PHealth 2015 Program

Tuesday, 2 June 2015

13:00 – 14:00  Conference Registration, Coffee


17:20 – 18:00  Students’ Poster Session

18:00-19:30  Welcome Reception at Aros Congress Center, Västerås (on invitation)

Welcome address: Mats Enlund, Centre for Clinical Research

Welcome address: Damir Isovic, Mälardalen University

Welcome address: Peter Pharow, Organizer of the PHealth Conference Series

Welcome address: Mikael Wintell, HL7 Sweden
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<th>Time</th>
<th>Session/Activity</th>
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<tr>
<td>08:30-08:45</td>
<td>Registration</td>
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<tr>
<td>08:45-11:00</td>
<td><strong>Welcome and Keynote session</strong></td>
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<td><strong>Chairs:</strong> Peter Pharow, Germany; Mikael Wintell, Sweden</td>
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<td>SPC Chair: Bernd Blobel, Germany – SPC Welcome Address</td>
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<td>LOC Chair: Maria Lindén, Sweden – LOC Welcome Address</td>
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<td>Director General The Swedish Council on Health Technology Assessment: Olivia Wigzell – Welcome address</td>
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<td><strong>Keynote Speech:</strong> Andreas Lymboris, European Commission: “How smart systems, bio &amp; med tech enable pHealth? Present and future developments through the European FP7 and H2020 programmes”</td>
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<td><strong>Keynote Speech:</strong> Bernd Blobel, Germany: “The importance of architectures for interoperability”</td>
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<td>11:00-11:20</td>
<td>Coffee Break - Demo and Exhibition</td>
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<td>11:20-13:00</td>
<td><strong>Interoperable ICT and Telemedicine</strong></td>
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<td><strong>Chairs:</strong> Filipe Sousa, Portugal; Mats Björkman, Sweden</td>
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A Generic Architecture for an Adaptive, Interoperable and Intelligent Type 2 Diabetes Mellitus Care System

_Gustavo Uribe, Bernd Blobel, Diego López, Stefan Schulz (Colombia, Germany, Austria)_
Interactive Distance Technology Enabling Home-Based Motor Training for Stroke Patients
   Maria Ehn, Pär Hansson, Marie Sjölander, Inga-Lill Boman, Mia Folke, Disa Sommerfeld, Jörgen Borg, Susanne Palmcrantz (Sweden)

Smartphone Serious Games for Senses Evaluation
   Pedro Dias, Bruno Aguiar, Filipe Sousa, Augusto Sousa (Portugal)

Specializing Architectures for the Type 2 Diabetes Mellitus Care Use Cases with a Focus on Process Management
   Gustavo Uribe, Bernd Blobel, Diego López, Alonso Ruiz (Colombia, Germany)

13:00-14:00  LUNCH

14:00-15:55  SIGNAL PROCESSING
   CHAIRS: DIETMAR RAFOLT, AUSTRIA; ARASH GHAREH BAGHI, SWEDEN

   ECG Artifact Removal from Surface EMG Signal Using an Automated Method Based on Wavelet-ICA
      Sara Abbaspour, Maria Lindén, Hamid Gholamhosseini (Sweden, New Zealand)

   Noise Reduction for a MEMS-Gyroscope-Based Head Mouse
      Jiaying Du, Christer Gerdtman, Maria Lindén (Sweden)

   EmoBurnout: An Approach for Supporting Burnout Syndrome Diagnosis
      Martinez Esteban, Giovanni Mera, Carolina Gonzalez, Diego López, Bernd Blobel (Colombia, Germany)
Heart Rate Measurement as a Tool to Quantify Sedentary Behavior
Anna Åkerberg, Gregory Koshmak, Anders Johansson, Maria Lindén (Sweden)

POSTER SHORT PRESENTATION

User Centered Design of a Personal Health Record System for Metabolic Syndrome
Diego López, Rosa Alvarez, Hernán Sierra (Colombia)

A Generic System-level Architecture for Self-Serve Health Monitoring System through Internet of Things (IoT)
Mobyen Uddin Ahmed, Mats Björkman, Maria Lindén (Sweden)

A Framework for (Tele-) Monitoring of Rehabilitation Progress in Stroke Patients
Dietmar Rafolt (Austria)

Smart Wireless Sensor for Physiological Monitoring
Ivan Tomašić, Viktor Avbelj, Roman Trobec (Sweden, Slovenia)

16:00-16:20 COFFEE BREAK - POSTERS AND EXHIBITION

16:20-17:35 INNOVATIVE MATERIALS AND METHODOLOGIES
CHAIRS: PER ASK, SWEDEN; NIKOLA PETEROVIC, SWEDEN

Psychologist in a Pocket
Jó Ágila Bitsch, Roann Ramos, Tim Ix, Paula Glenda Ferrer-Cheng, Klaus Wehrle (Germany, Philippines)
Impedance Matching Wireless Power Transmission System for Biomedical Devices
Kin Yun Lum, Maria Lindén, Tian Swee Tan (Malaysia, Sweden)

An in vitro Study of Protein Adsorption to Biocompatible Coatings
Trine Seeberg, Hanne O. Austad, Ingelin Clausen, Henning Cedervist, Magnar Bjørås, Rune Forstørn Jo-hansen (Norway)

19:00-23:00  **SOCIAL EVENT: CONFERENCE DINNER**

**THURSDAY 4 JUNE 2015**

09:00-09:45  **KEYNOTE SESSION**
**CHAIRS:** Bernd Blobel, Germany, Maria Lindén, Sweden

