




Faculty Details proforma for DU Web-site

Title	Dr.	First Name	Asani	Last Name	Bhaduri	Photograph
Designation	Assistant Professor					
Address	Room No. 116 First Floor, Cluster Innovation Centre Sports Complex, G.C. Narang Marg Delhi University, North Campus Delhi 110007, India					
Phone No Office	(+91) 11-27666706, Extension: 134					
Residence Mobile	(+91) 9871134005					
Email	abhaduri@cic.du.ac.in asani.bhaduri@gmail.com					
Web-Page	https://plus.google.com/u/0/+AsaniBhaduri					
Educational Qualifications						
Degree	Institution			Subjects/Topics		
Ph.D. (2014)	Institute of Genomics and Integrative Biology (CSIR-IGIB) and University of Delhi			Molecular and Biochemical Studies on Secretory Proteins of Mycobacteria (molecular microbiology)		
P.G Diploma (2009)	Indian Law Institute			Intellectual Property Rights		
M.Sc. (2005)	University of Delhi			Botany		
B.Sc. Hons. (2003)	Presidency College, University of Calcutta			Botany		
Career Profile						
Teaching Experience:						
<ul style="list-style-type: none"> • Assistant Professor at Cluster innovation Centre (2015 July onwards). • Assistant Professor (ad-hoc) at Cluster innovation Centre (2013 August- 2015 July). 						
Research Experience:						
<ul style="list-style-type: none"> • Institute of Genomics and Integrative Biology, Delhi (Research Fellow: 2006-2014). • National Institute of Immunology, Ph.D. coursework (2005-6). • Summer research internship at Department of Chemistry, Hyderabad Central University (2004-2005). • Project trainee in National Institute of Plant Genome Research, 2003-2004. 						
Administrative Assignments						
At Cluster innovation Centre:						
<ul style="list-style-type: none"> • Member, Academic Sub-Committee (MoU) (2016-). • Member, Maintenance Committee (2016-). • Member, Cultural Committee (2016-). • Member, Newsletter; Annual Report; Website Committee. Involved in creating design and 						

write-up of Cluster Innovation Centre Brochure (2014-2016).

- Member: sub-technical committee, system biology laboratory.
- Involved in creating the syllabus of Systems Biology curriculum (B.Tech IT) at CIC.
- Eco-club organization at CIC.

Other:

- Volunteer in organizing workshop, seminars at DU, CSIR-IGIB.

Areas of Interest / Specialization

- Host-Pathogen interaction in emerging and neglected infectious diseases.
- Secretory pathways and mechanisms in Tuberculosis.
- *in silico* biology.
- Non-coding RNA and Systems biology.
- Biotic/abiotic stress regulation in plants.
- Cancer and genetic diseases.
- Wildlife Biology: Birds, Odonates.
- Indian Classical Music (instrumental)

Subjects Taught

- Understanding new biology
- Methods for studying biological informational molecules
- Integrative biology
- Exploring biology - systems approach
- Genes to genomes
- Flow of information in living systems
- Biological networks: from micro to macro niche
- *in silico* biology
- Systems biology
- Theory in practice: the art of project management
- Environment science & ecosystem management

Research Guidance

Mentored several undergraduate students for semester-long projects and innovation projects.

Publications Profile

Research Articles:

- Arora G, Sajid A, Gupta M, **Bhaduri A**, Kumar P, Modak S, Singh Y (2010) Understanding the Role of PknJ in *Mycobacterium tuberculosis*: Biochemical Characterization and Identification of Novel Substrate Pyruvate Kinase A. **PLoS ONE** 5(5): e10772.
- Devi K, Sharma D, **Bhaduri A** and Kothamasi D (2013) Polymorphism in the partial hcnAB gene in hydrogen cyanide producing *Pseudomonas* species. **Geomicrobiology Journal**, 30: 2. 131-139.
- **Bhaduri A**, Misra R, Maji A, Bhetaria P, Mishra S, Arora G, J Virdi J S, Singh Y (2014) *Mycobacterium tuberculosis* cyclophilin A uses novel signal sequence for secretion and mimics eukaryotic cyclophilins for interaction with host repertoire. **PLoS ONE** 9(2): e88090
- Dhasmana N, Singh LK, **Bhaduri A**, Misra R, Singh Y (2014) Recent Developments in Antidotes Against Anthrax. **Recent Patents on Anti-Infective Drug Discovery** Vol. 9, No. 2 (PMID: 25174439): 83-96.

