

CURRICULUM VITAE

Arunava Roy, M.Sc., Ph.D.

Assistant Professor (Research)

Department of Molecular Medicine, University of South Florida
MDC 4140B; 12901 Bruce B Downs Blvd, Tampa, FL 33612, USA

Email: arunavaroy@usf.edu
arunavaroy1@gmail.com

Phone: 001 (312) 203-8292

Research Expertise

Molecular Virology, Oncogenic Herpesviruses, KSHV, EBV, HSV1, Viral Epigenetics, Viral restriction factors, Antiviral Innate Immune Response, Viral Transcription Regulations, Host-virus Interactions, Rhabdovirus, Antiviral Targets, Coronavirus, SARS- CoV.

Education

2007 - 2013 **Ph.D. Biotechnology**, Molecular Virology; University of Calcutta, India.

2005 - 2007 **M.Sc. Biotechnology**; University of Calcutta, India.

2002 - 2005 **B.Sc. Microbiology**, with honors; University of Calcutta, India.

Professional/Research experience

2019 - Present **Assistant Professor (Research)**

Dept. of Molecular Medicine, University of South Florida, Tampa, USA.

2017 - 2019 **Postdoctoral Research Associate**

Dept. of Molecular Medicine, University of South Florida, Tampa, USA.

Mentor: Prof. Bala Chandran

2014 - 2017 **Postdoctoral Research Fellow**

Dept. of Microbiology and Immunology, Chicago Medical School; Rosalind Franklin University of Medicine and Science, USA.

Mentor: Prof. Bala Chandran

2013 - 2014 **Dr. D. S. Kothari Fellow, UGC, India**

Dept. of Biotechnology; University of Calcutta, India.

Mentor: Prof. Dhruvajyoti Chattopadhyay.

2007 - 2013 **UGC-NET sponsored Ph.D. fellow**

Dept. of Biotechnology; University of Calcutta, India.

Mentor: Prof. Dhruvajyoti Chattopadhyay.

Grants & Funding

2024 **ACS-IRG-21-145-25** (American Cancer Society-Institutional Research Grant, Moffitt Cancer Center)
PI: Arunava Roy (\$30000/year).

Fellowships

2013 **Dr. D. S. Kothari Postdoctoral Fellowship and Grant**, University Grant Commission, Gov. of India.

2007 **National Eligibility Test (NET) - CSIR-UGC Research Fellowship**, University Grant Commission, Gov. of India.

2007 **Department of Biotechnology National Eligibility Test (DBT-NET)** (All India Rank 32), Gov. of India.

2007 **Graduate Aptitude Test in Engineering (GATE)**, Gov. of India.

2005 **National Merit Scholarship**, National Scholarship Scheme, Gov. of India.

Awards and Honors (Research)

2019 **Travel Award**, "22nd International Workshop on KSHV and Related Agents", New York, USA.

2018 **The 9th Annual Joseph Krzankowski Invited Oral Presentations Award**, University of South Florida, USA.

2012 **Best Poster award**, "81st Annual Meeting of the Society of Biological Chemists, India", Kolkata, India.

2012 **Student Travel Award**, "31st annual meeting of the American Society of Virology", Wisconsin-Madison, USA.

2012 **International Travel Support**, Department of Science and Technology, Government of India.

2011 **NC Travel Grant**, "8th International Retroviral Nucleocapsid Symposium", Barcelona, Spain.

2011 **University travel grant**, University of Calcutta, India.

2011 **Best Poster award**, "2nd Molecular Virology Meeting", Indian Institute of Science, Bangalore, India.

2010 **First Prize for Oral Presentation**, "B. C. Guha symposium for Young Investigators," Univ. of Calcutta, India.

2010 **Best Poster award**, "ICGEB – IUBMB International Workshop on Human RNA Viruses," New Delhi, India.

2005 **Post Graduate Merit Award**, Gov. of India.

