

## Symposium on “Accelerating Biology 2015: Catalyzing Evolution”

January 20-22, 2015

Venue: Yashada Auditorium, Baner Road, Pune

Day 1: January 20, 2015

Time	Title	Speaker
08:00-08:45	<b>Breakfast</b>	
08.30-09.00	Registration	
09:00-10:45	<b>Session I: Inaugural Function</b>	
	<b>Inaugural Address by Dr. Shekhar Mande, Director, National Centre for Cell Science, Pune</b>	
10:45-11:45	<b>Inauguration of the poster session and Poster Session-I (along with High Tea)</b>	
	<b>Session II: Next Generation Biology: Key Challenges</b>	
	<b>Session Chair: Prof. Devdutt Dubhashi, Chalmers University, Sweden</b>	
11:45-12:30	Exploring diversity and evolution of genomes using next generation sequencing	Prof. Alok Bhattacharya, JNU, Delhi
12:30-13:15	Predicting Optimal Therapeutic Strategies for the Pharmaceutical Industry	Prof. David Fell, Oxford Brookes University, UK
13:15-14:00	<b>Lunch Break</b>	
14:00-14:45	Analysis of a Genome Scale Metabolic Model to Identify Novel Antibiotic	Dr. Mark Poolman, Oxford Brookes University, UK
	<b>Session III: Genomics and Applications of Next Generation Sequencing</b>	
	<b>Session Chair: Dr. Deepti Deobagkar, SP Pune University</b>	
14.45-15.30	Hybrid genome assembly of Hydra vulgaris using Next Generation Sequencing	Dr. Farhat Habib, IISER, Pune
15:30-16:15	NGS Data and its application in agriculture	Dr. Dinesh Kumar, IASRI, New Delhi
16:15-16:30	<b>Tea Break</b>	
16:30-17:15	Big Data and Cancer: Context Makes All the Difference	Dr. Binay Panda, GANIT Labs, Bangalore

17:15-18:00	Unveiling the layers of Expression: Transcriptome analysis in operable breast cancer samples as an effect of pre-operative progesterone treatment	Dr.Priyanka Pandey, NIBMG, Kolkata
18:00-19:00	<b>Session IV: Panel: <i>Towards a Global Cyberinfrastructure for Science: Clusters, Gateways, Grids and Clouds</i></b>	
	<b>Session Moderator:</b> Dr. Michael Sullivan, Internet2, USA	
	Panelists: <ul style="list-style-type: none"> <li>• Dr. Devdatt Dubashi, Chalmers University, Sweden</li> <li>• Dr. Sandra Gesing, University of Notre Dame, USA</li> <li>• Prof. Alok Bhattacharya, JNU, Delhi</li> <li>• Mr. Amit Saxena, C-DAC, Pune</li> </ul>	
19:00 – 20:00	<b>Visit to BRAF and PARAM YuvaII</b>	
20:00 – 21:00		

## Day 2: January 21, 2015

08:00-09:00	<b>Breakfast</b>	
	<b>Session V: <i>Systems and Synthetic Biology</i></b>	
	<b>Session Chair:</b> Dr.Chetan Gadgil, NCL, Pune	
09:00-09:45	Dynamical analysis of signaling pathways to decipher inherent design principle	Prof.K.V.Venkatesh, IIT Bombay
09:45-10:30	Creating synthetic proteome - from junk DNA to drug molecules	Dr.Pawan Dhar, Shiv Nadar University, Dadri
10:30-10:45	<b>Tea Break</b>	
10:45-11:30	Gut microbes and human health : Insights from Metagenomics studies	Dr.Sharmila Mande, TCS, Pune

11:30-12:15	Bridging the gap between genotype and phenotype: A Genome Scale Constraints based approach to Systems And Synthetic Biology	Dr.Anu Rangunathan, NCL, Pune
12:15-13:15	<b>Poster Session II</b>	
13:15-14:00	<b>Lunch</b>	
<b>Session VI: Biomolecular Simulations and Drug Design</b>		
<b>Session Chair: Dr.C.G.Suresh, NCL, Pune</b>		
14.00-14.45	In silico analysis of enzymes associated with novel Post Translational Modifications	Dr.Debasisa Mohanty, NII, Delhi
14:45-15:30	Supercomputers against superbugs: Unveiling the molecular details of antibiotic resistance through multiscale modeling	Dr.Nisanth Nair, IIT Kanpur
15:30-16:15	Can natural proteins designed with ‘inverted’ peptide sequences adopt native-like protein folds?	Dr.K.Guruprasad, CCMB, Hyderabad
16:15-16:30	<b>Tea Break</b>	
16:30-17:15	Computer Simulations as the Tool for Probing Molecular Origins of Protein Thermal Stability, Misfolding and Self-Assembly	Dr.Neelanjana Sengupta, NCL, Pune
17:15-18:00	The role of collective coordinates in modulating biomolecular stability, flexibility, and function	Dr.Ravi Venkatramani, TIFR, Mumbai
18:00-18:45	On the Molecular Mechanism of Intercalation	Dr.Arnab Mukherjee, IISER, Pune
18:45-19:15	<b>Presentation by Bioinformatics Group of C-DAC</b>	
20:00	<b>Dinner at Pancard Clubs, Baner</b>	

**Day 3: January 22, 2015**

08:00-09:00	<i>Breakfast</i>	
<b>Session VII: BRAF Users</b> <b>Session Chair:</b> Prof. Jayant Pal, Department of Biotechnology, SP Pune University		
09:00-09:45	Emerging horizons in molecular design	Dr. Samiron Phukan, Lupin Ltd., Pune
09:45-10:30	Molecular Dynamics Simulation to Understand Temperature Induced Melting of Double Helical DNA Polymers – Internal Bubble Formation versus Fraying Effect	Dr. Dhananjay Bhattacharya, SINP, Kolkata
10:30-10:45	<i>Tea Break</i>	
<b>Session VIII: BIGDATA in Life Sciences</b> <b>Session Chair:</b> Dr. V.C.V. Rao, C-DAC, Pune		
10:45-11:30	Single Cell and Beyond: High-resolution adds new challenges to biological BIG DATA	Dr. Saumyadipta Pyne, CRRao AIMSCS, Hyderabad
11:30-12:15	Big Data Provenance - Role in Biological Data Management & Analytics	Dr. Navneet Goyal, BITS, Pilani
12:15-13:00	Intelligent Scalable Learning Using Softcomputing	Dr. Aruna Tiwari, IIT Indore
13:00-14:00	Lunch Break	
14:00-15:00	<b>Session VIII: Young Speakers Programme</b> <b>Chairs:</b> Dr. Farhat Habib, IISER, Pune and Dr. Sandra Gesing, University of Notre Dame, USA	
15:00-16:00	<b>Session IX: Valedictory Session and Poster Awards</b> <b>Dr. Raj Hirwani, Head, URDIP, Pune</b> <b>Chair:</b> Dr. Rajendra Joshi, Associate Director and HoD, Bioinformatics Group, C-DAC, Pune	
16:00-16:30	<i>Tea and Goodbye</i>	