- Singh LK, Dhasmana N, Sajid A, Kumar P, **Bhaduri A**, Bharadwaj M, Gandotra S, Kalia VC, Das T.K, Goel A.K, Pomerantsev AP, Misra R, Gerth U, Leppla SH, Singh Y (2014) ClpC operon regulates cell architecture and sporulation in *Bacillus anthracis*. **Environmental Microbiology** 17, 855–865.
- Pathak N, **Bhaduri A**, Bhat KV, Rai A (2015) Tracking sesamin synthase gene expression through seed maturity in wild and cultivated sesame species - a domestication footprint **Plant Biology** doi: 10.1111/plb.12327.
- **Bhaduri A**, Misra R, Dhamija N (2015) To eat or not to eat: understanding the tussle between mycobacteria and host autophagy **Indian Journal of Microbiology** doi: 10.1007/s12088-015-0541-9.
- Maji A, ..., **Bhaduri A**,..., Gokhale R, Singh Y (2015) Expression profiling of lymph nodes in tuberculosis patients reveal inflammatory milieu at site of infection **Scientific Reports** (SREP-15-05240A).
- Bhetariya P, Prajapati M, **Bhaduri A** et al. (2016) Structural analysis of keto synthase domain in *Aspergilli* and its utility for detection **Evolutionary Bioinformatics** (12: 109–119). doi: 10.4137/EBO.S32694.

Popular Articles:

- Rare sighting: A melanistic jangle cat from Ranthmbhore, **SAEVUS** wildlife magazine, 2015.
- On a high with art (on Parasrampurua fresco), **The Hindu**, 2015. <http://www.thehindu.com/todays-paper/tp-features/tp-metroplus/on-a-high-with-art/article7339911.ece>

Conference Organization/ Presentations (in the last three years)

Poster Presentation:

- Poster presented on ‘Tuberculosis Co-Morbidities and Immunopathogenesis’ organised by Keystone Symposia (February 2016), Unique Protein Motifs: The Mycobacterial Slice: Ankit Pathak, Chandrani Kumari, Pavitra Selvakumar, Pragyaa Jaiswal, Prashant Sinha, Abhijeet Parmar, Asani Bhaduri.
- Poster presented in 5th Indian Peptide Society Symposium, September 24-25, 2015, Predicting unique motifs using data mining techniques in the proteome of *Mycobacterium tuberculosis* Chandrani Kumari, Pavitra S, Deepak Kumar P, Karpurmanjari K, Asani Bhaduri.
- Poster presented in Antardhvani, 2015, TB-MOTIF and TB-PROMOTER.
- Poster presented in Antardhvani, 2015, ‘Tails and Feathers’ an app for animal rescue.
- Poster presented in Leh Symposium, 2012 ‘Impersonating human cyclophilins: a mycobacterial mimicry’ Asani Bhaduri, Anshika Singhal, Neha Dhasmana and Yogendra Singh August 3-7, 2012.
- Poster presented in GenoMeet 2012, ‘DeCYPhering the PIN code of Tuberculosis’, Asani Bhaduri, Abhijit Maji, Yogendra Singh 30th December 2011-1st January 2012.

