National Center for Integrative Biomedical Informatics NCEBI

Workshop: Try our NCIBI Tools Tuesday, April 28, 2009; 1:00 - 4:00 pm Great Lakes Rooms, Palmer Commons

About the Workshop:

As one of 7 NIH-funded bioinformatics centers nationwide, NCIBI develops databases, software and other computational resources. These resources help life scientists and medical researchers access and analyze a wealth of electronic biological data that are now publicly available for exploratory analysis.

On April 28 during NCIBI's Fourth Annual Research Meeting, a Try Our Tools workshop will give you an opportunity to learn our applications with guided instruction. Tutorial booklets based on realistic hands-on cases will be provided. Specialists will answer questions about applying our tools to your own research.

Facilitated by technology advances that NCIBI uses to integrate data from diverse sources and heterogeneous formats, you will explore such questions as:

- · What proteins interact and in what pathways?
- What compounds and reactions in a pathway may be associated with a set of genes?
- What interactions may play a mechanistic role in a disease?
- What articles are relevant to given genes, interactions or diseases?
- What genes are significantly enriched for a concept or for the same set of concepts?

Workshop Agenda:

Preceded by a brief overview of NCIBI tools, a series of 4 modules will then cover:

- Retrieving articles based on relevant interactions and other concepts (hands-on)
 Tool set: MiMI Web, GIN, Gene2MeSH, MiMI Plugin to Cytoscape
- 2. Finding conceptually similar genes and gene set (enrichment)
 Tool set: ConceptGen, MIMI
- 3. Visually exploring protein interaction networks and pathway associations (hands-on) Tool set: MiMI Plugin to Cytoscape, SAGA/Tale, and other Cytoscape plug-in
- 4. Exploring metabolomic data analysis tools: MiMI Web and MetScape Plugin to Cytoscape

Who Should Attend:

Any basic and/or clinical scientists that are interested in biomedical informatics, computational biology, and the application of tools to complex biological problems.



http://portal.ncibi.org/gateway/ARM2009_workshopreg.php Contact information: Jyoti Athanikar

jnathani@umich.edu

734-647-8222

