

Dr. Dhriti Majumdar, PhD

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[Email: dhriti2004@gmail.com](mailto:dhriti2004@gmail.com)

Education:-

● Post-Doctoral engagement:

SERB-NPDF fellow at IIT Madras (October 2017- present)

Understanding the role of Trans fatty acid in ischemic stroke

● IIT Madras

Research Associate (March 2016- October 2017)

Research work: Understanding the molecular mechanisms of disease caused by dysfunction of cardiovascular GIRK channels and ASIC channels in presence of transfatty acids.

● IIT Madras

Post Doctoral Research Fellow (Sept 2014 - June 2015):

Research work: Understanding the role of Trans fatty acid in ischemic stroke

● Doctoral Research

Indian Institute of Science Education and Research Kolkata (IISER Kolkata), India

CSIR-UGC Fellowship (2008)

PhD in Biological Sciences (Jan 2009 - July, 2014)

Thesis Title: Understanding the cellular and molecular Mechanism of Mouse Hepatitis Virus Induced Neuroinflammation and Demyelination in an Experimental Mice Model.

Supervisor – Dr. Jayasri Das Sarma









● Pre-Doctoral training

The Children's Hospital of Philadelphia (Division of Neurology) under Dr. Judith Grinspan from 14th June, 2009 to 14th Aug, 2009.









● University of Calcutta, India





M.Sc. in Botany with specialization in Microbiology (First Class) in 2007 B.Sc. in Botany (First Class) in 2005

Publications:-

-  [Macrophage-mediated optic neuritis induced by retrograde axonal transport of spike gene recombinant mouse hepatitis virus.](#)
Shindler KS*, **Chatterjee D***, Biswas K, Goyal A, Dutt M, Nassrallah M, Khan RS, Das Sarma J.
J Neuropathol Exp Neurol. 2011 Jun;70(6):470-80
[* shared first author]
-  [Microglia play a major role in direct viral-induced demyelination.](#)
Chatterjee D, Biswas K, Nag S, Ramachandra SG, Das Sarma J.
Clin Dev Immunol. 2013;2013:510396.
-  Cytomorphological and Cytochemical Identification of Microglia
Subhajit Das Sarma, Koushik Chatterjee, Himadri Dinda, **Dhriti Chatterjee**, and Jayasri Das Sarma
ISRN Immunology
Volume 2013, Article ID 205431, 10 pages
-  Mouse hepatitis virus infection upregulates genes involved in innate immune responses
Chatterjee D, Addya S, Khan RS, Kenyon LC, Choe A, Cohrs RJ, Shindler KS, Sarma JD. PLoS One. 2014 Oct 31;9(10):e111351. doi: 10.1371/journal.pone.0111351
-   Demyelinating strain of mouse hepatitis virus infection bridging innate and adaptive immune response in the induction of demyelination
Aushiki Biswas, **Dhriti Chatterjee**, Sankar Addya, Reas S. Khan, Lawrence C. Kenyon, Alexander Choe, Randall J. Cohrs, Kenneth S. Shindler, Jayasri Das Sarma. Clinical Immunology, Volume 170, September 2016, Pages 9-19.
-   Aspirin induces cell death by directly modulating mitochondrial voltage- dependent anion channel (VDAC).
[Tewari D*](#), [Majumdar D*](#), [Vallabhaneni S¹](#), [Bera AK¹](#). [Sci Rep.](#) 2017 Mar 22;7:45184. doi: 10.1038/srep45184.
* - shared first author

Awards and Honours:-

-   SERB-NPDF award (October 2017)
-   CSIR – UGC NET Fellowship (JRF and LS) in June 2008 (Funding Body UGC, India)
-   Best Poster Award in Indian Immunological Conference IMMUNOCON 2009.
1st rank in the University of Calcutta during B.Sc.
-   Ranked among top 100 in the state of West Bengal during class X board exams.

-   Our latest work published in Scientific Reports got published in science wire. The link is given: http://vigyanprasar.gov.in/whats_new/isn/Indian-scientists-discover-how-aspirin-can-kill-cancer-cells.pdf
-   [Received BIRAC grant in February 2020.](#)

Conferences attended:-

- 2009: Indian Immunological Conference, IMMUNOCON 2009, hosted by NIMHANS, Bangalore
- 2010: Society for Biological Chemists India, IISc Bangalore
- 2010: Workshop on Human Genetics and Genomics conducted by NIBMG, Kalyani
- 2011: Frontiers in Modern Biology, IISER Kolkata
- 2012: 11th International Society of Neuro Virology 2012 (ISNV 2012), New York, USA
- 2012 : 1st International Meet On Advanced Studies on Cell Signaling Network (*CeSiN*), IICB Kolkata
- 2012: 5th Annual meeting of the Cytometry Society, University of Calcutta, Kolkata
- 2014 - Indo US Symposium on Viral Infections of the Nervous System, organised by NBRC, India
- 2014 – Society for Biological Chemists (SBCI), India – Bhubaneswar chapter
- 2018 – international Conference on Translational Cancer Research – Chennai chapter

Skilled at:-

- Maintaining the bacterial culture, extraction of bacterial polyhydroxybutyrates.
- Flow Cytometric Analysis
- Microscopy – Fluorescence Microscopy and Confocal Microscopy
- Histopathological studies – Dissection, processing, embedding, sectioning of tissues by a microtome and cryotome, and different staining analysis
- Molecular biology techniques – DNA, RNA extraction, PCR, DNA Gel Electrophoresis, RNA Gel Electrophoresis, Western Blot
- Cell culture Techniques – cell line and primary cell culture
- Slice Culture Techniques – *Ex Vivo* culture
- Patch Clamp and Calcium Imaging
- Microarray techniques

Acquainted with:-

- Complete set up of a biological laboratory, instrument ordering, ordering

of materials.

- Experience in handling mice and animal house.
- Laboratory inventory management.
- Statistical analysis using Graph Pad Prism and Origin
- Competent in – Word, Excel, PowerPoint; Content development for lectures and presentation.

Experience summary:-







- Research Associate in IIT-Madras (March 2016- Present)
- Regional manager(training) at Educomp Solutions Ltd (July 2015 to Dec 2015)
- Post-Doctoral Research Fellow (Sept 2014 - June 2015) at IIT Madras
- Worked as a Resource Co-ordinator for Educomp Solutions Limited from March 2008 to December 2008.
- Worked as Life Science teacher in South Point High School, Kolkata in a leave vacancy post for 1 month from January – February 2008.

Personal Information:-

Name: Dhriti Majumdar

Date of Birth – 20, September 1983

Professional References:-

-   Dr. Amal Kanti Bera, Professor, IIT Madras (Email : amal@iitm.ac.in)
-   Dr. Jayasri Das Sarma, Professor, IISER Kolkata (Email: dassarmaj@iiserkol.ac.in)
-   Mr. Vivek Sharan, Assistant Vice President, Educomp Solutions Ltd. (Email: vivek.sharan@educomp.com)