


BRIEF RESUME OF DR. SOMASRI DAM

Name & Academic Qualification	:: Dr. Somasri Dam, MSc., Ph.D.	
Department	:: Microbiology, the University of Burdwan	
Present Designation	:: Assistant Professor	
Other Academic Assignment(s)	:: Assistant Professor (2012-2014), Department of Bio-Medical Laboratory Science & Management, Vidyasagar University, West Bengal, India :: Teacher-in-Charge, Department of Microbiology, BU, 2018-2020 :: Hostel Supervisor, Nivedita Hostel, BU :: Member, Under graduate Board (UGBS), Microbiology, BU :: Member, Under graduate Board (UGBS), Biochemistry, BU :: Member, Post graduate Board(PGBS), Microbiology BU :: Member, Board of Research (BRS), Microbiology, BU :: Member, Doctoral Committee, Microbiology, BU	
Teaching Experience Specialization	:: Total : 9 years :: Molecular Microbiology, Biochemistry	
Award(s) Natn., Internatn., NGOs/ Other organisations	:: Postdoctoral Research Fellowship, Max Planck Institute (MPITM), Germany (2010-2012) :: Graduate Aptitude Test for Engineering (GATE - 2003) – For Research, organized by Ministry of Human Resources Development, Government of India :: National Eligibility Test (NET-2003) and (NET-2004) – for Lectureship and research, jointly organized by the Council for Science and industrial Research, and University Grants Commission, Govt. of India :: National Merit Scholarship (1996) – for students who ranked in the top hundred in West Bengal in their X th Examination, Government of West Bengal, India	
Areas of Research	:: Molecular mechanisms involved in chromosome segregation of human pathogen <i>Entamoeba histolytica</i> :: Isolation and molecular characterization of microorganisms having probiotic potential :: Identification of lead molecules against <i>Entamoeba histolytica</i> from plants associated microbes	
Research Projects	:: Project entitled, “ Identifying interactors of Eh-sirtuins to understand genome segregation and cell cycle progression of <i>Entamoeba histolytica</i> ” sanctioned under the Young Scientists Scheme by BRNS, DAE (No. 37 (1)/20/15/2014-BRNS), As PI. Amount: 18,87,000; 2014-17. Completed :: Project entitled, “ Effect of nutritional status and intestinal parasitic infections on the health and development of children from eastern India: Molecular detection of protozoan parasites in their stool samples ” sanctioned under the UGC start-up grant by UGC (No. F.30-5/2014 (BSR), 18 th July, 2014), As PI. Amount: 6,00,000; 2014-15. Completed :: Molecular and functional characterization of Aurora Kinase from human pathogen <i>Entamoeba histolytica</i> ; CSIR; (No. 27(0322)/17/EMR-II, dated 12.04.2017), As PI. Amount: 21,20,000; 2017-21. Ongoing :: Prebiotic feed supplement for growth improvement of Indian major carps, <i>Labeo rohita</i>, <i>Cirrhinus mrigala</i> and <i>Catla catla</i> under composite culture system ; A gut microbiome and nutrigenomics based approach ; DBT (No. BT IPR2857 41 AAQ/3/920/20 18), As Co-PI. Amount: Rs. 91, 42,940; 2019-2022. Ongoing	
Research Publications Including	International Research publications	

