Head and Neck Optical Diagnostics

Christian Betz Brian J. F. Wong Editors

13–14 May 2013 Munich, Germany

Sponsored by The Optical Society (United States) SPIE

In conjunction with Head and Neck Optical Diagnostics Society (United Kingdom)

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Published by SPIE

Volume 8805

Proceedings of OSA Biomedical Optics-SPIE, 1605-7422, V. 8805

Head and Neck Optical Diagnostics, edited by Christian Betz, Brian J. F. Wong, Proc. of OSA Biomedical Optics-SPIE Vol. 8805, 880501 · © 2013 OSA-SPIE CCC code: 1605-7422/13/\$18 · doi: 10.1117/12.2033954

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Please use the following format to cite material from this book:

Author(s), "Title of Paper," in *Head and Neck Optical Diagnostics*, edited by Christian Betz, Brian J. F. Wong, Proceedings of OSA Biomedical Optics-SPIE Vol. 8805 (SPIE, Bellingham, WA, 2013) Article CID Number.

ISSN: 1605-7422 ISBN: 9780819498137

Copublished 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

The Optical Society

2010 Massachusetts Ave., N.W., Washington, D.C., 20036 USA Telephone 1 202/223-8130 (Eastern Time) Fax 1 202/223-1096 http://www.osa.ora

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Printed in the United States of America.

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Introduction

The Head and Neck Optical Diagnostic Society (HNODS) is an interest group that was founded in 2008. Its main focus is to encourage the practice and use of optical diagnostic techniques in the head and neck to improve early diagnosis and treatment of patients. The HNODS has more than 300 members, consisting of clinicians, scientists, physicists, engineers, technicians, radiologists and pathologists. The HNODS holds an annual Scientific Meeting to report the advances in the field.

The 5th Scientific Meeting of the HNODS was held in May 2013 in Munich in conjunction with the European Conference on Biomedical Optics (ECBO). Being run alternatively by the OSA and SPIE as an internationally renowned platform that brings together scientists, clinicians and engineers with an interest in both optics/photonics and medicine to share their experiences, the ECBO provided a perfect setting for the HNODS meeting.

Altogether, 20 excellent talks and 3 outstanding posters were presented, and the sessions had a rather remarkable attendance. Apart from the poster presentations, there were 3 Optical Diagnostic Sessions and one Photodynamic Therapy/Photochemical Internalization Session (PDT/PCI) dedicated to HNODS. Many talks of the Optical Diagnostic Sessions focused on the detection of premalignant lesions of the head and neck with the help of optical techniques, such as optical coherence tomography, narrow band imaging, confocal laser endomicroscopy and hyperspectral endoscopy. Other interesting applications such as the use of optical coherence tomography for a three dimensional assessment of the pediatric airway, or for a further differentiation of rhinologic pathologies and middle ear diseases were reported as well. Another actively discussed topic was the global perspective in using optical imaging techniques for oral cancer detection and diagnosis. In the PDT/PCI session, new results in the treatment of incurable head and neck cancer with PDT and PCI were reported. focusing on new drugs used for PCI ex vivo and in vivo and on the treatment of skull base tumors with PDT.

In summary, this was a highly successful meeting and we are looking forward to possible further collaborations in the future.

Christian Betz Brian J. F. Wong

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