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Medical Imaging 2017

Image-Guided Procedures, Robotic Interventions, and Modeling

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Editors

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2017 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.

This award is co-sponsored by:

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2017 Recipients:

First Place: **Direct measurement of Lubberts effect in CsI:Tl scintillators using single x-ray photon imaging** (10132-8)
A. Howansky, A. R. Lubinsky, Stony Brook Univ. (United States); S. K. Ghose, Brookhaven National Lab. (United States); K. Suzuki, Hamamatsu Photonics K.K. (Japan); W. Zhao, Stony Brook Univ. (United States)

Second Place: **Evaluation of a high-resolution patient-specific model of the electrically stimulated cochlea** (10135-21)
Ahmet Cakir, Vanderbilt Univ. (United States); Robert T. Dwyer, Vanderbilt Univ. Medical Ctr. (United States); Jack H. Noble, Vanderbilt Univ. (United States)

Conference 10135 Awards

Young Scientist Awards sponsored by Siemens Healthineers

1st Place: **Fundamental limits of image registration performance: effects of image noise and resolution in CT-guided interventions** (10135-7)
M. D. Ketcha, T. de Silva, R. Han, A. Uneri, J. Goerres, M. Jacobson, Johns Hopkins Univ. (United States); S. Vogt, G. Kleingszig, Siemens Healthcare (Germany); J. H. Siewerdsen, Johns Hopkins Univ. (United States)

Runner Up: **Evaluation of a high-resolution patient-specific model of the electrically stimulated cochlea** (10135-21)
Ahmet Cakir, Vanderbilt Univ. (United States); Robert T. Dwyer, Vanderbilt Univ. Medical Ctr. (United States); Jack H. Noble, Vanderbilt Univ. (United States)

Runner Up: **Toward dynamic lumbar punctures guidance based on single element synthetic tracked aperture ultrasound imaging** (10135-18)
Haichong K. Zhang, Melissa Lin, Younsu Kim, Mateo Paredes, Karun Kannan, Nisu Patel, Abhay Moghekar, Nicholas J. Durr, Emad M. Boctor, Johns Hopkins Univ. (United States)

Poster Presentation Awards sponsored by Northern Digital Inc.

Cum Laude: **Integrated system for point cloud reconstruction and simulated brain shift validation using tracked surgical microscope** (10135-87)
Xiaochen Yang, Logan W. Clements, Ma Luo, Saramati Narasimhan, Vanderbilt Univ. (United States) Reid C. Thompson, Vanderbilt Univ. Medical Ctr. (United States) Benoit M. Dawant, Michael I. Miga, Vanderbilt Univ. (United States) and Vanderbilt Univ. Medical Ctr. (United States)

Honorable Mention: **Study into the displacement of tumor localization needle during navigated breast cancer surgery** (10135-79)
Christina Yan, Tamas Ungi, Gabrielle Gauvin, Doris Jabs, Andras Lasso, Jay Engel, John Rudan, Gabor Fichtinger, Queen's Univ. (Canada)

Honorable Mention: **Temporal bone dissection simulator for training pediatric otolaryngology surgeons** (10135-95)
Pooneh R. Tabrizi, Sheikh Zayed Institute of Pediatric Surgical Innovation, Children's National Health System (United States); Hongqiang Sang, Tianjin Polytechnic Univ. (China); Hadi F. Talari, Diego Preciado, Reza Monfaredi, Brian Reilly, Sheikh Zayed Institute of Pediatric Surgical Innovation, Children's National Health System (United States); Sreekanth Arikatla, Andinet Enquobahrie, Kitware Inc. (United States); Kevin Cleary, Sheikh Zayed Institute of Pediatric Surgical Innovation, Children's National Health System (United States)