Teaching Experience

2021 - present	Co-Director, Advances in Virology-2 course (GMS 6107); Graduate Program, College of Medicine, University of South Florida, Tampa, USA. 5 lectures / 1 h 30 min each; 2 Exams
2018 - 2020	Advances in Virology-2 course (GMS 6107); Graduate Program, College of Medicine, University of South Florida, Tampa, USA. 5 lectures / 1 h 30 min each; 2 Exams
2017 - 2017	Instructor, 'Project Dreams' – A certificate course in molecular Biology techniques for veterans at Rosalind Franklin University of Medicine and Science, North Chicago, USA.
2013 - 2014	Recombinant DNA technology course (3 credits); M.Sc. (Semester II), Dept. of Biotechnology, University of Calcutta, India. 6 lectures / 2 h each; 1 Exam
2008 - 2012	Conducted laboratory exercises for Master Students (Semester I, II, and III) University of Calcutta; Dept. of Biotechnology, India.

Mentoring Experience

2021 - Present	Mentored – Anandita Ghosh, Ph.D. student, Chandran Lab, USF, Tampa.
2020 - 2022	Mentored – Ahmed Ramadan, Ph.D. student, Deschenes Lab, USF, Tampa.
2017 - 2021	Mentored – Anandita Ghosh, Research Associate, Chandran Lab, USF, Tampa.
2015 - 2017	Mentored – Gina Pisano, Ph.D. student, Chandran Lab, RFUMS, North Chicago.
2014 - 2015	Mentored – Olsi Gjyshi, MD- Ph.D. student, Chandran Lab, RFUMS, North Chicago.
2008 - 2014	Designed and supervised individual research projects for 6 Master's dissertation students (3-6 months) and 3-long term project trainees (6-12 months) in Chattopadhyay lab, CU, India.

Career Advancement

Feb 2022	NanoString nCounter Workshop, University of South Florida
Nov 2021	NanoString GeoMx Digital Spatial Profiler (DSP) Workshop, University of South Florida
Feb 2019	Computational NGS Data Analysis Workshop, University of South Florida
Feb 2019	RNA-seq Illumina Sequencing Laboratory Workshop, University of South Florida
Aug 2011	Science Communication workshop, Wellcome Trust/DBT India Alliance

Publications

Complete bibliography of published work:

Google Scholar: <https://scholar.google.com/citations?user=XZg08NoAAAJ&hl=en>

ORCID: <https://orcid.org/0000-0002-8486-0539>

NIH, My Bibliography: <https://www.ncbi.nlm.nih.gov/myncbi/arunava.roy.3/bibliography/public/>

Google Scholar Citation indices: **Citations: 824; h-index: 14; i10-index: 17** (as of March 26, 2024)

Research articles in peer-reviewed journals

- 1) **Arunava Roy[#]**, Anandita Ghosh. Epigenetic Restriction Factors (eRFs) in Virus Infection. **Viruses**. 2024, 16(2), 183. **#Corresponding Author**.
- 2) Indrani Das Jana, Prabuddha Bhattacharya, Karthick Mayilsamy, Saptarshi Banerjee, Gourab Bhattacharya, Sayan Das, Seemanti Aditya, Anandita Ghosh, Syamanthak Srikrishnan, Amit Kumar Das, Amit Basak, Shyam S. Mohapatra, Bala Chandran, Devesh Bhimsaria, Subhra Mohapatra[#], **Arunava Roy[#]**, Arindam Mondal[#]. Targeting an evolutionarily conserved "E-L-L" motif in the SARS-CoV-2 spike protein with Posaconazole as a small molecule fusion inhibitor. **PNAS Nexus**. 2022, 1, 1–14. **#Corresponding Author**.
- 3) Ahmed A Ramadan, Karthick Mayilsamy, Andrew R McGill, Anandita Ghosh, Marc A Giulianotti, Haley M Donow, Shyam S Mohapatra, Subhra Mohapatra, Bala Chandran, Robert J Deschenes[#], **Arunava Roy[#]**. Identification of SARS-CoV-2 Spike Palmitoylation Inhibitors That Results in Release of Attenuated Virus with Reduced Infectivity. **Viruses**. 2022, 14(3), 531. **#Corresponding Author**.
- 4) Valiya Veetil M, Krishna G, **Roy A**, Ghosh A, Dutta D, Kumar B, Chakraborty S, Raveendran AT, Sharma-Walia N, Chandran B. Kaposi's Sarcoma Associated Herpesvirus Infection Induces the Expression of Neuroendocrine Genes in Endothelial Cells. **Journal of Virology**. 2020 Mar 31;94(8):e01692-19.
- 5) **Arunava Roy[#]**, Anandita Ghosh, Binod Kumar, Bala Chandran[#]. IFI16, a nuclear innate immune DNA sensor, mediates epigenetic silencing of herpesvirus genomes by its association with H3K9 methyltransferases SUV39H1 and GLP. **eLife**. 2019 Nov 4; 8: e49500. **#Corresponding Author**.