Invited Lectures/Dialogues:

- Invited for lectures and practical demonstrations in add-on course on "Bioinformatics and *in silico* medicine" conducted by Miranda House, University of Delhi (Jan-March 2016).
- Invited to Katha/IGNOU consultative meeting and consequent discussions on ‘Translating India/ Understanding Diversity’ (August 20, 2015).
- Invited for lectures and practical demonstrations in add-on course on "Bioinformatics and *in*

silico medicine" conducted by Miranda House, University of Delhi (Jan-March, 2014).

Research Projects (Major Grants/Research Collaboration)

- **Start-Up Research Grant (Young Scientists)** by SERB, DST in ‘Identification of virulence factors involved in the infection process of emerging and neglected food-borne pathogen *Campylobacter jejuni*’ (2016-18).
- **University of Delhi Research and Development Grant** ‘Tracking expression patterns of mycobacterial secreted virulence factors’ (2015-16).
- **Innovation Project CIC-307** ‘Developing an affordable three-dimensional Bioprinter’ facility (2015-16).
- **Innovation Project CIC-206** ‘Improving the current system of Junk management and recycling’ (2013-15).

Awards and Distinctions

- **‘Global Health Travel Award’** funded by the Bill & Melinda Gates Foundation to attend conference on ‘Tuberculosis Co-Morbidities and Immunopathogenesis’ organised by Keystone Symposia (to be held on February 2016).
- **‘Teaching Excellence Award for Innovation’** by University of Delhi (on Foundation Day 2015).
- **Senior Research Fellowship** by CSIR 2008, 2010(extended).
- **Junior Research Fellowship & Eligibility for Lectureship** by CSIR-UGC, 2006.
- **National Scholarship** in Master’s Degree (Ranked 3rd in the University of Calcutta and 1st in the merit list of Entrance test of Delhi University).
- **National scholarships** in class X and XII examinations.

Association With Professional Bodies

- Life member, The Association of Microbiologists of India.
- Co-founder of CIC eco-club Vasundhara.
- Associated with ‘Translating India/ Understanding Diversity’ initiative.

Other Activities

Workshops, Courses and Leadership Camps:

- Workshop at YETI (Young Ecologists Talk and Interact) January 17, 2016.
- Technology Enriched Instruction Workshop “Faculty Development for the 21st Century” organised by PHD Chamber of Commerce and Industry and Microsoft (September 30 2015). Awarded ‘Microsoft Faculty Fellow’ certificate.
- Workshop on ‘Renovating bacterial taxonomy with Bioinformatics’ by National Bureau of Agriculturally Important Microorganisms (NBAIM) & Department of Zoology, University of Delhi, 14-15th May, 2015.
- Workshop on Environment/Natural Resource Conservation by Govt. of Delhi November 2014.
- ProArt Photography Workshop with Akash Das in Delhi Photography Festival Sept-Oct 2013.
- Art Appreciation course at National Museum Institute of the History of Art, Conservation and Museology, Delhi (2011-12).

- Third Novartis BioCamp – a biotechnology leadership camp in India (August 1-3, 2011).
- Attended training course in IPR from National Institute for Intellectual Property Management, Nagpur, India (2009-10).
- First CSIR workshop on Biosafety and Biosecurity organized at Indian Institute of Integrative Medicine, Jammu (29-31st January 2007).
- Workshop by Late Ustad Ali Akbar Khan and Pt. Buddhadeb Dasgupta at Rajya Sangeet Academy Kolkata (2000-2002).

Music:

- Learned violin under the guidance of Prof. Sisirkana Chowdhury, Previously Head, Bowing Department, Ustad Ali Akbar Khan College of Music, California, U.S.A.

Art:

- Presently engaged in abstract and wildlife photography and my other media of artwork involve pastel, collage and drawing. My photograph featured in **Nicephoto 2012**, organized by Delhi Photography Club. Several of my photographs have been used in the University of Delhi website.

Other interests:

Collecting handicrafts (especially toys made by local artisans in different part of India) and antiquities.