SAMBHAB MISHRA

<Code + Biology>

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https://github.com/SambhabMishraOfficial

EDUCATION

Bachelors in Biological Sciences (BSc)

University Of Sheffield

September 2024 - 2027

- To pursue a Bachelors degree in Biological Sciences.
- With a special focus on Genetics and Molecular Biology (With an intergration with Computational Biology)
- Qualitative research and In-depth analysis

High School Dimploma

Lajpat Rai D.A.V Public School, Cuttcak

April 2016 - May 2023

- 10th Grade:A+
- 12th Grade:A+
- Subjects: English, Math, Biology, Physics, Chemistry, History, Geography, Economics, Political Science and Computer Science.

EXPERIENCE

Founder and CEO

Xtensive.ai

May 2021 - June 2022

- Revolutionizing the landscape of scientific inquiry, our innovative platform endeavors to empower researchers through the provision of a sophisticated array of AI-driven tools and resources, aimed at augmenting their analytical capabilities and catalyzing transformative discoveries.

RESEARCH

GiGa Complex

May 2023 - Present

- A novel approach to mitigating locust attacks and safeguarding crops involves the application of a ginger and garlic extract mixture, effectively deterring locust infestations by utilizing Allicin from garlic and Diallyl trisulphide from ginger. This concoction acts as an inhibitor of the acetylcholinesterase (AChE) enzyme, inducing neuroexcitation in locusts and preventing crop damage

BCDS - Detecting Urinary Bladder Cancer early

March 2021 - August 2023

- Successfully isolated and characterized the bacteria from the urine sample of the Bladder cancer patients.
- The bacteria found in the urine of bladder cancer patient is somehow different from the bacteria found in the urine of a normal human (At genus as well as species level). Analysed using 16s RNA sequencing. Elevation is Firmicutes, Actinobacteria, Bacteroidetes and Proteobacteria (at phyla level). Fusobacterium nucleatum is abundant in BC patient urine.

Bacterial Pigments and their characterization

June 2020 - August 2022

- This project was aimed at full characterization of two bacterial pigment i.e. Prodigiosin and Violacein. The pigment prodigiosin was extracted from locally isolated from Serratia marcescens and Violacein was extracted from Chromobacterium violaceum. Chemical composition characterization using TLC, NMR and GC-MS.The extracted pigment was further checked for different properties including antibacterial, Anticancer, antiparasitic, antifungal, Algicidal, etc.

AMar (Aegle Marmelos) Biodegradable planting pots (PATENTED)

February 2021 - December 2023

- prepared a biodegradable planting pot using coconut coir and epicarp of Aegle marmelos
- This pot attracts the pollinators by its natural fragrance (very helpful for pollination without any artificial ways), ecofriendly, fully biodegradable, cost effective and is based on 14 out of 17 SDG's.
- Provides essential nutrition and minerals to the plants and is durable and flexible.
- Patented under the Department of Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce Industry, Government of India. Patent application no-202131043278

ACHIEVEMENTS

Bal Shakti Puraskar Recipient 2020Jan 2020Highest honor bestowed to an Indian below 18 by the **President of India** at the President's House.