

APARNA MUKHOPADHYAY, PhD

(aka Aparna Mukherjee)

Assistant Professor of Physiology

Department of Life Sciences

Presidency University, Kolkata

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APPOINTMENTS:

March 2013- Present

Assistant Professor

Department of Life Sciences, Presidency University, Kolkata, India.

August 2012-December 2012

Adjunct Assistant Professor

Department of Biology, School of Science, Health and Technology, Medgar Evers College, The City University of New York, Brooklyn, NY, USA.

October 2007-November 2012

Research Associate

Department of Anatomy and Structural Biology and Marion Bessin Liver Research Center, Albert Einstein College of Medicine, Bronx, NY, USA.

May 2002-October 2007

Graduate Student

Department of Developmental and Molecular Biology, Albert Einstein College of Medicine, Bronx, NY, USA.

September 2000-April 2002

Junior Research Fellow

Division of Molecular and Human Genetics, Indian Institute of Chemical Biology, Kolkata, India.

EDUCATION:

- 2007 **PhD** in Biomedical Sciences, Albert Einstein College of Medicine, Bronx, NY.
- 2004 **MS with Distinction** in Biomedical Sciences, Albert Einstein College of Medicine, Bronx, NY
- 2000 **MSc** in Biotechnology, Banasthali Vidyapith, Banasthali, India.
- 1998 **BSc** in Physiology, Presidency College, Calcutta University, India

TEACHING EXPERIENCE:

March 2013-Present: Assistant Professor

Department of Life Sciences (Physiology), Presidency University, Kolkata, India

- Teach (theory and practical) undergraduate, postgraduate and PhD students basic physiology, basic and advanced cell biology, biostatistics, molecular biology, research methodologies, research ethics and advanced virology.
- Design and upgrade syllabus aimed towards imparting students an overall basic knowledge as well as train for future competitive examinations.
- Serve as course co-coordinator, examiner for undergraduate and postgraduate practical cell biology/ developmental biology/neurobiology courses.
- Serve as course coordinator, paper setter and examiner for postgraduate research ethics and emerging field of science and medical microbiology courses since 2015.
- Serve as coordinator for interdepartmental general education (GE) courses aimed towards providing them awareness on modern lifestyle diseases and the influence of society on our behaviors since 2013.
- Serving as member of PhD committee, Presidency University, Kolkata since 2013.
- Served as member of Departmental Examination Committee since 2016-18, 2022-present.
- Serve as member of the Departmental Purchase Committee since 2014-22.
- Serve as member of Admission Committee.
- Train graduate, postgraduate students and research scholars' basic and advanced research methodologies.
- Mentor and postgraduate students in grant writing and manuscript preparation.
- Member Secretary of the Human Ethics Committee of Presidency University, Kolkata

August 2012-December 2012: Adjunct Assistant Professor

Department of Biology, School of Science, Health and Technology, Medgar Evers College, The City University of New York, Brooklyn

- Teach and supervise basic and advanced general biology laboratory courses (3 credit hours each) for students interested in a future in healthcare.
- The courses are designed for science majors and include study of viruses, bacteria, protists, selected forms and functions of flowering plants, animal behavior and environment.

June 2012-August 2012: Mentor an undergraduate student from the University of Arizona as part of NIH funded Minorities Access to Research Careers (MARC) program and the Albert Einstein College of Medicine Summer Undergraduate Research Program (SURP).

- Introduce basic concepts of cell biology and biomedical research as preparation to joining a Ph.D. program.
- Initiated over expression of sfGFP fusion proteins in HEK 293 cells for immunoprecipitation and identification of novel interacting partners for Rab1a.
- Design and monitor progress of project and provide daily assistance and guidance.
- Guide preparation of abstract and poster for presentation.

2011 Mentored a High school student from Yeshiva University High School for Girls in basic hands-on laboratory techniques.

- Introduce basic concepts in cell biology, biochemistry and molecular biology.
- Teach the basic concepts of biomedical research as an introduction to a career in

science.

- Teach basic laboratory techniques such as immunoblotting, immunoprecipitation and column purification

2009 Responsible Conduct of Research Course, Group Discussion Leader.

- Facilitate discussion of ethic principles in a group of about 10 students.
- Design and prepare questions related to topic.

RESEARCH EXPERIENCE:

June-August 2014: Visiting Scientist

Laboratory of Macromolecular Analysis and Proteomics, Dept. of Pathology, Albert Einstein College of Medicine, Bronx, NY

- Received advanced training in HPLC, proteomic analysis and mass spectrometry.

