

# ICSE 2009 Workshop on Software Engineering in Health Care (SEHC 09)

Monday, May 18, 2009

- 9:00-9:10     **Welcome, Logistics, Program**  
                  Leon J. Osterweil, (University of Massachusetts, Amherst,  
                  MA ,USA), SEHC 09 Co-Chair
- 9:10-10:30    **Keynote Presentation:**  
                  **Chair:** Leon J. Osterweil  
                  “Clinical Information Systems: The New Opposable Thumbs for  
                  Healthcare”  
                  **Speaker:** Dr. Morgan Price, MD, CCFP, (Department of Family  
                  Practice, University of British Columbia).
- 10:30-11:00   **BREAK**
- 11:00-12:30   **Session: Health Information Systems Architecture**  
                  **Chair:** Jens H. Weber-Jahnke (University of Victoria)
- Paper:** “Model Driven Software Engineering for Cancer Clinical  
                  Trials”  
                  **Authors:** Charles Crichton, Jim Davies, Jeremy Gibbons, Steve  
                  Harris, Andrew Tsui, Oxford University Computing Laboratory,  
                  Oxford, UK, and James Brenton Cancer Research UK, Cambridge  
                  Research Institute, Li Ka Shing Centre, Cambridge University,  
                  Cambridge, UK  
                  **Discussant:** Remi Bastide (Informatique et Systèmes d'information  
                  pour la Santé, Département d'Ingénierie, Castres, France)
- Paper:** “An Interactive Strategic Information Management Plan to  
                  Integrate Strategic and Tactical Information Management in  
                  Hospitals”  
                  **Authors:** Ulrike Mueller, Gert Funkat, Alfred Winter, Institute for  
                  Medical Informatics, Statistics and Epidemiology, University of  
                  Leipzig, Leipzig, Germany, and Lutz Issler, Systemantics, Aachen,  
                  Germany  
                  **Discussant:** Jeremy Gibbons (Oxford University Computing  
                  Laboratory, Oxford, UK)
- 12:30-14:00   **LUNCH**

**Monday, May 18, 2009 Afternoon**

14:00-15:30 **Session: Research Preview**

**Chair:** Jeremy Gibbons, Oxford University Computing Laboratory, Oxford, UK

**Paper:** “Mining and Analysing Security Goal Models in Health Information Systems”

**Authors:** Jens H. Weber-Jahnke, Adeniyi Onabajo, Department of Computer Science, University of Victoria, Victoria, British Columbia, Canada

**Discussant:** Øystein Nytrø (Department of Computer and Information Science, Norwegian University of Science and Technology, Trondheim, Norway)

**Paper:** “Risk Identification by Physicians and Developers – Differences Investigated in a Controlled Experiment”

**Authors:** Christin Lindholm, Martin Höst, Department of Computer Science, Lund University, Lund Institute of Technology, Lund, Sweden

**Discussant:** Andy Podgurski (Case Western Reserve University, Cleveland, Ohio, USA)

15:30-16:00 **BREAK**

16:00-17:30 **Panel Session. Chair:** Leon Osterweil

**Panelists:** Morgan Price, Jens H. Weber-Jahnke, Jeremy Gibbons

18:30 **Conference Dinner:**

Hermitage Restaurant,  
115-1025 Robson St.  
Vancouver, BC  
Telephone: 604-689-3237

Walking Directions:

Turn right (away from the waterfront) onto Cardero St.

Walk along Cardero St. 3 blocks to Robson St.

Turn left onto Robson St. (but don't cross Robson St.)

Walk about 5.75 blocks on Robson St.

If you reach Burrard St., you have gone too far. Turn around and walk back about ¼ block.

**Tuesday, May 19, 2009**

- 9:00-10:30 **Keynote Presentation:**  
**Chair:** Barbara Paech (University of Heidelberg, Heidelberg, Germany), SEHC 09 Co-Chair.  
“Challenges in Software Engineering for Assisted Living”  
**Speaker:** Carl Gunter, (Department of Computer Science, University of Illinois, Urbana, Ill., USA)
- 10:30-11:00 **BREAK**
- 11:00-12:30 **Session: Security and Risk**  
**Chair:** Lori A. Clarke (University of Massachusetts, Amherst, MA, USA)
- Paper:** “Software Engineering for Health Education and Care Delivery Systems: The Smart Condo Project”  
**Authors:** Eleni Stroulia, David Chodos, Nicholas Boers, Jianzhao Huang, Pawel Gburzynski, Ioanis Nikolaidis, Computing Science Department, University of Alberta, Edmonton, Alberta, Canada  
**Discussant:** Carl Gunter (University of Illinois, Urbana, Ill, USA)
- Paper:** “Using sensors and labeled graphs to detect the space confusion’s problem of patients suffering from Alzheimer's disease”  
**Authors:** Ali Larab, Bernard Rigaud, Informatique et Systèmes d'information pour la Santé, Département d'Ingénierie, Castres, France.  
**Discussant:** Eleni Stroulia (University of Alberta, Edmonton, Alberta, Canada)
- Paper:** “A Quality Requirement Model for Electronic Health Record Services”  
**Authors:** Alexander Hoerbst, Elske Ammenwerth, UMIT - University for Health Sciences, Medical Informatics and Technology, Institute for Health Information Systems, Hall in Tyrol, Austria  
**Discussant:** Jim Davies (Oxford University Computing Laboratory, Oxford, UK)
- 12:30-14:00 **LUNCH**

**Tuesday, May 19, 2009, Afternoon**

14:00-15:30 **Session: Utilizing Empirical Data**

**Chair:** Andy Podgurski (Case Western Reserve University, Cleveland, Ohio, USA)

**Paper:** “Query-Based Requirements Engineering for Health Care Information Systems: Examples and Prospects”

**Authors:** Øystein Nytrø, Inger Dybdahl Sørby, and Peter Karpati, Department of Computer and Information Science, Norwegian University of Science and Technology, Trondheim, Norway

**Discussant:** Christin Lindholm (Department of Computer Science, Lund University, Lund Institute of Technology, Lund, Sweden)

**Paper:** “Simulating Patient Flow through an Emergency Department Using Process-Driven Discrete Event Simulation”

**Authors:** M. S. Raunak, L. J. Osterweil, A. Wise, L. A. Clarke, Department of Computer Science, University of Massachusetts, Amherst, Massachusetts, USA, and P. L. Henneman, Tufts-Baystate Medical Center, Springfield, MA, USA

**Discussant:** Jens H. Weber-Jahnke (University of Victoria)

15:30-16:00 **BREAK**

16:00-17:30 **Panel Session. Chair:** Barbara Paech

**Panelists:** Carl Gunter, Lori A. Clarke, Andy Podgurski, Leon J. Osterweil

17:30 **Workshop Ends**