

SEQUENCE TO DRUGS

A 2019 Nextgen Genomics, Bioinformatics, Biology and Technologies (NGBT) Pre-conference Symposia

Venue:
St. Xavier's College, Mumbai



Since the completion of the \$3B USD human genome sequencing project, genomics technologies have evolved to enable genome generation at a much lower cost. This has enabled generation of genomes of many different organisms and has also enabled genome guided drug discovery. This pre-conference symposia will feature talks that cover the advances in genome sequencing, bioinformatics, clinical genomics and drug discovery.

Agenda

14:00-14:30 - Dr. Sekar Seshagiri, ModMab Therapeutics, USA
Genomics land scape overview

14:30-15:00 - Dr.Kushal Suryamohan, MedGenome Inc, USA
Bioinformatics analysis overview

15:00-15:30 - Dr. Sameer Phalke, MedGenome Labs, India
Genomics applications in clinics in India

15:30-16:00 – break

16:00-16:30 - Dr. Mallika Singh, REVOLUTION Medicines, USA
How drugs are made

16:30-17:00 - Dr. Zoltan Takacs- Nature's gift, ToxinTech, USA
From venom to drugs



Dr. Zoltan Takacs

Biomedical scientist Zoltan Takacs is specialized in drug discovery from animal venoms. Developed at the University of Chicago, Zoltan is the co-inventor of the Designer Toxins technology, a toxin-genomics drug discovery platform that generates millions of toxin variants and selects those that specifically aim at disease targets. Zoltan's work resulted in scorpion toxin leads for ion channel implicated in autoimmune disorders. Passionate about venomous animals and wildlife since childhood, he has traveled to 194 countries, is an aircraft pilot, scuba diver, and survivor of multiple snakebites. Zoltan holds a Ph.D. in pharmacology from Columbia University, was a researcher at Rockefeller University and Yale University, and was a on the faculty at the University of Chicago. He is a former Fellow of the Columbia Earth Institute and Emerging Explorer of the National Geographic Society. Zoltan's work on animal venoms has been featured in the National Geographic Magazine, on the National Geographic Channel, and on BBC, CNN, and PBS/NOVA.



Dr. Mallika Singh

Dr. Mallika Singh is an oncology scientist with 15 years of industry research and drug development experience across the spectrum of current oncology therapeutics. She is an acknowledged scientific and strategic thought leader in translational research and the application of sophisticated mouse models of human cancer for oncology drug development. She has established and led complex scientific programs in small biotechnology as well as large pharmaceutical company environments; key contributions to multiple investigational new drug applications. She is currently working in REVOLUTION medicines, California as a senior director.



Dr. Sekar Seshagiri

Dr. Sekar Seshagiri is Co-founder and Chief Scientific Officer for ModMab Therapeutics. Before that he spent 21 years at Genentech, most recently as Associate Director and Staff Scientist. During his tenure he established a state-of-the-art genomic laboratory, conducted research in cancer and cell signaling areas and participated in drug development. His research work has been at the forefront of understanding underlying genetic changes in cancer genomes through systematic identification of somatic mutations in large number of cancer types and subtypes using next generation sequencing and other novel techniques. Seshagiri and team have applied computational methods and functional assays to understand the role of cancer specific mutations in oncogenic signaling leading to new target discovery for therapeutic intervention. He has authored and co-authored over eighty articles in peer-reviewed journals including Science and Nature.



Dr. Kushal Suryamohan

Kushal Suryamohan is a scientist in Medgenome, Inc, USA. He obtained his Masters degree in Computer Science and Ph.D. in Biochemistry. His current research is aimed at leveraging recent advances in sequencing technologies including long reads, optical map sequencing and chromatin capture technology to generate high quality de novo genome sequences of emerging and medically important organisms. He is also actively involved in applying high throughput NGS-based functional genomic screens of oncogenes to characterize oncogene function in cancer.



Dr. Sameer Phalke

Sameer Phalke is Senior scientist in Medgenome Labs, India. He obtained his PhD in Genetics. After PhD, Sameer worked as a postdoctoral fellow in Institute of Molecular and cell Biology (IMCB), A-STAR, Singapore. Sameer has worked in molecular diagnostics companies on different NGS based assay development. Currently Sameer is working on several DNA/RNA genomic projects across different human diseases among Indian population.