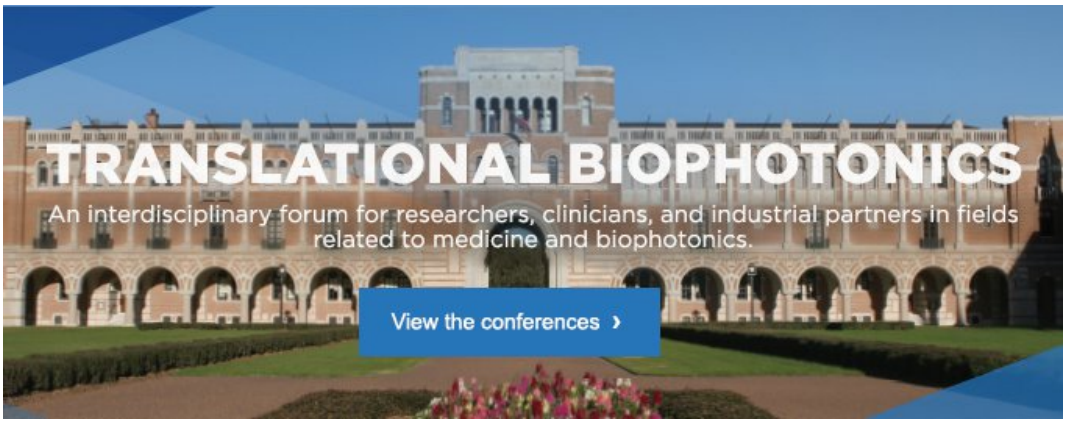
SPIE. TRANSLATIONAL BIOPHOTONICS

BioScience Research Collaborative, Rice Univ.
Houston, Texas, United States
14 - 15 May 2018

Translational Biophotonics 2018



SPIE Translational Biophotonics explores the status and future of optical imaging for biomedical research and clinical applications. Organized by SPIE and Rice University, this meeting fosters discussion and encourages continuing development of new technologies and techniques with the goal of successful translation into practical biomedical use.

Online registration is now closed. Onsite registration is available.

Registration prices increase
27 April 2018

Campus map

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Primary Conference Topics

- Diagnostic imaging and detection with applications in cancer diagnostics, cardiovascular imaging, infectious diseases (endoscopies, diffused imaging, spectroscopy)
- New techniques in microscopy and other emerging techniques (superresolution techniques, contrasts for microscopy, in vivo imaging)
- Analytical systems (microarrays, high-throughput detection)
- MD perspectives (unmet clinical needs)
- Industry perspectives (the implementation process, device success stories)

Symposium Chair

Tomasz Tkaczyk
Rice Univ. (United States)

Read full invitation from the chair

Invited Speakers

Brian Applegate
Texas A&M Univ.

Subnanometer functional vibratory imaging in the ear

Adela Ben-Yakar
The Univ. of Texas at Austin

Towards clinical femtosecond laser surgery guided with multiphoton microscopy

Paul Campagnola
Univ. of Wisconsin Madison

Analysis of collagen architecture alterations in human ovarian cancer via SHG polarization and texture analyses

Zhongping Chen
Univ. of California, Irvine

Advances in optical coherence tomography: translation of OCT technology from bench to bedside

Marcus Cicerone
National Institutes of Standards and Technology

Coherent Raman imaging as a potential diagnostic aid for histopathology

Kirill Larin
Univ. of Houston

Dynamic optical coherence elastography of soft tissue

Laura Marcu
Univ. of California Davis

Fluorescence lifetime techniques in clinical applications

Jana Kainerstorfer
Carnegie Mellon Univ.

Monitoring of cerebral hemodynamics with near-infrared light during trauma

Rebecca Richards-Kortum
Rice Univ.

Point-of-care diagnostics to improve newborn and women's health in sub-Saharan Africa

Darren Roblyer
Boston Univ.

Improving molecular sensitivity of wide-field measurements with label-free short-wave spatial frequency domain imaging

David Sampson
Univ. of Surrey (United Kingdom)

Resolution versus contrast: where to go with optical coherence tomography?

Eva Sevick
The Univ. of Texas Health Science Ctr. at Houston

Visualizing and delivering immunotherapeutics through the lymphatics

Peter So
Massachusetts Institute of Technology

Extracting biophysical markers for drug responses of sickle cells using interferometric imaging

Melissa Suter
Massachusetts General Hospital
Assessing airway remodeling, structure and function in allergic asthmatics using optical coherence tomography

Ben Vakoc
Wellman Ctr. for Photomedicine

High-speed and long-range OCT by optical subsampling: principles and clinical opportunities

Anita Mahadevan-Jansen
Vanderbilt Univ. (USA)

Translation of research grade device to an FDA ready prototype for intraoperative parathyroid detection

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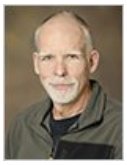
Gerard Coté
Texas A&M Univ.

The need for wearable technology advances to achieve true health monitoring



Art Gmitro
The Univ. of Arizona

Biomedical imaging systems based on optical fiber bundles

Zoltan Gorocs
Univ. of California, Los Angeles

Computational sensing technologies for point-of-care diagnostics and global health

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