2007- 2012: Postdoctoral Researcher

Department of Anatomy and Structural Biology and Marion Bessin Liver Research Center, Albert Einstein College of Medicine, Bronx, NY

Mentor: Dr. Allan Wolkoff

Partially Funded by NIH/NIDDK Hepatology Training Grant Fellowship (5T32DK007218-36)

- Initiated characterization of Rab1a's role in endocytic processing in the liver.
- Created siRNA mediated Rab1a knockdown cell lines to study endocytosis of fluorescent ligands by live cell imaging, microscopic examination of motility of endocytic vesicles on microtubules and motor recruitment, published in J. Cell Science in 2011.
- Presented data in journal clubs, departmental meetings, domestic and international meetings.
- Supervised two graduate, an undergraduate and a high school student in basic laboratory techniques and basic cell biology.
- Generated data and wrote annual progress reports for NIH funded Training grant and program project.

2002-2007: Doctoral training

Department of Developmental and Molecular Biology, Albert Einstein College of Medicine, Bronx, NY

Mentor: Dr. Duncan Wilson

- Initiated investigation of membrane recruitment of Herpes Simplex Virus tegument protein Vhs (Virion host shutoff).
- Generated a series of deletion mutants to discover a 42aa minimal region sufficient for targeting GFP into the virus particle, published in J. Virol, 2006.
- Presented data at international, domestic and departmental meetings.
- Trained and assisted three graduate students with their projects.

2000-2002: Junior Research Fellow

Division of Molecular and Human Genetics, Indian Institute of Chemical Biology, Kolkata, India.

Mentor: Dr. Keya Choudhury

- Initiated experiments to identify differentially expressed genes in radiation resistant strain M5 derived from the Chinese hamster V79 cell line, published in Radiation Research, 2003.
- Developed and perfected quantitative PCR techniques to study the differential expression of two mitochondrial genes.
- Presented work and recent literature at journal clubs.

2000: Graduate Assistant

Banasthali Vidyapith, Banasthali, India.

Mentor: Dr. Binita Nautiyal

- Studied FSH, LH and PRL titers during puberty in mice by ELISA.
- Maintained mice stock and monitored puberty in mice.
- Drew blood from eye.
- Prepared sections of testis and ovary for histological processing, sectioning and stain with Eosin and Hematoxylin.

1999: Summer Graduate Assistant

Bose Institute, Kolkata, India.

Mentor: Dr. Anuradha Lohia

- Acquired basic laboratory skills to clone, overexpress and purify E. histolytica ferredoxin gene in E. Coli.
- Grew and cultured bacterial stocks
- Prepared plasmid DNA without kits.

PUBLICATIONS:

A. Peer Reviewed Research Publications:

1. Mukherjee, Ruchira; Chanda, Rajarshi; Sen, Devashish; **Mukhopadhyay, Aparna***. Exploring the changes in fluid characteristics of saliva and ocular fatigue due to schoolbag carriage in children of West Bengal. *BLDE University Journal of Health Sciences* 10(1):p 24-31, Jan-Jun 2025. | DOI: 10.4103/bjhs.bjhs_84_24 ***Corresponding Author**.
2. Ruchira Mukherjee, Subhashis Sahu, Devashish Sen, **Aparna Mukhopadhyay***. Pulmonary ventilation ratios in normal and overweight/obese children carrying variously loaded backpacks. *Indian J Physiol Allied Sci.* 2025;77(2):21-26. DOI: 10.55184/ijpas.v77i02.301. ***Corresponding Author**.
3. Maitri Singh, Dwaipayan Chaudhuri, M. D. Irfan, Kalyan Giri, **Aparna Mukhopadhyay***. Natural Pangenotypic Hepatitis C Virus Preventives- a Hope With Terfenadine (2025) *Chemical Biology and Drug Design*, Volume 105, Issue 4. 1-19. <https://doi.org/10.1111/cbdd.70107>. IF= 3.2 ***Corresponding Author**
4. Subhashis Indra, Kuheli Chalak, Purbasha Das, **Aparna Mukhopadhyay***. Placenta a potential gateway of prenatal SARS-CoV-2 infection: A review. (2024) *European Journal of Obstetrics and Gynecology and Reproductive Biology*,

Volume 303, 123 - 131. doi: 10.1016/j.ejogrb.2024.10.027. IF=2.1 ***Corresponding Author**

