2019

Agenda
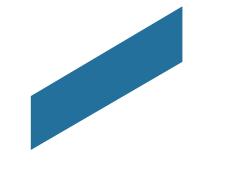
#HPI_Health

HPI - Mount Sinai Digital Health Forum

Hasso Plattner Institute
Mount Sinai Health System

Potsdam
21-22 · November · 2019

HPI
Hasso
Plattner
Institut
Digital Engineering · Universität Potsdam

HPI·MS
Hasso Plattner Institute
for Digital Health at Mount Sinai

Mount
Sinai

Agenda

09.00 am **Opening Session**

Conference Opening and Welcome
Erwin Böttinger
Hasso Plattner Institute for Digital Engineering
Icahn School of Medicine at Mount Sinai

Research Strategic Plan of Icahn School of Medicine at Mount Sinai
Dennis S. Charney
Icahn School of Medicine at Mount Sinai

Introduction of Hasso Plattner Institute for Digital Engineering
Christoph Meinel
Hasso Plattner Institute for Digital Engineering

Keynote: Genetic Risk and Its Use in Disease Prevention
Samuli Ripatti
Institute for Molecular Medicine Finland

10.30 am **Coffee Break**

11.00 am **Platforms for Multimodal Health and Clinical Datasets**
Session Chair: Felix Naumann
Hasso Plattner Institute for Digital Engineering

Data Engineering for Big Data Analytics
Tilmann Rabl
Hasso Plattner Institute for Digital Engineering

Scientific Computing/Research Clinical Data Warehouse at ISMMS
Farhan Mahmood
Icahn School of Medicine at Mount Sinai

High-Fidelity Phenotyping to Enable Robust Machine Learning of Electronic Health Record Data
Ben Glicksberg
Icahn School of Medicine at Mount Sinai

BioMe: Opportunities for Collaboration
Judy H. Cho
Icahn School of Medicine at Mount Sinai

The Mount Sinai Imaging Research Warehouse (MSIRW) As a Tool for AI Imaging Research
Zahi A. Fayad
Icahn School of Medicine at Mount Sinai

Introduction to D4L and the "D4L Insights Delivery Architecture"
Christian-Cornelius Weiss
D4L data4life

Mount Sinai AI-ready Health Data Platform Project
Péter Adorján
D4L data4life

Open discussion

01.00 pm **Lunch**

02.00 pm **Health Monitoring: Sensing and Analytics**
Session Chair: Frank Mayer
University Potsdam

Keynote: Wearable AI for Health and Well Being
Paul Lukowicz
German Research Center for Artificial Intelligence

Internet of Health Things
Bert Arnrich
Hasso Plattner Institute for Digital Engineering

Prescribing Apps and Bots: The Case of Diabetes Management in Trentino
Oscar Mayora
Bruno Kessler Foundation

Ubiquitous Health: Wearable Computing Systems that Increase Quality of Life and Transform Health Care
Bjoern Eskofier
Friedrich-Alexander-Universität Erlangen-Nürnberg

A Digital Health Cohort at Mount Sinai: A Framework for Clinical Trials, Clinical Studies and Transforming Healthcare
Girish Nadkarni
Icahn School of Medicine at Mount Sinai

Digital Health Innovation Germany: From Product to Reimbursement
Jörg F. Debatin
hih – health innovation hub of the Federal Ministry of Health

Open discussion

04.00 pm **Coffee Break**

04.15 pm **Panel Discussion: Co-Innovation in Digital Health**
Moderator: Erwin Böttinger
Hasso Plattner Institute for Digital Engineering
Icahn School of Medicine at Mount Sinai

Dennis S. Charney
Icahn School of Medicine at Mount Sinai

Katharina Hölzle
Hasso Plattner Institute for Digital Engineering

Heyo K. Kroemer
Charité – Universitätsmedizin Berlin

Erik Lium
Icahn School of Medicine at Mount Sinai

Samuli Ripatti
Institute for Molecular Medicine Finland

Agenda

Friday, November 22nd

08.30 am   **Special Lecture:**
A Sneak Peak of IBM Research - From Computing to Touching Health
Heike Riel
IBM Research

09.00 am   **Precision Medicine Use Cases**
Session Chair: Jonathan Edelman
Hasso Plattner Institute for Digital Engineering

Keynote: Big Data in Precision Medicine – Curse or Cure?
Roland Eils
Berlin Institute of Health and Charité –
Universitätsmedizin Berlin

Informing and Improving Imunotherapies with Analysis of High-Dimensional Immune Monitoring Assays
Sacha Gnjatic
Icahn School of Medicine at Mount Sinai

Opportunities for Innovation in Mental Health at HPI-Mount Sinai
Alexander Charney
Icahn School of Medicine at Mount Sinai

Real-time NGS Analysis for the Human Microbiome and Beyond
Bernhard Renard
Robert Koch Institute

Process Mining in Personalized Medicine
Mathias Weske
Hasso Plattner Institute for Digital Engineering

Digital Endpoints: Development and Validation of Emerging Capabilities to Measure Disease
Ieuan Clay
Novartis Institutes for BioMedical Research

Open discussion

11.00 am   **Coffee and Networking Break**

11.30 am   **Machine Learning and Artificial Intelligence in Human Health**
Session Chair: Hanna Drimalla
Hasso Plattner Institute for Digital Engineering

Keynote: Augmenting clinical intelligence with machine intelligence
Suchi Saria
Johns Hopkins University School of Medicine

Applied AI: Better Together
Christoph Feest
Helmholtz AI Cooperation Unit Central hosted by Helmholtz Center Munich

From Classification to Computation: Artificial Intelligence Enabled Pathology
Carlos Cordon-Cardo
Icahn School of Medicine at Mount Sinai

Deep Patient: Predict the Medical Future of Patients with Machine Learning and EHRs
Riccardo Miotto
Icahn School of Medicine at Mount Sinai

Personalized Vaccines - How Algorithms Shape Modern Cancer Therapy
Benjamin Schubert
Helmholtz Center Munich

Machine Learning for Health Cohorts
Christoph Lippert
Hasso Plattner Institute for Digital Engineering

Open discussion

01.30 pm   **Concluding Remarks**
Erwin Böttinger, Dennis Charney, Christoph Meinel