

# Shampa Deb Chanda

<b>Sex</b>	Female
<b>Nationality</b>	INDIAN
<b>Date of birth</b>	May 1, 1986
<b>Contact</b>	41, H.P. Dutta Lane, Tollygunj. Kolkata 700033 Cell No : +91-9433448708 E-mail : chanda.chanda35@gmail.com

<b>Executive summary</b>	<ul style="list-style-type: none"> <li>• Working individually or in a group</li> <li>• Preparing research reports and manuscripts</li> <li>• Identifying experimental problems and solving them independently</li> <li>• Writing project proposals for funding</li> <li>• Participating in fund management.</li> <li>• Expertise in preparing and presenting scientific proposals.</li> </ul>
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<b>Key skill set</b>	<ul style="list-style-type: none"> <li>• Acquired substantial knowledge on diversified wings of <b>molecular biology, animal biotechnology</b> including <b>small RNA Biology, virology, microbiology, sequencing, chromatography</b>.</li> <li>• Proactive participation in <b>writing proposal for fund raising, existing fund utilization</b> and various other domains of <b>science management</b>.</li> </ul>
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<b>Expertise</b>	<p><b>Molecular and Cell Biology:</b> DNA isolation, RNA Extraction. PCR, Reverse-transcription-PCR, qRT-PCR, PCR Purification and Gel Extraction, agarose gel-electrophoresis, Gene Cloning, ligation and Bacterial transformation (bacterial). Sequencing using Big Dye Terminator, SDS-PAGE, Western Blotting, Mammalian cell transfection of Plasmid DNA, and siRNA, Luciferase Reporter assay, Fluorescence microscopy, Next Generation Sequencing, Micro array, Flow cytometry.</p> <p><b>Tissue Culture and animal model:</b> Cell line maintenance (MA104, HT29, COS-7, HEK293, Vero, Hela), rotavirus infection in cell-line and Balb/c mice.</p> <p><b>Bioinformatics:</b> BLAST, Clustal W, used different online tools for identifying secondary structures of protein. Have limited experience of using various softwares for Next Generation Sequencing data analysis.</p> <p><b>Biochemistry:</b> Protein estimation, UV-Spectrophotometer, Biochemical tests, <i>In vitro</i> protein transcription translation and purification.</p> <p><b>Immunology:</b> Enzyme-Linked Immunosorbent Assay (ELISA), Immunoprecipitation.</p>
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## Work Experience

<b>Organization</b>	GITAM
<b>Designation</b>	DST National Post Doctoral Fellow
<b>Department</b>	Dept. of Biotechnology
<b>Tenure</b>	April 2017 – March 2019
<b>Project title</b>	“Study of differential regulation of microRNAs in pesticide affected silkworms.”
<b>Skills acquired</b>	<ul style="list-style-type: none"><li>• Executing a government sponsored project as principal investigator.</li><li>• Hands-on experience with chromatography, animal behaviour and development.</li></ul>

<b>Organization</b>	National Institute of Cholera and Enteric Diseases (NICED)
<b>Designation</b>	UGC research fellow
<b>Department</b>	Virology
<b>Tenure</b>	August 2010 – January 2016
<b>Project title</b>	“Analysis of role of RNA interference and mechanism by which Rotavirus counteract RNAi during infection”
<b>Skills acquired</b>	<ul style="list-style-type: none"><li>• Writing project proposals.</li><li>• Equipment monitoring, handling and maintaining bio-safety standards.</li><li>• Various techniques of molecular biology.</li></ul>

## Academic Qualifications

<b>Examination/Degree</b>	<b>Board/University</b>	<b>School/Institution</b>	<b>Year of passing</b>	<b>Result</b>
<b>Doctor of Philosophy (PhD)</b>	University of Calcutta	National Institute of Cholera and Enteric Diseases	2016	Awarded
<b>M.Sc. (Zoology)</b>	University of Calcutta	University of Calcutta	2008-2010	First Class (82%) (Rank 4)
<b>B.Sc. (Zoology)</b>	University of Calcutta	Presidency College.	2005-2008	First Class (70%) (Rank 7)

