Sujoy Kumar Das Gupta, PhD,

Ex-Professor and Chairman. Dept. Of Microbiology **Bose Institute**, P1/12 C.I.T . Scheme VIIM Kolkata 700054

Date of Birth: 10th July 1961 Family : Maitrayee (Spouse) and Rahul (Son)

Education

- PhD. (Biochemistry), Bose Institute, Calcutta University (1989)
- MSc. (Biochemistry), Calcutta University (1979)
- BSc. (Chemistry), St. Xavier's College, Calcutta University (1977)

Experience

- Research fellow (JRF and SRF) at Bose Institute, Kolkata (1982-1987)
- Research Associate at the University of Texas Health Centre at Tyler, USA (1987-1990)
- Research Associate Dept. of Biochemistry, University Of Delhi South Campus, (1991-94)
- Member of Bose Institute research faculty (1994 2021)

Research:

The focus of my research work was on the Molecular Biology of the TB pathogen *Mycobacterium tuberculosis*, its plasmids, and phage. I have authored more than forty papers in this area in prestigious journals and guided twenty-six students for their Ph.D. degrees. As a Principal Investigator, I executed twelve extra-mural projects funded by DST, DBT, and CSIR.

Teaching:

I was engaged in conducting and formulating the Ph.D. coursework of Bose Institute. I am involved in the teaching programs of several other institutes and universities, such as Calcutta University, Dept of Biochemistry, Ramakrishna Mission Vivekananda Educational and Research Institute (RKMVERI) Dept. of Microbiology, and St. Xavier's College, Department of Microbiology

Administrative:

I served as a member of various committees at Bose Institute, such as Professor In-Charge of Central Instruments Facility (CIF), Chairman, Standing Medical Committee, Radiation Safety Committee, IPR committee, and project monitoring committee of the Unified Academic Campus of Bose Institute. I was also a member of the DST-SERB Expert Committee on the Early Career Research Award (ECRA) in life sciences. In addition, I have been a member of Ph.D. Committees of Calcutta University, Presidency University, and St. Xavier's college.

Important publications.

- Basu, A., S. Chatterjee, S. Chatterjee, and S. K. Das Gupta. (2012). An Evolutionary link between the mycobacterial plasmid pAL5000 replication protein RepB and Extra Cytoplasmic Function (ECF) family of sigma factors. *J Bacteriol*. **194**: 1331-1341
- Bandyopadhyay, B., Das Gupta, T., Roy, D., and S. K. Das Gupta. DnaK Dependence of the Mycobacterial Stress-Responsive Regulator HspR Is Mediated through Its Hydrophobic C-Terminal Tail. *J. Bacteriol* 194, no. 17 (2012): 4688-4697.
- Bhowmik P, Das Gupta SK. (2015). Biochemical Characterization of a Mycobacteriophage Derived DnaB Ortholog Reveals New Insight into the Evolutionary Origin of DnaB Helicases. PLoS One 10:e0134762.
- Samaddar, S., R. K. Grewal, S. Sinha, S. Ghosh, S. Roy, and S. K. Das Gupta. (2016). Dynamics of Mycobacteriophage-Mycobacterial Host Interaction: Evidence for Secondary Mechanisms for Host Lethality. Applied and environmental microbiology 82:124-133. Selected as spotlight article.
- Ghosh, S., S. Samaddar, P. Kirtania, and S. K. Das Gupta. (2016). A DinB Ortholog Enables Mycobacterial Growth under dTTP-Limiting Conditions Induced by the Expression of a Mycobacteriophage-Derived Ribonucleotide Reductase Gene. Journal of bacteriology 198:352-362. Selected as spotlight article.
- Chatterjee, S., Patra, M. M., Samaddar, S., Basu, A. & **Gupta, S. K. D** (2017) Mutual interaction enables the mycobacterial plasmid pAL5000 origin binding protein RepB to recruit RepA, the plasmid replicase, to the origin. Microbiology 163 (4), 595-610.
- Bhawsinghka N, Dutta A, Mukhopadhyay J, **Das Gupta SK**. (2018) A transcriptomic analysis of the mycobacteriophage D29 genome reveals the presence of novel stoperator-associated promoters in its right arm. Microbiology ;164(9):1168-79.
- Apurba Sarkar, Shreya Ghosh, Rahul Shaw, Madhu Manti Patra, Fatema Calcuttawala, Noyonika Mukherjee, **Sujoy K. Das Gupta**. *Mycobacterium tuberculosis* thymidylate synthase (ThyX) is a target for plumbagin, a natural product with antimycobacterial activity. PlosOne 2020. https://doi.org/10.1371/journal.pone.0228657.
- Ghosh P, Barman A, **Das Gupta SK**. Induced expression of the *zwf* gene in the presence of glucose contributes to lowering of glucose 6-phosphate level and consequently reduction of growth rate of *Mycobacterium smegmatis*. Microbiology (Reading). 2021 Jul;167(7). doi: 10.1099/mic.0.001067. (Special mention in the editorial- "Thomas GH. 2021. Microbial musings- July 2021. *Microbiology*.167:001090.")

Patents

"Peptide antagonists for inhibiting Heat Shock Protein (Hsp16.3) of Mycobacterium tuberculosis" SUJOY K. DAS GUPTA, ABHIK SAHA, ARCHNA PATHAK SHARMA, SIDDHARTHA ROY, BHABATARAK BHATTACHARYA, PINAKPANI CHAKRABARTI. **Applicaton #:** 20070037211 **Class:** 435007100