

Name: AVISHEK GHOSH

Designation with Department: Assistant Professor, Department of Microbiology



Qualifications: MSc. Ph.D.

CSIR JRF, 2006

Ph.D. degree from Jadavpur University in the field of characterisation of a secretory colonisation factor of *Vibrio cholerae* and its cellular response.

Brief Intro:

Dr. Ghosh graduated from University of Calcutta in 2005 and completed his masters in Molecular Biology & Genetics from Presidency College, University of Calcutta in the year 2007. He pursued his Ph.D. degree in the Division of Biochemistry, ICMR NICED, Kolkata.

Current Teaching:

Dr. Ghosh is currently involved in teaching following topics-

- a. Microbial Evolution, Bacterial Systematics, Classification and Diversity of Bacterial World.**
- b. Intracellular vesicular trafficking, Concept of Stem cells, Cell death & Cancer development**
- c. Introduction & properties of viruses**
- d. Food & Fermentation Technology**
- e. Food borne diseases**
- f. Immunology**
- g. Instrumentation & Biophysical Techniques (Electrophoresis, Centrifugation)**

Research Interests:

Bacterial Host-pathogen interaction

Selected Publications:

1. Ahana Das, Pijush Basak, Arnab Pramanik, Rajib Majumder, **Avishek Ghosh**, Saugata Hazra , Manas Guria, Maitree Bhattacharyya, Samudra Prosad Banik. Ribosylation induced structural changes in Bovine Serum Albumin: understanding high dietary sugar induced protein aggregation and amyloid formation. 2020. *Heliyon*. 6(9): e05053. doi: 10.1016/j.heliyon. 2020.e05053.
2. Ahana Das· Pijush Basak· Arnab Pramanick· Rajib Majumder, Debadrita Pal· **Avishek Ghosh**, Manas Guria· Maitree Bhattacharyya, Samudra Prosad Banik. Trehalose mediated stabilisation of cellobiase aggregates from the filamentous fungus *Penicillium chrysogenum*. *Int J Biol Macromol* 2019, 127, 365-375. doi.org/10.1016/j.ijbiomac.2019.01.062.
3. Soumita Podder, **Avishek Ghosh**, Tapash Ghosh. Mutations in membrane-fusion subunit of spike glycoprotein play crucial role in the recent outbreak of COVID-19. *J Med Virol*. 2021 93(5):2790-2798. doi: 10.1002/jmv.26598.
4. Edmond Wong, Gustav Vaaje-Kolstad, **Avishek Ghosh**, Ramon Hurtado-Guerrero, Peter V. Konarev, Adel F. M. Ibrahim, Dmitri I. Svergun, Vincent G. H. Eijsink, Nabendu S. Chatterjee, Daan M. F. van Aalten. The *Vibrio cholerae* Colonization Factor GbpA Possesses a Modular Structure that Governs Binding to Different Host Surfaces. *J Plos Path* 2012 8(1):e1002373. doi: 10.1371/journal.ppat.1002373.
5. Subrata Sabui, Abhisek Ghosal, Sanjuncta Dutta, **Avishek Ghosh**, T. Ramamurthy, James P. Nataro, T. Hamabata, Nabendu Sekhar Chatterjee. Allelic variation in colonization factor CS6 of enterotoxigenic *Escherichia coli* isolated from patients with acute diarrhoea and controls. *J Med Microbiol* 2010, 59 (7), 770-779. doi.org/10.1099/jmm.0.017582-0.

6. Subrata Sabui, Sanjucta Dutta, Anusuya Debnath, **Avishek Ghosh**, T. Hamabata, K. Rajendran, T. Ram amurthy, James P. Nataro, Dipika Sur, Myron M. Levine, and Nabendu Sekhar Chatterjee. Real-Time PCR-Based Mismatch Amplification Mutation Assay for Specific Detection of CS6-Expressing Allelic Variants of Enterotoxigenic *Escherichia coli* and Its Application in Assessing Diarrheal Cases and Asymptomatic Controls. *J Clin Microbiol* 2012, 50 (4), 1308-1312. doi.org/10.1128/JCM.05424-11.

Awards/Recognitions/ Invited Talk:

1. Invited talk in virtual mode on “e-Certificate preparation, You Tube streaming & Link creation” in GGDC, Chapra.

Participation in Seminars / Conferences / Workshops:

Webinar:

1. Participated in National Level Webinar on ‘NAAC Accreditation Process in the perspective of New Education Policy’ jointly organised by IQAC, Malda College, Malda, IQAC, K.K. Das College, Kolkata & IQAC, Saheed Kshudiram College, Alipurduar in collaboration with NAAC, Bengaluru.
2. Participated in International Webinar on ‘Science, Biology & World’s Future’ organised by Department of Botany in collaboration with IQAC, Dinabandhu Andrews College, Kolkata.
3. Participated in State level webinar on ‘Shataborshe Satyajit: Shishu kishorer simana periye Feluda’ organised by IQAC Narasingha Dutt College, Howrah.

Workshop:

1. Attended Hands on workshop on ‘Molecular testing for Genetic Disorders’ organised by Centre for DNA Fingerprinting & Diagnostics, Hyderabad, Telengana.

Contact Details:

Email: ovghsh_1085@hotmail.com
Mobile: 9432834210.

Web Links to Teaching/other resources:

1. [Course: Viral Diseases \(moodlecloud.com\)](#)
2. [Course: Microbial Evolution & Position \(moodlecloud.com\)](#)
3. [Course: CC 11 Practical \(moodlecloud.com\)](#)
4. [Course: Instrumentation & Techniques \(moodlecloud.com\)](#)
5. [Course: CELL BIOLOGY \(moodlecloud.com\)](#)