

CURRICULUM VITAE

PERSONAL

Mayurika Lahiri; Indian Citizen
Indian Institute of Science Education &
Research (IISER)
Main Building, Biology Wing,
Dr Homi Bhabha Road, Pashan
Pune 411008

D.O.B: 15 November 1973
Office: (020) 2590 8056
Mobile: (0) 9923248080
E-mail: mayurika.lahiri@iiserpune.ac.in

EDUCATION

2002 PhD
School of Applied Sciences, University of
Wolverhampton, UK

1998 MSc, Pharmacology and Biotechnology
Division of Biomedical Sciences,
Sheffield Hallam University, UK

1996 BSc (Hons), Botany, Zoology, Chemistry
Presidency College, University of Calcutta, India

PROFESSIONAL EXPERIENCE

2015 - present Associate Professor, Indian Institute of Science Education & Research, Pune (IISER Pune), India.

2008 - 2015 Assistant Professor, Indian Institute of Science Education & Research, Pune (IISER Pune), India.

2006 – 2007 Postdoctoral Fellow, Department of Medicine, Harvard Medical School and Massachusetts General Hospital Cancer Center, MA, USA. Advisor: Dr L Zou
The Role of the ATR Checkpoint Pathway in Maintaining Genomic Stability in Mammalian cells.

2002 – 2006 Postdoctoral Research Associate, Tufts University, MA, USA.
Advisor: Dr C H Freudenreich
The Role of Cell Cycle Checkpoint Genes in Detecting Trinucleotide Repeat Tract Damage.

2001 - 2002 Research Assistant at Beatson Institute for Cancer Research, University of Glasgow, UK.

1998 – 2001 PhD Thesis, Wolverhampton University, UK. Advisor: Dr J H Martin
Characterisation of Nitric Oxide Synthase Isoforms and Nitric Oxide Synthase Activity in Human Breast Cancer Cell Lines.

1997- 1998 Master's Thesis at Sheffield Hallam University, UK. Advisor: Dr M Blair
Cloning And Expression Of ψ PTEN Gene.

1997 Summer research at Jawaharlal Nehru University, New Delhi, India. Advisor: Dr K Dutta
Overexpression of Hyaluronic Acid Binding Protein (HABP) in polymorphonuclear leukocytes in inflammatory reaction induced by glycogen.

RESEARCH PUBLICATIONS

Ahmad, M., Roy, N.J., Mondal, D., Vijayakanth, T., Lahiri, M. and Talukdar, P. (2025) Illuminating apoptosis: Visible light-activated chloride carrier for chloride transport and cell death. **J. Mater. Chem. B**. doi: 10.1039/D4TB02436B.

Bhattacharyya C, Subramanian K, Uppili B, Biswas NK, Ramdas S, Tallapaka KB, Arvind P, Rupanagudi KV, Maitra A, Nagabandi T, De T, Singh K, Sharma P, Sharma N, Raghav SK, Prasad P, Soniya EV, Jaleel A, Nelson Sathi S, Joshi M, Joshi C, Lahiri M. Dixit S, Shashidhara LS, Senthil Kumar N, Lalhruaitluanga H,

