

Agenda of Sessions

	9/15 (Sun.)	9/16 (Mon.)	9/17 (Tue.)	9/18 (Wed.)
08:00-09:00		Registration		
09:00-10:30		Welcome	Session T1	Session W1
		Session M1		
10:30-11:10		Coffee Break	Coffee Break + Poster	
11:10-12:30		Session M2: New Microscopy and Sensing Tech.	Session T2: High Resolution Imaging-1	Session W2: Biomedical Simulation and Deep Learning
12:30-14:00		Group Photo + Lunch	Lunch	Local tour
14:00-15:30		Session M3: Biosensing	Session T3: High Resolution Imaging-2	
15:30-16:30		Coffee Break + Poster		
16:30-18:00		Session M4: Non-linear Microscopy	Session T4: Functional Imaging and Sensing	
18:15-18:55		Session M5: Teleconference	---	
18:55-20:30	Registration	Reception	18:30- Social Dinner	

Sunday, September 15

Registration	
18:15-20:30	Material pick up @ 1F, Barry Lam Hall, National Taiwan University

Monday, September 16

Opening Session	
09:00-09:10	Welcome address
Session M1	
Presider: Silvano Donati, <i>Università di Pavia, Italy</i>	
09:10-10:00	M1.1 OCT and Nonlinear Endomicroscopy towards Visualization of Histology In Situ Xingde Li <i>Johns Hopkins University, USA</i>

10:00-10:30	<p>M1.2 No Fourier Transform Optical Coherence Tomography</p> <p>Adrian Podoleanu¹, Adrian Bradu¹, Ramona Cernat¹, Konstantin Kapinchev¹, Manuel Marques¹, Sylvain Rivet²</p> <p>¹University of Kent, UK, ²Université de Bretagne Occidentale, France</p>
<p>Session M2: New Microscopy and Sensing Tech.</p> <p>Presider: Shi-Wei Chu, <i>National Taiwan University, Taiwan</i></p>	
11.10-11:50	<p>M2.1 Multi-Contrast Imaging by Optical Coherence Tomography</p> <p>Yoshiaki Yasuno</p> <p><i>Tsukuba University, Japan</i></p>
11:50-12:10	<p>M2.2 Optical Flow Sensor for Lung Surfactant Delivery</p> <p>Ilaria Milesi¹, Lorenzo Ventura¹, Federico Cavedo¹, Michele Norgia¹, Raffaele Dellacà¹, Silvano Donati²</p> <p>¹Politecnico di Milano, Italy, ²Università di Pavia, Italy</p>
12:10-12:30	<p>M2.3 A 180-nm Tunable Ti:sapphire Crystal Fiber Laser for OCT Applications</p> <p>Chun-Yi Kuo¹, Sheng-Lung Huang¹, Silvano Donati²</p> <p>¹National Taiwan University, Taiwan, ²University of Pavia, Italy</p>
<p>Session M3: Biosensing</p> <p>Presider: Sheng-Hao Tseng, <i>National Cheng Kung University, Taiwan</i></p>	
14.00-14:30	<p>M3.1 Cheap, Smart and Reliable Technology for Biosensors and Diagnostics Tools</p> <p>Matteo Barozzi¹, Alessandro Candiani¹, Michele Sozzi¹, Alessandro Tonelli¹, Annamaria Cucinotta², Stefano Selleri²</p> <p>¹DNAPhone s.r.l., Italy, ²University of Parma, Italy</p>
14:30-14:50	<p>M3.2 Characterisation of a DNA Hydrogel Viscosity by an Integrated Optofluidic Microrheometer</p> <p>Valerio Vitali¹, Giovanni Nava², Tie Yang³, Paolo Minzioni¹, Francesca Bragheri⁴, Roberto Osellame⁴, Lucas Bethge⁵, Sven Klusmann⁵, Elvezia Maria Paraboschi⁶, Rosanna Asselta⁶, Tommaso Bellini², Ilaria Cristiani¹</p> <p>¹Università di Pavia, Italy, ²Università di Milano, Italy, ³Southwest University, China, ⁴IFN-CNR, France, ⁵NOXXON Pharma AG, Germany, ⁶Humanitas University, Italy</p>
14:50-15:10	<p>M3.3 Noninvasive Transcutaneous Bilirubin Assessment Using Diffuse Reflectance Spectroscopy</p> <p>Ying-Yu Chen, Nan-Yu Cheng, Yi-Ling Lin, Ming-Chien Fang, Sheng-Hao Tseng</p> <p><i>National Cheng Kung University, Taiwan</i></p>
15:10-15.30	<p>M3.4 High Sensitive Microsurgical Force Sensor using Spectral-Width of Tapered Fiber Bragg Gratings</p> <p>Abdulfatah A.G. Abushagur, Norhana Arsad, Mohd Hadri Hafiz Mokhtar, Ahmad Ashrif A Bakar</p> <p><i>Universiti Kebangsaan Malaysia, Malaysia</i></p>
<p>Session M4: Non-linear Microscopy</p> <p>Presider: Chau-Hwang Lee, <i>Academia Sinica, Taiwan</i></p>	
16.30-17:00	<p>M4.1 Line-Scanning Two-Photon Microscope for the Investigation of Biological Samples</p> <p>Elton Hasani, Luca Tartara, Alessandra Tomaselli</p> <p><i>University of Pavia, Italy</i></p>
17:00-17:20	<p>M4.2 Neurite Retraction and Regrowth under Optical and Chemical Stimulations</p> <p>Yu-Chiu Kao¹, Yu-Cing Liao², Pei-Lin Cheng¹, Chau-Hwang Lee¹</p> <p>¹Academia Sinica, Taiwan, ²Yang-Ming University, Taiwan</p>