- 6) Kumar B, **Roy A**, Asha K, Sharma-Walia N, Ansari MA, Chandran B. HACE1, an E3 ubiquitin-protein ligase, Mitigates Kaposi's Sarcoma-Associated Herpesvirus (KSHV) Infection Induced Oxidative Stress by Promoting Nrf2 Activity. **Journal of Virology** 2019 Feb 20. JVI.01812-18. doi: 10.1128/JVI.01812-18.
- 7) Kumar B, **Roy A**, Valiya Veettil M, Chandran B. Insight Into The Role of E3 ubiquitin Ligase c-Cbl, ESCRT Machinery, and Host Cell Signaling in Kaposi's Sarcoma-Associated Herpesvirus Entry and Trafficking. **Journal of Virology**. 2018 Jan 30;92(4).
- 8) Pisano G, **Roy A**, Ahmed Ansari M, Kumar B, Chikoti L, Chandran B. Interferon- γ -inducible protein 16 (IFI16) is required for the maintenance of Epstein-Barr virus latency. **Virology Journal**. 2017 Nov 13;14(1):221.
- 9) Iqbal J, Ansari MA, Kumar B, Dutta D, **Roy A**, Chikoti L, Pisano G, Dutta S, Vahedi S, Veettil MV, Chandran B. (2016) Histone H2B-IFI16 Recognition of Nuclear Herpesviral Genome Induces Cytoplasmic Interferon- β Responses. **PLoS Pathogens**. 2016 Oct 20;12(10):e1005967.
- 10) Kumar B, Dutta D, Iqbal J, Ansari MA, **Roy A**, Chikoti L, Pisano G, Veettil MV, Chandran B. (2016) ESCRT-I Protein Tsg101 Plays a Role in the Post-macropinocytic Trafficking and Infection of Endothelial Cells by Kaposi's Sarcoma-Associated Herpesvirus. **PLoS Pathogens**. 2016 Oct 20;12(10):e1005960.
- 11) Ghosh S, Mukherjee S, Sengupta N, **Roy A**, Dey D, Chakraborty S, Chattopadhyay D, Banerjee A, Basu A. (2016) Network analysis reveals common host protein/s modulating pathogenesis of neurotropic viruses. **Scientific Reports**. 2016 Sep 1;6:32593.
- 12) **Roy A**, Dutta D, Iqbal J, Pisano G, Gjyshi O, Ansari MA, Kumar B, Chandran B. (2016) Nuclear Innate Immune DNA Sensor IFI16 Is Degraded during Lytic Reactivation of Kaposi's Sarcoma-Associated Herpesvirus (KSHV): Role of IFI16 in Maintenance of KSHV Latency. **Journal of Virology**. 2016 Sep 12;90(19):8822-41.
- 13) Manini Mukherjee, Aditya Sarkar, **Arunava Roy**, Pinki Saha Sardar, Ansuman Lahiri, Dhruvajyoti Chattopadhyay and Sanjib Ghosh. (2015) Role of tryptophan 135 of Chandipura virus phosphoprotein P in dimerization and complex formation with leader RNA: structural aspect using time resolved anisotropy and simulation. **Royal Society of Chemistry Advances**, 2015,5, 104582-104593.
- 14) Ansari MA, Dutta S, Veettil MV, Dutta D, Iqbal J, Kumar B, **Roy A**, Chikoti L, Singh VV, Chandran B. (2015) Herpesvirus Genome Recognition Induced Acetylation of Nuclear IFI16 Is Essential for Its Cytoplasmic Translocation, Inflammasome and IFN- β Responses. **PLoS Pathogens**. 2015 Jul 2;11(7):e1005019.
