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Medical Imaging 2018

Physics of Medical Imaging

Joseph Y. Lo
Taly Gilat Schmidt
Guang-Hong Chen
Editors

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2018 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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2018 Recipients:

First Place: **Dynamic beam filtering for miscentered patients** (10573-29)
Andrew Mao, William Shyr, Grace J. Gang, J. Webster Stayman, Johns Hopkins Univ. (United States)

Second Place: **Tumor margin classification of head and neck cancer using hyperspectral imaging and convolutional neural networks** (10576-4)
Martin Halicek, Georgia Institute of Technology (United States) and Augusta Univ. (United States); James V. Little, Xu Wang, Emory Univ. School of Medicine (United States); Mihir Patel, Emory Univ. School of Medicine (United States) and The Winship Cancer Institute of Emory Univ. (United States); Christopher C. Griffith, Emory Univ. School of Medicine (United States); Amy Y. Chen, Emory Univ. School of Medicine (United States) and The Winship Cancer Institute of Emory Univ. (United States); Baowei Fei, Georgia Institute of Technology & Emory Univ. (United States) and The Winship Cancer Institute of Emory Univ. (United States)

Physics of Medical Imaging Student Paper Awards sponsored by GE Healthcare

Winner: Paper 10573-29, "Dynamic beam filtering for miscentered patients"
Andrew Mao, William Shyr, Grace J. Gang, J. Webster Stayman, Johns Hopkins Univ. (United States)

Runner-up: Paper 10573-78, "Sensitivity and specificity of a sparse reconstruction algorithm for superparamagnetic relaxometry"
S. L. Thrower, D. Fuentes, W. Stefan, J. Sovizi, K. Mathieu, J. D. Hazle, The Univ. of Texas M.D. Anderson Cancer Ctr. (United States)

Runner-up: Paper 10573-108, "Motion compensated reconstruction of the aortic valve for computed tomography"
T. Elss, Philips Research (Germany) and Hamburg Univ. of Technology (Germany); R. Bippus, H. Schmitt, Philips Research (Germany); T. Ivanc, Philips Healthcare (United States); M. Morlock, Hamburg Univ. of Technology (Germany); M. Grass, Philips Research (Germany)

Physics of Medical Imaging Poster Presentation Awards sponsored by Siemens Healthineers

Cum Laude: Paper 10573-95, "Towards non-invasive electrocardiographic imaging using regularized neural networks"
Abhejit Rajagopal, Vincent Radzicki, Hua Lee, Shivkumar Chandrasekaran, Univ. of California, Santa Barbara (United States)

Honorable Mention: Paper 10573-179, "Impact of radiation dose level on CT number accuracy in photon counting CT"
Ran Zhang, Juan P. Cruz-Bastida, Daniel Gomez-Cardona, John Hayes, Ke Li, Guang-Hong Chen, Univ. of Wisconsin School of Medicine and Public Health (United States)

Honorable Mention: Paper 10573-220, "A novel radiation imaging detector with proportional charge gain"
Denny L. Lee from Direct X Ray Digital Imaging Technology LLC (United States), Vieworks Co., Ltd. (Korea, Republic of), and Univ. of Waterloo (Canada); Hyunsuk Jang, Vieworks Co., Ltd. (Korea, Republic of); Ahmet Camlica, Karim S. Karim, Univ. of Waterloo (Canada)