# **Udita Jindal**

**UGC-Senior Research Fellow** | LSS-002, Cancer Biology Division, CSIR-Central Drug Research Institute, Lucknow, India-226031 | <u>uditajindal999@gmail.com</u> | +91-8949523761

### INTRODUCTION

- I am a research scholar with three years of dedicated research experience in cancer biology, specializing in cell biology, molecular biology, cancer chemoresistance, stemness, and cancer tumor microenvironment. A forward-thinking, ambitious, creative young researcher with a strong academic background and a keen interest in translational cancer research.
- As an effective scientific communicator and dedicated team player, I have a proven track record of uniquely contributing to collaborative research, culminating in peer-reviewed publications.
- A professional with a rare mix of a detail-oriented personality, exceptional management skills, and demonstrated capacity to meet tight deadlines in a fast-paced work environment.

## **EDUCATION**

M.Sc. in Zoology, (Percentage:85.5%) The IIS University, Jaipur, 2017-2019.

- Dissertation: "Assessing the effect of *Tinospora cordifolia* on hepatotoxicity induced by combination of aluminium and cadmium."
- Advisor: Dr. Lata Shahani.

B.Sc. in Science, (Percentage: 77.3%) University of Kota, Kota, 2014-2017.

*Higher Secondary (12<sup>th</sup>)*, *Central Board of Secondary Education (CBSE)*Examination, (Percentage: 72.6%), 2013.

Secondary (10<sup>th</sup>), **Central Board of Secondary Education (CBSE)** Examination, (CGPA: 10/10), 2011.

#### **PUBLICATIONS**

## Research Articles:

- **Jindal, U.**, Mamgain, M., Nath, U. K., Sharma, I., Rahman, K., Yadav, S., Sharma, A., Gupta, A., Singh, M. P., Mishra, S., Raghav, S., Chaturvedi, C. P., Courty, J., Singh, N., Gupta, S., Mallick, S., Gogia, A., Sarkar, J., Datta, D., & Jain, N. (2024). Targeting CERS6-AS1/FGFR1 axis as synthetic vulnerability to constrain stromal cells supported proliferation in Mantle cell lymphoma. *Leukemia* (2024). https://doi.org/10.1038/s41375-024-02344-1
- Jain, N., Mamgain, M., Chowdhury, S. M., **Jindal, U.**, Sharma, I., Sehgal, L., & Epperla, N. (2023). Beyond Bruton's tyrosine kinase inhibitors in mantle cell lymphoma: Bispecific antibodies, antibody-drug conjugates, CAR T-cells, and novel agents. *Journal of Hematology & Oncology*, 16(1), 99.

## ACHIEVEMENTS/FELLOWSHIPS/AWARDS

Qualified national level fellowship examinations for entrance into Ph.D. programs:

- ➤ CSIR-UGC NET Junior Research Fellowship- February, 2021, All India rank 62.
  - ➤ Graduate Aptitude Test for Engineering (GATE-2021) in Life Sciences.
- ➤ Graduate Aptitude Test for Engineering (GATE-2020) in Life Sciences.

#### RESEARCH EXPERIENCE

- *CSIR Senior Research Fellow (PI: Dr. Neeraj Jain), August 2023 Present,* work experience in molecular cancer biology at CSIR-CDRI, Lucknow, India.
  - CSIR Junior Research Fellow (PI: Dr. Neeraj Jain), August, 2021 August 2023, work experience in molecular cancer biology at CSIR-CDRI, Lucknow, India.

#### **EXPERIENCE AND TRAINING**

- Cell Culture: Maintenance of transformed (Adherent cell culture, suspension cell culture, 2D-3D cell culture) and normal cell lines. Adept in gene transfection and lentiviral-mediated transduction.
- Molecular Biology techniques: Expertise in Native and SDS-PAGE, Western blot, Plasmid/genomic DNA and RNA isolation, Gel-Electrophoresis, Recombinant DNA technology, qRT-PCR for gene expression quantification, Luciferase reporter assay, Immunoprecipitation (IP) and Chromosome immunoprecipitation (ChIP) techniques, Gene

Knockdown (siRNA & shRNA), Gene Overexpression (with and without tetracycline induction), Bacterial Transformation, and conducted Protein Expression studies for elucidating protein function.

- Gene Cloning: ligation cloning, Gibson Assembly (NEBuilder)) and plasmid design using SnapGene. Gene Knockout: Using twin guide CRISPR-Cas9 vector system.
- **Cell Biology:** Flow cytometry (FACS analysis and cell sorting), executed gene silencing and overexpression studies, Immunocytochemistry.
- **Microscopy:** Differential Interference Contrast Microscopy, Fluorescence microscopy, and Confocal Microscopy.
- **Histopathology:** Immunohistochemistry and H&E staining.
- Animal Experiments: Three years of extensive experience in maintenance and breeding of Nude, NOD SCID, NSG and BALB/c mice. Expertise in generation of orthotopic and subcutaneous models in Nude, NOD SCID and NSG mice.
- Online Data Mining, Computer proficiency, and Bioinformatics: Familiarity with TCGA data mining using UCSC-XENA, cBioPortal, GEPIA. Online Blast tools, sequence alignment, and primer designing tools. Software tools such as EndNote, Mendeley, ImageJ, FlowJo, GraphPad Prism 8.0, Adobe Photoshop, and MS Office (Word, PowerPoint, and Excel) for efficient data analysis.
- A good understanding of basic statistical principals.

## **CURRENT PROJECTS**

• Delineate molecular mechanism in development of chemo-resistance in non-Hodgkin's lymphoma.

Department of Biotechnology (DBT) Project

Central Drug Research Institute, Lucknow | P.I.- Dr Neeraj Jain

• Targeting nucleolin for refining anti-neoplastic chemo-immunotherapy and immunomodulation in B cell lymphoma.

Science and Engineering research board (SERB), Department of science & technology

Central Drug Research Institute, Lucknow | P.I.- Dr Neeraj Jain

• Identification of molecular therapeutic target leading to the development of chemo-resistance in non-GC DLBCL patients in India.

An American Society of Hematology Funded Project

Central Drug Research Institute, Lucknow | P.I.- Dr Neeraj Jain

# WORKSHOPS ATTENDED

- Participated in CSIR Integrated Skill Initiative on Science and Technical Skill Development Programme in Animal Experimentation organized by CSIR - Central Drug Research Institute, Lucknow, India, January 2023.
- Volunteered in 25<sup>th</sup> INDO-US FLOW CYTOMETRY Workshop, organized jointly by TETC and CSIR- Central Drug Research Institute, Lucknow, India, February 2023.

## **DECLARATION**

I hereby declare that all the information furnished above is correct and true to the best of my knowledge.

(Udita Jindal)