

## Visualization Enhanced Data Analysis for Health Applications A Special Track (ST4) of

## The 5<sup>th</sup> International Symposium on Visual Computing (ISVC'09)

Las Vegas, Nevada, USA November 30 – December 2 http://www.isvc.net

**General Chairs** 

Irene Cheng, University of Alberta, Canada

lin@cs.ualberta.ca

Anthony Maeder, University of Western Sydney, Australia a.maeder@uws.edu.au

**Program Committee** 

Walter Bischof, University of
Alberta, Canada
Pierre Boulanger, University of
Alberta, Canada
Ross Brown, Queensland University
of Technology, Australia
Jason Dowling, CSIRO, Australia
Pablo Figueroa, Universidad de los
Andes, Colombia
Liwan Liyanage, University of
Western Sydney, Australia
Tom Malzbender, HP, California,

Mrinal Mandal, University of Alberta, Canada

Steven Miller, University of British Columbia, Canada

Quang Vinh Nguyen, University of Western Sydney, Australia Hao Shi, Victoria University, Australia

Jianbo Shi, University of Pennsylvania, USA

Padova, Italy

Claudio Silva, University of Utah, USA

Simeon Simoff, University of Western Sydney, Australia Lijun (Jerry) Yin, State University of New York, USA Xenophon Zabulis, Forth-Institute of Computer Science, Greece Pietro Zanuttigh, University of







**Best Paper:** Sponsored by Informatics Circle of Research Excellence (iCORE) Multimedia Research Chair, Alberta, Canada

## **Scope and Topics**

Multi-modality and high-dimensionality datasets are rapidly becoming more commonplace in health data applications because they provide useful information that cannot be obtained from simple attributes. Analysis of such data using traditional processing focusing on annotation or understanding of basic data formats is insufficient because of the interleaving and superimposed structures that often occlude the target regions of interest. Visual representation and understanding of such data is therefore an emerging area of research interest. Although the development of Computer Aided Diagnostics (CAD) and Clinical Decision Support (CDS) have improved clinical performance quality and efficiency in diagnosis and treatment, it is believed that more effective results can be achieved by incorporating state-of-the-art visualization enhanced techniques, such as stereoscopic vision, three-dimensional television and displays (3DTV), haptic navigation, eyetracking and immersive virtual environment.

Visualization enhanced analysis represents a variety of techniques bringing expertise from diverse disciplines. We invite submissions on, but not limited to, the following topics:

- Novel visualization enhanced health data processing techniques for clinical diagnosis & treatment
- 2. Visualization enhanced analysis, measurement and registration of multimodal/dimensional health data
- 3. User interfaces & data presentation techniques for visualization enhanced health data
- 4. Data mining, linkage and record matching for visualization enhanced health data analysis
- 5. Visualization enhanced techniques for the delivery of health data, including e-health, remote diagnosis & surgery, clinical training, planning & education
- 6. Optimization of visualization enhanced health data analysis, modeling and simulation techniques
- 7. Emerging technologies for use on visualization enhanced health data, including HCI and virtual environments
- 8. Surgical planning and training guided by visualization enhanced analysis and presentation of health data

## **Important Dates**

Full paper submissions Notification of acceptance Camera ready final paper July 10, 2009 August 31, 2009 September 14, 2009

Papers submitted to ISVC 2009 Special Track must not have been previously published and must not be currently under consideration for publication elsewhere. Manuscripts should be submitted in camera-ready format and should not exceed 12 pages, including figures and tables (see <a href="http://www.isvc.net\_for\_details">http://www.isvc.net\_for\_details</a>). All papers accepted will appear in the symposium proceedings which will be published by Springer-Verlag in the Lecture Notes in Computer Science (LNCS) series.