SHOBHABEN PRATAPBHAI PATEL SCHOOL OF PHARMACY & TECHNOLOGY MANAGEMENT

SVKM's NMIMS Present's

nirf RANKED 11TH 2023

ONE WEEK SUMMER SCHOOL 2024

Hands-on Training in Computational and Animal Modeling Tools for Design & Discovery of Drugs for Neurodegenerative Disorders

2nd to 6th July 2024

Organized by

Department of Pharmaceutical Chemistry

and

Department of Pharmacology

Theme

Critical Concepts & Hands-on-Training:

- Molecular Docking
- ADME Screening
- Pharmacophore screening
- Network Pharmacology
- In-Vitro and In-Vivo pharmacological screening techniques

Eligibility

Any passionate learner is eligible to participate, preferably

- Faculty, Industry Personal
- Post-Doctoral Fellows
- Ph.D. Research Scholars
- M. Pharm. Students

Committee

Convener

Dr. Jagannath Sahoo, Dean, SPPSPTM

Workshop Coordinators

Dr. RajaSekhar Reddy Alavala

Dr. Pratigya Tripathi

Objectives

One week intensive summer school is aimed at meeting the objectives of

- Making the attendees able to understand the concept of in silico drug design for neurodegenerative disorders
- Getting trained on handling the applications of various computational techniques
- Demonstrate animal models and techniques for evaluation of drugs for treatment of neurodegenerative disorders

Registration

Online Registration Process

- Registration Fee: Rs. 1500/- (for students) & Rs. 2000 /- (for faculty)
- Working lunch included on all the days
- Fill the below registration form https://forms.gle/4RNjsj9PcS2Cf9KL7
- Limited to 30 seats *(On a first come, first serve basis)*
- Last Date to Register: 20th June 2024

Venue: SPPSPTM, SVKM's NMIMS Deemed to be University, V.L. Mehta Road, Vile Parle (W), Mumbai 400056.

For any queries, please contact: Workshop Coordinators
alavala.rajasekharreddy@nmims.edu (or) pratigya.tripathi@nmims.edu
Contact: 98852 71223, 89488 96950

SVKM'S NMIMS Deemed to be UNIVERSITY

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Schedule:

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Session No	Topic
Day-1: 02-07-2024 (Tuesday)	
	Inauguration
1	Introduction to Molecular Modelling
	Tea Break
2	Applications of Computational tools in Pharmaceutical Research
	Lunch Break
3	Drawing of the structures with various tools
4	Conversion of 2D structures to 3D & Energy minimization

Session No	Topic
Day-2: 03-07-2024 (Wednesday)	
5	Introduction to Network Pharmacology & its applications
	Tea Break
6	Building of Network Pharmacology Model: Protein-protein
	Lunch Break
7	Building of Network Pharmacology Model: Protein-gene
8	Building of Network Pharmacology Model: Protein-drug

Session No	Topic
Day-3: 04-07-2024 (Thursday)	
9	Introduction to Molecular Docking & its process
	Tea Break
10	Protein Selection & preparation
	Lunch Break
11	Molecular Docking Hands-on for the protein-ligands
12	Molecular Docking Hands-on for the protein-protein

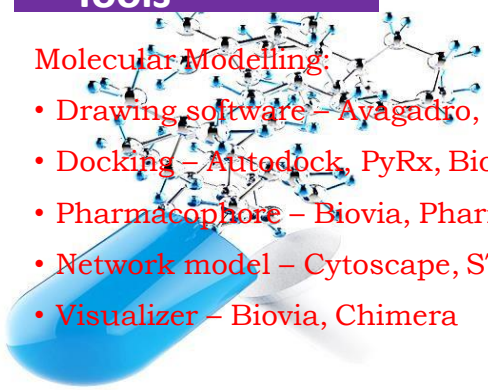
Session No	Topic
Day-4: 05-07-2024 (Friday)	
13	Analysis of the Molecular Docking Results
	Tea Break
14	Introduction to Pharmacophore modeling based screening
	Lunch Break
15	Hands-on for the Pharmacophore generation by LBDD
16	Hands-on for the Pharmacophore generation by SBDD

Session No	Topic
Day-5: 06-07-2024 (Saturday)	
17	Introduction to In-Vitro and In-Vivo pharmacological screening techniques
	Tea Break
18	Demonstration of Stereotaxic Surgery- Batch A & Demo on Fruit Fly Animal Model– Batch B
	Lunch Break
19	Demonstration of Stereotaxic Surgery- Batch B & Demo on Fruit Fly Animal Model– Batch A
20	Demonstration of Behavioral Studies
	Valedictory

Registration

Name of the A/C Holder:	**SVKM'S NMIMS**
NEFT IFSC Code:	**KKBK0000661**
Bank Name:	**Kotak Mahindra Bank**
	JUHU - Vile Parle West
Account No:	**2311578254**
Type of Account:	**Current**
MICR Code:	**400485022**
SWIFT Code:	**KKBKINBB**

Tools



Molecular Modelling:

- Drawing software – Avagadro, ChemSketch
- Docking – Autodock, PyRx, Biovia
- Pharmacophore – Biovia, Pharmmaper
- Network model – Cytoscape, STRING
- Visualizer – Biovia, Chimera

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