- 15) Gjyshi O, **Roy A**, Dutta S, Veettil MV, Dutta D, Chandran B. (2015) Activated Nrf2 Interacts with Kaposi's Sarcoma-Associated Herpesvirus Latency Protein LANA-1 and Host Protein KAP1 To Mediate Global Lytic Gene Repression. **Journal of Virology**. 2015 Aug;89(15):7874-92.
- 16) Chakraborty A, Bera A, Mukherjee A, Basak P, Khan I, Mondal A, **Roy A**, Bhattacharyya A, SenGupta S, Roy D, Nag S, Ghosh A, Chattopadhyay D, Bhattacharyya M. (2015) Changing bacterial profile of Sundarbans, the world heritage mangrove: Impact of anthropogenic interventions. **World Journal of Microbiology and Biotechnology**. 31(4):593-610.
- 17) Basak P, Majumder NS, Nag S, Bhattacharyya A, Roy D, Chakraborty A, SenGupta S, **Roy A**, Mukherjee A, Pattanayak R, Ghosh A, Chattopadhyay D, Bhattacharyya M. (2014) Spatiotemporal Analysis of Bacterial Diversity in Sediments of Sundarbans Using Parallel 16S rRNA Gene Tag Sequencing. **Microbial Ecology**. 69(3):500-11.
- 18) Debdut Naskar, George Maiti, Arijit Chakraborty, **Arunava Roy**, Dhruvajyoti Chattopadhyay, Malini Sen. (2014) Wnt5a - Rac1 - NF κ B homeostatic circuitry sustains innate immune functions in macrophages. **Journal of Immunology**, 192(9):4386-97.
- 19) **Arunava Roy**[#], Prasenjit Chakraborty[#], Smarajit Polley[#], Dhruvajyoti Chattopadhyay and Siddhartha Roy. (2013) A Leader RNA Interacting Peptide of the Phosphoprotein Inhibits Replication but not Transcription in Chandipura Virus, an Emerging Rhabdovirus. **Antiviral Research**, 100(2):346–355. ^{#These authors contributed equally to this work.}
- 20) **Arunava Roy**, Manini Mukherjee, Subhradip Mukhopadhyay, Shyam S. Maity, Sanjib Ghosh, Dhruvajyoti Chattopadhyay. (2013) Characterization of the Chandipura virus leader RNA-phosphoprotein interaction using single tryptophan mutants and its detection in viral infected cells. **Biochimie**, 95(2):180–94.
- 21) Mondal A[#], **Roy A**[#], Sarkar S, Mukherjee J, Ganguly T, D Chattopadhyay. (2012) Interaction of Chandipura Virus N and P Proteins: Identification of Two Mutually Exclusive Domains of N Involved in Interaction with P. **PLoS ONE** 7(4): e34623. ^{#These authors contributed equally to this work.}
- 22) Snehasish Basu, **Arunava Roy**, Abhrajyoti Ghosh, Amit Bera, Dhruvajyoti Chattopadhyay, Krishanu Chakrabarti. (2011) Arg235 is an essential catalytic residue of Bacillus pumilus DKS1 pectate lyase to degum ramie fiber. **Biodegradation** 22: 153–161.
- 23) S. Mukhopadhyay, S.S. Maity, **A. Roy**, D. Chattopadhyay, K.S. Ghosh, S. Dasgupta, S. Ghosh. (2010) Characterization of the Structure of the Phosphoprotein of Chandipura Virus, a Negative Stranded RNA Virus Probing Intra-tryptophan Energy Transfer Using Single and Double Tryptophan Mutants. **Biochimie**, 92(2):

