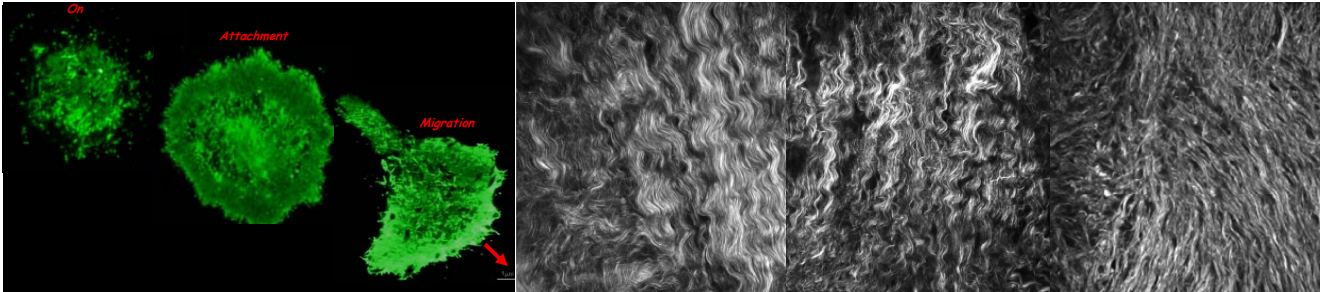


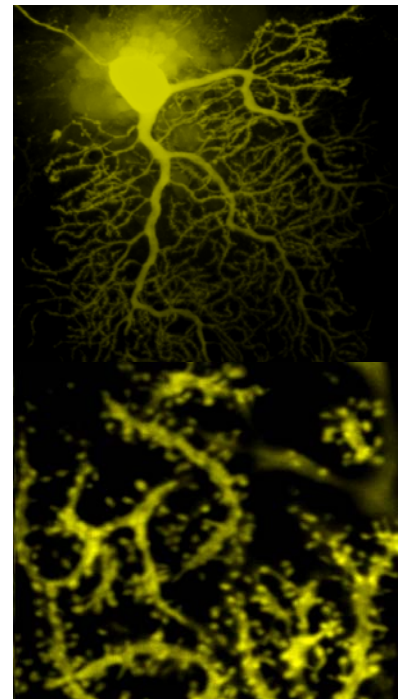
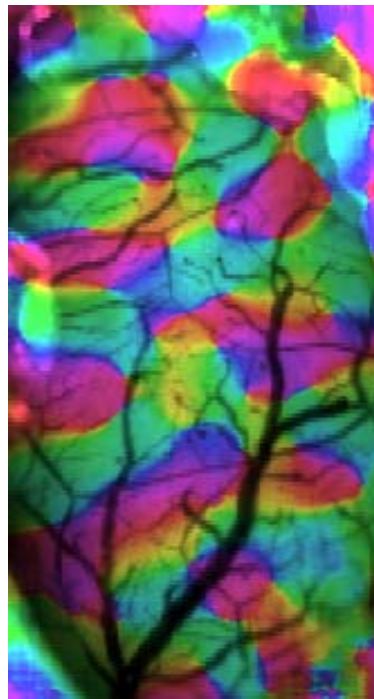
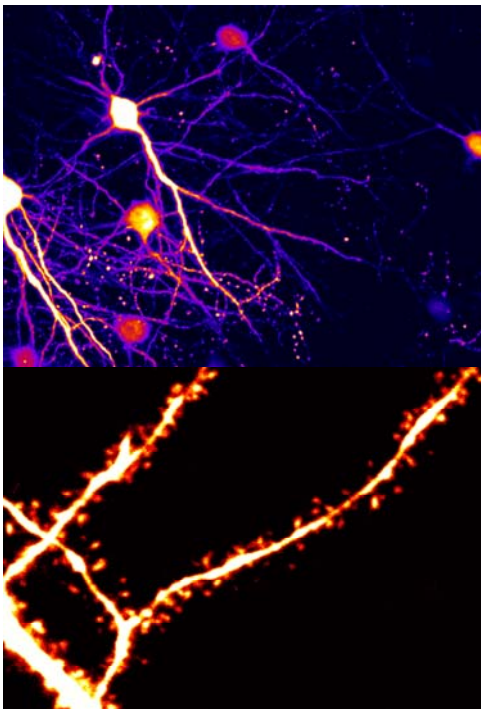
UW-NCKU Bilateral Workshop in Nano/Bio-Photonics

華盛頓大學－成功大學雙邊奈米生醫光電研討會



March 1st~2nd, 2010

Library B1 Conference Center, NCKU, Tainan, Taiwan



Organizers

Center for Micro/Nano Science and Technology (CMNST), NCKU, Taiwan
Department of Engineering Science, NCKU, Taiwan
School of Engineering, UW, USA

Sponsors

Office of International Affairs, NCKU, Taiwan
Advanced Optoelectronic Technology Center (AOTC), NCKU, Taiwan

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Nano/bio-photonics combining nanotechnology, biomedicine, and optoelectronics will become a significant research theme in this century. The workshop not only focus on the two major research themes, nano-photonics and bio-photonics, but also discuss what impact their integration will bring to the development and vision of the related industries. Establishing cross-pacific collaborations between University of Washington (UW) and National Cheng Kung University (NCKU) and attracting researchers' attentions to this innovative field are also the goals of the workshop.

