometry, Confocal microscopy, Electroporation,
 Small RNA sequencing, Next Generation Sequencing (NGS 550), Lab animals handling
 (Copenhagen rat, Balb/c nude mice), IVIS imaging, MicroCT, Transfection.

DECLARATION:

I hereby declare that the information furnished above is true to the best of my knowledge.

Place: Bhubaneswar

Signature

Saemita Samal.

SASMITA SAMAL