

Reference Images

CSIR-IICB

Dr. Saikat Chakrabarti

Alzheimer's Disease detection system using brain MRI processing and Deep Learning algorithms



**A Prototype system has been made.
A Provisional Patent has been
approved
(Ref. No. 0071NF2023).**

Dr. Sujoy Das

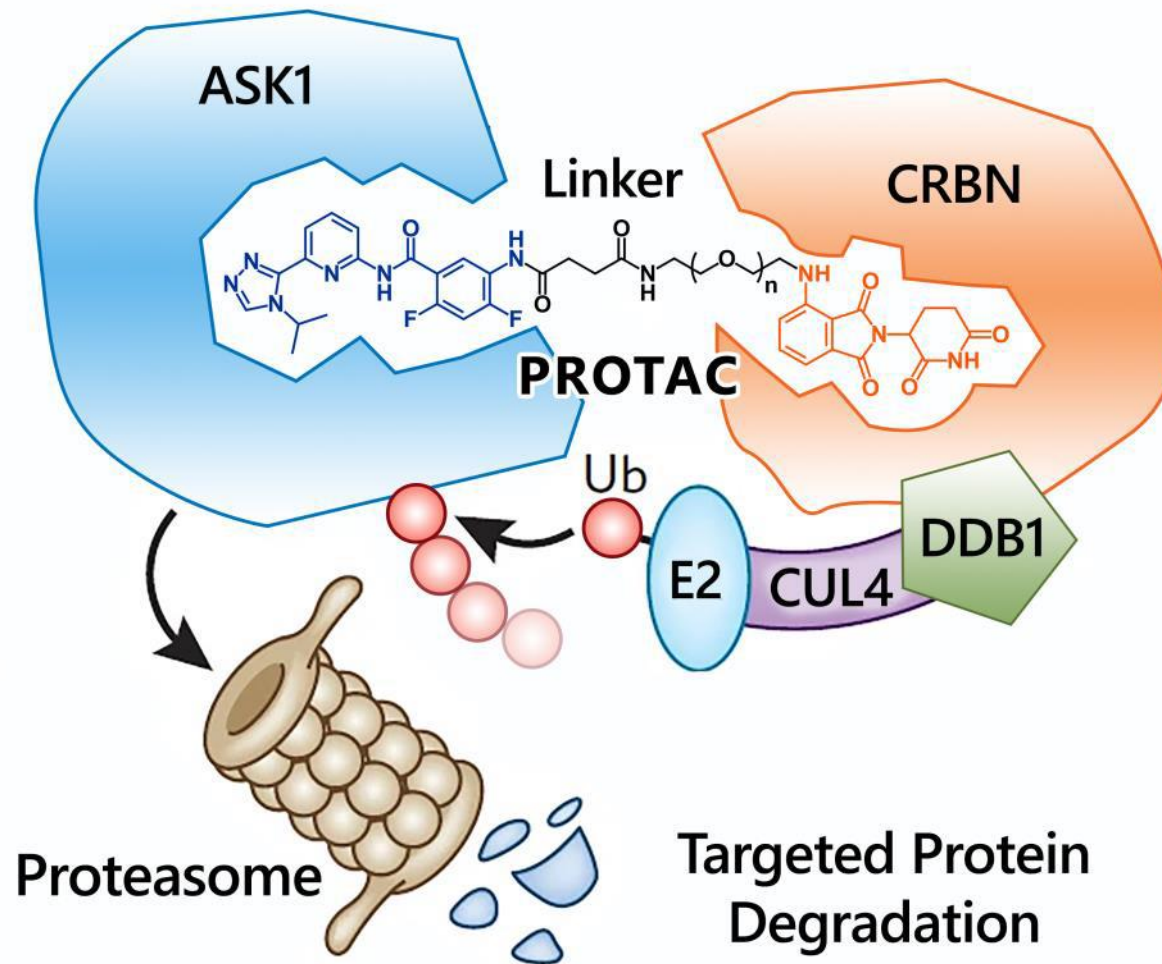
Hemostat- A Lifesaving Bandage for Faster Blood Arrest