## Fellowships/ Awards

- Senior Research Fellowship (UGC) 2013 – Jan, 2016
- Junior Research Fellowship (UGC) 2011-2013
- CSIR UGC NET, Qualified for Junior Research Fellowship. 2010
- Outstanding Poster Award by FEBS journal at NextGen Genomics & Bioinformatics Technologies (NGBT) Conference. 2014  
NIMHANS, Bangalore.
- Received Travel Grant from CMSPEID to present poster at 17th International Conference on Emerging Infectious Diseases. (EID-17), Taipei, Taiwan. 2015
- Received Travel fellowship from MALINDA & GATES FOUNDATION to present poster at 12<sup>th</sup> International Double-Stranded RNA Virus Symposium, Goa, India. 2015
- DST National Post Doctoral Fellowship 2017  
Received Travel Grant from to give oral presentation at International Congress on Cell biology, 2018, Hyderabad, India. 2018
- Best poster Award by SERB-DST and ACS for in DST-NPDF project assessment. 2020

## Refereed publications

- Mukhopadhyay U, **Chanda S**, Patra U, Mukherjee A, Komoto S, Chawla-Sarkar M. Biphasic regulation of RNA interference during rotavirus infection by modulation of Argonaute2. Cellular Microbiology.vol. 21, no. 12, article e13101, 2019.  
\*Urbi Mukhopadhyay and Shampa Chanda have equal contributions to this work.
- Rajan R, Chanda SD, Rani A, Gattu S, Vodithala S, Mamillapalli A. "Bacterial Gut Symbionts of *Antheraea mylitta* (Lepidoptera: Saturniidae)," Journal of Entomological Science. 2020; 55(1), 137-140.
- **Chanda S**, Nandi S, Chawla-Sarkar M. Rotavirus-induced miR-142-5p elicits proviral milieu by targeting non-canonical transforming growth factor beta signalling and apoptosis in cells. Cellular Microbiology.Article first published online: 14 DEC 2015. DOI: 10.1111/cmi.12544.
- **Chanda SD**, Banerjee A, Nandi S, Chakrabarti S, Chawla-Sarkar M. Cordycepin an Adenosine Analogue Executes Anti Rotaviral Effect by Stimulating Induction of Type I Interferon . J Virol Antivir Res 2015;4:2. doi:10.4172/2324-8955.1000138.
- Bhowmick R, Banik G, **Chanda S**, Chattopadhyay S, Chawla-Sarkar M. Rotavirus infection induces G1 to S phase transition in MA104 cells via Ca(+2)/Calmodulin pathway. Virology. 2014; 454-455:270-9.
- Nandi S, **Chanda S**, Bagchi P, Nayak MK, Bhowmick R, Chawla-Sarkar M.MAVS protein is attenuated by rotavirus nonstructural protein 1. PLoS One. 2014 Mar 18;9(3):e92126.
- Roy Mukherjee T, **Chanda S**, Mullick S, De P, Dey-Sarkar M, Chawla-Sarkar M. Spectrum of respiratory viruses circulating in eastern India: prospective surveillance among patients with influenza-like illness during 2010-2011. J Med Virol. 2013 Aug;85(8):1459-65. doi:10.1002/jmv.23607.

- Sarkar M, **Chanda S**, Chakrabarti S, Mazumdar J, Ganguly A, Chadha MS, Mishra AC, Chawla Sarkar M. Surveillance in Eastern India (2007-2009) revealed reassortment event involving NS and PB1-F2 gene segments among co-circulating influenza A subtypes. *Virology*. 2012; 9:3. doi: 10.1186/1743-422X-9-3.

