



## Session 6

8:00-12:00 **Industry Clinic Panel**

### **IPCAI 2011**

IPCAI 2011, the 2nd International Conference on Information Processing in Computer-Assisted Interventions, will be held on June 22 in Berlin, Germany (co-located with CARS). Based on a highly selective double anonymous review process, IPCAI is aiming at organizing an event in which the best conference articles in computer assisted interventions are reviewed, selected, presented, and actively discussed.

### **Venue**

IPCAI 2011 will be co-located with CARS 2011 at the Estrel Convention Center in Berlin, Germany.

### **Executive Committee**

- > Nassir Navab, CAMP/TU Munich, Germany
- > Russell Taylor, JHU, USA
- > Guang-Zhong Yang, Imperial College, UK
- > Kensaku Mori, Nagoya University, Japan
- > Pierre Jannin, INRIA/INSERM, Rennes, France and MNI-McGill, Montreal, Canada
- > Leo Joskowicz, Hebrew University, Israel

### **Organization**

- > Stefanie Demirci, CAMP/TU Munich, Germany
- > Martin Horn, CAMP/TU Munich, Germany



**IPCAI**  
Information Processing in Computer  
Assisted Interventions

2nd International Conference on  
Information Processing in  
Computer-Assisted  
Interventions  
Berlin, Germany, June 22

Thursday, June 23



## Program

8:30-8:40 **Opening statements**

### Session 1

8:40-9:05 **First set of short 5 minutes presentations**

- › The Tumor Therapy Manager -- Design, Refinement and Clinical Impact of a Software Product for ENT Surgery Planning and Documentation  
*Ivo Rössling, Lars Dornheim, Bernhard Preim, Andreas Boehm*
- › An image-guided surgery system to aid endovascular treatment of complex aortic aneurysms: description and initial clinical experience  
*Graeme Penney, Andreas Varnavas, Neville Dastur, Tom Carrell*
- › OR Specific Domain Model for Usability Evaluations of Intra-Operative Systems  
*Ali Bigdelou, Tobias Sterner, Stefan Wiesner, Thomas Wendler, Florian Matthes, Nassir Navab*
- › A Multi-view Active Contour Method for Bone Cement Reconstruction from C-Arm X-Ray Images  
*Blake Lucas, Yoshito Otake, Mehran Armand, Russell Taylor*
- › Biomechanically Constrained Groupwise Statistical Shape Model to Ultrasound Registration of the Lumbar Spine  
*Siavash Khallaghi, Parvin Mousavi, Dan Borschneck, Garbor Fichtinger, Purang Abolmaesumi*

9:05-9:40 **First Oral Session**

- › Visual tracking of surgical tools for collision detection in retinal surgery  
*Rogerio Richa, Marcin Balicki, Eric Meisner, Raphael Sznitman, Russell Taylor, Gregory Hager*

9:40-10:00 **Coffee Break**

### Session 2

10:00-10:20 **Second set of short 5 minutes presentations**

- › DOF Minimization for Optimized Shape Control under Active Constraints for a Hyper-redundant Flexible Robot  
*Valentina Vitiello, Ka-Wai Kwok, Guang-Zhong Yang*
- › A Robotic System for Intra-operative Trans-rectal Ultrasound and Ultrasound Elastography in Radical Prostatectomy  
*Troy Adebear, Septimiu Salcudean, Sara Mahdavi, Mehdi Moradi, Christopher Nguan, Larry Goldenberg*
- › Hand-Held Force Magnifier for Surgical Instruments  
*George Stetten, Bing Wu, Roberta Klatzky, John Galeotti, Mel Siegel, Randy Lee, Ralph Hollis*
- › PS-GANS: A Patient-Specific, Gravity Assisted Navigation System for Acetabular Cup Placement  
*Guoyan Zheng, Santiago Echeverri, Weiguo Xie, Lutz-P. Nolte*

10:20-12:00 **Second Oral Session**

- › Correlating clinical scores with anatomical electrodes locations for assessing deep brain stimulation  
*Florent Lalys, Claire Haegelen, Alexandre Abadie, Pierre Jannin*
- › Intra-operative "Pick-up" Ultrasound for Robot Assisted Surgery with Vessel Extraction and Registration: A Feasibility Study  
*Caitlin Schneider, Julian Guerrero, Christopher Nguan, Robert Rohling, Septimiu Salcudean*

12:00-12:30 **Lunch**

### Session 3

12:30-13:45 **Poster Discussion Session**

### Session 4

13:45-15:30 **Third Oral Session**

- › Constrained 2-D/3-D Registration for Motion Compensation in AFib Ablation Procedures  
*Alexander Brost, Andreas Wimmer, Rui Liao, Joachim Hornegger, Norbert Stobel*
- › Image-Based Automatic Ablation Point Tagging System with Motion Correction for Cardiac Ablation Procedures  
*YingLiang Ma, Gang Gao, Geert Gijssbers, Aldo Rinaldi, Jaswinder Gill, Reza Razavi, Kawal Rhode*
- › Soft Tissue Surface Tracking for Open Liver Surgery Using Passive Single Markers  
*Thiago Oliveira-Santos, Matthias Peterhans, Simon Hofmann, Stefan Weber*

15:30-15:45 **Coffee Break**

### Session 5

15:45-17:00 **Fourth Oral Session**

- › Improved Neuronavigation through Integration of Intraoperative Anatomical and Diffusion Images in an Interventional MRI Suite  
*Pankaj Daga, Gavin Winston, Marc Modat, M. Jorge Cardoso, Mark White, Andrew W. McEvoy, John Thornton, David Hawkes, John Duncan, Sebastien Ourselin*
- › Panorama Ultrasound for Guiding Epidural Anesthesia: A Feasibility Study  
*Hedyeh Rafii-Tari, Purang Abolmaesumi, Robert Rohling*

17:00-17:30 **Plenary Discussion  
Presentation of Awards**

Wednesday, June 22

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