17:20-17:40	M4.3 Lissajous Scanning Microscopy using Tailored Optical Fibre Meng Sheng Leong, Amirul Ashrf Zuhri, Mohd Saiful Dzulkeffly Zan, Norhana Arsad, Ahmad Ashrif A. Bakar, Mohd Hadri hafiz Mokhtar <i>Centre of Advanced Electronic and Communication Engineering, Malaysia</i>
17:40-18.00	M4.4 Advanced Nonlinear Endo-Microscopes by Wave-Vector Encoding Guan-Yu Zhuo ² , Po-Lin Tsai ¹ , Hsien-Yi Wang ³ , Ming-Che Chan ¹ ¹ <i>National Chiao Tung University, Taiwan</i> , ² <i>China Medical University, Taiwan</i> , ³ <i>Chimei Medical Center, Taiwan</i>
Session M5: Teleconference Presider: Shih-Hsiang Hsu, <i>National Taiwan University of Science and Technology, Taiwan</i>	
18.15-18:55	M5.1 Medical Device Applications of Silicon Photonics Roel Baets <i>Ghent University, Belgium</i>
18:55-20:30	Reception @ 1F, Barry Lam Hall

Tuesday, September 17

Session T1 Presider: Fu-Jen Kao, <i>National Yang-Ming University, Taiwan</i>	
09.00-09:50	T1.1 Single-Molecule Sensitive Super-Resolution Microscopy: between the Past and Future Marcus Sauer <i>University of Wuerzburg, Germany</i>
09:50-10:30	T1.2 Recent Applications of Static and Dynamic Full Field OCT Viacheslav Mazlin ¹ , Jules Scholler ¹ , Pedro Mêce ¹ , Cassandra Groux ¹ , Kate Grieve ² , Claude Boccaro ¹ ¹ <i>Institut Langevin ESPCI/CNRS, France</i> , ² <i>Quinze-Vingts National Eye Hospital, France</i>
Session T2: High Resolution Imaging-1 Presider: Linbo Liu, <i>National University of Singapore, Singapore</i>	
11:10-11:50	T2.1 Recent Instrumentation Advances in Reflectance Confocal Microscopy for Skin and Oral Cancers Kivanc Kose ¹ , Gary Peterson ¹ , Nicusor Iftimia ² , David Dickensheets ³ , Milind Rajadhyaksha ¹ ¹ <i>Memorial Sloan Kettering Cancer Center, USA</i> , ² <i>Physical Sciences Inc., USA</i> , ³ <i>Montana State University, USA</i>
11:50-12:10	T2.2 Scattering-Based Interferometric Laser Microscopy Enables High-Speed Imaging of 10 nm Gold Nanoparticles for Single-Molecule Measurements Ching-Ya Cheng, Yi-Hung Liao, Chih-Hsiang Lin, Wai Cheng(Christine) Wong, Jz-Yuan Juo, Chia-Lung Hsieh <i>Academia Sinica, Taiwan</i>
12:10-12.30	T2.3 In Vivo Rat Corneal Nerve Fiber Quantification with Cellular-Resolution Optical Coherence Tomography Chih-Chieh Chen Lin, Cheng-Hung Shih, Jheng-Ting Lin, Sheng-Lung Huang <i>National Taiwan University, Taiwan</i>
Session T3: High Resolution Imaging-2	

