Ekta Tripathi, Ph.D.
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PROFESSIONAL EXPERIENCE

- **Associate Professor (Oct 2025- till present)**
  Dept. of Biotechnology, FLAHS, M.S. Ramaiah University of Applied Sciences, Bangalore, India

- **Assistant Professor (Oct 2020- Sept 2024)**
  Dept. of Biotechnology, FLAHS, M.S. Ramaiah University of Applied Sciences, Bangalore, India

- **Postdoctoral Researcher (Oct 2019- Sept 2020)**
  Dr. N. Ravi Sundaresan' Lab, Indian Institute of Science, Bangalore, India

- **Postdoctoral Researcher (Aug 2018- Mar 2019)**
  Dr. Hanna Irie' Lab, Icahn School of Medicine at Mount Sinai, New York, USA

- **Postdoctoral Researcher (2013-2016)**
  Prof. Susan Smith' Lab, Skirball Institute of Biomolecular Medicine, Langone Medical Center, New York University, New York, USA

- **Research Associate (2011-2012)**
  Dr. Kanury Rao' Lab, Immunology Group, International Centre for Genetic Engineering and Biotechnology, New Delhi, India

ACADEMIC BACKGROUND

- **Ph.D. (2005-2011)**
  School of Life Sciences, Jawaharlal Nehru University, New Delhi, India.

- **M.Sc. Biochemistry (2003-2005)**.
  Department of Biochemistry, South Campus, University of Delhi, New Delhi, India

- **B.Sc. Biochemistry (2000-2003)**
  Daulat Ram College, University of Delhi, New Delhi, India

PUBLICATIONS

1. EIF3H Regulates ERK-Driven Oncogenic Signaling in Breast Cancer Metastasis. Bandyopadhyaya S, Patel J, Karyala P, Agrawal H, Tripathi E. bioRxiv, 2025.08. 24.672041. https://doi.org/10.1101/2025.08.24.672041.

2. Dasharathy S, Pranay, Devadas SK, Tripathi E* and Karyala P*. Emerging Role of Deubiquitinases in Modulating Cancer Chemoresistance. Drug Discov Today. 2025 Mar 19:104339. https://doi.org/10.1016/j.drudis.2025.104339. (IF- 7.5)

3. Sahoo G, Bandyopadhyay S, Tripathi E and Karyala P. Deubiquitinating Enzymes in Breast Cancer: In Silico Analysis of Gene Expression and Metastatic Correlation. J Biomol Struct Dyn. 2024 Dec 13:1-10. https://doi.org/10.1080/07391102.2024.2439046. (IF- 2.7)

4. Ito K, Harada I, Martinez C, Sato K, Lee E, Port E, Byerly J, Nayak A, Tripathi E, Zhu J, and Irie H. MARCH2, a novel oncogene-regulated SNAIL E3 ligase, suppresses triple negative breast cancer metastases Cancer Research Communications 2024. Mar 28;4(3):946-957. https://doi.org/10.1158/2767-9764.CRC-23-0090. (IF- 3.3)

5. Tripathi E and Smith S. Cell cycle-regulated ubiquitination of tankyrase 1 by RNF8 and ABRO1/BRCC36 control the timing of sister telomere resolution. EMBO Journal 2017, Feb 15, 36(4), 503-519. DOI: 10.15252/embj.201695135. (IF- 8.3)

6. Jindal E, Goswami SK. In cardiac myoblasts, cellular redox regulates FosB and Fra-1 through multiple cis-regulatory modules. Free Radic Biol Med. 2011 Oct 15;51(8):1512-21. DOI: 10.1016/j.freeradbiomed.2011.07.008. (IF- 8.1)

7. Paila YD*, Jindal E*, Goswami SK, Chattopadhyay A. Cholesterol depletion enhances adrenergic signaling in cardiac myocytes. Biochim Biophys Acta. 2011 Jan; 1808(1):461-5. DOI: 10.1016/j.bbamem.2010.09.006. (IF- 2.5)

Book Chapters

1. Patel J and Tripathi E. (2023). Targeting the Ubiquitin Machinery for Cancer Therapeutics in ‘Drug Repurposing for Emerging Infectious Diseases and Cancer’ Springer, Singapore.

2. Raghu S, Arathi BP, Shivanaiah B, Tripathi E, Sundaresan NR. (2022) Sirtuin 6 is a critical epigenetic regulator of cancer. In: Subcellular Biochemistry "Metabolism and Epigenetic Regulation: Implications in Cancer". Springer.

3. Gonsalves RC, Tripathi E, Karyala P, Dwarakanath BS, Kumar V. (2022) Targeting Signaling Pathways in Cancer Stem Cells for Therapy of Cancer. In: Chakraborti S. (eds) Handbook of Oxidative Stress in Cancer: Therapeutic Aspects. Springer, Singapore.

4. Gonsalves RC, Pacharla H, Manohar S, Belliraj SK, Tripathi E, Karyala P and Pakala SB (2021). SARS-CoV-2—host cell interactions and pathways: understanding its physiology, pathology, and targeted drug therapy in Buddolla Viswanath (ed.) ‘Pandemic Outbreaks in the 21st Century’. Elsevier Academic Press, pp. 185-210.

