

7th Workshop on Bioinformatics and Molecular Modeling in Drug Design

March 23-25, 2017

Venue: Seminar Hall, ACBR, University of Delhi

Detailed Programme	
<u>DAY 1</u>	<u>Thursday, March 23, 2017</u>
08:45 – 09:15 a.m.	Registration
09:15 – 09:30 a.m.	<i>Welcome and Administrative Announcements</i>
09:30 – 11:00 a.m.	Dr. Madhu Chopra, ACBR <i>Basics of Bioinformatics, Molecular Modeling and its applications</i>
11:00 – 11:30 a.m.	Tea
11:30 – 12:30 p.m.	Prof. K. Natarajan, Welcome Address & Introduction to speakers Dr. Dinesh Gupta, ICGEB, New Delhi <i>Inaugural Address,</i> <i>Computational tools for exploration of interacting proteins as drug targets</i>
12:30 – 01:30 p.m.	Dr. Debasisa Mohanty, NII, New Delhi <i>Keynote Address,</i> <i>In silico analysis of protein interaction networks using multi-scale modelling approach</i>
01:30 – 02 :30 p.m.	Lunch
02:30 – 03:30 p.m.	<i>Hands on training session by Dr. Madhu Chopra (Demonstration)</i>
	<ul style="list-style-type: none"> • Building Molecules, Visualization and Analysis • Energy Minimization and Dynamics • Use of the Binding Site tool panel to define a binding site using receptor cavities or known ligands for use in the Receptor-Ligand Interactions protocols
03:30 – 03:45 p.m.	Tea
03:45 – 05:00 p.m.	Hands –on –Training session on above tools
<u>DAY 2</u>	<u>Friday, March 24, 2017</u>
09:30 – 11:00 a.m.	Webinar by Dr. Rae Lawrence, <i>Expert Cresset Software, Cambrdigeshire, UK</i> <ol style="list-style-type: none"> 1) <i>Introduction to Cresset’s science and overview of applications</i> 2) <i>Introduction to scaffold-hopping and lead optimization by bioisosteric substitutions (Spark)</i> 3) <i>Introduction to ligand-based drug design and SAR analysis (Forge)</i> 4) <i>Overview of field based virtual screening (Blaze Demo Server)</i>

11:00 – 11:30 a.m.	TEA
11.30 – 12.30 p.m.	Webinar by Dr. Rae Lawrence Continued.....
12.30 – 1.30 p.m.	Dr. Anshu Bharadwaj, IGIB <i>Understanding Natural Product Chemical Space for New Drug Discovery: Tuberculosis as a case study</i>
01:30 – 02.30 p.m.	LUNCH
02:30 – 03:30 p.m.	Dr. Madhu Chopra <i>Process of Drug Discovery and Development: Inventing drugs through use of Computational methods</i>
03.30 – 03.45 p.m.	Tea
03.45 – 05.00 p.m.	Hands – on – training session <i>Protein Structure Modeling and Protein –Protein Interaction Network Analysis</i>
<u>DAY 3</u>	<u>Saturday, March 25, 2017</u>
09:30 – 10:30 a.m.	Prof. P. V. Bharatam, NIPER, Mohali, Punjab Keynote Speaker <i>Design, Synthesis and Biological Evaluation of GSK-3β Inhibitors as Anti-Alzheimer's Agent</i>
10:30 – 11:00 a.m.	TEA
11:00 – 11:45 a.m.	Dr. Shubhra Chaturvedi, INMAS, <i>INMAS perspective on the application of molecular modeling in the development of neurological radiopharmaceuticals</i>
11:45 – 12:30 p.m.	Prof. Vani Brahamachari, ACBR, <i>Distinguishing between biochemical and cellular function: Are there peptide signatures for cellular function of proteins?</i>
12:30 – 1.30 p.m.	Hands-on-Training session By Dr. Madhu Chopra <ul style="list-style-type: none"> • Docking and scoring • Pharmacophore Modeling
01:30 – 02:30 p.m.	LUNCH
03:00 – 4:00 p.m.	Prof. Punit Kaur , AIIMS New Delhi, <i>Valedictory Address, Title Awaited</i>
04.00 – 04.15 p.m.	<i>Distribution of Certificates and Vote of Thanks</i>
04:15 – 04:30 p.m.	TEA