**KEYNOTE SPEECH:** Anna LeFevre Skjöldrebrand, Sweden: “Technology Ready to be Launched, but is there a Payer?”

09:45-11:30  **SOLUTIONS FOR PERSONALIZED CARE AND mHEALTH APPLICATIONS**
**CHAIRS:** Hamid Gholamhosseini, New Zealand; Elaine Åstrand, Sweden

**INVITED SPEECH:** Diego M. López, Colombia: “mHealth in Low- and Middle-Income Countries: Status, Requirements and Strategies”
Mobile ECG Systems and Cardiovascular Risk: A Systematic Review
  Sebastián Felipe Landínez García, César Villamil Perafán, Diego López, Bernd Blobel (Colombia, Germany)

Towards Brain Research in a Pocket: Bringing EEG Research and Diagnostics out of the Lab
  Jó Ágila Bitsch, Roann Ramos, Cassandra Severijns, Klaus Wehrle (Germany, Philippines)

Development of an Eating Aid from the User Needs to a Product
  Ann-Louise Lindborg, Maria Lindén (Sweden)

11:30-11:55  COFFEE BREAK - DEMO AND EXHIBITION

11:55-13:10  WEARABLE AND IMPLANTABLE DEVICES AND SYSTEMS
  CHAIRS: DIEGO LÓPEZ, COLOMBIA; MARTIN EKSTRÖM, SWEDEN

A Study of Different Fabrics to Increase Radar Cross Section of Humans
  Torbjörn Ödman, Jan Welinder, Nils-Bertil Andersson, Magnus Otterskog, Maria Lindén, Natalia Ödman, Christer Larsson (Sweden)

Encapsulation for Smart Textile Electronics – Humidity and Temperature Sensor Performance
  Andreas Larsson, Thanh-Nam Tran, Knut E Aasmundtveit, Trine Seeberg (Norway)

Business Model Design for a Wearable Biofeedback System
  Patrik Hideffjäll, Dina Titkova (Sweden)
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<td>13:10-14:10</td>
<td>Lunch</td>
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<td>14:10-15:50</td>
<td><strong>Intelligent Systems</strong></td>
<td><strong>Chairs: Pekka Ruotsalainen, Finland; Shahina Begum, Sweden</strong></td>
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<td>Advanced Decision Support System for Older Adults</td>
<td><em>Mirza Baig, Hamid Gholamhosseini, Martin Connolly, Maria Lindén (New Zealand, Sweden)</em></td>
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<td>Supervised Machine Learning Algorithms to Diagnose Stress for Vehicle Drivers Based on Physiological Sensor Signals</td>
<td><em>Shaibal Barua, Shahina Begum, Mobyen Uddin Ahmed (Sweden)</em></td>
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<td>A Personalized Health-Monitoring System for Elderly by Combining Rules and Case-based Reasoning</td>
<td><em>Mobyen Uddin Ahmed (Sweden)</em></td>
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<td>A Public Health Decision Support System Model using Reasoning Methods</td>
<td><em>Maritza Mera, Carolina González, Bernd Blobel (Colombia, Germany)</em></td>
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<td>15:50-16:10</td>
<td>Coffee Break - Demo and Exhibition</td>
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<td>16:10-17:30</td>
<td><strong>Security, Privacy, Safety and Ethics</strong></td>
<td><strong>Chairs: Peter Pharow, Germany; Ivan Tomasic, Sweden</strong></td>
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INVITED SPEECH: Pekka Ruotsalainen, Finland: “THE ROLE OF PATIENTS IN pHEALTH”

Personalized Message Routing Policy in Pervasive eHealth Applications Based on HL7 RIM
Nachoua Guizani, Jocelyne Fayn (France)

Privacy Management and Networked PPD-Systems - Challenges and Solutions
Pekka Ruotsalainen, Peter Pharow, Francoise Petersen (Finland, Germany, Sweden)

17:30-17:55   GENERAL POSTER SESSION

CHAIRS: Maria Lindén, Sweden; Asbjorn Hovsto, Norway

POSTER SHORT PRESENTATION

Assisting Drug Dispensing using Google Glass: a Prototype Implementation
Frederic Ehrler, Raphaël Diener, Christian Lovis (Switzerland)

Wearable Sensors in Medical Education: Supporting Hand Hygiene Teaching with a Forearm EMG
Ekaterina Kutafina, David Laukamp, Stephan M. Jonas (Poland, Germany)

Prediction of Heart Attack Risk Using GA-ANFIS Expert System Prototype
Lejla Begic Fazlic, Aja Avdagic, Ingmar Besic (Croatia, Germany)
Dynamic Enhancement of a Smart System for Early Detection of Language Disorders  
  Maria Luisa Martín Ruiz, Miguel A. Valero, Iván Pau de la Cruz (Spain)

Personalized Decision Support System Based on Clinical Practice Guideline  
  Nassim Douali, Jos De Roo, Pauline Sweetman, Elpiniki I. Papageorgiou, Marie-Christine Jaulent (France, Belgium, UK, Greece)

17:55-18:20  **Closing Ceremony**

**Chairs:** Bernd Blobel, Germany; Peter Pharow, Germany; Maria Lindén, Sweden; Mobyen Uddin Ahmed, Sweden

**Best Contribution Award**

**Best Student’s Poster Award**