- Nundanga L, Shivakumar V, Venkatasubramanian G, Rao NP, Ganie MA, Wani IA, Jha G, Dalal A, Bashyam MD, Varadwaj PK, Bs S, Simmhan Y, Jain C, Sundar D, Gupta I, Yadav P, Sinha H, Narayanan M, Raman K, Padinjat R, Sabarinathan R; GenomelIndia Consortium; Narahari Y, Ravindranath V, Thangaraj K, Sowpati DT, Faruq M, Basu A, Kahali B. (2025) Mapping genetic diversity with the GenomelIndia project. **Nature Genetics**. doi: 10.1038/s41588-025-02206-1.
- Chatterjee, A., Narayanan, S., Thorat, S., Malik, A. J., Ambhore, M. D., Narayanan, A., Sihag, A. K., Babu, S., S. Lahiri, M., and Hazra, P. (2024) Multifunctional luminogens with synergy of aggregation-induced delayed fluorescence, two-photon absorption and photocurrent generation. **Chem Communications**. doi: <https://doi.org/10.1039/D4CC05113K>.
- Chatterjee A, Chatterjee J, Sappati S, Tanwar R, Ambhore MD, Arfin H, Umesh RM, Lahiri M, Mandal P, Hazra P. (2023) Engineering TADF, mechanochromism, and second harmonic up-conversion properties in regioisomeric substitution space. **Chemical Science**. 14(47):13832-13841. doi: 10.1039/d3sc04280d. eCollection 2023 Dec 6.
- Kuttanamkuzhi, A., Panda, DP., Malaviya, R., Gaidhani, G. and Lahiri, M. (2023) Altered expression of Api5 affects breast carcinogenesis by modulating FGF2 signalling. **BMC Cancer**. 23, 374, doi: <https://doi.org/10.1186/s12885-023-10866-7>.
- Roy, N.J., Save, S. N., Sharma, V., Abraham, B., Kuttanamkuzhi, A., Sharma, S., Lahiri, M. and Talukdar, P. (2023) NAD(P)H:Quinone Acceptor Oxidoreductase 1 (NQO1) Activatable Salicylamide H⁺/Cl⁻ Transporters. **Chemistry: A European Journal**. doi.org/10.1002/chem.202301412.
- Kuttanamkuzhi, A., Anandi, L., Chakravarty, V., Lahiri, M. (2022) Phospholipid Mediator Induced Transformation in Three-Dimensional Cultures. **Journal of Visualized Experiments** (185), e64146, doi:10.3791/64146.
- Venkataravi, A. and Lahiri, M (2022) DNA damage leads to microtubule stabilisation through an increase in Golgi-derived microtubules. **bioRxiv**. doi: <https://doi.org/10.1101/2022.08.29.505705>.
- Umesh, R. M. and Lahiri, M. (2022) Overexpression of TopBP1 leads to transformation with a TP53 mutation of non-tumorigenic breast epithelial cells. **bioRxiv**. doi: <https://doi.org/10.1101/2022.04.05.487132>.
- Sharma VK and Lahiri M (2021) Interplay between p300 and HDAC1 regulate acetylation and stability of Api5 to regulate cell proliferation. **Scientific Reports**. 11: 16427; <https://doi.org/10.1038/s41598-021-95941-4>.
- Chakravarty, V.*, Anandi, L.*, KA Ashiq *, K. Abhijith, Umesh R and Lahiri, M. (2021) Prolonged exposure to Platelet Activating Factor transforms breast epithelial cells. **Front. Genet**. doi: 10.3389/fgene.2021.634938.
- Chatterjee, A., Chatterjee, J., Sappati, S., Sheikh, T., Umesh, R. M., Ambhore, M. D., Lahiri, M., Hazra, P. (2021) Emergence of Aggregation Induced Emission (AIE), Room-Temperature Phosphorescence (RTP), and Multistimuli Response from a Single Organic Luminogen by Directed Structural Modification. **J Phys Chem B**. 125(46):12832-12846. doi: 10.1021/acs.jpcc.1c08126. Epub 2021 Nov 11.
- Pandey S, Sharma VK, Lahiri M and Basu S. (2021) Small molecule-mediated induction of endoplasmic reticulum stress in cancer cells. **RSC Med Chem**. 12(9):1604-1611. doi: 10.1039/d1md00095k.
- Sharma, VK., Islam, S., Borkar, J., Mishra, S., Panda, DP., Santra, MK., Lahiri, M. (2021) ATR facilitates the degradation of Api5 through the ubiquitin-proteasome pathway via FBXW2 to regulate apoptosis upon DNA damage. **bioRxiv**. doi: <https://doi.org/10.1101/2021.08.08.455545>.
- Malla JA, Sharma VK, Lahiri M, Talukdar P (2020) Esterase Activatable Synthetic M⁺/Cl⁻ Channel Induces Apoptosis and Disrupts Autophagy in Cancer Cells. **Chemistry - A European Journal** doi.org/10.1002/chem.202002964.
- Malla JA, Umesh RM, Yousf S, Mane S, Sharma S, Lahiri M, Talukdar P (2020) A glutathione activatable ion channel induces apoptosis in cancer cells by depleting intracellular glutathione levels. **Angewandte Chemie** doi: <https://doi.org/10.1002/anie.202000961>.
- Malla JA, Umesh RM, Vijay A, Mukherjee A, Lahiri M, Talukdar P (2020) Apoptosis-inducing activity of a fluorescent barrel-rosette M⁺/Cl⁻ channel. **Chemical Science** doi: 10.1039/c9sc06520b.

