



HANDS-ON WORKSHOP ON DEVELOPMENT OF SIGNALING PATHWAY NETWORKS

July 1, 2013 to July 5, 2013
Institute of Bioinformatics, Bangalore

Signaling pathways are an essential gateway to systems biology. With the success of the Human Protein Reference Database, a resource of information on human proteins, scientists at Institute of Bioinformatics have developed NetPath (<http://www.netpath.org>) as a resource of signaling pathways. NetPath hosts a number of curated signaling pathways published in international journals. Over 100 signaling pathways are currently under development. In the light of advancing high-throughput technologies for global approaches to functional genomics, signaling pathways have become an inevitable tool for biomedical research.

Scientists at IOB will share their expertise in the development of signal transduction pathways and the pathway analysis of data derived by transcriptomics and proteomics high-throughput technology platforms to highly motivated young researchers in India through this 5-day long workshop.

This workshop will offer theoretical understanding of tools and methods involved in the identification of protein-protein interactions, enzyme-substrate reactions, post-translational modifications, protein localization, and expression of mRNA, microRNA and proteins. The practical sessions will be provided to develop signaling pathways and their customization using different mapping and visualization tools. Further, these sessions will be extended to the pathway analysis of transcriptomics and proteomics data using different pathway analysis tools including GeneSpring and Cytoscape.

All the participants will be issued a certificate of participation.

**Open to students and researchers from
academia and industry**

Registration

Please visit
http://www.ibioinformatics.org/registration_pathways.php
to register for the workshop. Only 30 candidates will be selected by first-come, first-served basis.

Registration fee:
Participants from Academia - Rs. 10,000
Participants from Industry - Rs. 30,000

Contact us for economy accommodation

Focus of the Workshop

- Perspectives to cell signaling
- Tools and methods to study signaling pathway reactions
- Pathway curation strategies
- Development of signaling pathway network maps
- Tools for pathway visualization
- Standard community formats
- Pathway resources
- Pathway analysis tools
- Pathway analysis of high-throughput transcriptomics and proteomics data

Resource Personnel

- Dr. Rajesh Raju
- Dr. T. S. Keshava Prasad
- Dr. Arivusudar Marimuthu
- Dr. Aditi Chatterjee
- Dr. Sowmya Soman
- Dr. Puneeth Adishesha
- Other scientists from IOB

Contact

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