Advanced Hemstatic Pad



- ✓ Stops Bleeding in Minutes
- ✓ High Fluid Absorption capacity
- ✓ Cyto & Hemo Compatible
- ✓ Prevents Bacterial Infection
- ✓ Biocompatible and Non-Irritating
- ✓ Easy to apply & atraumatic removal

Dr. Arindam Talukdar
Development of PROTACs



PROTAC platform for targeted degradation of ASK1

CSIR-IICB efforts towards CAR-T cell Therapy Strategy

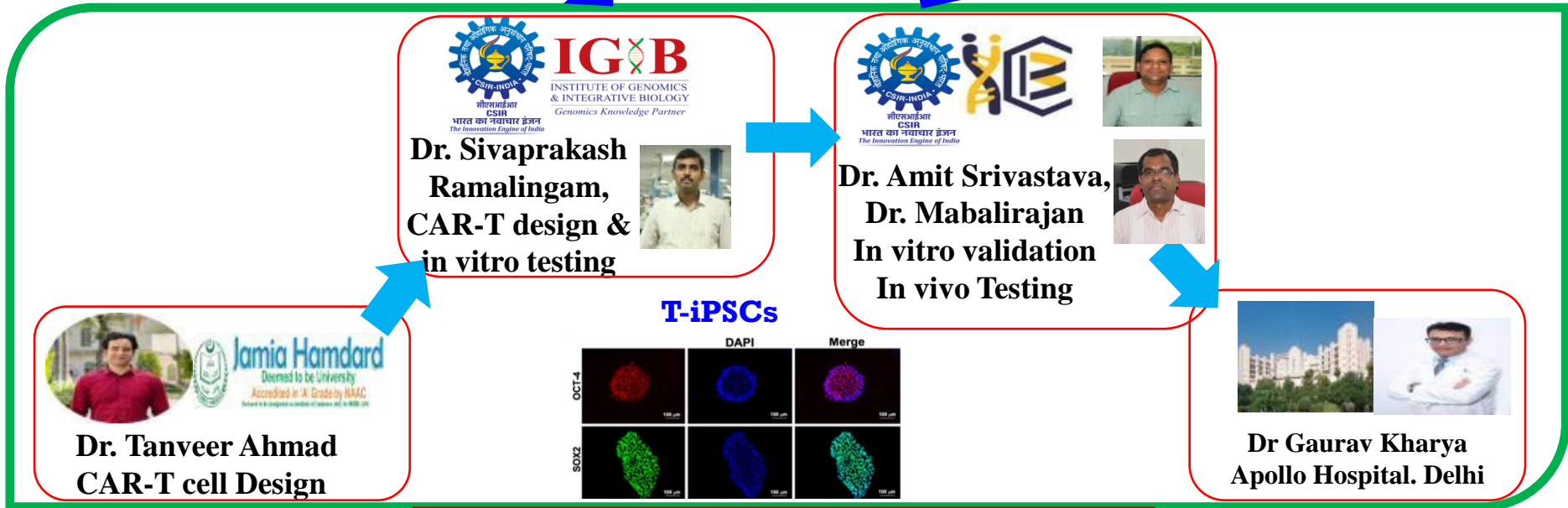
Preclinical validation of *genetically engineered 'off-the-shelf' and inducible CAR-T cells* and bispecific tumor targeting domains containing CAR-T cells (Cellogen funded)

DBT funded project

Industry Partner Cellogen Pvt Ltd

Genetically engineered 'off-the-shelf' and inducible CAR-T cells for cancer therapeutics