5. Mukhopadhyay A, Indra S, Ghosh J, Biswas S, Palit P, Chattopadhyay D. Herpes simplex virus-mediated skin infections: cytokines and its interplay. *Explor Immunol.* 2024;4:394–413. <https://doi.org/10.37349/ei.2024.00148>
6. Rubia Mondal, **Aparna Mukhopadhyay**, Alok Chattopadhyay, Amit Bandyopadhyay, Prabir Kumar Mukhopadhyay. Attenuation of sodium arsenite mediated ovarian DNA damage, follicular atresia, and oxidative injury by combined application of vitamin E and C in post pubertal Wistar rats. *Naunyn-Schmiedeberg's Archives of Pharmacology*, 2023 Oct;396(10):2701-2720. doi: 10.1007/s00210-023-02491-9. Epub 2023 May 2.
7. Rubia Mondal, Priyankar Pal, Sagnik Biswas, Alok Chattopadhyay, Amit Bandyopadhyay, **Aparna Mukhopadhyay**, Prabir Kumar Mukhopadhyay. Ovarian follicular atresia and uterine toxicity after subchronic oral exposure of postpubertal rats to sodium arsenite. *Comparative Clinical Pathology* 31 (4), 597-612 (2022).
8. Ruchira Mukherjee, Rajarshi Chanda, Devashish Sen, Subhashis Sahu, **Aparna Mukhopadhyay**. Investigating the Facets of Physical Activity Related to Schoolbag Carriage- Highlighting the Lacunae that Exists. *Global Journal of Medical Research: K Interdisciplinary.* 22(4), 1-13 (2022). ***Corresponding Author**
9. Ruchira Mukherjee, Koumi Dutta, Devashish Sen, Subhashis Sahu, **Aparna Mukhopadhyay**. Alterations of hand muscle strength in children due to schoolbag carriage. *BLDE University Journal of Health Sciences* 7 (2), 266-270 (2022). Published by Wolters Kluwer – Medknow. DOI: 10.4103/bjhs.bjhs_31_22. ***Corresponding Author**
10. Bhattacharjee, C., **Mukhopadhyay, A.** Generation of fluorescent HCV pseudoparticles to study early viral entry events- involvement of Rab1a in HCV entry. *VirusDis.* 33, 172–184 (2022). <https://doi.org/10.1007/s13337-022-00770-2> ***Corresponding Author.** IF=3.392
11. Ruchira Mukherjee, Koumi Dutta, Subhashis Sahu, Devashish Sen, **Aparna Mukhopadhyay***. Percentage Change in Reaction Time can Predict Respiratory Quotient during Light Weight Schoolbag carriage. *Ergonomics International Journal* 6(2), (2022). DOI: 10.23880/eoij-16000287. ***Corresponding Author**
12. Ruchira Mukherjee, Poushalee Dey, **Aparna Mukhopadhyay***. A novel severity scoring system to determine need for hospital beds- In preparation of anticipated waves of COVID-19. *Journal of PeerScientist* (2022) 5(1): 1-9. DOI: 10.5281/zenodo.xxxxxxx. ***Corresponding Author. IF=3.06**
13. Ruchira Mukherjee, Sabnam Islam, **Aparna Mukhopadhyay***. Visualizing the efficacy of vaccination in different Indian states: A comparative account with

- other countries Virus Disease (2022). VirusDis. (January–March 2022) 33(1):39–56. DOI: doi.org/10.1007/s13337-022-00759-x. ***Corresponding Author.** IF=3.392
14. Chayan Bhattacharjee, Maitri Singh, Debisukti Das, Sujit Chaudhuri, **Aparna Mukhopadhyay***. Current Therapeutics against HCV: A Review. VirusDisease (2021). 32. 228-243. ***Corresponding Author.** <https://doi.org/10.1007/s13337-021-00697-0>. IF=3.392
 15. Bhattacharjee C, **Mukhopadhyay A***. 31 Years of Discovery and the Progress of Hepatitis C Virus: 2020, Nobel Prize In Physiology or Medicine. Ann Gastroenterol Dig Syst. 2021; 4(1): 1040. MedDocs Publishers. ***Corresponding Author. IF=1.8**
 16. Mandal S, Chattopadhyay D, Singh I, **Mukhopadhyay A*** (2021) Hurdles and Directions in the Fight against COVID-19. J SARS-CoV-2 COVID 2(1) 9-23. ***corresponding author. IF=?**
 17. Partha Palit, **Aparna Mukhopadhyay**, Debprasad Chattopadhyay. Phyto-pharmacological perspective of Silymarin: A potential prophylactic or therapeutic agent for COVID-19, based on its promising immunomodulatory, anti-coagulant and anti-viral property. Phytotherapy Research. 2021; 35(8) 4246-4257. <https://doi.org/10.1002/ptr.7084>. IF7.2
 18. Biswas P, **Mukhopadhyay A**, Syed Nazrul Kabir SN, Mukhopadhyay PK . High-Protein Diet Ameliorates Arsenic-Induced Oxidative Stress and Antagonizes Uterine Apoptosis in Rats. Biological Trace Element Research. 2019 Dec; 192(2):222-233. doi: 10.1007/s12011-019-1657-2.
 19. Bhattacharjee C, Nandy S. K., Das P, **Mukhopadhyay A***. Differential interaction strategies of hepatitis c virus genotypes during entry– An in silico investigation of envelope glycoprotein E2 - CD81 interaction. **Infection, Genetics and Evolution.** 69 (2019), Apr;69:48-60, doi: 10.1016/j.meegid.2019.01.008 ***corresponding author. IF=4.4**
 20. Das S, Sen I. K., Kati A, Some S, Mandal A.K., Islam S. S., Bhattacharyya R and **Mukhopadhyay A**. Flocculating, emulsification and metal sorption properties of a partial characterized novel exopolysaccharide produced by *Rhizobium tropici* SRA1 isolated from Psophocarpus tetragonolobus (L) D.C. **International Microbiology (2019)**, March 2019, Volume 22, Issue 1, pp 91–101. doi.org/10.1007/s10123-018-0031-0.
 21. Chattopadhyay D, **Mukhopadhyay A**, Ojha D, Sadhukhan P.C., Dutta S. Immuno-metabolic changes in Herpes virus infection. Cytokine, 2018; December 112:52-62. doi: 10.1016/j.cyto.2018.06.028.
 22. Mondal R, Biswas S, Chatterjee A, Mishra R, **Mukhopadhyay A**, Bhadra RK, Mukhopadhyay PK. Protection against arsenic-induced hematological and hepatic anomalies by supplementation of vitamin C and vitamin E in adult male

