

# RAJAVEE SRIVASTAVA

1605 Elitra C, Casa Bella Gold, Palava City, Mumbai, 421204.

7016002530

rajaveesrivastava@gmail.com

## SUMMARY

- Computational Biology enthusiast with a varied background in biology including Toxicology, Immunology, Microbiology and Molecular Biology.
- Worked on identification of uncommon epitopes for a stable immune response through MHC1 binding for Covid19 as a part of a 5 week virtual global internship
- Trained 50+ student in the basic skills of Bioinformatics as a part of 3 day hands on workshop conducted during the college techfest CHIASMA '20
- Trained in HLA Crossmatch experiments as a part of Summer training project at Reliance Life Sciences, Mumbai.
- Self-motivated, problem-solving and collaborative scientist with excellent communication skills
- Seeking opportunities to further enhance my skills in NGS Data analysis and Proteomics.

## TECHNICAL SKILLS

- **Proteomics and Vaccine Dev:** Molecular docking, Virtual screening of small ligand databases, Protein-protein interactions, Epitope identification, Antigenicity analysis.
- **Computational:** Programming language (Python)
- **Cell Biology:** Cell culture, Cell assays.
- **Microscopy/Imaging:** Confocal microscopy, Cell imaging and analysis
- **Immunology:** ELISA Analysis, Flow Cytometry (FACS) analysis
- **Biochemistry:** Enzymatic assays
- **Molecular biology:** Conjugation and Transduction experiments

## RESEARCH EXPERIENCE

### HackBio

Research Intern

### Virtual Internship

Aug - Sep 2020

- Manuscript of the work done is under peer review at Scientific Reports
- Identified 10 unknown epitopes from non-structural proteins of the Coronavirus proteome that were highly antigenic and immunogenic.
- Generated structure of reviewed non structural protein sequences from Uniprot using homology modelling protocols.
- Protein structures have been submitted at Proteopedia

### Semester project

Research student

### Ahmedabad University

Jan - May 2020

- Worked towards characterization of pharmacophores of Withanone and Withaferin A from *Withania somnifera*
- Identification of structurally similar ligands from PubChem database that had better interactions with cancer targets in comparison to withanolides using virtual screening protocols.

## EDUCATION

### Masters in Life sciences

Ahmedabad University

July 2020 - Present

### Bachelors in Life sciences

Ahmedabad University

CGPA 3.04/4.00

July 2017 - May 2020

Computational and Structural Biology, Bioinformatics, Immunology, Toxicology, Cell Biology, Molecular Biology and Microbiology as core subjects.

### Higher Secondary Certificate

Baroda Lions School

CGPA 3.18/4.00

June 2017

Physics, Chemistry, Biology and Computer Science as core subjects.

## POSITION OF RESPONSIBILITY

- Feb 2020 - Was a trainer for the Life in Bytes workshop at the student organized techfest with participants from pan-india. Explained the basics of Computational Biology including Molecular docking and Homology modelling protocols to 50+ student from different fields of biology.
- August 2019 - Core committee member of The Management Club of Ahmedabad University. Co-ordinated and managed various club events throughout the year. Received the Chairman's recognition award for the best performing student club for that year.

## CONFERENCE PARTICIPATIONS

- Sep 2020- Abstract on Biophysical properties of amino acids from coronavirus proteome accepted at Virtual FISV Symposium on SARS-CoV-2 Biology and COVID-19.

## SKILLS

**Software** Microsoft Excel, Word and PowerPoint, Biovia Discovery Studio, PyMol, Autodock, PyRx.

**Languages** English: professional proficiency. Hindi: native. Gujarati: conversational.