

# Raksha Bhansali

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Indian Institute of Science Education and Research Pune  
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## Educational Qualifications

2021-present Integrated PhD student  
Indian Institute of Science Education and Research (IISER) Pune  
2018-2021 Bachelor of Science (B. Sc) in Biotechnology  
St. Xaviers college, Ahmedabad, Gujarat

## Achievements

2023 Junior Research Fellow (JRF)  
2021 Qualified Joint Graduate Entrance Examination for Biology and Interdisciplinary Life Sciences (JGEEBILS) and IIT Joint Admission test for Masters (JAM)  
2021 First class with distinction  
B. Sc in Biotechnology  
2019 Received a gold medal for scientific quiz competition  
Gujarat University Ahmedabad, India

## Research experience

2022-present Understanding membrane remodelling proteins and its role in cellular physiology  
Under the guidance of Dr. Thomas Pucadyil (IISER Pune)  
2021 Functional characterisation of the essential hypothetical gene in *C. Crescentus*  
Under the guidance of Dr. Sunish Radhakrishnan (IISER Pune)  
2021 Understanding antibiotic resistance in bacteria using laboratory evolution studies  
Under the guidance of Dr. Nishad Matange (IISER Pune)  
2019 Microbiology training programme  
B.V PATEL Pharmaceutical Education and Research Development (PERD)

## Teaching experience

2024 Cell Biology Teaching assistant  
Under Dr. Thomas Pucadyil and Dr. Nagaraj Balasubramanian  
2023 Advanced Immunology Teaching assistant  
Under Dr. Vineeta Bal and Dr. Satyajit Rath  
2023 Introductory Immunology Teaching assistant  
Under Dr. Vineeta Bal and Dr. Satyajit Rath

## Academic experience

2021-2023      Advanced Molecular Biology, Cellular Biophysics, Neurobiology, Advanced Biochemistry, Structural Biology, Biostatistics, Introductory Immunology, Microbiology, Animal Behaviour, Genome Biology and Epigenetics, Biology and disease, Ecology, Microbial Genetics, Advanced Immunology  
Credited courses at IISER Pune

## Conferences attended

2023            45<sup>th</sup> All India Cell Biology Conference International Symposium on Biology of Development and Disease  
Banaras Hindu University Varanasi, India

2020            31<sup>st</sup> GIBioN Gujarat Integrated Bio Network  
Organised by Gujarat State Biotechnology Mission (GSBTM) and Department of Science And Technology, Gujarat at P P Savani University Surat, India

2019            International Conference “Present-Day Biology: A Bastion for Social and Sustainable Development”  
St. Xavier’s college (autonomous) Ahmedabad, India

2018            National Seminar “Present Day Biology: Impact of Research at Molecular and Cellular level”  
St. Xavier’s college (autonomous) Ahmedabad, India

## Poster presentation

2022            Can Dynamin 1 fragment ER tubules in cells?  
Indian Institute of Science Education and Research Pune, India

2021            Functional characterisation of the essential hypothetical gene in *C. Crescentus*  
Indian Institute of Science Education and Research Pune, India

2019            Importance of Probiotics  
International Conference “Present-Day Biology: A Bastion for Social and Sustainable Development” St. Xavier’s college (autonomous) Ahmedabad, India

2018            Effect of diet on Type-2 Diabetes Mellitus  
National Seminar “Present Day Biology: Impact of Research at Molecular and Cellular level” St. Xavier’s college (autonomous) Ahmedabad, India

## Research skills

Laboratory      Molecular biology technique, Protein expression and purification, Chromatographic techniques used in separation and purification of proteins, Handling of bacterial yeast and mammalian cell cultures, Preparation of model membranes, Designing strategies to understand protein-lipid interactions, Genetic perturbations in yeast and mammalian cells, Western blotting

Instruments    Microscopy, UV-Vis Spectrophotometer, PCR machines, iBright gel doc system, Microplate reader, Fast protein liquid chromatography (FPLC)

Software & analysis    FIJI-ImageJ, GraphPad Prism, Chimera X, PyMOL, Mega X, Clustal Omega, SnapGene, Clustal Omega, Breseq analysis, Swiss PDB viewer, *Saccharomyces cerevisiae* Genome Database (SGD), Uniprot