Network Medicine: Future of Disease Genomics and Healthcare

Satellite symposium of NetSci2013, Copenhagen, Denmark

Date: June 3, 2013

Venue: Technical University of Copenhagen (DTU), campus in Lyngby (DTU Meeting Center)

Registration of this symposium is free of charge. Yet, symposium participants still need to register for the NetSci main conference.

Organizers:
Amitabh Sharma
Yang-Yu Liu
David Gomez-Cabrero

NETWORK MEDICINE

future of disease genomics and healthcare

A NetSci2013 satellite symposium

3rd June 2013

Copenhagen, DK

Network medicine is a rapidly developing field that applies systems biology and network science methods to human disease. The need for today is to provide holistic approach that uses network approaches and the clinical and experimental data to relate the interactome to the diseases. The age of "network medicine" has clearly begun.

Keynote speakers:
Leif Groop
Chuna Ram Choudhary
Sven Nelander

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08:00--9.15	Registration open					
Session I:	**Clinical, Genomics and**	**Time**	**Affiliation**	**Title**		
9.15-9.30	Welcome address	15 mins	Amitabh:	Network Medicine	By Amitabh Sharma	
9.20-10.00	Opening lecutre:Joerg Menche	40 mins	CCNR, Northeastern University, Boston, USA	Network Medicine: From Cellular Network to the Human Diseasome		Keynote
10.00- 10.35	Leif Groop	35 mins	LUDC, Skåne University Hospital Malmö, Sweden	Applying systems biology to the dissection of the genetics of type 2 diabetes		
10.35-11.00	**Tea break**	**25 mins**				
11.30-12.00	Kasper Lagge	30 mins	CMM Foundation Karolinska University Hospital , Sweden	Integrating biological networks and genetics to reverse engineer molecular systems driving disease		
12.-12.30	Erik Sonnhammer	30 mins	Bioinformatics Center, Solna, Sweden	Using global gene/protein networks for identification and annotation of novel disease gene		
12.30-1.00	Sven Nelander	30 mins	Science for Life Laboratory, Uppsala University, Sweden	Cancer Landscapes: global network modeling of human cancer diagnoses linked to experimental tests of anticancer perturbations		Keynote
1.00-1.55	**lunch**	**1 hour**				
Session II:	**Disease networks**	**5 mins**			Session chair: Yang-Yu Liu	
2.00-2.20	David	20 mins	Department of Systems Biology, Technical University of Denmark, Denmark	Deciphering COPD by using the Network approches		
2.20-2.40	Manuel Mattheisen	20 mins	CCNR, Northeastern University, Boston, USA	Using epistasis information to predict a gene network for schizophrenia		
2.20-2.40	Susanne Bornelöv	20 mins	The Linnaeus Centre for Bioinformatics, Uppsala, Sweden	Modelling gene-gene and gene-envirionment interactions in complex diseases - a case for allergy and asthma		
2.40-3.00	Nicolai Juul	30 mins	Department of Systems Biology, Technical University of Denmark, Denmark	Genome-wide analysis of copy number aberration patterns in triple negative breast cancer identify gained DNA repair pathway genes that predict for sensitivity to platinum chemotherapy		
3.00-3.20	**Tea break**	**20 mins**			Session chair: David	
Session III:	**Network medicine and therapeutics**					
3.20-3.50	Chuna Ram Choudhary	30 mins	Center for Protein Research, Disease Systems Biology, Denmark	Systems-wide analysis of cell signaling networks using quantitative mass spectrometry-based proteomics		Keynote
3.50-4:10	Heiko Horn	20 mins	Center for Protein Research, Disease Systems Biology, Denmark	Infering domain interactions via a network based approach		
4:10-4:30	Lasse Folkerssen	20 mins	Experimental Cardiovascular Research, Solna, Sweden	Looking Beyond the lampost of bioinformatics for communicating the complex data		
4.30-4.40	**break**	**10 mins**				
4:40-5.30	**Panel Discussion**					