



DR. BHASWATI BANERJEE

Assistant Professor, Biotechnology

HoD, Environmental Science

📞 +91-98100 93043

☎ +91-120-2344 4287

✉ bhaswati@gbu.ac.in
contactbhaswati@gmail.com

📍 B-222, School of Biotechnology
Gautam Buddha University
Greater Noida, UP – 201 312,
India

PROFILE

Driven to excel in interdisciplinary biological science research and academics by my passion for payback to society through translational research and beneficial teaching with the ability to influence people and initiate a change. Focused on teaching and learning innovation through integrative pedagogy and a result oriented and productive work approach with more than 14 years of university teaching and research experience.

PERSONAL DETAILS

Date of Birth: March 12, 1980

Nationality: Indian

Category: General

Gender: Female

Language proficiency: English,
Hindi, Bangla

Marital status: Single

MEMBERSHIP

Indian Society of Chemists and
Biologists (ISCB)

Indian Society of Cell Biology

EDUCATION

DOCTOR OF PHILOSOPHY

Jawaharlal Nehru University, New Delhi, India

2003 – 2010

Ph.D. Thesis Title: *Studies on the Role of Hyaluronan Binding Protein 1 (HABP1) on Modulation of Cell Cycle in Mammalian Cells*

CSIR-UGC NET-JRF

2003

JRF and National Eligibility Test (NET) – Lectureship in Life Sciences

MASTER OF SCIENCE

School of Environmental Sciences, Jawaharlal Nehru University, New Delhi, India

2001 – 2003

First Division (F.G.P.A.: 7.23 on 9.0 grade scale)

M. Sc. Dissertation Title: *Simultaneous mutational analysis of two key amino acid residues in the Hyaluronan binding motif of Hyaluronan Binding Protein 1 (HABP1)*

WORK EXPERIENCE

HEAD OF THE DEPARTMENT (Additional Charge)

2022 – Till date

Department of Environmental Science

University School of Vocational Studies and Applied Sciences

Gautam Buddha University, Greater Noida

ASSISTANT PROFESSOR

2011 – Till date

University School of Biotechnology, Gautam Buddha University, Greater Noida

RESEARCH/FACULTY ASSOCIATE

2010 – 2011

University School of Biotechnology, Gautam Buddha University, Greater Noida

RESEARCH INTEREST

- Cancer Epigenetics
- Translational Cancer Research

RESEARCH VISION

Investigating non-coding RNA's function as an intrinsic epigenetic regulator in modulating cell signaling pathways throughout cancer progression and stem cell maturation and differentiation. Furthermore, leveraging non-coding RNA's potential as a molecular diagnostic and therapeutic agent for cancer and developmental disorders.

TECHNICAL EXPERTISE

- Recombinant DNA and Genetic Engineering Techniques
- Mammalian cell culture protocols: Initiation, maintenance and propagation of primary and secondary cell culture, Synchronization, Cytometry, Cryopreservation
- Gene delivery and Drug delivery techniques
- Cytotoxicity and Cell viability assays
- *In vitro* apoptotic and cytological assays
- Immunofluorescence assays: IHC, Immunocytochemistry, live cell imaging, FACS, ELISA
- Molecular and Cell Biology techniques
- Basic proteomics and genomics techniques
- Microscopy, Image editing and analysis
- Statistical analysis
- Project drafting and execution
- Manuscript preparation

	All	Since 2019
Citations	157	49
h-index	4	4
i10-index	3	1

RESEARCH EXPERIENCE

DOCTORAL RESEARCH

- *In vitro* studies on the mechanism of mammalian cell cycle regulation
- Investigating apoptotic pathways in human cancer cell lines

RESEARCH SUPERVISION

- Supervised 2 Doctoral research (Ph.D. awarded)
 - Animal Immunogenetics
 - Environmental biotechnology/Bioremediation
- Supervising 1 Doctoral research
 - Green synthesized nano-composite hydrogel complex for bioremediation
- Supervised more than 20 M. Tech. /M. Sc. Dissertations/Minor Projects
 - Cancer biology
 - Developmental Biology
 - Epigenetics
 - Non-coding RNA
 - Biosimilars
 - Nano-biochar
 - Bioremediation
 - IPR
 - G-Quadruplex
 - DNA Vaccines

