



VIT[®]

Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

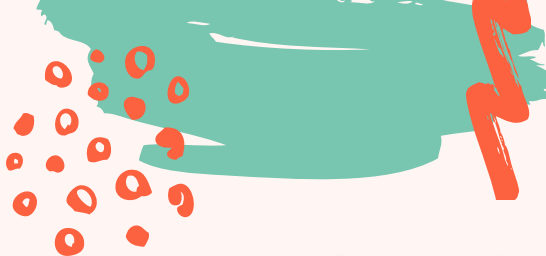
Ideathon

Drug Development & Delivery Systems

October 8th (6:00 pm) -
October 9th, 2021 (6:30 pm)

Organized by

Department of Biomedical Sciences
School of Bio Sciences & Technology,
Vellore Institute of Technology
Vellore, Tamil Nadu- 632014



About VIT

Vellore Institute of Technology was founded in 1984 as Vellore Engineering College by the Chancellor Dr. G.Viswanathan. VIT attracts students from all the 29 states of India and about 60 different countries, because of its academic excellence. VIT has been placed in the 12th position among the engineering institutions and the 21st position overall, based on the recently published NIRF ranking report. Globally, VIT has been placed as being one among the 450 top Universities, based on the 2021 QS World ranking. The research capabilities of the faculty and students is clearly evident based on the consistent track record in terms of the highest number of SCOPUS-indexed publications. VIT has completed 4 cycles of NAAC accreditation and has recently received the A++ status (Category 1 institution). ABET has accredited 14 programs in VIT. VIT has introduced many innovations in the academic process which adds value to each and every student. Such innovations include the Fully Flexible Credit System (FFCS) as well as Project-based Learning (PBL), that enhances the learning experience, apart from fully digitized academic portals. All these improvements are geared towards improving the employability of the students to meet the demands of the prospective employers. The 8th module guest lecture, delivered by an expert in Industry, gives the students an insight into the different processes from an Industrial perspective, apart from interacting with experts from different companies. In addition, ideathons, apart from Hackathons/Makeathons are organized to kindle interest, curiosity and the creative spirit, apart from providing a forum for the students to showcase their talents as well as inculcate a sense of competition among them. Also, participation in such activities improves their ability to work as part of a team and hone their skills in problem-solving ability. Also, VIT has forged links with several academic, research organizations and Industries in India and overseas. This effort has enabled the faculty and students to improve the visibility of the academic and research activities.

About SBST

The School of Biosciences & Technology consists of 4 departments, namely Biotechnology, Integrative Biology, Bio-Sciences and Bio-Medical Sciences headed by well-trained Professors. The school offers undergraduate (B.Tech Biotechnology) and post-graduate (M.Sc. & M.Tech.) programmes, apart from the Integrated Ph.D. and Ph.D. programmes. The priority of SBST is to develop entrepreneurship skills as well as mentor students to become future scientists for the improvement of humanity. Our efforts are strengthened following our collaborative endeavors with National and International Universities as well as multinational companies. Consultancy-related activities as well as the commercialization of products are undertaken as part of the programme. The school has excellent infrastructure in addition to well-trained faculty members. This makes SBST one among the top ten Bio-schools in the country.

About the Ideathon

This ideathon is to be conducted in the area of drug development and delivery systems. The journey involved in drug development is arduous and would generally take about 10-15 years for the medicine to reach the marketplace. Only, approximately 10% of the drugs that enter the clinical trial stage make it to the marketplace. Hence, the attrition rate and the consequent risk-benefit ratio is exceedingly high from the drug developer's point-of-view. Among the various challenges, poor PK/PD profile (poor bioavailability) is one of the major factors contributing to drug failure. This warrants the development of delivery systems that can confer selectivity to the target with minimal off-shore effects. Also, drug repositioning (testing of currently prescribed medicines for new indications) is yet another strategy that is continuously evolving as an approach for improving the efficacy and safety of the already existing armamentarium of drugs. This ideathon will provide students a forum to showcase their abilities in conceptualizing ideas as well as the development of strategies for drug development, including novel chemical entities. Also, this interaction will provide students an opportunity to come face-to-face with experts from Industry in the area of drug development and delivery systems.

