



Danmarks Grundforskningsfond Danish National

IGDA-

MISP-talks: THE NEW HORIZON IN BIOMEDICINE

Friday 8 December 2017, 16:00 - 19:00, Jerne auditorium, Mærsk Tower Panum Institute, Blegdamsvej 3B, DK-2200 Copenhagen

MISP talks are a series of for- ward looking talks on precision medicine and the emerging new science frontiers and technol- ogies, presented by leading international experts.	Moderator:	Professor Jens Lundgren MD DMSc, PERSIMUNE Center Leader
	16:00-16:15	WELCOME by Professor Liselotte Højgaard MD, DMSc
	16:15-16:30	BIG DATA by Professor Søren Brunak, PhD
The MISP talks on the new hori- zon in biomedicine are organised in conjunction with the MISP Re- search Camp, a multidisciplinary workshop in biomedicine involv- ing biologist, mathematicians, computer scientists and physi- cians from around the world.	16:30-16:45	A CLOSER LOOK AT LIFE - AN IMAGE IS WORTH A THOUSAND WORDS by Professor Magnus Fontes, PhD
	16:45-17:00	CAN WE PREDICT AND CONTROL VIRAL EVOLUTION? by Marco Vignuzzi, PhD
	17:00-1 <mark>7</mark> :15	HUMAN GENOME DIVERSITY, EVOLUTION
The MISP talk session is open to all, scientists and general public.		by Lluis Quintana-Murci, PhD
Registration before Friday 1 st December 2017 via link <u>http://www.persimune.dk/ mispcamp2017</u> For more information: <u>www.persimune.org</u>	17:15-17:30	DECENTRALIZATION, MOLECULAR PROFILING, AND AN ANCIENT PARABLE by Principal Scientist Brian Bot, Bsc
	17:30-17:45	BUBBLE STUDIES IN THE CONTEXT OF SCIENTIFIC PROGRESS AND USE OF BIG DATA by Professor Vincent Fella Hendricks, Dr Phil, PhD
	17:45-18:00	CLOSING REMARKS by Jens Lundgren
	18:00	RECEPTION - SNACKS AND DRINKS

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PROFESSOR JENS LUNDGREN MD, DMSc

Jens Lundgren is Center Leader of the Danish National Foundation for Research's (DNRF) Centre of Excellence

(CoE) for Personalized Medicine of Infectious Complications in Immune Deficiency (PERSIMUNE).

20+ years expertise in leading large international research related to infectious complications in HIV+ persons and transplant recipients funded by the European Commission (EuroSIDA in EuroCoord), the European Medicines Agency (D:A:D) and NIH (INSIGHT studies). Lead of the European-funded networks and co-founder of the global infectious disease research network INSIGHT. Founded MATCH in 2010 to monitor viral infections in transplant patients at Rigshospitalet, now by a grant from the Danish National Research Foundation turned into a research platform across Rigshospitalet to identify factors predicting the risk of infectious complication in immune deficient patients.



PROFESSOR LISELOTTE HØJGAARD MD, DMSc

Liselotte Højgaard is Head of Department of Clinical Physiology, Nuclear Medicine & PET,

Rigshospitalet and Professor in Medicine and Technology at the University of Copenhagen with clinical responsibility for the education as bioengineer in Medicine and Technology given in collaboration with the Technical University of Denmark, DTU, where she is also Adj. Professor in advanced imaging. Liselotte Højgaard is Chairman of the Board of the Danish National Research Foundation and member of the board of the Karolinska Institute and the Robert Bosch Foundation.



PROFESSOR SØREN BRUNAK PhD

Søren Brunak is a biological and physical scientist working in bioinformatics, systems biology and medical infor-

matics. He is professor of Disease Systems Biology at the University of Copenhagen and professor of Bioinformatics at the Technical University of Denmark. As Research Director at the Novo Nordisk Foundation Center for Protein Research at the University of Copenhagen Medical School, he leads a research effort where molecular level systems biology data are combined with phenotypic data from the healthcare sector, such as electronic patient records, registry information and biobank questionnaires.