- Gellon L, Kaushal S, Cebrián J, Lahiri M, Mirkin SM, Freudenreich CH. (2019) Mrc1 and Tof1 prevent fragility and instability at long CAG repeats by their fork stabilizing function. **Nucleic Acids Research** 47(2): 794-805. doi: 10.1093/nar/gky1195.
- Anandi, L., Chakravarty*, V. Ashiq KA*, Bodakuntla S and Lahiri, M. (2017) DNA-PK plays a central role in transformation of breast epithelial cells following alkylation damage. **Journal of Cell Sciences**; 130 (21): 3749–3763. doi: 10.1242/jcs.203034. (*equal contribution)
Journal Cover: <http://jcs.biologists.org/content/130/21.cover-expansion>
First Author: <http://jcs.biologists.org/content/130/21/3605>
- Palvai, S*, Libi Anandi*; Sarkar, S.; Augustus, M.; Roy.; Lahiri, M.# and Basu, S.# (2017) Drug-Triggered Self-Assembly of Linear Polymer into Nanoparticles for Simultaneous Delivery of Hydrophobic and Hydrophilic Drugs in Breast Cancer Cells. **ACS Omega** 2: 8730 - 40. (* equal contribution; # corresponding authors).
- Saha, T., Gautam, A., Mukherjee, A., Lahiri, M and Talukdar, P (2016) Chloride Transport through Supramolecular Barrel-Rosette Ion Channels: Lipophilic Control and Apoptosis-Inducing Activity **Journal of American Chemical Society** DOI: 10.1021/jacs.6b10379.
- Anandi, L. and Lahiri, M. (2016) Investigating two Hallmarks of Cancer – Genome Instability and Tumor Promoting Inflammation. **Indian Society of Cell Biology Newsletter** 35 (2): ISSN: 2349:8307.
- Anandi, VL. and Lahiri, M. (2016) Platelet Activating Factor leads to initiation and promotion of breast cancer. **Cancer Cell and Microenvironment** 3 (3): e1370.doi:<http://dx.doi.org/10.14800/ccm/1370> [Invited review].
- Anandi, VL., Ashiq, KA*, Nitheesh, K*. and Lahiri, M. (2016) Platelet Activating Factor promotes motility in breast cancer cells and disrupts non-transformed breast acinar structures. **Oncology Reports** 35 (1): 179-88. doi: 10.3892/or.2015.4387 (* equal contribution)
- Saha, T., Hossain, MS., Saha, D., Lahiri, M. and Talukdar, P (2016) Chloride-mediated apoptosis-inducing activity of Bis(sulfonamide) anionophores. **Journal of American Chemical Society** 138 (24): 7558-7567.
- Bharne, AP., Borkar, CD., Bodakuntla, S., Lahiri, M., Subhedar, NK. and Kokare, DM. (2016) Pro-cognitive action of CART is mediated via ERK in the hippocampus. **Hippocampus**. doi: 10.1002/hipo.22608.
- Kand, D., Saha, T., Lahiri, M. and Talukdar, P. (2015) Lysosome targeting fluorescence probe for imaging intracellular thiols. **Org Biomol Chem**. 13 (30): 8163-8.
- Mallick, A., More, P., Ghosh, S., Chippalkatti, R., Chopade, BA., Lahiri, M. and Basu, S. (2015) Dual drug conjugated nanoparticle for simultaneous targeting of mitochondria and nucleus in cancer cells. **ACS Applied Material Interface** 7(14): 7584-98.
- Jain, DR., Anandi, VL., Lahiri, M. and Ganesh, KN. (2014) Influence of pendant chiral C(γ)- (alkylideneamino/guanidino) cationic side-chains of PNA backbone on hybridization with complementary DNA/RNA and cell permeability. **Journal of Organic Chemistry** 79 (20): 9567-77. doi: 10.1021/jo501639m.
- Bodakuntla, S., Anandi VL., Sural, S., Trivedi, P and Lahiri, M. (2014) N-nitroso-N-ethylurea activates DNA damage surveillance pathways and induces transformation in mammalian cells. **BMC Cancer** 14 (1): 287. doi:10.1186/1471-2407-14-287.
- Kand, D., Chauhan, DP., Lahiri, M. and Talukdar, P. (2013) δ-Unsaturated γ-amino acids: enantiodivergent synthesis and cell imaging studies. **Chemical Communications** (Cambridge) 49 (34): 3591-3593.
- Kar, M., Tiwari, N., Tiwari, M., Lahiri, M* and Sengupta, S.* (2013) Poly-L-Arigin grafted silica nanoparticles for enhanced cellular uptake and their application in DNA delivery and controlled drug release. **Particle & Particle Systems Characterization** 30 (2): 166-179. (* corresponding authors)
- Kand, D., Mishra, PK., Saha, T., Lahiri, M. and Talukdar, P. (2012) BODIPY based colorimetric probe for selective thiophenol detection: theoretical and experimental studies. **Analyst** doi: 10.1039/C2AN35320B

