#### Saad Ahmad Khan

IISER Tirupati 517619 • saadahmad@students.iisertirupati.ac.in • +91 8600626736

#### Education

**Indian Institute of Science Education and Research (IISER)** 

Tirupati, AP April 2025

BS-MS, Biology.

MS-Thesis: Purification and Characterization of FxFG repeat Nup condensates

Harikisan Maloo International School (10+2)

Amravati, MH June 2019

Score: 82.31%

June 2019

**Dnyanmata High School (1-10)** 

Score: 90.20%

Amravati, MH March 2017

#### **Experience**

## National Centre for Cell Science (NCCS) MS - THESIS

Pune, MH July 2024 - April 2025

- Optimized E. coli expression and multi-step purification (affinity, reverse-phase HPLC, size-exclusion chromatography) of nucleoporin IDR constructs, achieving high-purity protein yield via Lyophilization.
- Demonstrated NaCl-induced phase separation of IDR constructs via centrifugation assays.
- Utilized ImageJ/Fiji for quantitative image analysis and IUPred for disorder prediction to correlate sequence features with observed phase behavior
- Generated site-directed mutants of IDR sequences to add cystine for maleimide labeling of protein and DIC/fluorescence microscopy for visualization of PEG induced protein condensate formation.
- Executed experiment independently, encompassing experimental design, data analysis and thesis writing.

# Indian Institute of Science Education and Research (IISER) Semester Project

Tirupati, AP August 2023 - November 2023

Cloning of genes related to memory in heat stress primed plant

#### **Bioinformatics Lab**

Basic Computational Biology

January 2023 - April 2023

## Technical University of Denmark (DTU) - Online (Coursera)

• Computational course on Whole genome sequencing of bacterial genomes - tools and applications.

December 2023

#### **Events and Workshops**

## 2025 How to Grow Almost Anything (MIT Media Lab) - Online (Global Listener)

• Synthetic biology bootcamp, Synthetic Minimal Cells, DNA Nanostructures, Next Generation Synthesis etc March - May 2025

#### **India| EMBO Lecture Course (NCCS Pune)**

• RNA-protein complexes: from molecular assembly to physiological functions and disease

Pune, MH 24-28 February 2025

#### Biophysics Paschim -2024 (IISER Pune)

Biophysics Conference

Pune, MH 24 August 2024

#### SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY

Tirupati, AP

Workshop on Advanced Industrial Biotechnology Techniques

1-3 November 2023

#### Skills & Interests

**Technical:** R/ Statistics, Basic Python

Language: English

Laboratory: Protein Purification, qualification, quantification/DNA cloning/PCR /Microscopy.

Interests: Urban Exploration/ Football/ Calisthenics.

#### Reference

Dr. Radha Chauhan (MS Thesis Supervisor) Lab of Macromolecular Assembly Dynamics NCCS. Pune

Email: radha.chauhan@nccs.res.in

Dr. Ravi Kumar Pujala (Faculty Advisor) **Associate Professor, Physics IISER Tirupati** 

Email: <u>pujalaravikumar@labs.iisertirupati.ac.in</u>