Date: Monday, 1st March, 2010

Venue: Library B1 Conference Center, NCKU

Time	Title	Speaker	Chair
9:00~9:10	<i>Opening Remarks</i>	Dr. Michael M.-C. Lai President, NCKU	Dr. Teh-Lu Liao Eng. Science, NCKU
Bio-Photonics Session			
9:10~9:50	<i>Keynote Speech</i> Photoacoustic Imaging: A View from the Ultrasonic Side of the House	Dr. Matthew O'Donnell Dean of Eng., UW	Dr. Shean-Jen Chen Eng. Science, NCKU
9:50~10:20	Fluorescence Imaging and Drug Delivery	Dr. Suzie H. Pun Bioengineering, UW	
10:20~10:50	Second Harmonic Generation Imaging Microscopy of Cancer	Dr. Paul Campagnola Cell Biology, UCHC	
10:50~11:10	<i>Coffee Break</i>		
11:10~11:40	Multifunctional Nanoparticles for Biomedical Imaging and Drug Delivery	Dr. Xiaohu Gao Bioengineering, UW	Dr. Paul Campagnola Cell Biology, UCHC
11:40~12:00	Imaging Cell-Substrate Contacts via Surface Plasmon Microscopy	Dr. Shean-Jen Chen Eng. Science, NCKU	
12:00~12:20	Optoelectrical Approaches for Stroke Studies	Dr. Jia-Jin Jason Chen Biomed. Eng., NCKU	
12:20~13:30	<i>Lunch</i>		
13:30~14:10	<i>Keynote Speech</i> Biomedical Imaging with Intrinsic and Extrinsic Molecular Beacon	Drs. Britton Chance & Shoko Nioka Visiting Chair Professor, NCKU	Dr. Xiaohu Gao Bioengineering, UW
14:10~14:30	Helicobacter Pylori-Related Gastric Histology Classification Using Support-Vector-Machine-Based Feature Selection	Dr. Pau-Choo Chung Electrical Eng., NCKU	
14:30~15:00	Recent Advances of Radiology	M.D. Wen-Sheng Tzeng Chi Mei Med. Center	
15:00~15:20	<i>Coffee Break</i>		
Nano-Photonics Session			Dr. Sheng-Hao Tseng Elect-Opt Eng., NCKU
15:20~16:00	<i>Keynote Speech</i> Synthesis and Self-Assembly of Organic Functional Materials for Photonic and Biophotonic Applications	Dr. Alex K-Y. Jen Material Sci. & Eng., UW	

16:00~16:20	Optical Properties of Zinc Oxide Quantum Dots	Dr. Wen-Feng Hsieh Elect.-Opt. Eng., NCKU	
16:20~16:50	Silicon-Organic Hybrid Nanophotonics	Dr. Michael Hochberg Electrical Eng., UW	
16:50~17:10	Using Nano-Imprint Lithography to Enhance Output Power of Light-Emitting Diodes	Dr. Shoou-Jinn Chang Microelectronics, NCKU	
18:30~	Reception Banquet		Dr. Michael M.-C. Lai President, NCKU

Date: Tuesday, 2nd March, 2010

Venue: Library B1 Conference Center, NCKU

Time	Title	Speaker	Chair
Nano/Bio-Photonics Session			
9:10~9:50	Keynote Speech Nanostructure-Enhanced Laser Tweezers	Dr. Lih Y. Lin Electrical Eng., UW	Dr. Shean-Jen Chen Eng. Science, NCKU
9:50~10:10	Near-Infrared Au Nanorods in Imaging, Photodynamic Therapy, and Hyperthermia of Malignant Cells	Dr. Wen-Shuo Kuo Eng. Science, NCKU	
10:10~10:30	Gold Nanoparticles in Cancer Theranostics and Photonic Manipulation of Gene Expression	M.D. Dar-Bin Shieh Oral Med., NCKU	
10:30~10:50	Coffee Break		
10:50~11:10	Cardiac Regeneration—Are We Getting Closer?	M.D. Patrick C.-H. Hsieh Clinical Med., NCKU	Dr. Lih Y. Lin Electrical Eng., UW
11:10~11:40	TBA	M.D. Li-Ching Lin Chi Mei Med. Center	
11:40~12:00	Applying the Diffusing probe to Study Absorption and Scattering Properties of Human Skin <i>in-vivo</i>	Dr. Sheng-Hao Tseng Elect-Opt Eng., NCKU	
12:00~13:30	Lunch		
13:30~14:10	Keynote Speech Molecular Imaging with Coupled Molecular Contrast Agents	Dr. Matthew O'Donnell Dean of Eng., UW	Dr. Teh-Lu Liao Eng. Science, NCKU
14:10~14:30	Signaling from Membrane Receptors to Tumor Suppressor WWOX	Dr. Nan-Shan Chang Molecular Med., NCKU	
14:30~15:00	Photodynamic Therapy for Dermatology	M.D. Feng-Jie Lai Chi Mei Med. Center	
15:00~15:30	Coffee Break		
15:30~17:00	Panel Discussion Biomedical Collaborations Cross Pacific Dr. Tai Chein (President, STUT) Dr. Paul Liao (NCKU Outstanding Alumnus) Dr. Wen-Teng Wu (Dean of Eng., NCKU) Dr. Matthew O'Donnell (Dean of Eng., UW) Dr. Chyi-Her Lin (Dean of Med., NCKU) Dr. Jen-Fin Lin (Director, CMNST, NCKU)		Dr. Da Hsuan Feng SEVP, NCKU
18:30~	Round Table Discussion for Potential Collaborations		Dr. Da Hsuan Feng SEVP, NCKU