- Biswas P, Das M, Pal S, Ghosh R, **Dam S**. EhSir2c, a Sir2 homolog from the human pathogen *Entamoeba histolytica* interacts with a DNA repair protein, EhRAD23: Protein-protein interaction, docking and functional study. Journal of Biomolecular Structure & Dynamics. 2021 Nov23: 1-17 doi: 10.1080/07391102.2021.2004925
- Pal S, Biswas P, Ghosh R, **Dam S**. In silico analysis and molecular identification of an anaphase-promoting complex homologue from human pathogen *Entamoeba histolytica*. Journal of Genetic Engineering and Biotechnology. 2021 Sep;19(1):133. doi: 10.1186/s43141-021-00234-y
- Ghosh S, Das P, Bairy B, Ghosh R, **Dam S**, Sen MB. Exploration of photoreduction ability of reduced graphene oxide–cadmium sulphide hetero-nanostructures and their intensified activities against harmful microbes. Journal of Materials Science. 2021 Oct; 56(30):16928-44. doi: 10.1007/s10853-021-06349-4
- Das P, Tantubay K, Ghosh R, **Dam S**, Sen MB. Transformation of CuS/ZnS nanomaterials to an efficient visible light photocatalyst by ‘photosensitizer’ graphene and the potential antimicrobial activities of the nanocomposites. Environmental Science and Pollution Research. 2021 May; 1:1-4. doi:10.1007/s11356-021-14068-1
- Biswas P, Ghosh R, Das M, Pal S, **Dam S**. Molecular characterization of EhAK6, an endonuclease V domain-containing aurora kinase protein from *Entamoeba histolytica*: Protein-protein interaction, docking and functional aspect. Current Research in Biotechnology. 2021 Jan; 3: 225-234.
- Sarkar S, Sinha S, **Dam S**, Roy SK. Assessment of secondary metabolites and antioxidant activity of fungal endophytes isolated from *Ziziphus jujuba* Mill. Plant Cell Biotechnology And Molecular Biology. 2020 Dec; 10:78-90.
- Chatterjee K, Dutta A, Rahaman SKR, Mandal P, Datta AK, Majumdar M, **Dam S**. Altered resistin and IL6 in Neonatal sepsis in patients admitted in a tertiary care teaching hospital at Eastern India. International Journal of Health and Clinical Research. 2020 Jul;3(5):97-102
- Sarkar A, Fouzder C, Chakraborty S, Ahmmed E, Kundu R, **Dam S**, Chattopadhyay P, Dhara K. A Nuclear-Localized Naphthalimide-Based Fluorescent Light-Up Probe for Selective Detection of Carbon Monoxide in Living Cells. Chemical Research in Toxicology. 2020 Jan; 24; 33(2):651-6.
- Biswas P, **Dam S**. In Silico Analysis of Molecular Interaction of EhSir2a with its Interacting Proteins from Human Pathogen *Entamoeba histolytica*. Haya: The Saudi Journal of Life Sciences. 2020 Aug; 5(8): 140-155.
- Chakraborty S, Lohar S, Dhara K, Ghosh R, **Dam S**, Zangrando E, Chattopadhyay P. A new half-condensed Schiff base platform: structures and sensing of Zn²⁺ and H₂PO₄⁻ ions in an aqueous medium. Dalton transactions (Cambridge, England: 2003). 2020 Jul; 14;49(26):8991-9001.
- Das P, Ghosh S, Ghosh R, **Dam S**, Baskey M. *Madhuca longifolia* plant mediated green synthesis of cupric oxide nanoparticles: a promising environmentally sustainable material for waste water treatment and efficient antibacterial agent. Journal of Photochemistry and Photobiology B: Biology. 2018 Dec; 1;189:66-73.
- Chatterjee N, **Dam S**. Epidemiological study of *Acinetobacter baumannii* and its resistance pattern in clinical isolates from a private hospital in Kolkata, Eastern India.

