

## **Call for Poster abstracts: 10th International Workshop Machine Learning in Systems Biology (MLSB-2016)**

Organized as a ECCB pre-conference workshop, September 3-4, 2016, World Forum, The Hague, Netherlands

### **SUMMARY**

Biology is rapidly turning into an information science, thanks to enormous advances in the ability to observe the molecular properties of cells, organs and individuals. This wealth of data allows us to model molecular systems at an unprecedented level of detail and to start to understand the underlying biological mechanisms. This field of systems biology creates a huge need for methods from machine learning, which find statistical dependencies and patterns in these large-scale datasets and that use them to establish models of complex molecular systems. MLSB is a scientific forum for the exchange between researchers from Systems Biology and Machine Learning, to promote the exchange of ideas, interactions and collaborations between these communities.

### **TARGET AUDIENCE**

The aim of this workshop is to contribute to the cross-fertilization between the research in machine learning methods and their applications to systems biology (i.e., complex biological and medical questions) by bringing together method developers and experimentalists.

### **WORKSHOP TOPICS (NON EXHAUSTIVE)**

Methods: Active learning/Experimental design, Bayesian Methods, Clustering/Biclustering, Data integration/fusion/multi-view learning, Feature/subspace selection, Graph inference/completion, Kernel Methods, Machine Learning Algorithms, Multi-task/Structured output prediction, Probabilistic inference, Semi-supervised learning, Systems identification, Time-series analysis

Applications: Biomarker identification, Epigenetics, Genome-wide association studies, Metabolic modeling and reconstruction, Metabolomics, Protein function and structure prediction, Protein-protein interaction networks, Rational drug design methods, Regulatory genomics, Sequence Annotation, Signaling networks, Synthetic biology

### **IMPORTANT DATES**

August 19, 2016: Poster abstract submission deadline

August 19, 2016: Registration deadline

September 3-4, 2016: Workshop

### **INVITED SPEAKERS**

Prof. Ziv Bar-Joseph, School of Computer Science Carnegie-Mellon University, USA  
Prof. Jukka Corander, Department of Mathematics and Statistics, University of Helsinki, Finland  
Prof. Lodewyk Wessels, The Delft Bioinformatics Lab, Delft University of Technology, The Netherlands  
Prof. Yvan Saeys, VIB Inflammation Research Center, Ghent University, Belgium

### **SUBMISSIONS**

The poster should be preferably of size A0 in portrait orientation (84.1 x 118.9cm ; or 33.1 x 46.8 inches).

In addition, we will organise a poster pitching session, where you have the opportunity to give a 2 minute oral presentation of your poster.

Abstract of your poster will appear in an informal abstract book that will be available online (unless you instruct otherwise). The abstract should have length 1-2 pages (in arbitrary format).

Submission is through the Easychair system:

<https://easychair.org/conferences/?conf=mlsb2016>

## **REGISTRATION**

Registration via the general ECCB2016 registration system

<http://www.eccb2016.org/registration/>