### Conference presentations

1. Taposhi Roy Mukherjee, Satabdi Nandi, **Shampa Chanda**, Mamta-Chawla Sarkar. "Identification and Full Genome Analysis of a Reassortant Influenza A (H1N2) virus in Eastern India: Evidence of Reassortment between Co-circulating A (H1N1) pdm09 and A/Brisbane/10/2007-like H3N2 Strain". 100<sup>th</sup> Indian Science Congress, 2012, Kolkata, India. [Poster presented]
2. Satabdi Nandi, **Shampa Chanda**, Mamta Chawla Sarkar. "Rotavirus NSP1 Targets MAVS Protein to Antagonize RIG-I/MAVS Signaling Pathway". 3<sup>rd</sup> Virology Meet, 2013. NIV, Pun, India. [Poster Presented].
3. **Shampa Deb Chanda**, Satabdi Nandi, Mamta Chawla-Sarkar. "Rotavirus Blocks Viral Small RNA Mediated RNA Interference by Degradation of Argonaute Protein." 2014 NextGen Genomics & Bioinformatics Technologies (NGBT) Conference. 2014. NIMHANS, Bangalore, India. **(Outstanding Poster Award by FEBS journal.)**
4. **Shampa Deb Chanda**, Anindyajit Banerjee, Satabdi Nandi, Saikat Chakrabarti, Mamta Chawla-Sarkar. "Cordycepin, an adenosine analogue, effectively induces type I interferon and executes anti rotaviral effect." 2014 2nd International Meet on Advanced Studies on Cell Signaling Network (CeSiN 2014), Kolkata, India. [Poster Presented].
5. **Shampa Deb Chanda**, Satabdi Nandi, Mamta Chawla-Sarkar. 2015. "Identification of Differentially Induced miRNAs and Delineating their Functional Significance during Rotavirus Infection." 2015 The 17th International Conference on Emerging Infectious Diseases, (EID-17), Taipei, Taiwan. [Poster Presented].
6. **Shampa Deb Chanda**, Satabdi Nandi, Mamta Chawla-Sarkar. 2015. "miR-142-5p Augments Rotavirus Infection by Targeting Non Canonical TGFβ Signaling and Apoptosis" 2015. 12<sup>th</sup> International Double-Stranded RNA Virus Symposium, Goa, India. [Poster Presented].
7. **Shampa Deb Chanda**, Resma Rajan and Anitha Mamillapalli. 2018. Unraveling the Correlation between Polyamines and Autophagy during Developmental Stages of model Lepidopteran *Bombyx mori*. International Congress on Cell Biology, 2018, Hyderabad, India. [Oral Presentation].
8. **Shampa Deb Chanda**, Resma Rajan and Anitha Mamillapalli. 2018. Differentially regulated silk gland miRNAs hampers silk production in Dichlorvos affected mulberry silkworms. APSERI-2019, Mysore, India. [Oral Presentation].

### Workshops/other courses attended

1. Certificate course on "Promoting Access to Medical Technologies and Innovation - WHO, WIPO, WTO Executive Course on the intersections between public health, intellectual property and trade" (DL-701), offered by "World Intellectual Property Organization", 2017 (75%).
2. Certificate course on "General Course On Intellectual Property" (DL-101), offered by "World Intellectual Property Organization", 2017 (77%).
3. Attended workshop on "Women in Science: Science Administration and Management", conducted by British Council, Newton Bhaba Fund, MHRD and IISER Pune, level 1-18<sup>th</sup> - 21<sup>st</sup> September, 2017 and level 2- 8<sup>th</sup> -9<sup>th</sup> January, 2018.

4. Attended workshop on “Next Generation Sequency Data Analysis” (Conducted by BIONIVID, Bangalore.) , 3<sup>rd</sup> -7<sup>th</sup> December, 2012.

## **Referees**

### **Dr. Mamta Chawla-Sarkar (PhD supervisor)**

Scientist E

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### **Dr. Anupam Mukherjee**

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