- rats. **J Basic Clin Physiol Pharmacol.** 2016 Nov 1;27(6):643-652. doi: 10.1515/jbcpp-2016-0020.
23. Mukherjee S, **Mukhopadhyay A**, Andriani G, Machado FS, Ashton AW, Huang H, Weiss LM, Tanowitz HB. Trypanosoma cruzi invasion is associated with trogocytosis. **Microbes Infect.** 2015 Jan;17(1):62-70 doi: 10.1016/j.micinf.2014.10.009.
24. **Mukhopadhyay A**, Quiroz JA, Wolkoff AW. Rab1a regulates sorting of early endocytic vesicles. **Am J Physiol Gastrointest Liver Physiol.** 2014 Mar 1;306(5):G412-24. doi: 10.1152/ajpgi.00118.2013. IF=4.5
25. Tanowitz HB, **Mukhopadhyay A**, Ashton AW, Lisanti MP, Machado FS, Weiss LM, Mukherjee S. Microarray analysis of the mammalian thromboxane receptor-Trypanosoma cruzi interaction. **Cell Cycle.** 2011 Apr 1;10(7):1132-43.
26. **Mukhopadhyay A**, Nieves E, Che F, Wang J, Jin L, Murray JW, Gordon K, Angeletti RH, Wolkoff AW. Proteomic Analysis of Endocytic Vesicles: I. Rab1a Regulates Motility of Early Endocytic Vesicles. **J Cell Sci.** 2011 Mar 1;124(Pt 5):765-75. Epub 2011 Feb 8. doi: 10.1242/jcs.079020. IF=4.0
27. Mukherjee S, Nagajyothi F, **Mukhopadhyay A**, Machado FS, Belbin TJ, Campos de Carvalho A, Guan F, Albanese C, Jelicks LA, Lisanti MP, Silva JS, Spray DC, Weiss LM, Tanowitz HB. Alterations in myocardial gene expression associated with experimental Trypanosoma cruzi infection. **Genomics.** 2008 May;91(5):423-32. Epub 2008 Mar 17. doi: 10.1016/j.ygeno.2008.01.008.
28. **Mukhopadhyay A**, Lee GE, Wilson DW. The amino terminus of the herpes simplex virus 1 protein Vhs mediates membrane association and tegument incorporation. **J Virol.** 2006 Oct;80(20):10117-27.
29. Mukherjee S, Belbin TJ, Spray DC, **Mukhopadhyay A**, Nagajyothi F, Weiss LM, Tanowitz HB. Microarray technology in the investigation of diseases of myocardium with special reference to infection. **Front Biosci.** 2006 May 1;11:1802-13. Review.
30. Chi JH, Harley CA, **Mukhopadhyay A**, Wilson DW. The cytoplasmic tail of herpes simplex virus envelope glycoprotein D binds to the tegument protein VP22 and to capsids. **J Gen Virol.** 2005 Feb;86(Pt 2):253-61.
31. Chaudhuri K, Banerjee R, Pandit B, **Mukherjee A**, Das S, Sengupta S, Roychoudury S, Bhattacharyya NP. Identification of two differentially expressed mitochondrial genes in a methotrexate-resistant Chinese hamster cell strain derived from v79 cells using RNA fingerprinting by arbitrary primed polymerase chain reaction. **Radiat Res.** 2003 Jul;160(1):77-85.

