Precision Health Day 2025

Giornata della Salute di Precisione

Lugano, 28 March 2025

(Campus Est USI-SUPSI, Sala polivalente, Sector A)

PROGRAM

8:30-9:00	Registration and welcome – Accoglienza e benvenuto
9:00-9:15	Opening – Apertura (chair: Prof. Stéphane Meystre; Scientific committee co-chairs: Profs. Alessandro Ceschi and Gian Luca di Tanna)
9:15-10:15	**Keynote: Prof. Mihaela van der Schaar**
10:15-10:45	Coffee break and poster session – Pausa caffè e poster session

10:45-12:15 — Improving diagnosis and treatment (chair: Prof. Alessandro Ceschi)

- Weakly-supervised diagnosis identification from Italian discharge letters (Vittorio Torri, Elisa Barbieri, Anna Cantarutti, Carlo Giaquinto, Francesca Ieva)
- SLEEPYLAND: an open-source and easy-to-use toolbox to fairly evaluate automatic sleep staging algorithms on NSRR data (Luigi Fiorillo, Alvise Dei Rossi, Matteo Metaldi, Michal Bechny, Giuliana Monachino, Athina Tzovara, Shaun Purcell, Francesca Dalia Faraci)
- NLP in support of Pharmacovigilance: QUality Adverse Drug Reaction AcTIve Control (QUADRATIC) (Roberta Noseda, Oscar Lithgow Serrano, Andrea Franchini, Joseph Cornelius, Amos Colombo, Sandra Mitrovic, Lorenzo Ruinelli, Alessandro Ceschi, Fabio Rinaldi)
- Evaluation of dose and image quality in Inner ear imaging: comparison between computed tomography and 3D rotational angiographic acquisitions (Luca Bellesi, Francesco Magoga, Gaetano Cancellato, Elisa Ventura, Alessandro Cianfoni, Filippo Del Grande, Stefano Presilla)
- Advancing Digital Mental Health: Graph Convolutional Networks for Depression Screening in Clinical Conversations (Esau Villatoro-Tello and Sergio Burdisso)

12:15-13:15	Lunch and poster session – Pranzo e poster session
13:15-14:00	**Experts Panel on "Precision Health Latest Trends"** (moderator: Prof. Stéphane Meystre; Prof. Silke Gillessen Sommer, Prof. Giulio Conte, Prof. Luca Gabutti)
14:00-15:00	**Short presentations of selected posters** (chair: Dr. Francesca Faraci)
	(Details below)
15:00-15:30	Coffee break and poster session – Pausa caffè e poster session

15:30-17:00 — From diagnosis and treatment to predicting course and outcomes (chair: Dr. Laura Azzimonti)

- Persistence diagrams for exploring the shape variability of abdominal aortic aneurysms (Matteo Pegoraro, Dario Arnaldo Domanin, Santi Trimarchi, Maurizio Domanin, Piercesare Secchi)
- A Multimodal Combined Treatment-Assessment Approach to Reduce Stroke Symptoms: Toward Precison Medicine (Riccardo Gironi, Edoardo Ricci, Alessandro Lecchi, Pamela Agazzi, Alain Kaelin-Lang, Claudio Gobbi, Gianna Carla Riccitelli)
- Can Physics-Informed Neural Networks infer Hidden Insulin Dynamics? (Lea Multerer, Manuel Acquistapace, Marco Forgione, Laura Azzimonti)
- Early Identification of Ventilator-Associated Pneumonia Using Machine Learning Techniques: A Prospective Cohort Study (Sandra Mitrović, Amos Colombo, Stefano Toniolo, Enrico Bulleri, Marco Scutari, Daniele Malpetti, Lorenzo Ruinelli, Laura Azzimonti, Alberto Pagnamenta)
- Electronic Health Records to recognize and predict Acute Kidney Injury and Disease (Lorenzo Ruinelli, Antonio Bellasi, Paolo Ferrari, Pietro Cippà, Clelia Di Serio)