Ejthadi, HD., Martin, JH., Junying, J., Roden, DA., Lahiri, M., Warren, P., Murray, PG. and Nelson, PN. (2005) A novel multiplex RT-PCR system detects human endogenous retrovirus-K in breast cancer. **Archives in Virology**. 150(1): 177-84.

Liu, S*, Shiotani, B*, Lahiri, M., Marechal, A., Tse, A., Leung, C., Glover, J. N. M., Yang, X. and Zou, L. (2011) ATR phosphorylation as a molecular switch for checkpoint activation. **Molecular Cell** 43 (2): 192-202. (* equal contribution)

Lahiri, M. and Martin, JHJ. (2009) Nitric Oxide Decreases Motility and Increases Adhesion in Human Breast Cancer Cells. **Oncology Reports**, 21, 275-281.

Freudenreich, CH. And Lahiri, M. (2004) Structure-Forming CAG/CTG Repeat Sequences are Sensitive to Breakage in the Absence of Mrc1 Checkpoint Function and S-phase Checkpoint Signaling: Implications for Trinucleotide Repeat Expansion Diseases. **Cell Cycle** 3(11): 1370-1374.

Lahiri, M., Gustafson, TL., Majors, ER. and Freudenreich CH. (2004) Expanded CAG repeats activate the DNA damage checkpoint pathway. **Molecular Cell**. 15(2): 287-93.

Lahiri, M. and Martin, JHJ. (2004) Reduced expression of endothelial and inducible nitric oxide synthase in a multi-drug resistant variant of the MCF-7 human breast cancer cell line. **Oncology Reports** 12(5), 1007-1011.

INVITED TALKS

Genome Instability and Cancer. DST-INSPIRE Internship Science Residential Camp at University of Kashmir, 27 – 31 August, 2024.

TopBP1 is required to maintain genome stability: overexpression leads to breast tumorigenesis. **Speak your Science (SyS)**, 9 February 2024, NCCS, Pune, India.

