

pHealth 2019 Program

	Monday, 10 June 2019	
08:00-09:00	Registration	
09:00-10:30	Welcome and Keynote Session	
	Chairs: Pekka Routsalainen, Finland; Sergio Cerutti, Polytechnic Milan, Italy	
	Welcome Address: Sonia Viale, Liguria Council Member for Health	
	Welcome Address: Marco Bucci, Mayor of Genoa	
	Welcome Address: Matteo Rosso, President of the Regional Health Commission	
	Welcome Address: Giorgio Boni, Dean of the Polytechnic School	
	Welcome Address: Enrico Puppo, Director of DIBRIS	
	Welcome Address: Gianni Vernazza, Member of the governing council of the order of Engineers in Genova	
	Welcome Address: Dr. Andreas Lymberis, European Commission, DG Connect	
	Welcome Address: Bernd Blobel, Chair SPC pHealth 2019	
	Welcome Address: Mauro Giacomini, Chair LOC pHealth 2019	
09:45-10:30	Keynote Healthcare Transformation towards Personalized Medicine – Chances and Challenges Bernd Blobel, Pekka Routsalainen	45'
10:30-11:00	Coffee and Demo Break (Exhibition Area)	
11:00-13:05	Decision Support (Part I)	125'
	Chairs: Filipe Sousa, Portugal; Carmelina Ruggiero, Univ. of Genoa, Italy	
11:00-11:25	Translating the Results of Discrete Choice Experiments into p-/e-/m-Health Decision Support Tools Jack Dowie, Mette Kjer Kaltoft	25'
11:25-11:50	Optimization of Clinical Decision Support Based on Pearson Correlation of Attributes Alekssei Dudchenko, Matthias Ganzinger, Georgy Kopanitsa	25'
11:50-12:15	A Multi-Criterial Support Tool for the Multimorbidity Decision in General Practice Vije Kumar Rajput, Mette Kjer Kaltoft, Jack Dowie	25'
12:15-12:40	Using Neural Networks for Diagnostics in Dermatology Margarita Bobrova, Maksim Taranik, Georgy Kopanitsa	25'
12:40-13:05	Risk Classifications Interfere with Preference-Sensitive Decision Support Mette Kjer Kaltoft, Jack Dowie	25'
13:05-14:00	Lunch (Exhibition Area)	
14:00-14:50	Decision Support (Part II)	50'
	Chairs: Filipe Sousa, Portugal; Carmelina Ruggiero, Univ. of Genoa, Italy	
14:00-14:25	Development and Pilot Testing of a Mobile Based Patient Decision Aid for Childbirth Decision Making Zahra Madhani, Azam Aslani, Maryam Kasraeian	25'

14:00-14:50	Microservice Architecture to Provide Medical Data Management for Decision Support Georgy Kopanitsa	25'
14:50-16:50	Other pHealth Issues Chairs: Bernd Blobel, Germany; Roberta Gazzarata, Healthropy, Italy	120'
14:50-15:15	Multicompartment Hydrogels for the Local Delivery of Chemotherapeutic Drugs Stefania Boi, Elena Dellacasa, Nadia Rouatbi, Orietta Monticelli, Laura Pastorino	25'
15:15-15:40	Systematic Review on Features Extracted from PPG Signals for the Detection of Atrial Fibrillation Nathalia A. Girón, César Millan, Diego M. Lopez	25'
15:40-16:05	Brain-on-a-Chip: A Human 3D Model for Clinical Application Lorenzo Muzzi, Sergio Martinoia, Monica Frega	25'
16:05-16:30	End-to-End Notifications and Interactivity in Standard Based EHR Networks Patrick Mangesius, Dmytro Rud, Samred Saboor, Thomas Schabetsberger	25'
16:30-16:35	Poster: An Information Technology System Including Patient Generated Health Data for Cancer Clinical Care and Research Norbert Maggi, Lucas Douglas Magnoni, Carmelina Ruggiero, Roberta Gazzarata, Mauro Giacomini	5'
16:35-16:40	Poster: Ischemic Heart Disease Correlates with Muslim Names in a Population of Ten Year First Admissions at Tirana University Hospital Center Ilir Akshija	5'
16:40-16:45	Poster: A Web-Based Instrument to Collect High Quality Data for a Complete Evaluation of Fragility in Senior HIV+ Patients Sara Mora, Alberto Venturini, Giovanni Cenderello, Daniela Fiorellino, Alberto Pilotto, Mauro Giacomini	5'
16:45-16:50	Poster: Critical Appraisal of Mental Health Applications Fatameh Salehi, Zahra Arab Kermani, Fatameh Khademian, Azam Aslani	5'
16:50-17:20	Coffee and Demo Break (Exhibition Area)	
17:20-19:05	Security and Privacy, Social Factors and Environmental Context in pHealth Systems Chairs: Georgy Kopanitsa, Russia; Victor Erokhin, CNR, Italy	105'
17:20-17:50	Invited Speech Digital pHealth – Problems and Solutions for Trust and Privacy Pekka Ruotsalainen, Bernd Blobel	30'
17:50-18:15	Literature Survey towards Mitigating Healthcare Security Violations in the Psycho-Socio-Cultural Context Prosper Kandabongee Yeng, Bian Yang, Einar Arthur Snekkenes	25'
18:15-18:40	Access Control Models – A Systematic Review Giorgia Gazzarata, Bernd Blobel	25'
18:40-19:05	iSupport: Building a Resilience Support Tool for Improving the Health Condition of the Patient During the Care Path Angelina Kouroubali, Haridimos Kondylakis, Lefteris Koumakis, George Papagiannakis, Paul Zikas, Dimitrios G. Katehakis	25'
20:00-21:30	Aperitif – Music	

