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Image Perception, Observer Performance, and Technology Assessment

David J. Manning
Craig K. Abbey
Editors

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Introduction

The Image Perception, Observer Performance, and Technology Assessment conference, part of the 2011 Medical Imaging symposium of SPIE, was held February 16–17 2011 in Disney Coronado Springs Resort, Lake Buena Vista, Orlando, Florida.

The conference was opened by a workshop on the evening of 15 February, entitled Device Evaluation—Perspectives from Inside and Outside the FDA. Chaired by Claudia Mello-Thoms of the University of Pittsburgh, the workshop was a candid discussion of the FDA device approval process from the perspective of FDA staff (reviewers and administrators), academics, and from industry representatives. Presentations from the panelists were followed by a lively and substantive discussion of the device approval process including strengths and weaknesses of the process as well as practical advice on how to successfully negotiate the process.

The conference program included a total of 40 oral presentations and a keynote lecture organised into seven sessions over the two full days of the conference. The poster session was again strong with 22 submissions accepted for display and dialogue on the evening of the 16th; the cum laude award went to Weijie Chen and colleagues from the U.S. Food and Drug Administration for their poster, "Assessment of updated CAD without a new reader study: effect of calibration of computer output on the computer-aided reader performance in CADx." The runner-up was awarded to Sophie Pequeralt and colleagues, also from the U.S. Food and Drug Administration, for their poster, "Analysis of the number of distinct findings obtained by multiple readers in an MRMC study: When do findings obtained from the addition of new readers become redundant, or otherwise negligible?"

The keynote lecture was part of an effort to broaden the conference in the area of digital pathology. The lecture, entitled "The observer end of digital imaging: integrating the digital microscope into clinical practice," was given by Dr. Stephen M. Hewitt of the National Institutes of Health, and served as an excellent overview of the challenges and opportunities for digital imaging in pathology.

Craig K. Abbey
David J. Manning