Research articles under preparation

- 24) Anandita Ghosh, Jeffrey Britto, Bala Chandran, **Arunava Roy**[#]. IFI16 Facilitates KSHV Latency by Recruiting HDAC 1 and 2 to deacetylate its Latency Associated Nuclear Antigen (LANA). **#Corresponding Author**
- 25) **Arunava Roy**[#], Ramadan Ahmed Mohammed, Anandita Ghosh, Bala Chandran. Antagonization of the Type I Interferon Synthesis and Signaling Pathways by SARS-CoV-2. **#Corresponding Author**

Book Chapter

- 26) Kumar B, Veettil MV, **Roy A**, Chandran B. Proximity Ligation Assay (PLA) to Determine the Endosomal Localization of ESCRT Subunit in Virus-Infected Cells. **Methods Mol Biol.** 2019 June 28;1998:63-72.
- 27) Tridib Ganguly, Smarajit Polley, Arindam Mondal, **Arunava Roy**, Dhruvajyoti Chattopadhyay. Understanding Chandipura virus: identification of a potential drug target. **New Horizon in Biotechnology, 2008.**

Patents

- 1) Robert Deschenes, **Arunava Roy**, Ahmed Ramadan, Subhra Mohapatra. Title of Invention: METHODS OF USING PROTEIN PALMITOYLATIONS INHIBITORS. **US Patent Application No. 17/938,531.**

Presentations and Abstracts

Oral

- 1) **Arunava Roy**. Double Dribble: Two Novel Approaches to Target the SARS-CoV-2 Spike. **SNU University, Kolkata, India. Dec 2022. (Invited Talk)**
- 2) **Arunava Roy**. Double Dribble: Two Novel Approaches to Target the SARS-CoV-2 Spike. **Indian Institutes of Science Education and Research (IISER), Kolkata, India. Nov 2022. Virtual. (Invited Talk)**
- 3) **Arunava Roy**. One Protein Many Functions- the Innate Immune DNA Sensor IFI16 also Silences Herpesvirus Genomes by Recruiting H3K9 Methyltransferases SUV39H1 and GLP. **45th International Herpesvirus Workshop. Aug 2021. Virtual. (Selected Talk)**
- 4) **Arunava Roy**. Novel Role of the Innate Immune DNA Sensor IFI16 as a Major Epigenetic Modulator of KSHV Gene Expression. *Oral presentation, 22nd International Workshop on Kaposi's sarcoma Herpesvirus (KSHV) and Related Agents*, New York, USA; June 2019. **(Selected Talk)**
- 5) **Arunava Roy**. Novel Epigenetic Roles of the Innate Immune DNA Sensor - IFI16. *Oral presentation, USF Postdoctoral Research Symposium*, University of South Florida, Tampa, USA, 2019. **(Selected Talk).**
- 6) **Arunava Roy**. Novel Role of the Innate Immune DNA Sensor IFI16 (Interferon Gamma Inducible Protein 16) as a Major Epigenetic Modulator During KSHV Infection and Lytic Reactivation. *Oral presentation, the 9th Annual Joseph Krzankowski, PhD Invited Oral Presentations*, University of South Florida, Tampa, USA, 2018. **(Selected Talk).**
- 7) **Arunava Roy**. Nuclear Innate Immune DNA Sensor IFI16 Is Degraded during Lytic Reactivation of Kaposi's Sarcoma-Associated Herpesvirus (KSHV): Role of IFI16 in Maintenance of KSHV Latency. **Chicago Area Virology Association Symposium (CAVA)**, Loyola University, Chicago, USA, 2016. **(Invited Talk).**
- 8) **Roy A**. Nuclear Innate Immune DNA Sensor IFI16 is Degraded During Lytic Reactivation of Kaposi's Sarcoma-Associated Herpesvirus (KSHV): Role of IFI16 in Maintenance of KSHV Latency. *Oral presentation, 41st International Herpesvirus Workshop*, Madison, Wisconsin, USA, 2016. **(Selected Talk).**
- 9) **Arunava Roy**. Understanding the interaction between the leader RNA and Phosphoprotein, P of the Chandipura virus – a step towards a novel peptidomimetic antiviral. *Oral presentation, B. C. Guha symposium for Young Investigators*, Kolkata, 2010. **(Selected Talk).**

Posters

- 10) Anandita Ghosh, **Arunava Roy**, Jeffrey Britto, and Bala Chandran. KSHV LANA Interacts with IFI16, an Innate Immune Nuclear Episomal DNA Sensor, and Hijacks IFI16's Function of HDAC1 and 2 Association to Maintain its Latency. **25th International Conference on Kaposi's Sarcoma Herpesvirus and Related Agents (KSHV) 2023**, Dar es Salaam, Tanzania.
- 11) Anandita Ghosh, **Arunava Roy**, Jeffrey Britto, and Bala Chandran. Piracy of Host Innate Immune Response IFI16 Protein by Kaposi's sarcoma-associated herpes virus (KSHV) Protein LANA to Aid in Viral Latency. **47th Annual International Herpesvirus Workshop 2023**, Missoula, Montana.
- 12) Ahmed A Ramadan, Karthick Mayilsamy, Andrew R McGill, Anandita Ghosh, Marc A Giulianotti, Haley M Donow, Shyam S Mohapatra, Subhra Mohapatra, Bala Chandran, Robert J Deschenes, **Arunava Roy**. Identification of a novel target to attenuate SARS-CoV-2 infectivity. **USF Health Research Day 2022**, University of South Florida, Tampa.
- 13) Anandita Ghosh, **Arunava Roy**, Bala Chandran. KSHV LANA-1 interacts with IFI16, an innate immune nuclear episomal DNA Sensor. **USF Health Research Day 2022**, University of South Florida, Tampa.