Registration: <http://sys.cmnst.ncku.edu.tw/uw-ncku>

Contact Person: Ms. DanQi Ava Lin 06-2757575#31382 danqia@mail.mina.ncku.edu.tw

Lab. Tour: Wednesday, 3rd March, 2010

Places: ITRI South → Chi Mei Corp. → Med. School, NCKU → Eng. School, NCKU → CMNST, NCKU

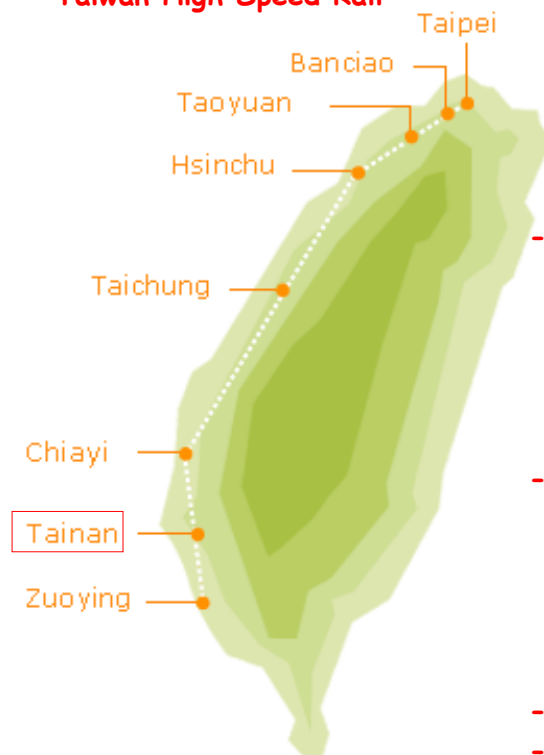
- 08:30 Departure from Shangri-La's Far Eastern Plaza Hotel
- 09:30~10:30 ITRI South
- 11:00~12:00 Chi Mei Corp.
- 12:00~13:00 *Lunch at Chi Mei Corp.*
- 13:30~14:00 Medical School at NCKU
- 14:00~14:30 Image Core Facility at Medical School
- 14:30~15:00 Prof. Patrick C.-H. Hsieh's Lab at Institute of Clinical Medicine
- 15:00~15:00 Engineering School at NCKU
- 15:30~16:00 Prof. Shean-Jen Chen's Adaptive Photonics Lab at Department of Engineering Science
- 16:00~16:30 Center for Micro/Nano Science and Technology at NCKU

Tainan City Tour: Thursday, 4th March, 2010

- 08:30 Departure from Shangri-La's Far Eastern Plaza Hotel
- 08:30~12:00 City Tour
- 12:00~13:30 *Lunch at A-Xia Restaurant (阿霞飯店 Traditional Taiwanese Food)*

Tainan, Taiwan 台南, 台灣

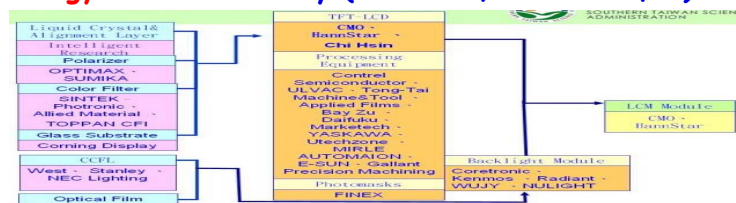
- Taiwan High Speed Rail



- Historic Place: Oldest City (Temple, Traditional Opera, ...)



- Technology: Photonic Valley (TFT LCD, Solar Cell, ...)



- Stay at 關子嶺: Famous hot spring (Hot Spring Villa)



- Leisure: Traditional Taiwanese foods, Shopping, ...

- Weather: Nice on March (Temp. ~25 °C; Humidity < 50%)

National Cheng Kung University (NCKU)

國立成功大學

- Established in 1931 (Tainan Technical College, 臺南高等工業學校)
- No.2 Comprehensive University
- 9 Campuses (172.6 hectares)
- 11 Colleges: Engineering, Medicine, ...
- Faculty: 1,547 full-time faculty members (Engineering with 35% & Medicine with 15%);
- Student: 20,000 students (Undergraduate with 50%)