B. Proceedings from Conferences

1. Chayan Bhattacharjee, **Aparna Mukhopadhyay** and Mukhopadhyay P K. *Protection of arsenic induced reproductive toxicity by supplementation with isocaloric high protein diet: A study on adult male rats. Proceedings International Ergonomics Conference*, December 3-5, 2014: 577-582.

C. Books Authored/ Book Chapters

1. 2016: Nutrition, Obesity and Bariatric Surgery-Dr. Sarfaraz J. Baig and Dr. Aparna Mukhopadhyay Released at 'Story' bookshop on August 3rd, 2016.
2. Aparna Mukhopadhyay, Rubia Mondal, Sagnik Biswas and Prabir Kr. Mukhopadhyay. Arsenic-mediated female Reproductive Disorders and its possible Protection.in Molecular Physiological and Nutritional Responses during Pathological Alteration of Cell Function. West Bengal State University, Barasat. AAHELI PUBLISHERS.

D. Contributions to National/ International Conferences:

Oral Presentations:

Invited Lectures

Aparna Mukhopadhyay

“Temporal posture maps during the physical activity of schoolbag carriage” at HWWE 24- Ergonomics for Everyone organised by University of Calcutta, 13th-15th December, 2024.

Aparna Mukhopadhyay

“Glimpse into the mechanistics of HCV entry using fluorescent pseudoparticles’ at 43rd Annual Conference of Indian Association of Biomedical Scientists (IABMS) and International Conference on An Integrative Approach Towards Health Protection and Health Promotion organised by Sri Sri University, Cuttack, Odisha, 19th-21st December, 2022.

Aparna Mukhopadhyay

‘A glimpse into the mechanistics of HCV entry-any possible route of intervention?’- PHYSICON-2019 and extension program on Recent Trends in Physiology and Healthcare Research for Salubrious Society-Department of Physiology, Bankura Christian College, Bankura, West Bengal, India, 18th-20th November, 2022.

Aparna Mukhopadhyay

‘Patho-physiological understanding behind medical interventions : Emphasis on viral diseases’- Conference on Allied health Professionals: the unsung heroes of the health system. School of skills Allied Health Sciences- 23rd-25th November, 2023, Siamton Inn, Kolkata.

Aparna Mukhopadhyay

'Present Status of Women in Science'- in One -Day International Webinar on Women Empowerment to celebrate International Women's day at Ghatal Rabindra Satabarsiki Mahavidyalaya held on 8th March, 2022

Aparna Mukhopadhyay

'Timeline and glimpse into the mechanistic of HCV entry'- International Conference on Mechanistic and Therapeutic Approaches in Human and Animal Health organized Department of Zoology. Cooch Behar Panchanan Barma University, West Bengal, India, 6th-8th December, 2021.

Aparna Mukhopadhyay

'Biology of SARS CoV-2: How is this different from SARS and MERS?' International webinar on COVID-19 drug and Diagnostic Developments: A Virtual Conference, organized by Sciinov, November 2nd, 2020.

Aparna Mukhopadhyay.

'Learn to conquer- tips from the successful invader'. International webinar on "Viral Infection and Immunity: Physiological aspects and Preventive Strategy, organized by Department of Physiology, IQAC, Belda College, WB, India. 14th August, 2020.

Aparna Mukhopadhyay, Chayan Bhattacharjee, Avik Bardhan and Maitri Singh.

'Rab1a regulates HCV endocytosis.' National Seminar on Advancement of Biology in the 21st century organized by Department of Zoology, Visva-Bharati, Santiniketan, February 28-29, 2020

Aparna Mukhopadhyay

Genotypic differences in HCV entry. 40th Annual Conference of Indian Association of Biomedical Scientists & Chettinad Hospital & Research Institute 31st October - 2nd November 2019, Chettinad Hospital, Chettinad, Tamil Nadu.

Aparna Mukhopadhyay

HCV genotype specific differences in receptor interaction- an in silico study. PHYSICON 2018, November 22-24, 2018, Serapore College, Serampore, Hooghly.

Aparna Mukhopadhyay

Current Trends in Viral Detection. 1st National Level Seminar cum workshop on Recent Aspects of Microbial Techniques, February 10-12th, 2017, Techno India University, West Bengal

Aparna Mukhopadhyay, Chayan Bhattacharjee and Allan W. Wolkoff

Rab1a - the traffic policeman of endocytosis. XXVIIIth Annual Conference of The Physiological Society of India (PHYSICON-2016), 18th-20th November 2016, Midnapore College (Autonomous), Midnapore, West Bengal, India

Aparna Mukhopadhyay and Allan W. Wolkoff.

