Medical Imaging 2013

Image Perception, Observer Performance, and Technology Assessment

Craig K. Abbey Claudia R. Mello-Thoms Editors

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Introduction

The Image Perception, Observer Performance, and Technology Assessment Conference, part of the SPIE Medical Imaging Symposium 2013, was held Sunday and Monday – February 10th and 11th – at the Disney Coronado Springs Resort, Lake Buena Vista, Orlando, Florida.

The conference opened with a Keynote lecture by Prof. Miguel Eckstein, Ph.D., from the University of California, Santa Barbara, entitled "Optimizing visual search: How does the brain do it?" The talk was lively and connected search in medical imaging to current research topics in vision and neuroscience. In many ways it set the tone for the presentations and discussions that followed.

The conference program included a total of 36 oral presentations, in addition to the Keynote lecture, organised into seven sessions over the two days of the conference. The poster session was again strong with 26 submissions accepted for display and dialogue on the evening of February 11th; the *cum laude* award went to Dr. Bin Zheng Ph.D. and colleagues from the University of Pittsburgh for their poster on "Prediction of near-term breast cancer risk using a Bayesian belief network."

The workshop held the first evening of the conference was entitled "ROC Analysis: A tribute to Charlie Metz and an assessment of the State of the Art." The workshop served as a commemoration of the life and career of the late Prof. Charles Metz, Ph.D., from the University of Chicago, as well as an assessment of the field he did so much to develop and promote. Four speakers gave presentations that ranged from describing the arc of Prof. Metz's life, to the specific topics in ROC analysis that appear to be driving research at this time. The speakers were Prof. Yulei Jiang, Ph.D., from the University of Chicago, Prof. Harrison Barrett Ph.D. from the University of Arizona (standing in for Dr. Kyle Myers of the FDA who could not attend), Prof. Stephen Hillis, Ph.D., of the University of Iowa, and Dr. Brandon Gallas, Ph.D., of the FDA. Their presentations both reminded the audience of the loss to our community in Dr. Metz's passing, but also managed to convey the gratitude that so many felt to have had the chance to work and interact with him, as well as painted a bright future for the field that he dedicated so much of his career to.

Craig K. Abbey Claudia Mello-Thoms