



## "Synergy of Bioinformatics and Biomedical Research"

## Friend Center, Princeton University Princeton, New Jersey, USA

Saturday, June 7, 2008

# Program

## **Keynote**

"On the protein structure-dynamics-function relationship" Speaker: **Jenn-Kang Hwang**, Ph.D. Dean, College of Biological Science and Technology National Chiao Tung University (Hsinchu, Taiwan)

## Session 1: Bioinformatics and Systems Biology (I)

Session Organizer: **Cathy Wu, Ph.D.**Professor of Biochemistry and Molecular & Cellular Biology Director of Protein Information Resource Georgetown University (Washington, DC, USA)

"Application of Biomedical Informatics to Translational Research" **Hai Hu, Ph.D.** 

Deputy Chief Scientific Officer and Senior Director of Biomedical Informatics Windber Research Institute (Windber, PA, USA)

"Biological Networks: A bistable Rb–E2F switch underlies the restriction point"

## Guang Yao, Ph.D.

Postdoctoral Fellow Molecular Genetics and Microbiology Duke University (Durham, NC, USA)

"Biological Pathway and Network Analysis for Functional Interpretation of Large-Scale Omics Data"

## Zhang-Zhi Hu, M.D.

Associate Professor and Associate Team Lead

Protein Information Resource, Georgetown University Medical Center (Washington, DC, USA)

## Session 2: Cancer Biology (I)

Session Organizer: Shridar Ganesan, M.D.

Assistant Professor, University of Medicine and Dentistry of New Jersey (Newark, NJ, USA)

"Solving the Puzzle of Metastasis with an Agent-Based Model"

### Carlo Maley, Ph.D.

Assistant Professor

Wistar Institute (Philadelphia, PA, USA)

"Biology of Basal-like breast cancer"

#### Shridar Ganesan, M.D.

Assistant Professor

University of Medicine and Dentistry of New Jersey (Newark, NJ, USA)

"Polymorphisms in P53 Pathway Genes and Clinical Associations in Breast Cancer"

## Kim Hirshfield, M.D., Ph.D.

Assistant Professor of Medicine

University of Medicine and Dentistry of New Jersey

## Session 3:Bioinformatics and Systems Biology (II)

Session Organizer: Ouhyoung Ming, Ph.D.

Professor of Computer Science and Information Engineering

Deputy Dean, College of Electrical Engineering and Computer Science

National Taiwan University (Taipei, Taiwan)

"Detecting RNA Motifs with RADAR"

#### Jason T.L. Wang, Ph.D.

Professor, Department of Computer Science

Director, Data and Knowledge Engineering Lab and Bioinformatics Center

New Jersey Institute of Technology (Newark, NJ, USA)

"Data-Driven Computational Function Association Networks in Cancer Study"

#### Jung-Hsien Chiang, Ph.D.

Professor, Institute of Medical Informatics

National Cheng-Kung University (Tainan, Taiwan)

"Identification of Robust Genomic Signatures via Multiple Cross Validation"

### Spencer Chiang-Ching Huang, Ph.D.

Assistant Professor of Preventive Medicine

Northwestern University (Evanston, IL, USA)

### Session 4: Cancer Biology (II)

Session Organizer: Yibin Kang, Ph.D.

Assistant Professor

Department of Molecular Biology

Princeton University (Princeton, NJ, USA)

"Genomic Gain of 8q22 Activates Metadherin and Promotes Chemoresistant Metastasis of Poor-Prognosis Breast Cancer"

#### Guohong Hu, Ph.D.

Postdoctoral Fellow, Department of Molecular Biology

Princeton University (Princeton, NJ, USA)

"Computer-aided Diagnosis of Breast, Prostate Cancer from Digitized Histopathology"

#### Anant Madabhushi, Ph.D.

Assistant Professor, Department of Biomedical Engineering

Rutgers the State University of New Jersey (Piscataway, NJ, USA)

## Session 5: Bioinformatics and Systems Biology (III)

Session Organizer: Frank Hsu, Ph.D.

Clavius Distinguished Professor of Computer and Information Science

Associate Dean, Graduate School of Arts and Sciences

Fordham University (Bronx, NY, USA)

"Multidimensional scaling for large genomic data sets"

## Henry Horng-shing Lu, Ph.D.

Professor, Institute of Statistics

National Chiao-Tung University (Hsinchu, Taiwan)

"Comparing Projection Neuron- and Neuromodulator-Elicited Network Oscillations: A Modeling Study"

#### Nickolas Kintos, Ph.D.

Visiting Assistant Professor, Department of Mathematics Fordham University (New York, NY, USA)

"Modeling Genetic Inheritance of Copy Number Variations"

#### Mingyao Li, Ph.D.

Assistant Professor, Department of Biostatistics and Epidemiology University of Pennsylvania (Philadelphia, PA, USA)

## **Panel Discussion**

Topic: "Synergy of Informatics and Biomedical Research in Academia and Industry" Moderators: Yibin Kang (Princeton University), Li-San Wang (University of Pennsylvania)

#### Panelists:

Shridar Ganesan (UMDNJ) Hai Hu (Windber Institute) Jenn-Kang Hwang (Chiao-Tung University, Taiwan)

**Cathy Wu** (Georgetown University)