

# The Indo-USA – The Virtual Institute for Mathematical and Statistical Sciences Workshop



## Statistical Methods for Bioinformatics

12-14 December 2013, IISc, Bangalore, India

Organized by:

**Indian Institute of Science (IISc), India, Indian Statistical Institute (ISI),  
India and Statistical and Mathematical Sciences Institute (SAMSI), USA**

This workshop will consist of a series of one-hour lectures spanning a broad range of topics of current interest in statistical modeling, data analysis and inference in Bioinformatics. A wide range of topics of current use and interest in bioinformatics and more generally for biological data will be presented. These include methods for analysis of micro array data, modeling for dynamics of mixtures, methods for differential methylation using next generation sequencing data, methods for analysis of gene networks and modeling and inference for circadian and directional data. The workshop will also touch on themes to be further developed during the SAMSI 2014-15 "Beyond Bioinformatics" research program ([www.samsi.info/bioinformatics](http://www.samsi.info/bioinformatics)).

Approximately half of the speakers will be from U.S. Universities and the rest from Universities and Institutes in India.

### APPLICATION FOR PARTICIPATION & SUPPORT :

Applications are invited from research scholars and young faculty members with knowledge of statistics at a graduate level and involved in problems from bioinformatics. There is no registration fee. A limited number of participants will be selected. Support for travel & local hospitality will be made available to some of the selected participants.

There will be contributed paper sessions. Any participant desirous of presenting a contributed paper should send an abstract in about 200 words along with the application. Priority of support will be given to participants selected for contributed paper presentations.

Applications comprising of a brief bio-data and a write-up of at most 100 words attesting to the motivation for attending the workshop should be sent within November 15 by e-mail, with "Subject" marked as "Indo-US Stat-Bioinfo Wshop", to: [amsseng@gmail.com](mailto:amsseng@gmail.com)

### Invited Speakers (Partial list) :

**Keynote Speaker:** Dr. Madhan Mohan, Advisor, Department of BioTechnology, Govt. of India

**From USA** – Prof. Naomi Altman, Professor of Statistics, Pennsylvania State University, State College, Pennsylvania; Prof. Varghese George, Chair and Professor of Biostatistics and Epidemiology, Georgia Regents University, Augusta, Georgia; Prof. Susan Holmes, Gabilan Faculty Scholar, Professor of Statistics, Stanford University, Stanford, California; Prof. Paul Joyce, Professor of Mathematics, Statistics and Bioinformatics, Dean, College of Science, University of Idaho, Moscow, Idaho; Prof. Olga Vitek, University Faculty Scholar, Associate Professor of Statistics and Computer Science, Purdue University, West Lafayette, Indiana.

**From India** – Prof. Sanghamitra Bandopadhyaya, Machine Intelligence Unit, ISI; Prof. Nagasuma Chandra, IISc; Prof. S.R. Deshmukh, Head, Department of Statistics, University of Pune; Dr. Indranil Mukhopadhyay, Human Genetics Unit, ISI; Prof. T.S. Vasulu, Biological Anthropology Unit, ISI; Prof. Ashis SenGupta, Applied Statistics Unit, ISI; Prof. N. Srinivasan, IISc.

**Advisors** : Prof. Bimal Roy, Director, ISI and Prof. Richard L. Smith, Director, SAMSI

**Convenor** : Prof. Govindan Rangarajan, IISc, Bangalore

**International Coordinators:** Prof. Snehalata Huzurbazar, SAMSI, USA and Prof. Ashis SenGupta, ISI, India

Details on the venue are provided in the "ABOUT IISc" link in the homepage of IISc, Bangalore:  
<http://www.iisc.ernet.in/>

This workshop is being arranged under VI-MSS and is sponsored by DST (India) and NSF (USA)