Rab1a is a master regulator of early endocytic sorting events in hepatocytes. One day National Conference on "Molecular Physiological and Nutritional Responses during

Pathophysiological Alteration of cell Function"- March 16, 2016, West Bengal State University.

Contributed Papers

1. Chayan Bhattacharjee, Sayantan Adhikary and **Aparna Mukhopadhyay**
Investigating the molecular details of Hepatitis C and Enteric Viruses of Kolkata. 26th Annual Conference of Indian Virological Society (IVS), December 7th to 9th, 2017, Nitte University, Mangalore, India.
2. **Aparna Mukhopadhyay** and Allan W. Wolkoff.
Rab1a mediates endocytic trafficking by selective microtubule motor recruitment. 36th Annual Conference of Indian Association of Biomedical Scientists, December 18th-20th, 2015, Pondicherry University, TN.
3. **Aparna Mukhopadhyay** and Allan W. Wolkoff.
Rab1a regulates early sorting of endocytic vesicles. International Symposium on Genetic Analysis Translational and Developmental. November 21st-23rd, 2014, University of Burdwan, India.
4. **Aparna Mukhopadhyay** and Allan W. Wolkoff.
Rab1a is a master regulator of early endocytic sorting events in hepatocytes. 63rd Annual Meeting of American Association for the Study of Liver Diseases, Nov 9 - 13, 2012; Boston, MA.
5. **Aparna Mukhopadhyay** and Allan W. Wolkoff.
Rab1a Regulates Minus End Directed Motility of Early Endocytic Vesicles. 61th Annual meeting of the American association for the study of liver Diseases, Oct29-Nov2, 2010, Boston, MA.
6. **Aparna Mukhopadhyay**, Ruth H. Angeletti, John W. Murray, and Allan W. Wolkoff.
Rab1a Regulates Motility and Trafficking of Early Endocytic Vesicles. 60th Annual meeting of the American association for the study of liver Diseases, Oct30-Nov3, 2009, Boston, MA.

Abstracts/Posters at National/ International Conferences:

1. Chayan Bhattacharjee and **Aparna Mukhopadhyay**. Looking at HCV Entry-Timelines and host factors. 7th Molecular Virology Meeting, 2023, 22nd -23rd September, 2023, Indian Institute of Science, Bangalore.
2. Chayan Bhattacharjee, Suman Nandy, Pratik Das, **Aparna Mukhopadhyay**. HCV entry: Genotypic differences and the importance of Rab1a. 6th Molecular Virology Meeting 2019, 28th February-2nd March, 2019, IIT Kharagpur.
3. Chayan Bhattacharjee, Avik Bardhan, Maitri Singh, **Aparna Mukhopadhyay**. Rab1a regulates HCV endocytosis. HCV 2019, COEX, Seoul, South Korea from October 5th - 8th, 2019.

4. Avik Bardhan, Chayan Bhattacharjee, **Aparna Mukhopadhyay**. Effect of Dicotyledonous Plant Extracts on Hepatitis C Virus Entry Events. Intervirocon 2018, International Conference of Virology, IVS, 12th-14th November, 2018.
5. Chayan Bhattacharjee, Sayantan Adhikary, **Aparna Mukhopadhyay**. Importance of Rab1a in HCV endocytosis. Intervirocon 2018, International Conference of Virology, IVS, 12th-14th November, 2018.
6. Chayan Bhattacharjee, Suman Nandy, **Aparna Mukhopadhyay**. Binding of CD81 varies among opes: An in silico prediction. 26th Annual Conference of Indian Virological Society (IVS), December 7th to 9th, 2017, Nitte University, Mangalore, India.
7. Sayantan Adhikary, Ahana Bhattacharyya, Bagisha Maitra, Sulagna Mandal, Trishita Banerjee, **Aparna Mukhopadhyay**. Detection and identification of prevalent Rotavirus and Norovirus strain from raw street food in Kolkata. 26th Annual Conference of Indian Virological Society (IVS), December 7th to 9th, 2017, Nitte University, Mangalore, India.
8. Chayan Bhattacharjee, Pratik Das, Sayantan Adhikary and **Aparna Mukhopadhyay**. *In silico analysis of Hepatitis C viral surface glycoprotein diversification*. **International Symposium on HIV and Hepatitis**. September 1, 2016, South Asian University, New Delhi.
9. Sayantan Adhikary, Partha Sarathi Pore, Chayan Bhattacharjee, Bagisha Maitra, Ahana Bhattacharya and **Aparna Mukhopadhyay**. Survey Of Enteric-Disease Incidence And Causes: A Case Study, West Bengal State Science Congress, February 28-29th, 2016, Presidency University, Kolkata.
10. Chayan Bhattacharjee, Sayantan Adhikary, Pratik Das and **Aparna Mukhopadhyay**, Studying The Cell Entry Of Hepatitis C Virus With HCV Pseudoparticles, West Bengal State Science Congress, February 28-29th, 2016, Presidency University, Kolkata.
11. Sayantan Adhikary, Madhurima Nandy, Ankit Roychoudhury, Shayan Sarkar, Shrestha Chakraborty, Chayan Bhattacharjee, **Aparna Mukhopadhyay**, Prabir Kr. Mukhopadhyay. Assessment Of Common Health Disorders Amongst The Tribes Of Lataguri Area, North Bengal, West Bengal State Science Congress, February 28-29th, 2016, Presidency University, Kolkata.
12. Koumi Dutta, Tanmayika Saha, Shreyashi Chandra, Trisha Kundu, Tapasya Pal, Prabir Kr. Mukhopadhyay and **Aparna Mukhopadhyay**. Prevalence Of Pain And Degree Of Perceived Exertion Amongst Tea Pluckers Of North Bengal, West Bengal State Science Congress, February 28-29th, 2016, Presidency University, Kolkata.
13. Bibaswan Basu, Shubhecchha Baidya, Agniv Chakraborti, Ritisri Mondal, Shreya Saha, **Aparna Mukhopadhyay** and Prabir Kr. Mukhopadhyay.