Conference Abstract

Vaibhav, Fahika Nazeerulla, Tatjana Paunesku, Ekta Tripathi, Gayle Woloschak, Prashanthi Karyala, Rao V Papineni. Differential expression of deubiquitinating enzymes and its related DNA damage response genes in neuroblastoma heterogeneity. Cancer Research. 2024 84(7 Suppl) LB015. The American Association for Cancer Research. doi:10.1158/1538-7445

Press Mentions

https://www.chennaicitynews.net/business/new-frontiers-science-and-spirituality-and-the-bbc-cure-2024/

RESEARCH

- **Grant:** DBT-Ramalingaswami Reentry Fellowship (2020-2025)
- **Grant:** ICMR grant (2025-2028)

- **Current Research**:

    - Identification and characterization of deubiquitinases in telomerase regulation in breast cancer through CRISPR screening.
    - Understanding the roles of deubiquitinases in breast cancer metastasis, metabolic reprogramming, and chemo- and radioresistance through integrated bioinformatics and experimental approaches, with the aim of identifying potential small-molecule inhibitors.
    - Mechanistic investigation of USP46 as a cancer stem cell–specific deubiquitinase in glioblastoma and evaluation of its therapeutic potential.

AWARDS AND FELLOWSHIPS

- Awarded DBT Ramalingaswami Re-entry Fellowship in 2020
- Awarded DBT-IISc Postdoctoral Fellowship in 2019
- Best oral presentation in International Conference on Cardiovascular Research Convergence; All India Institute of Medical Sciences, New Delhi, Feb 2012.
- Awarded Full Graduate research fellowship from University Grants Commission, Govt. of India (2005-2010).
- Awarded Monsanto scholarship during M. Sc. (2003-2004).
- Awarded Silver jubilee merit scholarship during B.Sc. (2002-2003)

CONFERENCES AND PRESENTATIONS

- **Poster Presentation: '**Decoding Deubiquitinases in Breast Cancer: Mechanistic Insights & Therapeutic Potential'. EMBO Lecture Course Structure, function, and quality control of proteins in cell organelles from 10 – 14 November 2025 in Hyderabad, India
- **Poster Presentation:** 'Decoding Deubiquitinating Enzymes in Breast Cancer: Mechanistic Insights and Therapeutic Potential. 17th Young Investigators Meeting (YIM) meeting. 3rd-5th Mar 2025. Agra, India.
- **Short talk: '**Exploring the role of DUBs in breast cancer: Mechanistic insights and Targeted therapy'. ProUPS-25 Decoding Protein Homeostasis in Human Health. Feb 3rd -5th 2025, SRM University, Chennai, India**.**
- **Invited talk: '**Exploring DUB regulation in breast cancer using CRISPR'. Converging on Cancer research: International Conference. Dec 17th 2024, JIVA Campus, Telangana, India.
- **Poster Presentation:** 'Exploring the Role of Deubiquitinating Enzymes in Breast Cancer Pathways to Novel Therapies'. Regional Young Investigators Meeting (RYIM) meeting at Manipal Academy of Higher Education 29th -30th Nov 2024, Bengaluru, India.
- **Poster Presentation:** 'Deciphering the Deubiquitinase-mediated Telomerase regulation in Cancer cells by targeted CRISPR screening'. 92nd SBC Annual Meeting. 18-20th Dec 2023. BITS Pilani, Goa, India.
- **Poster Presentation:** 'Elucidation of Ubiquitin mediated Telomerase regulation in breast cancer by targeted CRISPR screening'. 13th DBT- Ramalingaswami Re-entry Fellowship Conclave. Nov 30th - Dec 3rd 2022. Rajiv Gandhi Centre for Biotechnology (RGCB), Thiruvananthapuram, India.
- **Invited talk: '**Resolution of sister telomere cohesion is controlled by K63-linked polyubiquitination of tankyrase 1'. Genome Integrity Meeting. NYU Langone Medical Center. Sept 2015. NY, USA.

- **Poster Presentation: '**Differential regulation of Tankyrases by K63- and K48- linked polyubiquitination'. CSHL meeting: Telomeres and Telomerase. Apr 28th- May 2nd 2015. Cold Spring Harbor Laboratory, Cold Spring Harbor, NY, USA.
- **Poster Presentation: '**Differential regulation of Tankyrases by K63- and K48- linked polyubiquitination'. Genome Integrity Discussion Group, New York Academy of Science. 2015. NY, USA.
- **Oral presentation**: International Conference on Cardiovascular Research Convergence. All India Institute of Medical Sciences. Feb 2012. New Delhi, India.
- **Invited talk: '**Differential adrenergic signaling in cardiac myocytes: extensive cross talk between redox and kinase pathways. 13th Transcription Assembly**.** Feb 26-27th 2010. School of Life Sciences, Jawaharlal Nehru University, New Delhi, India.
- **Poster Presentation: '**Cholesterol Depletion Enhances Norepinephrine Mediated Signaling in Cardiac Myocytes'. XXXIII All India Cell Biology Conference on "Cell Cycle Regulation". Dec 10-13th 2009. University of Hyderabad, India.
- **Poster Presentation: '**Redox Signaling in cardiac myocytes by Norepinephrine: differential induction of FosB and Fra-1'. 77th annual meeting of Society of Biological Chemist (SBC). Dec 18-20th 2008. Chennai, India.

COURSES TAUGHT AT UG/PG LEVEL

- Cell Biology, Molecular Biology, Recombinant DNA Technology, Animal Biotechnology, Stem cells and Regenerative Medicine, Molecular Carcinogenesis and Research Methodology

PROFESSIONAL MEMBERSHIP

- Society of Biological Chemists (SBC)
- Indian Women Scientist Association (IWSA)