

## *Medical Imaging 2014*

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# **Image Processing**

**Sebastien Ourselin**

**Martin A. Styner**

*Editors*

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**Mona K. Garvin**, The University of Iowa (United States)  
**James C. Gee**, University of Pennsylvania (United States)  
**Guido Gerig**, The University of Utah (United States)  
**David R. Haynor**, University of Washington (United States)  
**Tobias Heimann**, Siemens AG (Germany)  
**Bennett A. Landman**, Vanderbilt University (United States)  
**Tianhu Lei**, University of Pittsburgh Medical Center (United States)  
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(Netherlands)  
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**Cristian Lorenz**, Philips Medizin Systeme GmbH (Germany)  
**Frederik Maes**, Katholieke Universiteit Leuven (Belgium)  
**Vincent A. Magnotta**, The University of Iowa Hospitals and Clinics  
(United States)  
**Sunanda D. Mitra**, Texas Tech University (United States)  
**Kensaku Mori**, Nagoya University (Japan)  
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**Mads Nielsen**, University of Copenhagen (Denmark)  
**Wiro Niessen**, Erasmus MC (Netherlands) and Technische Universiteit Delft  
(Netherlands)  
**Brian S. Nutter**, Texas Tech University (United States)

**Josien P. W. Pluim**, Universitair Medisch Centrum Utrecht (Netherlands)  
**Jerry L. Prince**, Johns Hopkins University (United States)  
**Sonia Pujol**, Harvard Medical School (United States) and Brigham and Women's Hospital (United States)  
**Punam K. Saha**, The University of Iowa (United States)  
**Olivier Salvado**, Commonwealth Scientific and Industrial Research Organisation (Australia)  
**Julia A. Schnabel**, University of Oxford (United Kingdom)  
**Philippe Thévenaz**, École Polytechnique Fédérale de Lausanne (Switzerland)  
**Jayaram K. Udupa**, The University of Pennsylvania Health System (United States)  
**Tomaž Vrtovec**, University of Ljubljana (Slovenia)  
**Andreas Wahle**, The University of Iowa (United States)

#### *Session Chairs*

- 1 OCT and Ultrasound  
**Aaron Fenster**, Robarts Research Institute (Canada)  
**Mona K. Garvin**, The University of Iowa (United States)
- 2 Segmentation  
**Brian S. Nutter**, Texas Tech University (United States)  
**Elsa D. Angelini**, Telecom ParisTech (France) and Columbia University (United States)
- 3 Temporal and Motion Analysis  
**Jerry L. Prince**, Johns Hopkins University (United States)  
**Jayaram K. Udupa**, The University of Pennsylvania Health System (United States)
- 4 Cardiac and Vascular Imaging  
**Boudewijn P. F. Lelieveldt**, Leids Universitair Medisch Centrum (Netherlands)  
**Alejandro F. Frangi**, The University of Sheffield (United Kingdom)
- 5 DTI  
**Sonia Pujol**, Harvard Medical School (United States) and Brigham and Women's Hospital (United States)  
**James C. Gee**, University of Pennsylvania (United States)
- 6 Shape  
**Punam K. Saha**, The University of Iowa (United States)  
**Cristian Lorenz**, Philips Medizin Systeme GmbH (Germany)
- 7 Keynote and Brain  
**David R. Haynor**, University of Washington (United States)  
**Benoit M. Dawant**, Vanderbilt University (United States)

- 8 Classification and Texture  
**Baowei Fei**, Emory University (United States)  
**Tomaž Vrtovec**, University of Ljubljana (Slovenia)
- 9 Registration  
**Josien P. W. Pluim**, Universitair Medisch Centrum Utrecht (Netherlands)
- 10 Atlas-based Segmentation  
**Bennett A. Landman**, Vanderbilt University (United States)
- 11 Magnetic Resonance Imaging  
**Sunanda D. Mitra**, Texas Tech University (United States)

## Awards



### Robert F. Wagner Award

Robert F. Wagner was an active scientist in the SPIE Medical Imaging meeting, starting with the first meeting in 1972 and continuing throughout his career. He ensured that the BRH, and subsequently the CDRH, was a sponsor for the early and subsequent Medical Imaging meetings, helping to launch and ensure the historical success of the meeting. The Robert F. Wagner All-Conference Best Student Paper Award (established 2014) is acknowledgment of his many important contributions to the Medical Imaging meeting and his many important advances to the field of medical imaging.

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2014 Recipients:

First Place: **MRI signal and texture features for the prediction of MCI to Alzheimer's disease progression** (9035-78)

A. Martínez-Torteya, J. A. Rodríguez-Rojas, J. M. Celaya-Padilla, J. I. Galván-Tejada, V. M. Treviño-Alvarado, Sr., J. G. Tamez-Peña, Tecnológico de Monterrey (Mexico)

Second Place: **Distinguishing benign confounding treatment changes from residual prostate cancer on MRI following laser ablation** (9036-49)

G. Litjens, H. Huisman, Radboud Univ. Nijmegen Medical Ctr. (Netherlands); R. Elliot, Case Western Reserve Univ. (United States); N. Shih, M. Feldman, Univ. of Pennsylvania (United States); S. Viswnath, Case Western Reserve Univ. (United States); J. Futterer, J. Bomers, Radboud Univ. Nijmegen Medical Ctr. (Netherlands); A. Madabhushi, Case Western Reserve Univ. (United States)

## Conference Award

2014 Recipients:

Cum Laude Poster Award: **Spectral embedding-based registration (SERg) for multimodal fusion of prostate histology and MRI** [9034-133]

E. Hwuang, Rutgers, The State Univ. of New Jersey (United States); M. Rusu, Case Western Reserve Univ. (United States); S. Karthigeyan, Duke Univ. (United States); S. C. Agner, Washington Univ. School of Medicine in St. Louis (United States); R. Sparks, Univ. College London (United Kingdom); N. Shih, Univ. of Pennsylvania (United States); J. E. Tomaszewski, Univ. at Buffalo (United States); M. Rosen, M. Feldman, Univ. of Pennsylvania (United States); A. Madabhushi, Case Western Reserve Univ. (United States)