

Adhiraj Roy

Associate Professor, Former DBT-Ramalingaswami Fellow

Hardworking, skilled researcher with more than 13 years of experience in biochemistry, molecular oncology, cancer therapeutics and drug discovery. Proven record of accomplishments and communication skills with 29 peer-reviewed articles, 4 book chapters and 13 conference presentations with h-index of 16 and more than 800 citations.



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scholar.google.co.in/citations?user=zXEKB58AAAAJ&hl=en

linkedin.com/in/adhirajroy

WORK EXPERIENCE

Associate Professor Amity University, Noida

11/2019 - Present

Noida, India

Achievements/Tasks

- Principal investigator of 3 Govt. funded research projects focusing on cancer cell signaling and cancer therapeutics.
- Led multi-personnel teams towards time-bound completion of all projects undertaken.
- Experienced in budgetary handling and management of extramural grants.
- Mentored and supervised 3 doctoral, 2 master's and 3 undergraduate students.
- Experienced in administrative duties as Program Leader of B.Sc. (Hons), Biochemistry 2021-2024 batch and Co-Ordinator of Institute Cultural Club.
- Extensive teaching experience in the field of molecular genetics, cancer cell signaling, cancer therapeutics and drug discovery.

Contact: Dr. Subhrajit Biswas, HoI -

Email: sbiswas2@amity.edu, Tel: 919540946976

Ramalingaswami Faculty Fellow Banaras Hindu University

03/2019 - 10/2019

Varanasi, India

Achievements/Tasks

- Principal investigator of 1 Govt. of India-funded research projects investigating the role of Protein kinase D in epithelial ovarian cancer.
- Experienced in budgetary handling and management of extramural grants.
- Teaching master's and doctoral students on the topic of biochemistry and molecular biology.

Contact: Dr. Gopeshwar Narayan, Mentor -

Email: gnarayan@bhu.ac.in, Tel: 919450013701

Senior Research Scientist TCG Lifesciences Pvt.Ltd

08/2018 - 02/2019

Kolkata, India

Achievements/Tasks

- Improved high throughput drug screening.
- Developed *in vitro* assay systems.
- Managed oncology discovery projects.

TECHNICAL SKILLS

Project management	●	●	●	●	●
Research & Development	●	●	●	●	●
Molecular biology techniques	●	●	●	●	●
Cancer research methodologies	●	●	●	●	●
Assay development	●	●	●	●	●
Cell culture techniques	●	●	●	●	●
Protein purification methods	●	●	●	●	●
Molecular cloning techniques	●	●	●	●	●
Genetic engineering skills	●	●	●	●	●
Immunofluorescence & Immunohistochemistry	●	●	●	●	●
<i>in vivo</i> mouse model handling	●	●	●	●	●
Statistical analysis knowledge	●	●	●	●	●
Scientific writing experience	●	●	●	●	●
Laboratory management skill	●	●	●	●	●

SOFT SKILLS

Adaptability

Effective communication

Strong leadership

Critical thinking

Team collaboration

Time management

Networking

HONORS/AWARDS

Ramalingaswami Re-entry Fellowship
(03/2019 - 02/2024)

Department of Biotechnology, Govt. of India



WORK EXPERIENCE

Postdoctoral Associate University of Pittsburgh Medical Centre

06/2016 - 07/2018

Pittsburgh, USA

Achievements/Tasks

- ▶ *in vitro* and *in vivo* assay development for cancer therapeutics.
- ▶ Led multi-personnel teams towards time bound completion of 2 projects undertaken.
- ▶ Mentored 1 Ph.D. student and 3 visiting scholars towards completion of their research objectives and fostering their development in research techniques and scientific writing.

Contact : Dr. Qiming Jane Wang -
Email: qjw1@pitt.edu, Tel: +1412-383-7764

Postdoctoral Scientist The George Washington University

06/2014 - 05/2016

Washington D.C, USA

Achievements/Tasks

- ▶ Developed *in vitro* and *in vivo* assay systems to better understand the role of Protein Kinase D molecule in cancer cell cycle regulation and cancer therapeutics.
- ▶ Led multi-personnel teams towards time bound completion of 3 projects undertaken.
- ▶ Mentored 3 master's students towards completion of their research objectives and fostering their development in research techniques and scientific writing.