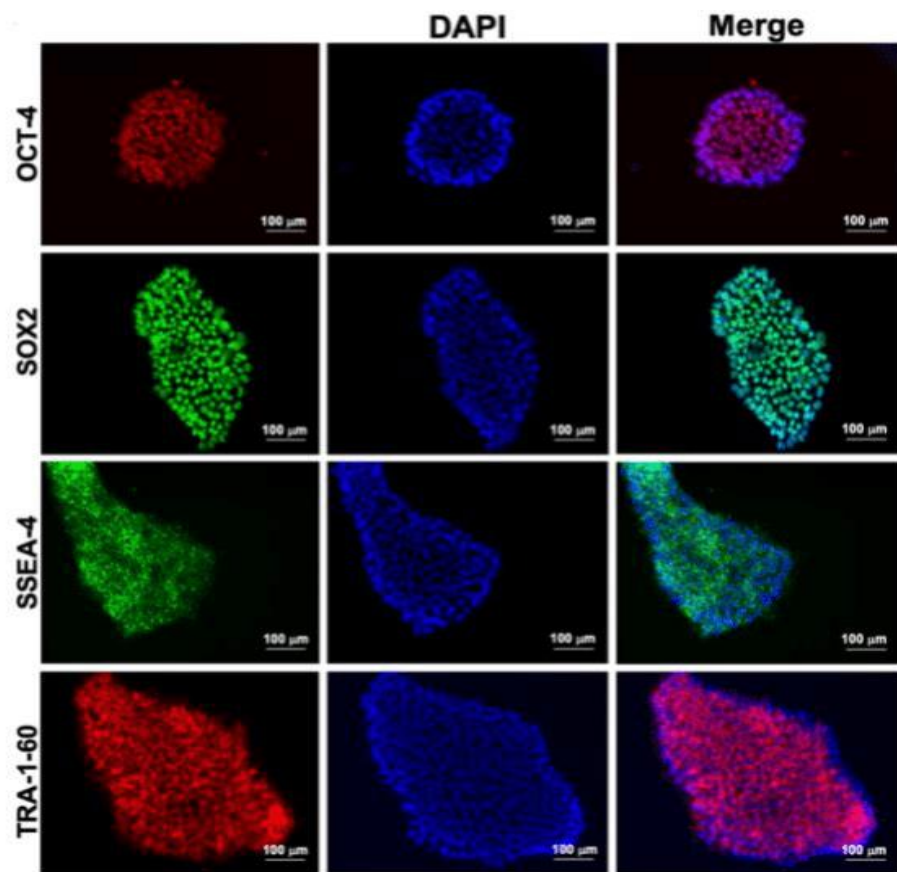
Pre-clinical validation of CAR-T cells containing bispecific tumor targeting domains



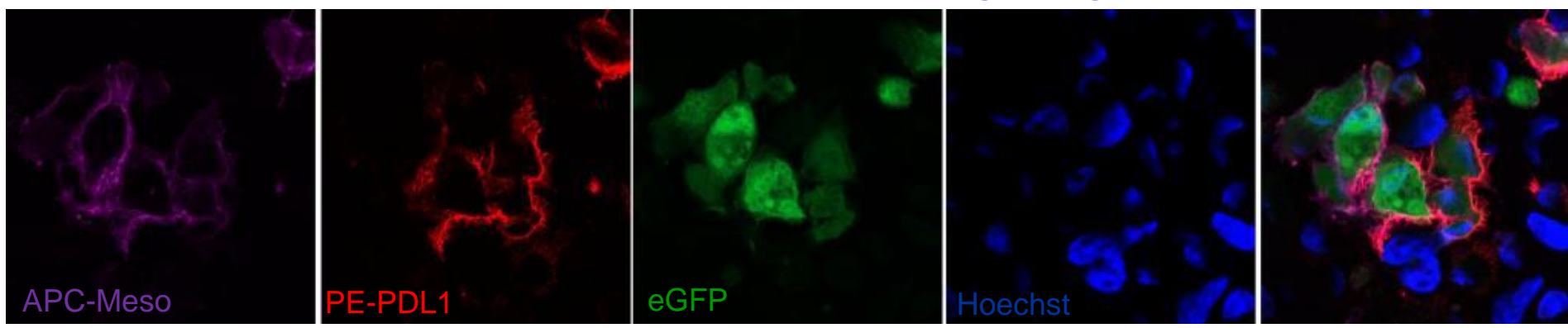
Made a Team including AIIMS-Kalyani to focus of Indian Centric Cancers