PUBLICATIONS

1. Mishra, S. K., Niranjana, S. K., Singh, R., Kumar, P., Kumar, S. L., Banerjee, B., & Kataria, R. S. (2020). Diversity analysis at MHC class II DQA locus in buffalo (*Bubalus bubalis*) indicates extensive duplication and trans-species evolution. *Genomics*, 112(6), 4417-4426.
2. Mishra, S. K., Niranjana, S. K., Banerjee, B., & Kataria, R. S. (2018). Evaluating differential expression of MHC class II genes for association with resistance to mastitis in Indian buffaloes (*Bubalus bubalis*). In *Proceedings of the World Congress on Genetics Applied to Livestock Production* (Vol. 11, p. 465).
3. Mishra, S. K., Niranjana, S. K., Banerjee, B., Singh, R., Kumar, P., & Kataria, R. S. (2018). Identification of novel allelic variants at the MHC class II DQA locus in Murrah water buffalo. *Animal Genetics*, 49(5), 497-498.
4. Mishra, S. K., Niranjana, S. K., Banerjee, B., Singh, R., Singh, R. V., Kumar, N., & Kataria, R. S. (2018). Genetic diversity at MHC-DRB3 locus suggests distinctness of the riverine swamp buffalo populations in North-East region of India. *Indian Journal of Animal Research*, 52(6), 820-823.
5. Mishra, S. K., Niranjana, S. K., Banerjee, B., Dubey, P. K., Gonge, D. S., Mishra, B. P., & Kataria, R. S. (2016). High genetic diversity and distribution of Bubu-DQA alleles in swamp buffaloes (*Bubalus bubalis carabanesis*): identification of new Bubu-DQA loci and haplotypes. *Immunogenetics*, 68, 439-447.
6. Biswas, A. K., Hafiz, A., Banerjee, B., Kim, K. S., Datta, K., & Chitnis, C. E. (2007). *Plasmodium falciparum* uses gC1qR/HABP1/p32 as a receptor to bind to vascular endothelium and for platelet-mediated clumping. *PLoS pathogens*, 3(9), e130.

SKILL SET

- Analytical approach and Innovative thinking
- Problem-Solving attitude
- Independent and critical thought process
- Technical Proficiency
- Data Analysis and Interpretation
- Attention to Detail
- Project Management
- Communication Skills
- Collaborative and unbiased research aptitude
- Adaptability and Resilience
- Ethical Judgement
- Time Management

TEACHING INTEREST

- Developmental Biology
- Animal Cell and Tissue Culture Techniques
- Genetic Engineering
- Recombinant DNA Technology
- IPR
- Cell and Molecular Biology
- Animal Biotechnology

LinkedIn:

<https://www.linkedin.com/in/bhaswati-banerjee-phd-3aa99712/>

ORCID:

0000-0002-8745-9863

Google Scholar:

Dr Bhaswati Banerjee

7. Chowdhury, A. R., Prakash, M., Banerjee, B., Ghosh, I., & Datta, K. (2007). Multifunctional characterization of hyaluronan binding protein 1 of human as apoptotic inducer and activator of matrix metalloproteases.
8. Sengupta, A., Banerjee, B., Tyagi, R. K., & Datta, K. (2005). Golgi localization and dynamics of hyaluronan binding protein 1 (HABP1/p32/C1QBP) during the cell cycle. *Cell Research*, 15(3), 183-186.

Book Chapters

9. Chaprana, J., Maitra, J., & Banerjee, B. (2023). Nanoparticle infused hydrogel as a sustainable approach in wastewater remediation: A mechanistic and comprehensive review. *Recent Research in Physical & Chemical Sciences and Engineering*, 153-164.
10. Ashraf, M. T., Banerjee, B., & Misra, G. (2019). Circular dichroism. In *Data Processing Handbook for Complex Biological Data Sources*, 21-30.

ACADEMIC EXPERIENCE AND CAREER HIGHLIGHTS

Faculty Development Programs/Workshops/Conferences

- Participated in one-day National Awareness Program on IPR, organized by IPR Cell, GBU (24 February, 2024)
- Participated in five days offline Capacity Building Program on Disaster Risk Reduction organized by GBU & IUINDRR, NIDM (6 February – 10 February 2023)
- Participated in one-month International Workshop (digital) on Drug Discovery and Development Organized by Decode Life; (29 October – 22 November 2022)
- Participated in five-days online Faculty Development Programme (Under GURU-DAKSHTA) Organized by Amity Academic Staff College & IEEE UP Section and IETE, New Delhi (June – July 2022)
- Participated in five-days online Training Programme on BSL-III Facility, Organized by Dept. of Biochemistry, South Campus, Univ. of Delhi, New Delhi; (January – February 2022)
- Participated in two weeks online Faculty Development Programme on Online Teaching Pedagogies organized by GBU (20 July – 02 August 2020)
- Participated in one-day National Workshop on IPR organized by IPR Cell, GBU (5 March, 2020)
- Attended UGC sponsored Interdisciplinary Refresher Course in Life Science, conducted by HRDC, Pondicherry University, Puducherry (December, 2018)
- Attended 6th UGC-Orientation Course, conducted by JNU, New Delhi; (July - August 2016)

