



COMPLEXITY
SCIENCE
HUB
VIENNA

CSH WORKSHOP SERIES

FUTURE DIRECTIONS IN MEDICAL DATA SCIENCE

OCTOBER 10-11, 2016

COMPLEXITY SCIENCE HUB VIENNA
PALAIS STROZZI
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ABOUT THE WORKSHOP

Most chronic disorders are caused by multiple genetic processes that act in concert with environmental factors. Recent advances in handling and analyzing large data sets on such disease-causing mechanisms, their interactions, and their associated phenotypes enable a novel, quantitative, and data-driven approach to understand human disease.

This workshop brings together leading experts from the forefront of these developments to discuss future research directions. Each participant will present his or her work in approximately 35-45 minutes, followed by a discussion.

If you are interested to participate please send an email to office@csh.ac.at.

ABOUT THE COMPLEXITY SCIENCE HUB VIENNA

The objective of CSH is to host, educate, and inspire complex systems scientists who are dedicated to collect, handle, aggregate, and make sense of big data in ways that are directly valuable for science and society. Focus areas include smart cities, innovation dynamics, medical, social, ecological, and economic systems. CSH is a joint initiative of AIT Austrian Institute of Technology, IIASA International Institute for Applied Systems Analysis, Medical University of Vienna, Vienna University of Technology, Graz University of Technology, and Vienna University of Economics and Business.

AGENDA

MONDAY, OCTOBER 10

- 09:30-10:00 Welcome and Introduction
- 10:00-11:00 **Nicholas Tatonetti**, Herbert Irving Assistant Professor of Biomedical Informatics, Columbia University
- 11:00-12:00 **David Gomez-Cabrero**, Assistant Professor, Karolinska Institutet, Stockholm
- 12:00-13:00 **Alex Arenas**, Professor of Computer Science and Mathematics, Universitat Rovira i Virgili
- 13:00-14:00 Lunchbreak
- 14:00-15:00 **Natasa Przulj**, Professor of Biomedical Data Science, University College London
- 15:00-16:00 **Sebastian Köhler**, PostDoc, Computational Biology Department, Charité Berlin
- 16:00-17:00 **Miquel Duran-Frigola**, Post-Doc, IRB Barcelona
- 17:00 End of Day 1

TUESDAY, OCTOBER 11

- 09:30-10:30 **Jörg Menche**, Principal Investigator and Head of Bioinformatics, Research Center for Molecular Medicine of the Austrian Academy of Sciences CeMM
- 10:30-11:30 **Mikael Benson**, Professor of Pediatrics, Linköping University
- 11:30-12:30 **Peter Klimek**, Assistant Professor, Section for Science of Complex Systems at the Medical University of Vienna
- 12:30-12:35 Concluding Remarks