- 14) **Arunava Roy**, Anandita Ghosh, Bala Chandran. IFI16 Functions as a Major Epigenetic Modulator During KSHV Infection and Lytic Reactivation. *Poster presentation, 16th International Conference on Malignancies in HIV/AIDS (ICMH)*, National Institutes of Health, Bethesda, Maryland, USA, 2018. **(Presenting Author)**.
- 15) **Roy A**, Dutta D, Iqbal J, Pisano G, Gjyshi O, Ansari MA, Kumar B, Chandran B. Nuclear Innate Immune DNA Sensor IFI16 is Degraded During Lytic Reactivation of Kaposi's Sarcoma-Associated Herpesvirus (KSHV): Role of IFI16 in Maintenance of KSHV Latency. *Poster presentation, 41st International Herpesvirus Workshop*, Madison, Wisconsin, USA, 2016. **(Presenting Author)**.
- 16) Dutta D, **Roy A**, Kumar B, Pisano G, Walia N, Chikoti L and Chandran B. BRCA1 functions as a novel antiviral restriction factor in cooperation with IFI16 and represses HSV-1 gene expression via epigenetic histone modifications. *Poster presentation, 41st Annual International Herpesvirus Workshop*, Madison, Wisconsin, USA, 2016.
- 17) Kumar B, Dutta D, Iqbal J, Ansari MA, **Roy A**, Chikoti L, Pisano G, Valiya Veetil M, Chandran B. ESCRT-I Protein Tsg101 Plays a Role in KSHV Trafficking and Productive Infection of Endothelial Cell by Macropinocytosis. *Poster presentation, 41st International Herpesvirus Workshop*, Madison, Wisconsin, USA, 2016.
- 18) Ansari MA, Dutta D, **Roy A**, Iqbal J, Kumar B, Chandran B. HSV-2 *de Novo* Infection Induces IFI16 and NLRP3 Inflammasome Mediated IL-1 β and IFI16-Mediated Interferon- β Innate Immune Responses. *Poster presentation, 41st International Herpesvirus Workshop*, Madison, Wisconsin, USA, 2016.
- 19) **Roy A**, Gjyshi O, Dutta S, Veetil MV, Dutta D, Chandran B. Activated Nrf2 Interacts with Kaposi's Sarcoma-Associated Herpesvirus Latency Protein LANA-1 and Host Protein KAP1 To Mediate Global Lytic Gene Repression. *Poster presentation, 40th International Herpesvirus Workshop*, Boise, USA, 2015. **(Presenting Author)**.
- 20) Ansari MA, Dutta S, Veetil MV, Dutta D, Iqbal J, Kumar B, **Roy A**, Chikoti L, Singh VV, Chandran B. Herpesvirus genome recognition induced acetylation of nuclear IFI16 is essential for its cytoplasmic translocation, inflammasome and IFN- β response. *Poster presentation, 40th International Herpesvirus Workshop*, Boise, USA, 2015.
- 21) Dutta D, Dutta S, Veetil MV, **Roy A**, Ansari MA, Iqbal J, Chikoti L, Kumar B, Johnson KE, Chandran B. BRCA1 Regulates IFI16 Mediated Nuclear Innate Sensing of Herpes Viral DNA and Subsequent Induction of The Innate Inflammasome and Interferon- β Responses. *Poster presentation, 40th International Herpesvirus Workshop*, Boise, USA, 2015.
- 22) **Arunava Roy**, Dhiman Sankar Pal and Dhruvajyoti Chattopadhyay. Role of Chandipura Virus (CHPV) Cytoplasmic Inclusion Bodies in Viral RNA Synthesis and Propagation. *Poster presentation, SBC(I) Annual Meeting*, Kolkata, 2012. **(Presenting Author)**.
- 23) **Arunava Roy**, Prasenjit Chakraborty, Smarajit Polley, Siddhartha Roy, Dhruvajyoti Chattopadhyay. A Leader RNA Interacting Peptide of the Phosphoprotein (P) Inhibits Viral Replication but not Transcription in Chandipura Virus – a step towards a novel peptidomimetic antiviral. *Poster presentation, 31st annual meeting of the American Society of Virology*, Wisconsin-Madison, USA, 2012. **(Presenting Author)**.
- 24) **Arunava Roy**, Arindam Mondal, Dhruvajyoti Chattopadhyay. Differential Activity of Chandipura Virus Nucleocapsid Protein Depending on its Oligomerization Status: Functional Insights. *Poster presentation, 8th International Retroviral Nucleocapsid Symposium*, Barcelona, Spain, 2011. **(Presenting Author)**.
- 25) Dhruvajyoti Chattopadhyay, **Arunava Roy**, Smarajit Polley, Prasenjit Chakraborty, and Siddhartha Roy. Chandipura virus, an emerging pathogen causing mortality in children: Biology based strategy for antiviral development. *Oral presentation, OMICS Group Conferences - International Conference and Exhibition on Virology*, Baltimore, USA, 2011.
- 26) **Arunava Roy**, Arindam Mondal, Tridib Ganguly, and Dhruvajyoti Chattopadhyay. Interaction of Chandipura Virus N and P Proteins: Identification of a Unique Domain at the N Terminus of N that is Involved in N-P Complex Formation and its Role in Encapsidation of Viral Genome RNA. *Poster presentation, 2nd Molecular Virology Meeting*, Bangalore, 2011. **(Presenting Author)**.
- 27) **Arunava Roy**, Smarajit Polley, Prasenjit Chakraborty, Siddhartha Roy, Dhruvajyoti Chattopadhyay. Understanding the interaction between the leader RNA and Phosphoprotein of the Chandipura virus – a step towards a novel peptidomimetic antiviral. *Poster presentation, ICGEB Human RNA virus meeting*, New Delhi, 2010. **(Presenting Author)**.