CSIR-IICB efforts towards CAR-T cell Therapy Strategy

Generation of T-iPSCs from peripheral blood T lymphocytes

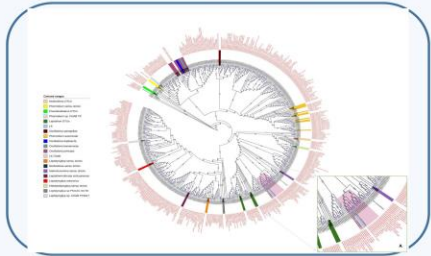


CAR-T targeting Mesothelin and PDL1

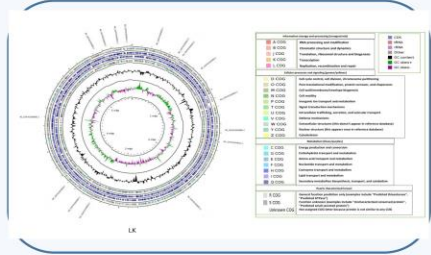


Dr. Sucheta Tripathy
Discovery of Novel Species and Tools for Bioinformatics applications

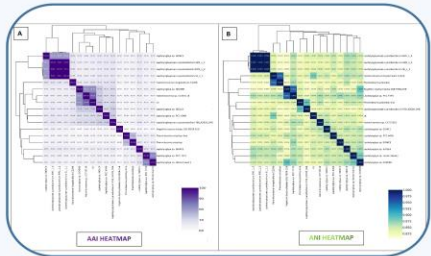
Phylogenetic analysis



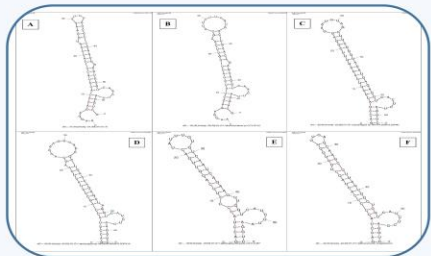
Genome sequencing and analysis



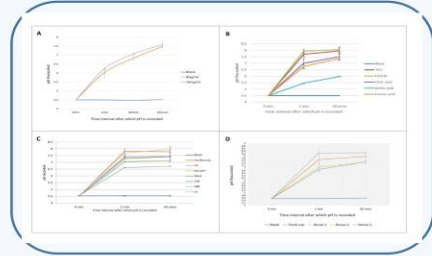
Genomic similarity indices ANI, AAI, gANI analysis



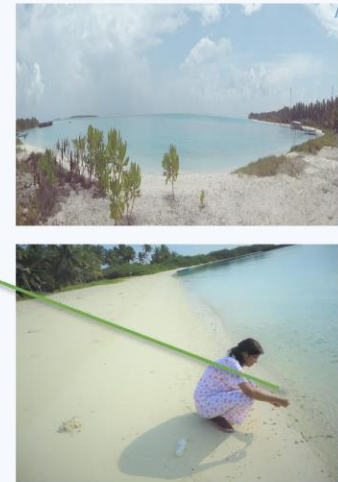
ITS sequence and secondary structure analysis



Novel species

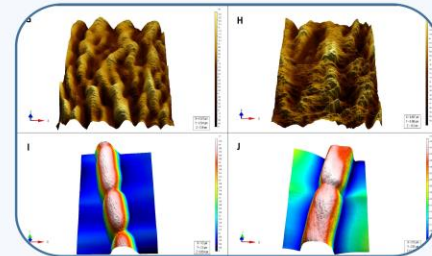


Excellent acidic pH neutralizing ability



Pic source: Bangaram Atoll. (2023, March 4). In Wikipedia. https://en.wikipedia.org/wiki/Bangaram_Atoll