DNA Damage and Repair. January 27, 2024. Bio Wissen IISER, Tirupati, India

DNA Damage Response Mechanisms & Genome Instability. World Cancer Research Day, 23 September 2023 at St. Xavier's College, Mumbai, India.

TopBP1 is required to maintain genome stability: overexpression in non-tumorigenic breast epithelial cells lead to transformation with a TP53 mutation. International Conference on Cancer Biology: Molecular Mechanisms, Genomics and Novel Therapeutics" September 14–16, 2023 at IIT Madras, Chennai.

TopBP1 is required to maintain genome stability: overexpression in nontumorigenic breast epithelial cells leads to transformation with a TP53 mutation. Annual BSBE Winter Symposium – 2022 "Recent Trends in Cancer Research and Precision Medicine" December 16 – 18, 2022, IIT Kanpur, India.

DNA damage and breast cancer. IISER Kolkata, Infinity Space. 28 November, 2021.

Understanding Cancer. Guest lecture October 11, 2019 at Ramkrishna More College under DBT star college scheme, Akurdi, Pune, India.

DNA-PK plays a central role in transformation of breast epithelial cells following alkylation damage. "1st TCGA CONFERENCE in INDIA Multi-Omics studies in Cancer Learnings from The Cancer Genome Atlas (TCGA)" September 21-22, 2019; IISER Pune, India.

DNA-dependent protein kinase plays a central role in transformation of breast epithelial cells following alkylation damage. National conference on "Cellular and Molecular Basis of Cancer: Molecules to mechanisms" February 7-9, 2019; Department of Biotechnology, Savitribai Phule Pune University, Pune, India.

DNA-dependent protein kinase plays a central role in transformation of breast epithelial cells following alkylation damage. 7th International Conference on Molecular Signalling (ICMS 2019)" January 23-25 January, 2019; Department of Zoology, Savitribai Phule Pune University (SPPU) and National Center for Cell Science (NCCS), Pune, India.

DNA-dependent protein kinase plays a central role in transformation of breast epithelial cells following alkylation damage. Indo-Canada-Israel joint conference on “Phenotypic heterogeneity as a driver of cancer progression” January 5-8, 2019; IISc, Bengaluru, India.

DNA-dependent protein kinase plays a central role in transformation of breast epithelial cells following alkylation damage. Session Keynote at the International Conference on Cell Death in Cancer and Toxicology. February 20-22, 2018 at CSIR-Indian Institute of Toxicology Research, Lucknow, India in association with the Roswell Park Cancer Institute, Buffalo, USA and International Cell Death Society, USA.

DNA-dependent protein kinase plays a central role in transformation of breast epithelial cells following alkylation damage. Indo-French conference on “Recent Advances in Genome Integrity and Plasticity”. December 4 – 5, 2017 Clarks Exotica Resort, Bengaluru.

A central role for DNA-dependent protein kinases in transformation of breast epithelial cells following DNA damage. International Symposium on Breast Cancer Research, February 27, 2017; NCCS, Pune.

N-methyl N-nitrosourea induces Golgi dispersal via DNA-PK leading to transformation in breast epithelial cells. April 06, 2016, BARC, Mumbai, India.

N-nitroso-N-ethylurea activates DNA damage surveillance pathways and induces neoplastic transformation in mammalian cells. ICABB Nov 25-27, 2012 Pune, India.

DNA Damage Checkpoint Response to Alkylating Damage in Cells. XXXVI All India Cell Biology Conference on “Stress Adaptive Response and Genome Integrity (SARGI)” (2012) BARC, Mumbai, India.

DNA Damage Checkpoint Response to Alkylating Damage in Cells. GZMB-Symposium: “Frontiers in Molecular Bioscience - A joint symposium of the IISER Pune & Göttingen University” (2012) Universität Göttingen, Germany.