	Tuesday 11 June 2019	
09:00-11:10	pHealth Solutions and Architectures (Part I)	130'
	Chairs: Diego Lopez, Colombia; Mauro Giacomini, University of Genoa, Italy	
09:00-09:30	Invited Speech Patient's empowerment: an advantage or a burden? A use case in cognitive rehabilitation Silvana Quaglini (Italy)	30'
09:30-09:55	A SOA Based Solution for the MDRO Surveillance and a Better Antibiotic Prescription in Abruzzo Region Roberta Gazzarata, Maria Eugenia Monteverde, Monica Bonetto, Vincenzo Savini, Ennio Polilli, Serena Corridoni, Alberto Costantini, Fiorenzo Santoleri, Giorgia Rapacchiale, Dalia Palmieri, Stefania Melena, Arturo Di Girolamo, Antonina Sciacca, Marco De Benedictis, Heber D'Alberto, Giacomo Galleani, Mauro Giacomini, Giustino Parruti	25'
09:55-10:20	Characterising Physical Rehabilitation Exergames for Player Experience Evaluation Purposes Edwin Gamboa, Maria Trujillo	25'
10:20-10:45	Extraction from Medical Records Aleksi Dudchenko, Polina Dudchenko, Matthias Ganzinger, Georgy Kopanitsa	25'
10:45-11:10	Development and Usability Evaluation of Web-Based Telerehabilitation Platform for Patients after Myocardial Infarction Saba Jameie, Habib Haybar, Azam Aslani, Maryam Saadat	25'
11:10-11:40	Coffee and Demo Break (Exhibition Area)	
11:40-12:40	pHealth Solutions and Architectures (Part II)	55'
	Chairs: Diego Lopez, Colombia; Mauro Giacomini, University of Genoa, Italy	
11:40-12:10	Affordable Personalized Immersive VR Motor Rehabilitation System with Full Body Tracking Jindrich Adolf, Jaromir Dolezal, Lenka Lhotska	25'
12:10-12:35	Usability Testing of Two Mini-Games and One Serious Game to Educate People about Genetics Renato Mainetti, Serena Oliveri, Alessandra Gorini, Ilaria Cutica, Gabriella Pravettoni, N. Alberto Borghese	25'
12:35-12:40	Poster: Personalized Assistance for Patients with Chronic Diseases through Multi-Level Distributed Healthcare Process Assessment Liubov Elkhovskaya, Maksim Kabyshev, Anastasia Funkner, Marina Balakhontceva, Vladimir Fonin, Sergey Kovalchuk	5'
12:40-13:25	Artificial Intelligence and Machine Learning (Part I)	55'
	Chairs: Bian Yang, Norway; Silvana Quaglini, University of Pavia, Italy	
12:40-13:10	Invited Speech Suitable Data Representation for Abnormal Pattern Detection in Smart Home Environment Jiri Petnik, Lenka Lhotská	30'
13:10-13:35	Echocardiography Population Study in Russian Federation for P4 Medicine Using Machine Learning Oleg Metsker, Alexey Yakovlev, Alexandr Ilin, Sergey Kovalchuk	25'