Assessment Of Various Obesity Indices Amongst The Tribes Of Sikkim, West Bengal State Science Congress, February 28-29th, 2016, Presidency University, Kolkata.

14. Aparna Mukhopadhyay and Allan W. Wolkoff

Efficient Endocytic sorting by Rab1a. National Symposium on “Molecules to Systems”, January 29-31, 2015, Presidency University, Kolkata.

15. Aparna Mukhopadhyay and Allan W. Wolkoff.

Rab1a is a global regulator of endocytosis via clathrin coated vesicles. 62th Annual meeting of the American Association for the Study of Liver Diseases, Nov 4-8, 2011 San Francisco, CA.

16. Aparna Mukhopadhyay, John W Murray and Allan W Wolkoff

Characterizing the role of Rab1a in Endocytic Trafficking. 48th Annual Meeting for the American Society for Cell Biology, Dec 13-17, 2008, San Francisco, CA.

17. DW Wilson and Mukhopadhyay A.

The Amino terminus of the Herpes Simplex Virus protein Vhs mediates Membrane Association and Tegument Incorporation. 31st International Herpesvirus Workshop, July 22-28, 2006. University of Washington, Seattle, WA.

18. Mukhopadhyay, A and Wilson DW.

Identification of tegument targeting sequence in HSV-1. 10th Annual Julius Marmur Symposium, March 22, 2006. Albert Einstein College of Medicine, Bronx, NY- 10461.

ADMINISTRATIVE DUTIES:

Member of the following University Committees:

- Serving as member of PhD committee, Presidency University, Kolkata since 2013.
- Served as member of Departmental Examination Committee 2016-18, 2022-present.
- Serving as member of the Departmental Purchase Committee since 2014.
- Served as member of Departmental Working committee from 2013-2014.
- Serving as member of Departmental Admission Committee since 2019.
- Serving as member of Postgraduate Research Advisory Committee (PRAC) since 2018.
- Serving as member of Departmental Academic Integrity Panel (DIAP) since 2021.
- Serve as course coordinator of
 - GenED courses:
 - BIOS 0132 (Modern Lifestyle Diseases),
 - BIOS 0431(Society and Behavior),
 - Undergraduate courses:
 - BIOS04C8 (Systems Physiology)
 - BIOS 592 (Fundamentals of cell biology practicals),
 - BIOS 692 (Pathophysiology of common human diseases and pharmacological drug design practicals)
 - Postgraduate courses
 - BIOS 791 (Advanced Cellular Biology, Developmental Biology and Fundamentals of Neurobiology practicals),

BIOS 803 (Research conduct and Bioethics and Emerging field of Science) and
BIOS 903 (Medical Microbiology)

- PhD Coursework

AWARDS AND HONORS:

- 2016: Awarded Mrs. Thangam Vasudevan Award at the 37th annual IABMS conference, Shobhit University, Meerut, UP, for best research paper in any aspect of biomedical sciences, for scientists below 45 years.
- 2011: Awarded Presidential Poster of Distinction at the 62th Annual meeting of the American Association for the Study of Liver Diseases, Nov 4-8, 2011 San Francisco, CA.
- 2004: Passed MS with Distinction at the Albert Einstein College of Medicine, Bronx, New York, USA.
- 2001: Honored for obtaining highest marks in the PhD qualifying Examination organized by Indian Institute of Chemical Biology, Kolkata, India.
- 1999: Awarded Junior Research fellowship (CSIR) through a competitive National Level Eligibility (NET) test conducted jointly by Council of Scientific and Industrial Research (CSIR) and University Grants Commission (UGC) in 1999, Govt. of India.
- 1997: Received first prize for scoring the highest marks in BSc Physiology, Part-1 examination in 1997, University of Calcutta (Kolkata), India.

