

NETWORKING BIOSTATISTICS AND BIOINFORMATICS

Aim and Scope

Biostatistics and bioinformatics are considered and perceived as different disciplines, with the former being more associated with complex math and modeling issues and the latter dealing more with the development of faster and efficient algorithms within an informatics and engineering approach. In practice, they are strongly interrelated sharing common interest in learning from biological data and understanding complex biological processes. The goal of the session is to encourage a “data driven” approach aimed at developing appropriate models that provide new insights into the biomedical problem. Since, in the big data era, the biomedical data turns out to be complex and multivariate, robust and computationally efficient statistical tools are needed to investigate complex dependencies within data structure. In this spirit, the special session will be devoted to both theoretical advances and applications of statistical methods for the analysis of high-dimensional genetic/omics data.

Topics of interest includes but are not limited to:

- Expert Systems and Bayesian Networks
- Graphical models
- Multivariate techniques for dimensionality reduction
- Latent class (mixed) modelling

Session chairs

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