13:35-14:30	Lunch (Exhibition Area)	
14:30-16:30	Artificial Intelligence and Machine Learning (Part II)	125'
	Chairs: Bian Yang, Norway; Silvana Quaglini, University of Pavia, Italy	
14:30-14:55	Estimating Systolic Blood Pressure Using Convolutional Neural Networks Solmaz Rastegar, Hamid Gholamhosseini, Andrew Lowe, Farhad Mehdipour, Maria Lindén	25'
14:55-15:20	Graph-Based Predictive Modelling of Chronic Disease Development: Type 2 DM Case Study Ilya Derevitskii, Anastasia Funkner, Oleg Metsker, Sergey Kovalchuk	25'
15:20-15:45	Permutation Entropy Applied to Fitbit Data: Long-Term Sleep Analysis on One Healthy Subject Elisa Salvi, Giordano Lanzola, Silvana Quaglini, Silvia Panzarasa, Riccardo Bagarotti, Laura Rodi, Cristiana Larizza, Lucia Sacchi	25'
15:45-16:10	Heart Disease Dataset Clusterization Polina Dudchenko, Aleksei Dudchenko, Georgy Kopanitsa	25'
16:10-16:35	A Comprehensive Tool for Usability Evaluation of Telehealth Zahra Koohjani, Azam Aslani, Sanz Abasi, Shamim Kyiani	25'
16:35-17:00	Coffee and Demo Break (Exhibition Area)	
17:00-16:30	Artificial Intelligence and Machine Learning (Part III)	80'
	Chairs: Bian Yang, Norway; Silvana Quaglini, University of Pavia, Italy	
17:00-17:25	Using Machine Learning for Personalized Patient's Adherence Level Determination Maksim Taranik, Georgy Kopanitsa	25'
17:25-17:50	Dynamic Features Impact on the Quality of Chronic Heart Failure Predictive Modeling Ksenia Balabaeva, Sergey Kovalchuk, Oleg Metsker	25'
17:50-18:15	NASA RTLX as a Novel Assessment for Determining Cognitive Load and User Acceptance of Expert and User-Based Evaluation Methods Exemplified through an mHealth Diabetes Self-Management Application Evaluation Mattias Georgsson	25'
18:15-18:20	Poster: Human in vitro Model of the Penumbra Sara Pires Monteiro, Joana Covelo, Marloes Levers, Gerco Hassink, Joost le Feber, Monica Frega	5'
20:00-22:30	Gala Dinner	

	Wednesday 12 June 2019	
09:00-11:00	ALCOTRA Project – ANTEA Workshop	120'
11:00-11:30	Coffee and Demo Break (Exhibition Area)	
11:30-13:15	Wearable Technologies for pHealth (Part I)	105'
	Chairs: Lenka Lhotska, Czech Republic; Laura Pastorino, University of Genoa, Italy	
11:30-12:00	Invited Speech Organic Memristive Device: Towards Synapse Prosthesis Victor Erokhin	30'
12:00-12:25	Obesity Risk Assessment Model Using Wearable Technology with Personalized Activity, Calorie Expenditure and Health Profile Hamid Gholamhosseini, Mirza Baig, Joseph Maratas, Farhaan Mirza, Maria Lindén	25'
12:25-12:50	In-Vehicle Respiratory Rate Estimation using Accelerometers Ju Wang, Joana M. Warnecke, Thomas M. Deserno	25'
12:50-13:15	Wearable Kinematic Monitoring System Based on Piezocapacitive Sensors Gabriele Frediani, Bianca Botondi, Lorenzo Quartini, Giovanni Zonfrillo, Leonardo Bocchi, Federico Carpi	25'
13:15-14:10	Lunch (Exhibition Area)	
14:10-13:15	Wearable Technologies for pHealth (Part II)	105'
	Chairs: Lenka Lhotska, Czech Republic; Laura Pastorino, University of Genoa, Italy	
14:10-14:35	Smartphone-Based Remote Monitoring Solution for Heart Failure Patients Inêz Lopes, Filipe Sousa, Emilia Moreira, José Cardoso	25'
14:35-15:00	Adaptation Component based on Wearable Technology to Support Personalized Tracking of Physical Activity in Children Ana Diaz, Santiago Perez, Diego M. Lopez	25'
15:00-15:25	A Novel Medical Device for Early Detection of Melanoma Shereen Afifi, Hamid Gholamhosseini, Roopak Sinha, Maria Lindén	25'
15:25-15:50	Heart Rate Variability from Wearables: A Comparative Analysis among Standard ECG, a Smart Shirt and a Wristband Pierluigi Reali, Giulia Tacchino, Giulia Rocco, Sergio Cerutti, Anna Maria Bianchi	25'
15:50-15:55	Poster: Carried Weight Affects Walking Speed Monitoring with the IngVaL System Per Anders Rickard Hellstrom, Mia Folke	5'
15:55-16:40	Closing Ceremony	45'
	Students' Best Paper Award	
	Students' Best Poster Award	
	Next pHealth Event	
	Closing Remark of SPC and LOC	