The DNA Damage Surveillance Mechanism in the Maintenance of Genome Integrity. (2012) Dr DY Patil School of Biotechnology and Bioinformatics, Tathawade, Pune, India.

DNA Alkylation Damage Activates the Cellular Checkpoint Response in cells. The DNA damage response and cell cycle control in cancer” – A Satellite Meeting of the Ataxia Telangiectasia Workshop, (2012) ACTREC, Navi Mumbai, India.

The DNA Damage Surveillance Mechanism in the Maintenance of Genome Integrity. ACTREC-IISER Meet, (2010) IISER, Pune, India.

The DNA Damage Surveillance Pathway in Human Pathologies. Trends in Modern Biology, (2008) IISER, Pune, India.

Expanded CAG repeats activate the DNA damage checkpoint pathway. Genomics, Model Organisms and Disease, (2008) NCBS, Bangalore, India.

The DNA Damage Surveillance Pathway in Human Pathologies. National Symposia on Recent Trends in Modern Biology, (2008) Pune University, India.

REFEREED ABSTRACTS AND PRESENTATIONS

Anandi, L., Chakravarty*, V. Ashiq KA*, Bodakuntla S and Lahiri, M. (July 22 - 27, 2018) DNA-dependent protein kinase plays a central role in transformation of breast epithelial cells following alkylation damage. GRC Genomic Instability, Hong Kong. * equal contribution.

Ashiq KA and Mayurika Lahiri (May 28 – June 03, 2016) PAF stimulation to breast epithelial cells disrupts cell polarity and upregulates EMT. GRC Mammary Gland Biology: The Mammary Gland in Normal Development and Progression to Cancer” at, Lucca (Barga) Italy.

Libi Anandi and Mayurika Lahiri (May 28 – June 03, 2016) N-methyl N-nitrosourea induces Golgi dispersal via DNA-PK leading to transformation in breast epithelial cells. GRC Mammary Gland Biology: The Mammary Gland in Normal Development and Progression to Cancer” at, Lucca (Barga) Italy.

Abhinav Parivesh and Mayurika Lahiri (August 1-5, 2015) Api5 and TopBP1 interactions in response to DNA damage. Zing Conference on “Genomic Integrity”. Pullmans Cairns International, Australia. Abhinav won the “DNA Repair” best poster award and cash prize of \$500.

Libi Anandi and Mayurika Lahiri (February 11-13, 2015) Alkylation damage induces transformation in breast epithelial cells grown as three dimensional cultures. Carcinogenesis 2015, International Conference jointly organised by Carcinogenesis Foundation (USA) and ACTREC, Mumbai.

Libi Anandi and Mayurika Lahiri (November 17- 21, 2014) Alkylation damage induces transformation in breast epithelial cells grown as three dimensional cultures. Cold Spring Harbor Asia Conference on "Dynamics of Cellular Behavior in Disease and Development" Suzhou China.

Libi Anandi V, Satish Bodakutla, and Mayurika Lahiri (July 2014) Alkylation damage induces transformation in three-dimensional breast acini cultures of non-malignant breast epithelial cells. GRC Genomic Instability, Hong Kong.

Satish Bodakutla, Libi Anandi V, Surojit Sural, Prasad Trivedi and Mayurika Lahiri (June 2013) Alkylation damage activates checkpoint signaling pathway in mammalian cells. GRC Cell Growth and Proliferation, Mount Snow Resort, VT, USA.

Libi Anandi and Mayurika Lahiri (May 26-28, 2013) Studying Neoplastic transformation induced by alkylating agents using three dimensional cultures. International Meeting in Chemical Biology (IMCB-2013), IISER, Pune.

Satish Bodakuntla and Mayurika Lahiri (May 26-28, 2013) N-nitroso-N-ethylurea activates the DNA damage surveillance pathways in mammalian cells. International Meeting in Chemical Biology (IMCB-2013), IISER, Pune.