Presider: Hsiang-Chieh Lee, <i>National Taiwan University, Taiwan</i>	
14:00-14:30	T3.1 High Performance and Low Cost Optical Coherence Tomography Linbo Liu, Xinyu Liu, Qiaozhou Xiong, Nanshao Wang, Si Chen, Jinhan Li, Jun Xie <i>National University of Singapore, Singapore</i>
14:30-14:50	T3.2 Faster, Deeper, Clearer Imaging of Brain Shi-Wei Chu <i>National Taiwan University, Taiwan</i>
14:50-15:10	T3.3 Signal Processing in Stimulated Emission Microscopy Subir Das, Khalil Ur Rehman, Fu-Jen Kao <i>National Yang-Ming University, Taiwan</i>
15:10-15:30	T3.4 Synchronized Subharmonic Modulation in Stimulated Emission Microscopy <i>S. Das¹, Y-C. Liang¹, S. Tanaka², Y. Ozeki², F.-J. Kao^{1*}</i> <i>¹National Yang-Ming University, Taiwan, ²University of Tokyo, Japan</i>
Session T4: Functional Imaging and Sensing Presider: Meng-Tsan Tsai, <i>Chang Gung University, Taiwan</i>	
16:30-17:00	T4.1 Recent Advances in the Development and Applications of Endoscopic Optical Coherence Tomography Hsiang-Chieh Lee <i>National Taiwan University, Taiwan</i>
17:00-17:20	T4.2 The single software architecture supporting Fourier domain optical coherence tomography system Yin-Peng Huang, Ting-Yen Tsai, Ting-Hao Chen, Chuan-Bor Chueh, Yi-Ping Hung, Hsiang-Chieh Lee <i>National Taiwan University, Taiwan</i>
17:20-17:40	T4.3 Bio-Composite Materials: Nano-Functionalization of 4D Bio-Engineered Scaffold Ruben Foresti, Stefano Rossi, Stefano Selleri <i>University of Parma, Italy</i>
17:40-18:00	T4.4 Progress in Interferometric Measurements of Biological Signals Silvano Donati ¹ , Michele Norgia ² <i>¹University of Pavia, Italy, ²Politecnico di Milano, Italy</i>
18:30-20:30	Social dinner at the Taidatable (曉鹿鳴樓), No. 85, Sec. 4, Roosevelt Rd., Taipei

Wednesday, September 18

Session W1 Presider: Sheng-Lung Huang, <i>National Taiwan University, Taiwan</i>	
09:00-09:50	W1.1 Mapping the Drosophila Engram Ann-Shyn Chiang <i>National Tsing Hua University, Taiwan</i>
09:50-10.30	W1.2 Confocal Microscopy with a Detector Array Colin J.R. Sheppard <i>National University of Singapore, Singapore</i>