	<p>International Journal of Current Research in Life Sciences. 2018 May;7(05):2001-3.</p> <ul style="list-style-type: none"> • Roy A, Mukherjee M, Dam B, Dam S, Roy P. A rhodamine-based fluorescent chemosensor for Al³⁺: is it possible to control the metal ion selectivity of a rhodamine-6G based chemosensor? New Journal of Chemistry.2018; 42(11): 8415-8425. • Chatterjee N, Dam S. Prevalence of <i>Pseudomonas aeruginosa</i> and its resistance pattern in community based clinical samples. European Journal of Biomedical and Pharmaceutical Sciences. 2017 Oct; 4(11): 551-554. • Paul I, Sar A, Dam S. Isolation, characterization and identification of potent lipase producing bacteria from oil spilled soil of oil processing factory in Burdwan, West Bengal. European Journal of Biomedical and Pharmaceutical Sciences. 2016 Jan; 3(2):208-14. • Chatterjee N, Bhattacharyya K, Dam S. <i>Acinetobacter baumannii</i>: an emerging unique multi-drug resistant pathogen. European Journal of Biomedical and Pharmaceutical Sciences. 2015 Dec; 3(1):117-30. • Bhattacharyya K, Chatterjee N, Laskar S, Sengupta M, Adhikari A, Dam S. Environment: a potential source of drug resistant bacteria in a tertiary care hospital of Kolkata, India. International Journal of Recent Scientific Research. 2015 May; 6(5): 4162-4166. • Dam B, Dam S, Kim Y, Liesack W. Ammonium induces differential expression of methane and nitrogen metabolism-related genes in <i>Methylocystis</i> sp. strain SC2. Environmental microbiology. 2014 Oct; 16(10):3115-27. • Dam B, Dam S, Blom J, Liesack W. Genome analysis coupled with physiological studies reveals a diverse nitrogen metabolism in <i>Methylocystis</i> sp. strain SC2. PloS one. 2013 Oct; 10; 8(10):e74767. • Dam B, Dam S, Kube M, Reinhardt R, Liesack W. Complete Genome Sequence of <i>Methylocystis</i> Sp. Strain SC2, an Aerobic Methanotroph With High-Affinity Methane Oxidation Potential. Journal of bacteriology. 2012 Nov;194(21):6008-9. • Dam B, Kube M, Dam S, Reinhardt R, Liesack W. Complete sequence analysis of two methanotroph-specific repABC-containing plasmids from <i>Methylocystis</i> sp. strain SC2. Applied and environmental microbiology. 2012 Jun; 15; 78(12):4373-9. • Dam S, Lohia A. <i>Entamoeba histolytica</i> sirtuin EhSir2a deacetylates tubulin and regulates the number of microtubular assemblies during the cell cycle. Cellular Microbiology. 2010 Jul;12(7):1002-14. <p>Daily Newspaper</p> <ul style="list-style-type: none"> • NEWS paper, Anandabazar Patrika, Popular article: “How can protozoan diseases be controlled?” on 10.08.2020 and 17.08.2020
Book Chapter	<p>:: Biswas P, Pal S, Das M, Dam S. Microbe-Induced Oxidative Stress in Cancer Development and Efficacy of Probiotics as Therapeutics in Preventing Its Onset and Progression. Handbook of Oxidative Stress in Cancer: Therapeutic Aspects; Springer Nature. 2022 Jan. DOI: 10.1007/978-981-16-1247-3_159-1</p> <p>:: Dam S, Biswas P, Ghosh R. Oxidative Stress in <i>Entamoeba histolytica</i>. Oxidative Stress in</p>

	Microbial Diseases. Oxidative stress in microbial diseases. Springer Nature. 2019 Oct; 26:257-280. DOI: 10.1007/978-981-13-8763-0_14
Life Member	Association of Microbiologists in India (AMI)
Conference/Seminar Organized	<p>:: National</p> <ul style="list-style-type: none"> • 3 days National Workshop, 2015, organized by University Science Instrumentation Centre and Department of Microbiology, University of Burdwan on “Understanding unusual cell cycle events by Fluorescence Microscopy” <p>:: International</p> <ul style="list-style-type: none"> • One day International Seminar, 2020, organized by Department of Microbiology, the University of Burdwan, West Bengal on “Recent Trends in Microbiology” • 3 days International Webinar, 2020, organized by Department of Microbiology, the University of Burdwan, West Bengal on “Present and future strategies to combat emerging and reemerging contagious diseases”
Ph.D. Supervision	:: Awarded: 1; Submitted: 1 & Registered: 4
Details of communication	<p>:: E-mail: sdam@microbio.buruniv.ac.in</p> <p>:: Vidwan ID.: 197351 (Profile URL: https://vidwan.inflibnet.ac.in/profile/197351)</p> <p>:: Google Scholar ID.: bUG2z4UAAAAJ</p> <p>:: ORCID ID: 0000-0002-9055-3412</p>