Abhinav Parivesh and Mayurika Lahiri (February 13-16, 2013) Structure-Function Characterization of TopBP1-Api5 Interaction in Response to DNA Damage. 32nd Annual Convention of Indian Association for Cancer Research (IACR) & International Symposium on "Infection & Cancer" Dr BR Ambedkar Centre for Biomedical Research (ACBR), University of Delhi (North Campus).

Satish Bodakuntla and Mayurika Lahiri (February 13-16, 2013) N-nitroso-N-ethylurea activates the DNA damage surveillance pathways in mammalian cells. 32nd Annual Convention of Indian Association for Cancer Research (IACR) & International Symposium on "Infection & Cancer" Dr BR Ambedkar Centre for Biomedical Research (ACBR), University of Delhi (North Campus).

Abhinav Parivesh and Mayurika Lahiri (October 17-19, 2012) Structure-Function Characterization of TopBP1-Api5 Interaction in Response to DNA Damage. XXXVI All India Cell Biology Conference and International Symposium on "Stress adaptive response and genome integrity" held at BARC Mumbai. Abhinav won the "Dr Manasi Ram Memorial" prize for best paper presentation by young scientists in poster session.

Satish Bodakuntla and Mayurika Lahiri (October 17-19, 2012) N-nitroso-N-ethylurea activates the DNA damage surveillance pathways in mammalian cells. XXXVI All India Cell Biology Conference and International Symposium on "Stress adaptive response and genome integrity" held at BARC Mumbai.

Payal Arya and Mayurika Lahiri. Role of TopBP1 and Msh2 interaction in ATR-Chk1 pathway (22-25 September 2012) The Fourth EMBO Meeting, Nice, France.

Sural, S and Lahiri, M. (January 5-7, 2012) DNA alkylation damage activates dose-dependent cellular checkpoint response in breast epithelial cells. Tenth CMC Winter Symposium on Cellular and Molecular Medicine (Cancer, Stem Cells & Inflammation).

Prasad Trivedi & Mayurika Lahiri. (2011) N-nitroso ethyl urea activates checkpoint signaling in breast cancer. IACS Conference, IICB, Kolkata.

Mayurika Lahiri, Elizabeth Majors, Tanya Gustafson and Catherine Freudenreich. (February 2009) Expanded CAG Repeats Activate the DNA Damage Checkpoint Pathway. Young Investigators Meeting, Poovar, Kerala.

Mayurika Lahiri, Elizabeth Majors, Tanya Gustafson and Catherine Freudenreich. (2008) Expanded CAG repeats activate the DNA damage checkpoint pathway. Genomics, Model Organisms and Disease, NCBS, Bangalore, India.

Lahiri, M., Gustafson, T.L., Majors, E.R., and Freudenreich, C.H. (2004) Structure-Forming CAG/CTG Repeat Sequences are Sensitive to Breakage in the Absence of S-phase Checkpoint. DNA Repair and Mutagenesis: From Molecular Structure to Biological Consequences, Southampton, Bermuda.

Lahiri, M., Gustafson, T.L., Majors, E.R., and Freudenreich, C.H. (2004) Expanded CAG repeats

activate the DNA damage checkpoint pathway. The Cell Cycle Meeting, Cold Spring Harbor, USA.

Lahiri, M., Gustafson, T., Majors, E.R and Freudenreich, C. (2002) The Role of Cell Cycle Checkpoint Genes in Detecting Trinucleotide Repeat Tract Damage. Yeast Genetics and Molecular Biology Meeting, Madison, Wisconsin, USA.

Lahiri, M., Smyth, M.S. and Martin J.H. (2002) Reduced Expression of Endothelial and Inducible Nitric Oxide Synthase in a Multi-drug Resistant Variant of the MCF-7 Human Breast Cancer Cell Line and Effect of Nitric Oxide on Motility and Adhesion. International Cancer Conference, Riyadh, Saudi Arabia.