Probable surface phenomenon

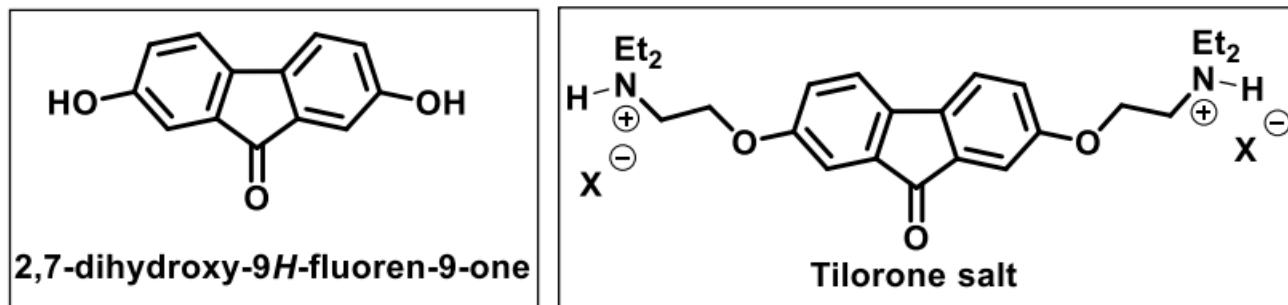


Dr. Indu Bhusan Deb

Generic formulations and cost effective processes for synthesis of high value drugs, its intermediates and agro-chemicals

An improved process for 2,7-dihydroxyfluorenone in the manufacture of tilorone and its salts

INTRODUCTION: Tilorone (available under the brand names Amixin[®], Lavomax[®] and others) is an orally bioavailable interferon inducer. It has a broad-spectrum applications in antiviral activities through an IFN-related innate immunity pathway. CSIR-IICB has developed an efficient, safe, cost effective and industry friendly process to prepare 2,7 dihydroxy fluorenone towards the total synthesis of Tilorone dihydrochloride and other Tilorone salt forms.



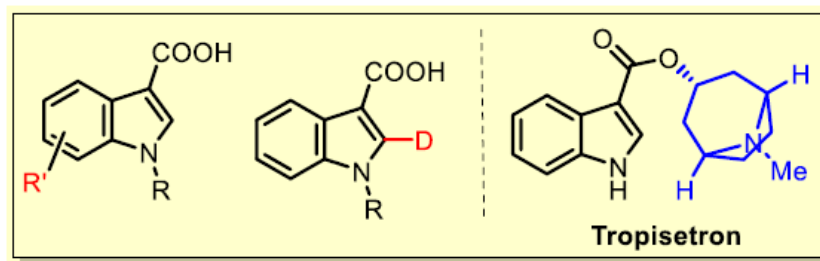
CHALLENGE/APPLICATION DOMAIN: IICB has developed an environment friendly and cost effective process using inexpensive reagents. Throughout, Crystallization technique has been used for purification.

Dr. Indu Bhusan Deb

Generic formulations and cost effective processes for synthesis of high value drugs, its intermediates and agro-chemicals

An improved process for indole-3-carboxylic acid derivatives in the manufacture of TROPISETRON

INTRODUCTION: The present invention relates to the finding of a new straightforward synthetic methodology for the preparation of indole-3-carboxylic acid (ICA) derivatives. It is a building block motif widely present in numerous natural products and biologically active molecules. CSIR-IICB has developed an efficient, safe, cost effective and industry friendly process to prepare indole-3-carboxylic acid derivatives towards the synthesis of tropisetron (**Navoban**) a is a serotonin-5HT₃ receptor antagonist *used mainly as an antiemetic to treat nausea and vomiting following chemotherapy.*



CHALLENGE/APPLICATION DOMAIN: IICB has developed an environment friendly and cost effective process using inexpensive reagents.