Ideathon

DRUG DEVELOPMENT AND DELIVERY SYSTEMS

8th (6:00 pm) - 9th of October 2021 (6:30 pm)

Inaugural Session -9:00 am -10:00 am (9th of October 2021)

Key note Address

Dr. Ezhil Arasan Ramanan
Founder & Managing Director
Dr VRE Research Lab PVT Ltd
Medlish Communications
Chennai, Tamil Nadu- 600078



Resource Persons & External Judges

Dr. Ganesh Ramachandran
Sr. Director & Chief Scientific
Manager
Peptide Lab, Biocon Ltd.
Hebbagoddi, Bangalore-560100



TITLE OF THE TALK:

"Challenges in drug delivery development of peptides & proteins"

Mr. K. N. Chandrashekhar
Scientific Manager
R&D, Biocon Biologics Limited
Bangalore - 560099



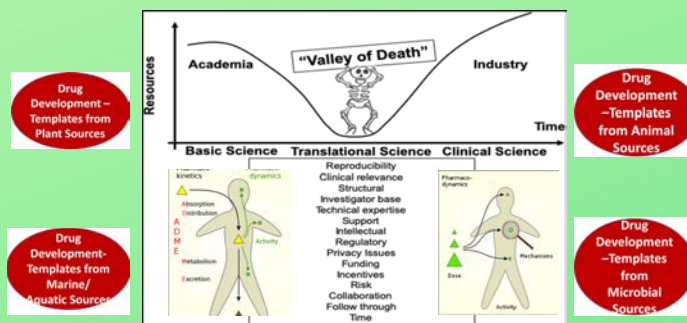
TITLE OF THE TALK:

"Cell Culture Process Development for Biologics"

Dr. Navratna Vajpai -**JUDGE**
Principal Scientific Manager, R&D,
Biocon Biologics Ltd, Biocon Biologics
Limited,
Biocon Special Economic Zone,
Bangalore - 560099, India



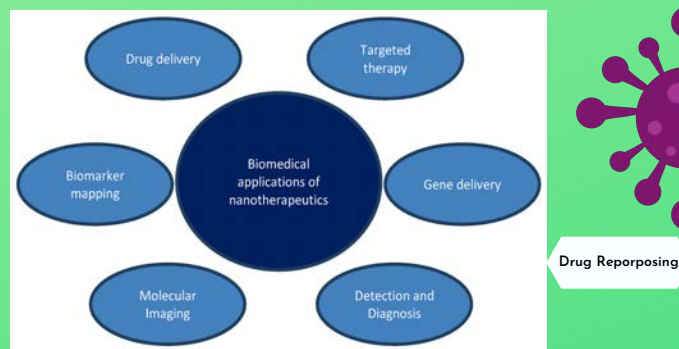
Graphical Representation of Drug Attrition



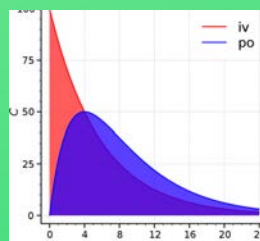
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<https://upload.wikimedia.org/wikipedia/commons/thumb/c/c5/Pharmacodynamics.svg/220px-Pharmacodynamics.svg.png>

<https://i2.wp.com/www.differencebetween.com/wp-content/uploads/2021/06/Pharmacokinetics-and-Pharmacodynamics.png?resize=387%2C328&ssl=1>



<https://www.intechopen.com/media/chapter/46953/media/fig1.png>



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Registration
Link: (for student participant)

<https://forms.gle/9dvprRNfRQD7rN466>

Chief Patron

Dr. G. Viswanathan
Chancellor, VIT.

Patrons

Mr. Shankar Viswanathan, Vice President, VIT
Dr. Sekar Viswanathan, Vice President, VIT
Mr. G. V. Selvam, Vice President, VIT
Ms. Kadambari S Viswanathan,
Assistant Vice President, VIT

Co-Patrons

Dr. Rambabu Kodali, Vice-Chancellor, VIT
Dr. S.Narayanan, Pro-Vice-Chancellor, VIT
Dr. K. Sathiyanyanan, Registrar, VIT

Organizer, SBST, VIT Vellore

Chair

Dr. V. Pragasam, Dean, SBST

Convener

Dr.P.K.Suresh, Professor Higher Academic Grade,
SBST

Co-Convener

Dr.Asha Devi, Head, Department of Biomedical
Sciences, SBST

Organizing Members: SBST Faculty

Student Coordinators: Students from SBST