Service

- Judge: Travel Award, Postdoc Category – USF Health Research Day 2024, University of South Florida, Tampa
- Judge: Poster presentation, Postdoc Category – USF Health Research Day 2023, University of South Florida, Tampa

- Judge: Poster presentation, Postdoc Category – USF Health Research Day 2022, University of South Florida, Tampa
- Judge: Poster presentation, Graduate student Category – USF Health Research Day 2021, University of South Florida, Tampa
- Judge: Poster presentation, Graduate student Category – USF Health Research Day 2019, University of South Florida, Tampa

Reviewer/Editorial Roles (Ad Hoc)

- **Academic Editor:** PlosOne [Publisher: PLOS]
- **Topic Editor:** -Viruses [Publisher: MDPI]
- **Review Editor:** -Frontiers in Microbiology – Virology section [Publisher: Frontiers]
-Frontiers in Pharmacology – Respiratory Pharmacology section [Publisher: Frontiers]
- **Reviewer:** -Nature Microbiology [Publisher: NPG]
-Science Translational Medicine [Publisher: AAAS]
-Journal of Biomedical Science [Publisher: BMC]
-International Journal of Molecular Sciences [Publisher: MDPI]
-Viruses [Publisher: MDPI]
-Virology Journal [Publisher: BioMed Central]
-Journal of Clinical Medicine [Publisher: MDPI]
-Frontiers in Molecular Biosciences [Publisher: Frontiers]
-Frontiers in Molecular Neuroscience [Publisher: Frontiers]
-Process Biochemistry [Publisher: Elsevier]
-BioMed Research International [Publisher: Elsevier]
-Case Reports in Hematology [Publisher: Hindawi]
-F1000Research [Publisher: F1000]

Professional Society Memberships

1. **American Society for Virology (ASV)** – Associate Member
2. **International Society for Infectious Diseases** – Life Member
3. **Society of Biological Chemists India (SBCI)** – Member

Outreach

2015 – 2017	Postdoc Steering Committee Member , Rosalind Franklin University of Medicine and Science, North Chicago, USA. Member of a 3-member steering committee for planning and organizing career development workshops/events for postdocs and graduate students.
2008 – 2014	General Secretary - Biotech Forum , an alumni association of the Dept. of Biotechnology working towards scientific outreach and alumni events, University of Calcutta, India.

Arunava Roy, M.Sc., Ph.D.
(March/26/2024)