PROFESSOR MAGNUS FONTES PhD

Magnus Fontes is PhD, Professor of Mathematics and expert in modeling, analysis and visualization of complex systems.

He is co-founder of the bioinformatics software company Qlucore (www.qlucore.com) and has a long-term academic leadership experience, including Chairman for the Centre for Mathematical Sciences at Lund University 2003-2014 as well as numerous international commissions of trust.

Since 2014 he has been leading the effort to establish and coordinate the Institut Pasteur International Network for Data Analysis as Director of International Relations at the Institut Pasteur Centre for Bioinformatics Biostatistics and Integrative Biology in Paris, where he also heads the International Group for Data Analysis. Member of the Executive Committee of PERSIMUNE.



MARCO VIGNUZZI PhD

Marco Vignuzzi studied Microbiology and Immunology at McGill University in Canada, followed by a PhD in Virology at the University of Paris VII.

During his postdoc at UCSF, Dr. Vignuzzi helped establish new methods of studying the role of genetic diversity in the biology and evolution of RNA viruses. Since 2008, head of research unit at Institut Pasteur using experimental and computational methods to monitor, predict and alter virus evolution, using a number of RNA viruses as study models, including chikungunya, Zika, enterovirus and influenza. In 2015, he received the Sanofi-Pasteur National award in biomedical research. Serves on the editorial boards of Viral Evolution journal, Journal of Virology, Virus Research and is Evolutionary Biology Section Editor at PLOS Pathogens.

Since 2017, co-director of the Artificial Evolution of Viruses International Joint Unit with Icahn School of Medicine at Mount Sinai in NYC.



LLUIS QUINTANA-MURCI PhD

Lluis Quintana-Murci heads the Unit of Human Evolutionary Genetics at the Institut Pasteur (Paris) since 2007. Ph.D. in Population Genetics at the University

of Pavia (Italy), and MSc in Biology at the University of Barcelona (Spain). He is a population geneticist whose research focuses on the study of human genetic diversity in the context of genome evolution to the role of host genetic diversity in infectious disease. Specifically, the Quintana-Murci laboratory studies the extent to which pathogens have exerted selective pressures on the human genome, particularly at innate immunity genes, as this provides clues to important immunological pathways in pathogen resistance and homeostasis.

Co-authored over 180 publications and published 7 book chapters. Received several awards, including the CNRS Bronze Medal (2008), the Dagnan-Bouveret Award from the French Academy of Sciences (2009), the Debiopharm- EPFL Life Sciences Award (2009), the CNRS Silver Medal (2013) and the Grand Prix of Medicine and Medical Research of the City of Paris (2014). Laureate of the European Research Council (ERC) and an EMBO member since 2014.



PRINCIPAL SCIENTIST BRIAN BOT Bsc

Principal Scientist and Head of Outreach and Strategic Development at Sage Bionetworks. Worked for seven years as a stat-

istician at the Mayo Clinic primarily in cancer clinical trials and cancer genomics.

Extensive experience working with clinical and genomic data and passion for exploring ways to make science more open and transparent. Involved in a number of national efforts to promote a research ecosystem where participants are treated as partners in the research process. Invited speaker at a number of national and international events and recently named by Mozilla as one of "50 People Who Are Making the Internet a Better Place." Current work aims to make the biomedical research system more effective by challenging the traditional roles of researchers, institutions, funders, and research participants. At its heart, this work is rooted in building trust between these parties as well as with the public at large.



PROFESSOR VINCENT FELLA HENDRICKS Dr Phil, PhD

Vincent F. Hendricks is Professor of Formal Philosophy at The University of Copenhagen. He is Director

of the Center for Information and Bubble Studies (CIBS) sponsored by the Carlsberg Foundation and was awarded the Elite Research Prize by the Danish Ministry of Science, Technology and Innovation and the Roskilde Festival Elite Research Prize both in 2008.

He was Editor-in-Chief of Synthese: An International Journal for Epistemology, Methodology and Philosophy of Science between 2005-2015.

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For more information: <u>www.persimune.org</u>

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