PARTICIPATION IN NIH FUNDED RESEARCH:

2007-2010: Research funded by NIH/NIDDK Hepatology Training Grant (5T32 DK007218-36).

FUNDED PROJECTS:

1. Title: Evaluation of cardio-respiratory and oxidative stress parameters among normal weight and overweight/obese school children due to mandatory load carriage.
Funding Agency: WB-DST
Role: PI
Funds: 15,90,800.00
2. Title: Molecular Dissection on The Protection Ability of Vitamin E and C Against Arsenic Induced Reproductive Disorders in Adult Female Rats.
Funding agency: WB-DST, June 2018-June 2021
Role: Co-PI
Funds: Rs. 13,99,800.00
3. Title: Dissecting the molecular events of Hepatitis C Virus entry using pseudo-particles.
Funding Agency: Department of Biotechnology, Bio-CARE program, Govt. of India
Role: PI (2015-18)
Funds: Rs. 28,57,739.00
4. Title: Biochemical characterization of SarA and SarB regulators in *S. aureus* to study molecular genetics.
Funding Agency: Department of Biotechnology, Govt. of India
Role: co-PI (2013-16)

Funds: 32,02,995.00

PhD STUDENTS:

1. Dr. Chayan Bhattacharjee (2014-2021)
Title of Thesis: **Investigating the molecular details of Hepatitis C virus entry events**
Status: Awarded-2021
2. Ms. Ruchira Mukherjee (2018-present)
Title of Thesis: **Quantification of oxidative stress and physiological parameters due to schoolbag carriage in normal, overweight/obese male schoolchildren of West Bengal.**
Status: Awarded-2024
3. Ms. Maitri Singh (2019-present)
Title of Thesis: **Investigating Host Protein Interactions with HCV E2 in Viral Entry Events**
4. Sulagna Mandal (2020-Present)
Title of Thesis: **Characterization of cellular receptors and evaluation of SARS-CoV-2 entry in placenta.**

DISSERTATION PROJECTS MENTORED:

1. Swati Sraboni Paul-2014
2. Sayantan Adhikary-2015
3. Parthosarothei Pore-2015
4. Pratik Das-2016
5. Ahana Bhattacharyya-2016
6. Bagisha Maitra-2016
7. Debisukti Das-2017
8. Sulagna Mondal-2017
9. Trishita Banerjee-2017
10. Ritisri Mondal-2018
11. Avik Bardhan -2018-19
12. Saily Roy- 2018-19
13. Oindrila Sinha-2019-20
14. Md. Irfan-2019-20
15. Poushalee dey- 2020-21
16. Sabnam Islam 2020-21
17. Ritam Chakraborty- 2020-21
18. Bithika Pramanick- 2021-22
19. Subhashish Indro (2023)
20. Kuheli Chalak (2023)
21. Purbasha Das (2024)
22. Anwesha saha (2024)
23. Ushnish Sengupta (2025)
24. Shramana Halder (2025)

SUMMER/ WINTER INTERNSHIPS MENTORED:

1. August-September, 2016: Sukanya Chakraborty, MAKAUT (Former WBUT), West Bengal
2. Dec2017-Jan2018, June-Jul, 2018: Awantika Rai, Dept. of Biotechnology, SRM Institute of Science and Technology, Tamil Nadu
3. June-Jul, 2018: Debabrata Mandal, Dept. of Biotechnology, SRM Institute of Science and Technology, Tamil Nadu
4. June-Jul, 2018: Mayukh Acharjee, Amity University, Kolkata
5. 1st June-27th June, 2019: Riasha Pal, SRM Institute of Science and Technology, Chennai.
6. 27th May-22nd July, 2019: Arunima Mukherjee, Amity University
7. 2nd December, 2019- 1st January, 2020: Simar Sharma, Manipal Institute of Technology, Manipal.
8. Nikita Shukla
9. 20th May to 11th July, 2022: Rashi Chatterjee, 2nd year B. tech student of Vellore Institute of Technology, Vellore
10. Aleya
11. Joydip Majumder-KIIT
12. Sukanya Bhattacharyya_ University of Burdwan

MEMBERSHIPS:

1. Indian Association of Biomedical Scientists: since 2015
2. Indian Virological Society: since 2017

AD-HOC REVIEWER:

Virus Disease

World Journal of Hepatology

World Journal of Gastroenterology

World Journal of Virology

Scientific Reports