EDUCATION

Ph.D. The George Washington University

06/2010 - 05/2014

Washington D.C., USA

Thesis title:

- ▶ The Glucose Signal Transduction Pathway Mediated by the Rgt2 and Snf3 Glucose Sensors in the Budding Yeast *Saccharomyces cerevisiae*

M.Sc. (Microbiology) University of Calcutta

07/2005 - 06/2007

Kolkata, India

B.Sc. (Hons. Microbiology) University of Calcutta

08/2002 - 07/2005

Kolkata, India



TEACHING EXPERIENCE

B.Sc. (Hons) Biochemistry/ Biomedical Sciences Amity University, Noida

11/2019 - Present

Noida, India

Courses taught:

- ▶ Fundamentals of Molecular Biology
- ▶ Cell, Molecular Biology and Genetic Engineering
- ▶ Molecular Biology, Bioinstrumentations and Biotechniques



PROJECTS UNDERTAKEN

Investigating the therapeutic targeting of the PKD/LAMA5 signaling axis in high-grade serous ovarian cancer, securing funding of INR 14,36,000 from the Council of Science & Technology, Govt. of Uttar Pradesh, India (01/2025 - Present)

Led a project on deciphering the role of PKD and PI3K-PKC α signaling in refractory ovarian cancer, funded by Department of Biotechnology, Govt. of India with a total budget of INR 40,00,000. (03/2019 - 02/2024)

Explored autophagy's role in regulating exosomal micro-RNA in triple-negative breast cancer, receiving INR 9,47,600 funding from ICMR, Govt. of India (03/2021 - 02/2022)



SELECTED PUBLICATIONS

Research article

Protein kinase D2-Aurora kinase A-ERK1/2 signalling axis drives neuroendocrine differentiation of epithelial ovarian cancer

Author(s)

Sachdeva A, Roy A*, Mandal S

January 2025

Molecular & Cellular Biochemistry, 480(1):535-547

Research article

Protein kinase C δ promotes glycolysis via PI3K/AKT/mTOR signalling in high grade serous ovarian cancer

Author(s)

Tyagi K, Roy A*, Mandal S

September 2024

Molecular Biology Reports, 14;51(1):983

Research article

Design, Synthesis, and Characterization of Polyoxotungstate-Decorated Ionic Liquid-Based Hybrid Material, [BmIm] $_4$ [SiW $_{12}$ O $_{40}$] toward Rapid Adsorption of Dye and Antibacterial Activities

Author(s)

Das S, Sen B, Sarkar S, Das I, Sepay N, Paul S, Mandal S, Roy A, Malecka M, Abbas JS, Gangavarapu RR, Vijaykumar B, Ali, IS

September 2024

Inorganic Chemistry, 63(39):18448-18467

Research article

Pharmacological inhibition of protein kinase D suppresses epithelial ovarian cancer via MAPK/ERK1/2/Runx2 signalling axis

Author(s)

Tyagi K, Roy A*, Mandal S

October 2023

Cellular Signalling, 110:110849

Research article

Protein kinase D2 and 3 promote prostate cancer cell bone metastasis by positively regulating Runx2 in a MEK/ERK1/2-dependent manner

Author(s)

Roy A, Prasad S, Chen Y, Chao Y, Liu Y, Zhao J, Wang QJ

May 2023

Americal Journal of Pathology, 193(5):624-637

Patent

A nano-formulated Zinc (II) trinuclear complex for targeted prostate cancer therapy and method thereof

Author(s)

Roy A, Nagpal K, Wasai A

Indian Patent filed

Application No: 202411059070, TEMP/E-1/68049/2024-DEL



TEACHING EXPERIENCE

M.Sc. Biochemistry/ Molecular Medicine/ Clinical Embryology Amity University, Noida

11/2019 - Present

Noida, India

Courses taught:

- ▶ Medical Genetics and Cytogenetics
- ▶ Genome Engineering and Editing
- ▶ Animal Cell Culture & Cell Engineering
- ▶ Biomarkers and Molecular Diagnostics
- ▶ Microbiology in Human Health
- ▶ Proteins and Enzymology

Integrated M.Phil. and Ph.D. Banaras Hindu University

03/2019 - 10/2019

Varanasi, India

Course taught:

- ▶ Advances in Biochemistry



SELECTED CONFERENCES

EMBO Lecture Course (Tumor metabolism: Current understanding and opportunities for novel drug discovery), Amity University Noida (03/2023 - 03/2023)

Conference/Issuer of the certificate

42nd Annual conference of the Indian Association for Cancer Research (IACR), Tata Memorial Centre (ACTREC), Navi Mumbai, India (01/2023 - 01/2023)

Conference/Issuer of the certificate

41st Annual conference of the Indian Association for Cancer Research (IACR), Amity University Noida (03/2022 - 03/2022)

Conference/Issuer of the certificate



REFERENCES

Dr. Gopeshwar Narayan

“Professor, Banaras Hindu University, Varanasi, India”

Contact: gnarayan@bhu.ac.in - 919450013701

Dr. Somnath Chakravorty

“Deputy General Manager, Bharat Serums and Vaccines Ltd.”

Contact: somnathsoft@gmail.com - 917019258589



PROFESSIONAL AFFILIATIONS

Indian Association for Cancer Research, Life member

Indian Society of Human Genetics, Life member

Indian Society of Cell Biology, Life member



CERTIFICATES

Graduate aptitude test in engineering

XL-Life Sciences

Plant tissue culture & genetic transformation

Centre of Advanced Study in Cell & Chromosome Research, University of Calcutta



LANGUAGES

English



Bengali



Hindi



INTERESTS



Photography



Watercolor painting