Career Highlights

- Formal education completed in continuous, full-time mode with excellent academic record and first division through out
- Prepared 5 Modules (Content Writer) for the UGC-ePG Pathshala (Subject: Biotechnology; Paper: Genetic Engg. & RDT) (2017)
- Appointed as External Examiner (Q.P setting: Animal Cell Culture Technology) for M.Sc. Molecular Biology and Biotechnology, Subharti Medical College, Meerut (May 2017)
- Appointed as examiner (Q.P setting: Animal Tissue Culture and Recombinant DNA Technology) B.Sc. Biotechnology (DUVASU, Mathura) (2017-2024)
- Secured All India Rank 2 in JNU Entrance Examination for M.Phil/PhD , 2003
- Secured All India Rank 4 in JNU Entrance Examination for M.Sc., 2001

REFERENCES

Prof. Kasturi Datta, Ph.D., FNA, FASc., FNA Sc., TWAS

DBT Distinguished Biotechnology Professor (Retd.)
Adjunct Professor, Special Centre for Molecular Medicine (Retd.)
Former Professor & Dean, School of Environmental Sciences,
Jawaharlal Nehru University, New Delhi-110 067, India
E-mail: datta_k@hotmail.com
Tel: +91-11-26704327 (O); +91-0124-4205596 (R); Fax: +91-11-26741502

Prof. Rakesh K. Tyagi, PhD, FNASc

Professor, Special Centre for Molecular Medicine,
Jawaharlal Nehru University, New Delhi – 110 067, India
E-mail: rkyagi@yahoo.com;
rkt2300@mail.jnu.ac.in
Web:
<http://www.jnu.ac.in/Faculty/rtyagi/>
Tel: +91-11-2673-8741 (Office) Fax. +91-11-26741781 (Office)

Dr. Aniruddha Sengupta DGM, Partnership and Portfolio Strategy

Sun Pharma Advanced Research Company Ltd.
Vadodara, Gujarat, India
E-mail:
aniruddha.sengupta@sparcmail.com
LinkedIn: [linkedin.com/in/ani146](https://www.linkedin.com/in/ani146)

ADMINISTRATIVE EXPERIENCE

- **Head**, Dept. of Environmental Science, School of Vocational Studies and Applied Sciences, GBU (Additional charge) (April 2022 till present)
- **Member, Selection Committee**, Assistant Professor, Dept. of Environmental Science, SoVSAAS, GBU (September-October 2023)
- **Member**, Screening Committee, Assistant Professor, Dept. of Environmental Science, SoVSAAS, GBU (September-October 2023)
- **Member, Selection Committee**, A.P. (OCFD), SoVSAAS, GBU (2023-2024)
- **Member**, Screening Committee, A.P. (OCFD), SoVSAAS, GBU (2023-2024)
- **Member, Selection Committee**, Faculty-on-Contract, SoVSAAS, GBU (2022-2023)
- **Member**, Screening Committee, Faculty-on-Contract, SoVSAAS, GBU (2022-2023)
- **Member, MoU Committee**, GBU-CRCCT MoU, (2023-2024)
- **Member**, Organizing Committee: International Conference on Structural Biology and Drug Discovery, Organized by University School of Biotechnology, GBU (11 October – 12 October 2023)
- **Organizing Secretary/Convenor**: World Environment Day Celebration at GBU (June 2022, June 2023)
- **Organizing Secretary**: World Food Day Celebration at GBU (October 2022, October 2023)
- **Member**, Internal Complaints Committee, GBU (September, 2020 onwards)
- **NCC Coordinator**, 31 UP BN (Girls)Bn, GBU Chapter (October, 2016 – September, 2021)
- **Member**, University Anti-ragging Committee, GBU (2012-2013)
- **Member**, University Proctorial and Disciplinary Board, GBU (2013-2014)
- **Chief Invigilator**, GBU Examination Centre (Block-B), U.P.-B.Ed.-JEE (2020)
- **Deputy Centre Superintendent**, SSPH & PGTI Written Test (Feb., 2016)
- **Centre In-charge**, SOE Exam Centre, End-term Theory Examinations (May 2017)
- **Centre In-charge**, Centralized Evaluation Centre (SOICT) (May 2018)
- **Centre In-charge**, Centralized Evaluation Centre (SOBT & SOVSAS) (May-June, 2019)
- **Assistant Centre Superintendent**, (SolCT, GBU), GBU Entrance Exam (2018)

The above mentioned information is true to the best of my knowledge and belief.

Dr. Bhaswati Banerjee