Lahiri, M., Martin, A. and Martin, J. (2001) Effect of Nitric Oxide on MMP-9 secretion in MCF-7 ADR and MDA-MB 231 human breast cancer cell lines. British Cancer Research Meeting, Leeds, UK.

Lahiri, M. (2004) Expanded CAG repeats activate the DNA damage checkpoint pathway. [Invited Lecture] DNA Repair and Mutagenesis Meeting, MIT, USA.

Lahiri, M., AlAlami, O., Baumforth, K. and Martin, J. (1998) Reduced expression of Nitric Oxide Synthase (NOS) in multi-drug resistant MCF-7 ADR cells. Beatson International Cancer Conference, Glasgow, UK.

OTHER MEETINGS ATTENDED

Keystone Symposia on DNA Replication Gaps, Cancer and Disease (April 27-30, 2025) Daejeon Convention Centre, Daejeon, South Korea.

Gordon Research Conference on Cell Growth and Proliferation (2007) University of New England, Maine, USA

International Symposia on Model Organisms and Stem Cells on Development, Regeneration and Disease (2008), NCBS, Bangalore, India.

GRADUATE STUDENTS

Graduated: 7

Under supervision: 6

EXTRAMURAL FUNDING

<u>Title of Project</u>	<u>Period and Amount</u>	<u>Funding Agency</u>
Investigating the interplay between Api5 and FGF2 signalling during breast morphogenesis	2024-2027; 25 Lakhs	CSIR-ASPIRE
The role of DNA damage on cytoskeleton dynamics	2022 – 2025; 77.33 Lakhs	DBT
The Role of Api5 during Breast Morphogenesis	2022 – 2025; 58 Lakhs	ANRF POWER
GenomeIndia: Cataloguing the Genetic Variation in Indians	2020 - 2025 INR 132 Lakhs	DBT
Preclinical study on development of therapeutic adjuvants based on Ayurveda	2018 – 2021; INR 10 Lakhs	AYUSH
Investigating PAF-induced transformation in 3D breast acini	2017 – 2020; INR 52.06 Lakhs	DST-SERB
Studying neoplastic transformation of mammosphere cultures in 3D using chemical carcinogens	2014 – 2017; INR 97 Lakhs	DBT

DNA Damage Surveillance and Repair: Characterizing the Interaction between TopBP1 and Msh2-Msh6 Complex	2012 – 2015; INR 76 Lakhs	DBT
Characterization of the novel interaction between checkpoint protein, TopBP1 and anti-apoptotic protein, Api5	2010 – 2013, INR 19 Lakhs	DBT-RGYI

PEER REVIEW

Journal of Genetics, FEBS Journal, Journal of Biosciences, Scientific Reports, Oncology Reports, Frontiers in Genetics.

COMMITTEE MEMBERSHIP

2022 - present	Member, Institute Animal Ethics Committee
2022 - present	Member, DBT Steering Committee on Human Resource Development
2022 - 2025	Executive Committee Member (East), Indian Association for Cancer Research
2020 - 2022	Member, IISER-P Covid 19 Task Force
2018 - 2024	Presiding Officer, Internal Complaints Committee
2018 - 2024	Biology Faculty Screening Committee
2017 - 2018	Chairperson, First year Semester Committee
2014 – 2018	Chairperson, Women's Cell at IISER-P
2014 - present	President, IISER Daycare Society
2010 - 2015	Member of 5 th year Masters project committee (Biology)
2012 - 2014	Coordinator for IISER-Goettingen Exchange Program
2009 - 2011	Member of IISER Stores and Purchase Committee
2008 - 2009	Member of IISER Tender Opening Committee

PROFESSIONAL MEMBERSHIP

Member of the British Association for Cancer Research, 1998-2001.
Member of the Genetics Society of America, 2002 – 2005.
Member of American Association for Advancement of Science, 2005.
Member of Indian Society of Cell Biology [Life]
Member of Indian Association for Cancer Research [Life]