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Editors

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Introduction

The papers contained in this volume were presented at the twenty-sixth conference on Ophthalmic Technologies, held from February 13 to 14, 2016, at the Moscone Center in San Francisco, California as a part of the SPIE Photonics West BiOS Meeting.

A total of 52 papers and 16 posters were presented by scientists, clinicians, and engineers from academia and industry representing 19 countries and 4 continents. Topics included new ophthalmic devices and approaches for the assessment of neurological function, characterization of corneal biomechanics using optical coherence elastography, retinal and choroidal blood and vasculature imaging, handheld retinal imaging technology for pediatric applications, laser therapy, ophthalmic image processing, and applications of adaptive optics for retinal imaging.

The conference hosted its tenth presentation on the topic of the unmet needs and impact of technology in a clinical area. Prof. Mingguang He, from the University of Melbourne, gave a lecture on the topic of technology needs in delivering community-based eye care services.

The sixteenth Pascal Rol Award was presented to Dr. Zhuolin Liu and her colleagues from Indiana University for their outstanding paper on *"Imaging human retinal pigment epithelium cells using adaptive optics optical coherence tomography"* (9693-48). Established in memory of Dr. Pascal O. Rol, former chair and co-founder of the Ophthalmic Technologies conference, the award is in recognition of the best manuscript and presentation. The 2016 finalists of the award, selected by the entire program committee among the 68 abstract submissions, were Oscar Carrasco-Zevallos (9693-5), Frederick South (9693-49), and Satoshi Sugiyama (9693-21).

We are very grateful to the Brien Holden Vision Institute in Sydney, Australia, for sponsoring the 2016 Pascal Rol award and keynote lecture through the Pascal Rol Foundation.

We thank the Program Committee members, session chairs, speakers and participants, as well as the SPIE staff for their support and dedication in making this conference a success.

We extend an invitation for the Ophthalmic Technologies XXVII conference, which is scheduled for Saturday January 28 and Sunday January 29, 2017 in San Francisco, CA.

Fabrice Manns
Per G. Söderberg
Arthur Ho

Sixteenth Pascal Rol Award for Excellence in Ophthalmic Technologies
Supported by the Brien Holden Vision Institute
through the Pascal Rol Foundation

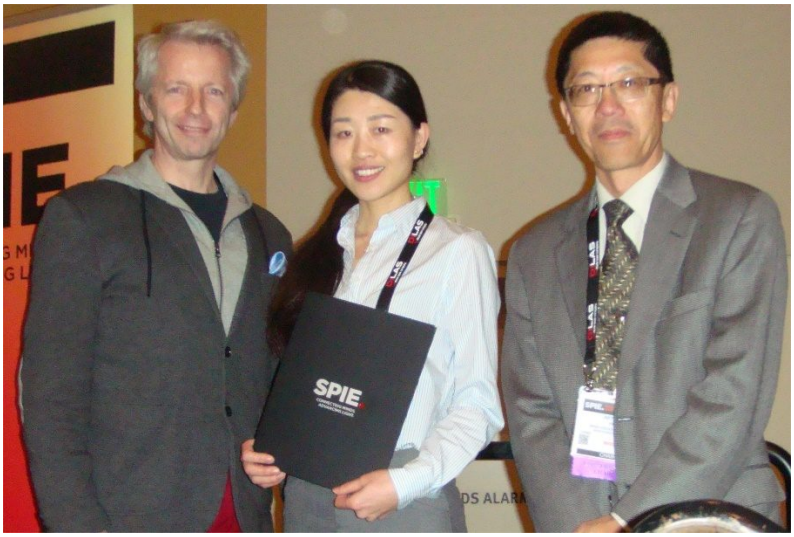
Brien Holden Vision Institute

Presented on Sunday February 14, 2016 to

Dr. Zhuolin Liu

for her excellent paper on

"Imaging human retinal pigment epithelium cells using adaptive optics optical coherence tomography"



Wolfgang Drexler (left) and Arthur Ho (right) presents the 2016 Pascal Rol Award to Zhuolin Liu (center).

Past awardees

2015	**Francesco de la Rocca**	*Ultra-compact switchable SLO/OCT handheld probe design*
2014	**Marco Ruggeri**	*Biometry of the ciliary muscle during dynamic accommodation assessed with OCT*
2013	**Yossi Mandel**	*In-vivo performance of photovoltaic subretinal prosthesis*
2012	**Clemens Alt**	*In vivo quantification of microglia dynamics with an SLO in a mouse model of focal laser injury*
2011	**James Loudin**	*Photovoltaic Retinal Prosthesis*
2010	**Daniel Hammer**	*Multimodal adaptive optics for depth enhanced high-resolution ophthalmic imaging*
2009	**Kazuhiro Kurokawa**	*1μm wavelength adaptive optics scanning laser ophthalmoscope*
2008	**Boris Povazay**	*Minimum distance mapping using volumetric OCT: A novel indicator for early glaucoma diagnosis*
2007	**Yoshiaki Yasuno**	*Clinical examinations of anterior eye segments by three-dimensional swept-source optical coherence tomography*
2006	**Enrique Fernandez**	*Adaptive optics using a liquid crystal spatial light modulator for ultrahigh-resolution optical coherence tomography*
2005	**Karsten König**	*Cornea surgery with nanojoule femtosecond laser pulses*
2004	**Daniel Palanker**	*Attracting retinal cells to electrodes for high-resolution stimulation*
2003	**Igor Ermakov**	*Non-invasive optical techniques for the measurement of macular pigments*
2002	**Georg Schuele**	*Non-invasive temperature measurements during laser irradiation of the retina with optoacoustic techniques*
2001	**Matthew Smith**	*Minimizing the influence of fundus pigmentation on retinal vessel oximetry measurements*

The 2016 Pascal Rol Lecture on Ophthalmic Technologies
Saturday February 13, 2016

Professor Mingguang He
Centre for Eye Research Australia (CERA)
University of Melbourne, Australia

Need for technologies for advancement in delivering community-based eye care service

The Pascal Rol Lecture on Ophthalmic Technologies" is presented by a leading researcher in ophthalmology with a strong interest and pioneering research contributions to the field of ophthalmic technologies. This invited lecture is intended to trigger further development of ophthalmic technologies by stimulating discussions between basic scientists, engineers, and clinicians.

The 2016 lecture was supported by the Brien Holden Vision Institute through the Pascal Rol Foundation (www.pascalrolfoundation.org)

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