

# SEMMEIWEIS SYMPOSIUM 2024 PROGRAM SCHEDULE

11 <sup>th</sup> November			
12.00-13.00	Registration		Topic
13.00-15.00	<b>Opening Session</b> Chairpersons: Béla Merkely & Péter Ferdinandy		
13.00-13.15	Béla Merkely		Rector's welcome message
13.15-13.30	Péter Ferdinandy		Introduction of Semmelweis University
13.30-13.50	László Bódis	Deputy State Secretary for Innovation	To be announced
13.50-14.20	Joseph Loscalzo	NMA Founder and Scientific Committee Chair	Introduction of Network Medicine Alliance
14.20-14.40	Albert-Laszlo Barabasi	NMA Cofounder	From Network Medicine to the Foodome
14.40-15.00	Questions & Discussion		
15.00-15.30	Coffee Break & Poster Viewing		
15.30-17.00	<b>Session I. Diseases and Comorbidities</b> Chairpersons: Jörg Menche & Péter Ferdinandy		
Session I.			
15.30-16.00	Keynote 2. - Jörg Menche	Harvard Medical School	A glimpse into the future of Network Medicine
16.00-16.15	Dezső Miklós	MTA Rényi Research Centre	AI-powered analysis of electronic health records in a population-wide setting
16.15-16.30	Maurizio Sessa	University of Copenhagen	AI and Intelligent Automation in Pharmacovigilance and Pharmacoepidemiology
16.30-16.45	Julia Guthrie	Max Perutz Labs Vienna	Autoimmunity and autoinflammation: a network-based perspective
16.45-17.00	Questions & Discussion		
17.00-18.00	Poster Viewing		
18.00-20.30	Get together – Social Event: Watching together the Semmelweis Movie		

# 12<sup>th</sup> November

8.00-8.30	Registration		Topic
<b>8.30-10.00</b>	<b>Session II. Drug Development and Repurposing</b> Chairpersons: Harald Schmidt & Péter Ferdinandy		
8.30-9.00	Keynote 3. Harald Schmidt	Maastricht University	The End of Medicine as We Know It
9.00-9.15	Hermann Mucke	H.M. Pharma Consultancy	AI-supported networked knowledge management for drug repurposing: patents and peer review papers
9.15-9.30	Emre Guney	Discovery and Data Science Unit, STALICLA	Toward translational precision medicine in neuropsychiatric disorders
9.30-9.45	David Cavalla	Numedicus Ltd	Drug Repurposing: saving lives with unsafe drugs
9.45-10.00	Questions & Discussion		
10.00-10.30	Coffee Break & Poster Viewing		
<b>10.30-12.00</b>	<b>Session III. Multiomic Analysis</b> Chairpersons: Manuel Mayr & Bence Ágg		
10.30-11.00	Keynote 4. – Manuel Mayr	Imperial College London	The Proteomics Landscape of Dilated Cardiomyopathy
11.00-11.15	Dániel Veres	Turbine Ltd.	Integration of multiomics data using graph-based AI to build in silico disease models for drug discovery
11.15-11.30	David Deritei	Channing Division of Network Medicine, Brigham and Women's Hospital (Harvard Medical School)	Dynamic network models in network medicine
11.30-11.45	Min Xie	BGI Research Southwest China	Omics for All - The Innovation and Application of Omics Technologies
11.45-12.00	Vladimir Kovacevic	BGI Research Europe	Bridging Space and Genes: Algorithms in the Era of Spatial Transcriptomics
12.00-13.00	Lunch Break & Poster Viewing		

## 12<sup>th</sup> November

<b>13.00-14.30</b>	<b>Session IV. Clinical Phenotyping and applications</b>		
	Chairpersons: Paolo Parini & Ádám Tabák		
13.00-13.30	Keynote 5. - Ed Silverman	Brigham and Women's Hospital (Harvard Medical School)	Investigating Chronic Obstructive Pulmonary Disease with Genetics, Omics, and Networks
13.30-13.45	Simone Novelli	Sapienza University of Rome	Network analysis in oncology: How will integration of omics data with imaging biomarkers affect outcomes?
13.45-14.00	Robert Wagner	Research Group Clinical Research Center, DDZ	Precision medicine in type 2 diabetes and prediabetes
14.00-14.15	Paolo Parini	Karolinska Institutet	Network Medicine Approaches to Cardiovascular Disease - In-Depth Definition of Lipid Lowering Treatments in Humans
14.15-14.30	Questions & Discussion		
14.30-15.00	<b>Coffee Break &amp; Poster Viewing</b>		
<b>15.00-16.30</b>	<b>Session V. Network Medicine in Oncology vs. AI in Network Medicine</b>		
	Chairpersons: Mikael Benson & Balázs Györfy		
15.00-15.30	Keynote 6. István Csabai	Professor of Physics, ELTE TTK	Data-intensive sciences - empowering healthcare with AI
15.30-15.45	Mikael Benson	Karolinska Institutet	Digital Twins of individual patients to predict, prevent or treat disease
15.45-16.00	Luca Magnani	Institute of Cancer Research	Breast Cancer Dormancy: A Link to the Past
16.00-16.15	Zoltán Szállási	Harvard Medical School,	Can AI save cancer research ?
16.15-16.30	Question & Discussion		
16.30-17.00	<b>Poster Viewing</b>		

13 <sup>th</sup> November			
8.00 - 9.00	Registration		Topic
<b>9.00-10.30</b>	<b>Session VI. AI and Network Medicine</b> Chairpersons: Szilárd Vörös & Pál Maurovich-Horvat		
9.00-9.30	Keynote 7. - Ijad Madisch	Researchgate CEO	From an idea to a disruptive technology
9.30-9.50	Pál Maurovich-Horvat	Semmelweis University	To be announced
9.50-10.10	Szilárd Vörös	G3 Therapeutics	To be announced
10.10-10.30	Questions & Discussion		
10.30-11.30	<b>Coffee Break &amp; Poster Viewing</b>		
<b>11.30-13.00</b>	<b>Session VII. Bioinformatics Methods</b> Chairpersons: Jan Baumbach & Zsolt Bagyura		
11.30-12.00	Keynote 8. Yang-Yu Liu	Harvard Medical School	Deep Learning for Microbiome Research
12.00-12.15	Paola Paci	Sapienza University of Rome	Network-based Approaches for the Identification of Cancer Signature from Omics Data
12.15-12.30	István A. Kovács	Northwestern University	Fighting the incompleteness and biases of biological networks
12.30-12.45	Jan Baumbach	University of Hamburg	Quantum bioinformatics - Fake it till you make it
12.45-13.00	Questions & Discussion		
<b>13.00-14.00</b>	<b>Lunch Break</b>		
14.00-15.00	<b>Session VIII. Doctor Honoris Causa Session &amp; Closure</b> Chairpersons: Béla Merkely & Péter Ferdinandy		
14.00-14.15	Ajay Singh	Harvard Medical School	To be announced
14.15-14.30	Tienush Rassaf	University Hospital Essen	Challenges in Cardiology – per aspera ad astra
14.30-14.40	Péter Ferdinandy	Semmelweis University	Wrap-up and Closure of Semmelweis Symposium
<b>14.40-15.00</b>	<b>Awards &amp; Closing Ceremony - Semmelweis Best Poster Award</b>		