# Medical Imaging 2016

# Image Perception, Observer Performance, and Technology Assessment

Craig K. Abbey Matthew A. Kupinski Editors

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3 Perception Metrology
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4 Perception

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5 Keynote and ROC Analysis

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6 Model Observers II: Search

**Howard C. Gifford**, University of Houston (United States) **Subok Park**, U.S. Food and Drug Administration (United States)

7 Breast Imaging II

Pontus A. Timberg, Scanias University Hospital (Sweden)

8 Technology Assessment

Maciej A. Mazurowski, Duke University (United States)

WORKSHOP: Validation of Medical Image-Perception Models

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# 2016 Medical Imaging Award Recipients

## Robert F. Wagner Best Student Paper 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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2016 Recipients:

First Place: MIND Demons for MR-to-CT deformable image registration in image-guided spine surgery (9786-16)

S. Reaungamornrat, T. De Silva, A. Uneri, Johns Hopkins Univ. (United States), J.-P. Wolinsky, Johns Hopkins Hospital (United States), A. J. Khanna, Johns Hopkins Health Care & Surgery Ctr. (United States), G. Kleinszig, S. Vogt, Siemens Healthcare (Germany), J. L. Prince, J. H. Siewerdsen, Johns Hopkins Univ. (United States)

Second Place: Design, fabrication, and implementation of voxel-based 3D printed textured phantoms for task-based image quality assessment in CT (9783-76)

Justin Solomon, Duke Univ. School of Medicine (United States), Alexandre Ba, Institut Univ. de Radiophysique Appliquée (Switzerland), Andrew Diao, Duke Univ. (United States), Joseph Lo, Elianna Bier, Duke Univ. School of Medicine (United States), François Bochud, Institut Univ. de Radiophysique Appliquée (Switzerland), Michael Gehm, Duke Univ. (United States), Ehsan Samei, Duke Univ. School of Medicine (United States)

#### **Conference 9787 Awards**

#### Cum Laude Poster Award

First Place: Changes in frequency of recall recommendations of examinations depicting cancer with the availability of either priors or digital breast tomosynthesis (9787-46) C. M. Hakim, M. A. Ganott, V. J. Catullo, D. M. Chough, A. E. Kelly, D. D. Shinde, J. H. Sumkin, L. P. Wallace, Magee-Womens Hospital (United States); A. I. Bandos, R. M. Nishikawa, Univ. of Pittsburgh (United States); D. Gur, Univ. of Pittsburgh School of Medicine (United States)

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