Curriculum Vitae

ARUNAVA PODDAR

SRM Institute of Science and Technology

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EDUCATION:

Bachelor of Biotechnology(3rd Year)

(Ongoing, CGPA-9.67) SRM University, Tamilnadu

High school

(12th Std, ISC percentile- 90.25) Holy Home School, West Bengal

High Secondary School

(10th Std, ICSE percentile-89.4) **Don Bosco School, West Bengal**

CO-CURRICULAR ACTIVITIES:

Member of bio science domain of RUDRA.

SRM University (Aug- Oct, 2019)

- A team which takes part mainly in URC (University Rover Challenge) and other related competitions, challenging teams of university level students to fabricate a rover that would be of use for future Mars exploration, organised by The Mars Society.
- To design a chemical test and biochemical assay which can detect the presence of extant and extinct life (biosignatures) in soil samples.
- To find or design biosensors which can further support the results obtained from the chemical test.
- Analysis of possible biosignatures by studying stratigraphic profiles, fluvial patterns, kerogens in a rock sample.

Concept design of a "Space Settlement" as a team. SSERD(Aug5-Sept,2020)

 Conceptualising ECLSS(Environment Control and Life Support Systems), transportation, power, radiation protection, and structure design for accommodating 1000 people in a Space settlement in Space.

Smart Protein Challenge

GFI India(July 19th-Aug16th 2020)

 An online challenge organized by Good Food Institute(GFI), India to develop plant and cell based meat, fish and dairy analogues as a sustainable food strategy.
Qualified Phase 1(Induction Phase) of the challenge.

Attended a workshop on "Molecular Docking". Stemonc R&D (8th – 9th Feb 2020).

• Ligand and protein preparation, molecular docking, analysis of protein ligand interaction.

Attended Forensic Investigation Workshop by Indian Forensics Organisation organised by Aaruush'18($5^{th} - 6^{th}$ Sept, 2018).

• Recognising fingerprint patterns, picking up fingerprints from a sample, investigating a crime scene.

Online Courses(on Coursera):-

- <u>Drug Discovery</u> by University of California San Diego(UCSD)
- <u>Introduction to the Biology of Cancer and Understanding Cancer Metastasis</u> by John Hopkins University
- Epigenetic Control of Gene Expression by The University of Melbourne
- The Science of Stem Cells by American Museum of Natural History

AREA OF INTEREST:

- Understanding pathways which lead to cancer and its progression, chemoresistance, and treatment using drugs and immunotherapy.
- Space biology and studying experiments conducted in microgravity conditions.
- Analysis of the ability of extremophiles and extremotolerant organisms to sustain and survive in harsh conditions of space, Mars and other extra-terrestrial planets and the search for extra-terrestrial life.
- Studying functional genomics, transcriptomics and epigenetics of various organisms.
- Mechanism and application of various gene editing technologies such as CRISPR-Cas9 and RNAi.
- Exploring the possibilities and science behind human spaceflight.

EXTRA CURRICULAR ACTIVITIES:

- Participated in SRMIEC'19 and represented Maldives as a delegate in the "Committee on Climate Change" (3rd-4th August 2019).
- Participated in Aaruush'18 as a volunteer of the domain "Praesentatio".
- Secured 3rd position in "Creativity Challenge 2018" conducted for the Professional Skills and Practices Course 2018-19.

AWARDS/SCHOLARSHIP:

 Performance based scholarship for the 1st and 2nd semester's University Examinations held at SRM Institute of Science and Technology.