PROGRESS IN BIOMEDICAL OPTICS AND IMAGING
Vol. 16 No. 14

Multimodal Biomedical Imaging X

Fred S. Azar
Xavier Intes
Editors

7 February 2015
San Francisco, California, United States

Sponsored and Published by
SPIE

Volume 9316

Proceedings of SPIE, 1605-7422, V. 9316

SPIE is an international society advancing an interdisciplinary approach to the science and application of light.

Multimodal Biomedical Imaging X, edited by Fred S. Azar, Xavier Intes, Proc. of SPIE Vol. 9316,
931601 · © 2015 SPIE · CCC code: 1605-7422/15/$18 doi: 10.1117/12.2192259

The papers included in this volume were part of the technical conference cited on the cover and title page. Papers were selected and subject to review by the editors and conference program committee. Some conference presentations may not be available for publication. The papers published in these proceedings reflect the work and thoughts of the authors and are published herein as submitted. The publisher is not responsible for the validity of the information or for any outcomes resulting from reliance thereon.

Please use the following format to cite material from this book:
Author(s), "Title of Paper," in *Multimodal Biomedical Imaging X*, edited by Fred S. Azar, Xavier Intes, Proceedings of SPIE Vol. 9316 (SPIE, Bellingham, WA, 2015) Article CID Number.

ISSN: 1605-7422
ISBN: 9781628414066

Published by
SPIE
P.O. Box 10, Bellingham, Washington 98227-0010 USA
Telephone +1 360 676 3290 (Pacific Time) · Fax +1 360 647 1445
SPIE.org

Printed in the United States of America.

Publication of record for individual papers is online in the SPIE Digital Library.

SPIE Digital Library
SPIEDigitalLibrary.org

Paper Numbering: Proceedings of SPIE follow an e-First publication model, with papers published first online and then in print. Papers are published as they are submitted and meet publication criteria. A unique citation identifier (CID) number is assigned to each article at the time of the first publication. Utilization of CIDs allows articles to be fully citable as soon as they are published online, and connects the same identifier to all online, print, and electronic versions of the publication. SPIE uses a six-digit CID article numbering system in which:

- The first four digits correspond to the SPIE volume number.
- The last two digits indicate publication order within the volume using a Base 36 numbering system employing both numerals and letters. These two-number sets start with 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B … 0Z, followed by 10-1Z, 20-2Z, etc.

The CID Number appears on each page of the manuscript. The complete citation is used on the first page, and an abbreviated version on subsequent pages.

Contents

POSTER SESSION

Authors

Numbers in the index correspond to the last two digits of the six-digit citation identifier (CID) article numbering system used in Proceedings of SPIE. The first four digits reflect the volume number. Base 36 numbering is employed for the last two digits and indicates the order of articles within the volume. Numbers start with 00, 01, 02, 03, 04, 05, 06, 07, 08, 09, 0A, 0B...0Z, followed by 10-1Z, 20-2Z, etc.

Conference Committee

Symposium Chairs

James G. Fujimoto, Massachusetts Institute of Technology (United States)
R. Rox Anderson, Wellman Center for Photomedicine, Massachusetts General Hospital (United States) and Harvard School of Medicine (United States)

Program Track Chairs

Tuan Vo-Dinh, Fitzpatrick Institute for Photonics, Duke University (United States)
Anita Mahadevan-Jansen, Vanderbilt University (United States)

Conference Chairs

Fred S. Azar, Philips Medical Systems (United States)
Xavier Intes, Rensselaer Polytechnic Institute (United States)

Conference Program Committee

Caroline Boudoux, Ecole Polytechnique de Montréal (Canada)
Christophe Chefd'hotel, Ventana Medical Systems, Inc. (United States)
Yu Chen, University of Maryland, College Park (United States)
Qianqian Fang, Massachusetts General Hospital (United States)
Sergio Fantini, Tufts University (United States)
Gultekin Gulsen, University of California, Irvine (United States)
Theodore J. Huppert, University of Pittsburgh (United States)
Tim Nielsen, Philips Research (Germany)
Vasilis Ntziachristos, Helmholtz Zentrum München GmbH (Germany)
Brian W. Pogue, Thayer School of Engineering at Dartmouth (United States)
Siavash Yazdanfar, GE Global Research (United States)
Arjun G. Yodh, University of Pennsylvania (United States)

Session Chairs

1 Image Processing Techniques
Fred S. Azar, Philips Medical Systems (United States)

2 Clinical Applications
Hamid Dehghani, The University of Birmingham (United Kingdom)