17:00-18:00	Closing and apéritif – Chiusura e aperitivo

Posters selection with short presentations:

- A Participatory Approach to Support Glucose Tolerance Tracking in Real-Life of Patients with Type 2 Diabetes (Alberto Nascimbene, Edoardo Faggionato, Michele Schiavon, Enea Parimbelli)
- Test bench for in vitro simulation of an Abdominal Aortic Aneurysm (Giulio Saroglia, Stefano Marocco, Lorenzo Bazzolo, Shasa Nicoloso, Lorenzo Cavallini, Matteo Metaldi, Salvatore Diana, Igor Stefanini)
- A wireless implantable pressure sensor for monitoring an Abdominal Aortic Aneurysm growth (Giulio Saroglia, Salvatore Diana, Matteo Metaldi, Stefano Marocco, Shasa Nicoloso, Igor Stefanini)
- Machine Learning Framework for Fall Detection and Time-of-Impact Estimation (Nicholas Cartocci, Antonios E. Gkikakis, Darwin Caldwell, Jesus Ortiz)
- Early Monitoring Reveals Novel Toxicities and Prognostic Factors in Patients with De Novo Metastatic Hormone-Sensitive Prostate Cancer Undergoing Hormonal Treatment (Giuseppe Salfi, Martino Pedrani, Amos Colombo, Lorenzo Ruinelli, Giovanna Pecoraro, Chiara Maria Agrippina Clerici, Ricardo Pereira Mestre)
- Alpha oscillations as a personalized listening effort indicator during a speech-in-noise test (Davide Simeone, Edoardo Maria Polo, Fabrizio Dabbene, Riccardo Barbieri, Alessia Paglialonga)
- Differential equations-driven counterfactuals for personalized diabetes risk management (Marta Lenatti, Marco Zaffalon, Alessandro Antonucci, Pierluigi Francesco De Paola, Lea Multerer, Maurizio Mongelli, Alessia Paglialonga, Laura Azzimonti)
- Combined tumor-associated microbiome and immune gene expression profiling predict response to neoadjuvant chemo-radiotherapy in locally advanced rectal cancer (Raffaello Roesel, Francesco Strati, Camilla Basso, Samantha Epistolio, Elisa Sorrenti, Martina Villa, Pietro Edoardo Majno-Hurst, Alessandra Franzetti-Pellanda, Sara De Dosso, Milo Frattini, Dimitrios Christoforidis, Giandomenica Iezzi)
- Highly Specific Theranostics via Engineered Nanoparticles Mimicking Extracellular Vesicles: A Computational Perspective (Charly Empereur-Mot, Claudio Perego, Giada Rosso, Stijn Van Veen, María Sancho-Albero, Giulia Tamboia, Marije Kuipers, Joaquin Seras-Franzoso, Ibane Abasolo, Esther Nolte-'T Hoen, Giovanni M. Pavan, Luisa De Cola, Lorenzo Albertazzi, Valentina Cauda)
- Switching from standard to personalized dosimetry for HCC patients treated with Y-90 SIRT. A real-life experience (Marco Cuzzocrea, Federico Pedersoli, Cesare Michele Iacovitti, Stefano Cappio, Gaetano Paone)
- Towards a Musculo-Skeletal Digital Twin for Posture and Movement Disorder Analysis (Giuseppe Patane, Martina Paccini, Simone Cammarasana)

Proceedings available at: [PrecisionHealthDay2025-Proceedings](#)

Information, registration and contacts:

Event website: https://www.supsi.ch/en/giornata-della-salute-di-precisione

Email: meditech@supsi.ch

Local WiFi: SUPSI Guest (instructions at https://si.supsi.ch/cms/wp-content/uploads/sites/44/2022/06/Autonomous-SUPSI-Guest-registration-for-guests.pdf)

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