Session W2: Biomedical Simulation and Deep Learning

Presider: Snow H. Tseng, *National Taiwan University, Taiwan*

11:10-11:40	W2.1 Numerical Analysis of the Feasibility of Propagating Light through Biological Turbid Medium Snow H. Tseng, Liang-Yu Huang, Tzu-Hao Kuo <i>National Taiwan University, Taiwan</i>
11:40-12:00	W2.2 Deep Feature Learning for Contour Segmentation of Aorta's Intima by using Sub-Micron-Resolution OCT Kuan-Ming Chueh ¹ , Hsien-Li Kao ² , Homer H. Chen ¹ , Chia-Tung Shun ² , Manuel Calderon-Delgado ¹ , Sheng-Lung Huang ¹ ¹ <i>National Taiwan University, Taiwan</i> , ² <i>National Taiwan University Hospital, Taiwan</i>
12:00-12:20	W2.3 Conversion between In Vivo Human Skin Tomographic Images and H&E Stained-Like Images via Generative Adversarial Network Sheng-Ting Tsai ¹ , Chin-Cheng Chen ¹ , Jheng-Ting Lin ¹ , Homer H. Chen ¹ , Jeng-Wei Tjiu ² , Sheng-Lung Huang ¹ ¹ <i>National Taiwan University, Taiwan</i> , ² <i>National Taiwan University Hospital, Taiwan</i>
12:20-12:40	W2.4 Deep Learning Approach for Red Blood Cell Segmentation from Full-Field OCT Data of Human Skin Bitewulign Mekonnen ¹ , Dian-Fu Tsai ¹ , Tung-Han Hsieh ¹ , Fu-Liang Yang ¹ , Shien-Kuei Liaw ² , Sheng-Lung Huang ³ ¹ <i>Academia Sinica, Taiwan</i> , ² <i>Taiwan Tech, Taiwan</i> , ³ <i>National Taiwan University, Taiwan</i>

Poster Session

P1	In Vivo Human Skin Image using High-Speed Full-Field Optical Coherence Tomography Jheng-Ting Lin, Sheng-Ting Tsai, Rajendran Soundararajan, Teng-I Yang, Sheng-Lung Huang <i>National Taiwan University, Taiwan</i>
P2	Application of Two-Photon Microscopy in Ion-Doped Crystals Yi-Sheng Lin ¹ , Ming-Che Chan ¹ , Shou-Tai Lin ² , Sheng-Lung Huang ³ , Guan-Yu Zhuo ⁴ ¹ <i>National Chiao-Tung University, Taiwan</i> , ² <i>Feng-Chia University, Taiwan</i> , ³ <i>National Taiwan University, Taiwan</i> , ⁴ <i>China Medical University, Taiwan</i>
P3	Near-Infrared Transillumination of In Vivo Biological Tissues for Functional Imaging Valentina Bello, Elisabetta Bodo, Sara Pizzurro, Sabina Merlo <i>University of Pavia, Italy</i>
P4	Femtosecond Laser Pulses for Frequency-Domain Biophotonic Diagnosis: From Extreme Modulation Bandwidth to Widely Wavelength Tunability Tzu-Feng Huang ¹ , Sheng-Hao Tseng ² , Hsien-Yi Wang ³ , Ming-Che Chan ⁴ ¹ <i>Taiwan Semiconductor Manufacturing Company, Taiwan</i> , ² <i>National Cheng-Kung University, Taiwan</i> , ³ <i>Chimei Medical Center, Taiwan</i> , ⁴ <i>National Chiao Tung University, Taiwan</i>

<p>P5</p>	<p>Ultrahigh-Resolution Optical Coherence Tomography/Angiography by using a Q-switch Pumped Supercontinuum Laser</p> <p>Tai-Ang Wang², Hsiang-Chieh Lee³, Chen-Yu Lee¹, Ming-Che Chan², Meng-Tsan Tsai¹</p> <p>¹Chang Gung University, Taiwan, ²National Chiao-Tung University, Taiwan, ³National Taiwan University, Taiwan</p>
<p>P6</p>	<p>A Novel Technique for the Measurement of Two-Photon Absorption Spectra of Dyes for Nonlinear Fluorescence Microscopy</p> <p>Elton Hasani, Luca Tartara, Alessandra Tomaselli</p> <p>Università degli Studi di Pavia, Italy</p>
<p>P7</p>	<p>Biosensing Sensitivity Enhancement on Mach-Zehnder Interferometer Interrogated with Microring Resonator using Higher Order Interferograms</p> <p>Wei-Chien Chang, Shih-Hsiang Hsu</p> <p>National Taiwan University of Science and Technology, Taiwan</p>
<p>P8</p>	<p>Depolarization Study through Stimulated Emission</p> <p>Khalil Rehman, Subir Das, Fu-Jen Kao</p> <p>National Yang-Ming University, Taiwan</p>
<p>P9</p>	<p>Spectroscopic Full-field Optical Coherence Tomography in Dermatology</p> <p>Rajendran Soundararajan¹, Ting-Wei Hsu¹, Manuel Calderon-Delgado¹, Silvano Donati², Yanding Qin³, Sheng-Lung Huang¹</p> <p>¹National Taiwan University, Taiwan, ²University of Pavia, Italy, ³Nankai University, China</p>