Introduction to the BODA 2013 feature issue

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Abstract: The guest editors introduce a feature issue containing papers based on research presented at the BODA 2013 meeting.

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OCIS codes: (170.0170) Medical optics and biotechnology; (220.0220) Optical design and fabrication; (330.0330) Vision, color, and visual optics; (110.0110) Imaging systems; (120.0120) Instrumentation, measurement, and metrology; (180.0180) Microscopy; (230.0230) Optical devices.

Reference and link

Bio-Optics: Design and Application (BODA), http://www.osa.org/en-us/meetings/osa_meeting_archives/2013/bio-optics_design_and_application/

Since 2011, the Optical Society of America has been organizing biennial topical meetings on Bi-optics: Design and Applications [1], which is part of the Optics in Life Science Congress. The first two meetings (2011 and 2013) were chaired by Dr. Guoqiang Li (USA) and Dr. Rongguang Liang (USA). The papers published in this issue of Biomedical Optics Express are contributions from authors who presented their work at this past meeting held in Waikoloa Beach, Hawaii, April 14-18, 2013.

The Bio-Optics: Design and Application topical meeting has become the pre-eminent international meeting focused on the design, fabrication, instrumentation, and application of innovative optical techniques in life science. Advances in optical techniques are significantly improving the performance and capabilities of biomedical devices and instruments and hence greatly improving the quality of our lives. Examples include high-resolution high-speed optical imaging technologies for basic life science research and diagnosis of diseases, adaptive optics for vision care, portable biomedical sensors for point of care, nanotechnologies for biomedical imaging and sensing, novel optical fabrication and 3D integration technologies for biomedical devices and biochip, optical systems for intraoperative and clinical applications, etc. This meeting and the associated feature issue will provide an excellent platform for researchers and engineers from academia and industry to discuss the most recent advances of bio-optics in life science. Thirteen papers were accepted for this special issue after peer review process.

Topics for the feature issue include:

- · Visual optics, eye imaging and sensing
- Biomedical optical imaging technologies
- Design and fabrication of biomedical optical devices
- · Biosensor, biochip, optofluidics, and bio-inspired optics
- Nanophotonics for biomedicine
- Clinical systems and applications

The meeting is planned to continue every two years and the next meeting will be held in 2015.