

Preface

The 25th biennial international conference on Information Processing in Medical Imaging (IPMI 2017) was held at the Appalachian State University in Boone, North Carolina, USA, June 25–30, 2017. This conference was the latest in a series where novel developments in the acquisition, formation, analysis, and display of medical images were presented, discussed, dissected, and extended.

This year 147 manuscripts were submitted to IPMI. Of these, 53 were accepted, resulting in an acceptance rate of 36%. Out of the 53 accepted manuscripts, 24 were selected for oral presentation and 29 for poster presentation. All manuscripts were reviewed by exactly three reviewers. Based on these reviews, final acceptance and rejection decisions were made by the paper selection committee. The paper selection committee also discussed the overall program and decided whether a manuscript should be selected for an oral or for a poster presentation. Every effort was made to assure a fair selection process. In particular, the review process was double-blind. For the acceptance and rejection decisions, the paper selection committee was also blinded with respect to the authorship of manuscripts. Balancing with respect to research groups was not performed. Decisions were purely based on reviews and in-depth discussions of the paper selection committee. Owing to the large number of submissions, many good and promising manuscripts could unfortunately not be accepted to the final program of the conference.

Topics of interest of IPMI are diverse and have evolved over the past three decades in the medical imaging community that IPMI serves. This year's program covered topics that have become tradition at IPMI such as image registration, shape analysis, analysis on manifolds, and diffusion-weighted imaging. In addition, following the trend in computer vision and image analysis in general, a large number of submitted manuscripts explored machine-learning approaches, frequently in the form of deep learning, to address problems in the processing of medical imaging information.

As is tradition for IPMI, we put a strong emphasis on creating a vibrant atmosphere for in-depth research discussions. This included unlimited discussions for oral presentations as well as in-depth poster presentations. To foster a community spirit we, of course, also honored the traditional social components of IPMI, including spending as much time as possible together during the conference by staying on the campus of Appalachian State University, jointly exploring Boone, continuing discussion while hiking the beautiful Blue Ridge Mountains, and enjoying the IPMI choir.

IPMI 2017 also provided 16 scholarships to junior scientists from underrepresented populations. Of these scholarships, 15 went to junior female scientists and one to a junior scientist from an underrepresented racial or ethnic group. Furthermore, 18 out of the 24 oral presentations were eligible for the Erbsmann award, which is given in memory of Francois Erbsmann, one of the founders of IPMI. It is an award for the best oral presentation by a young scientist who is presenting for the first time at IPMI.

IPMI has always been a very special conference, combining a great scientific community, with discussions of the latest research, and a strong emphasis on nurturing the next generation of researchers. We feel grateful for having been able to continue this IPMI spirit.

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