

## S0601. Oral Session I

🕒 Nov 27, Wednesday, 13:30-15:00

📍 Room 504a

🗣️ Presider: Prof. Kung-Bin Sung (National Taiwan University, Taiwan)  
Prof. T. Tony Yang (National Taiwan University (Taiwan))

13:30

2024-WED-S0601-I001

Invited

**Optical Coherence Microscopy and Nanoscopy using Spatial Coherence Engineering: Speckle-free Quantitative Phase Imaging of Biological Cells with High Spatial and Temporal Phase Sensitivity and High Space Bandwidth Product**

Prof. Dalip Singh Mehta, Indian Institute of Technology Delhi (India)

14:00

2024-WED-S0601-O001

**GUI and Ensemble Models Integration in Optical Coherence Tomography for Dental Applications**

Jun Ming Bai, National Yang Ming Chiao Tung University (Taiwan); Shyh Yuan Lee, Yi Ching Ho, Taipei Veterans General Hospital (Taiwan); Miao Hui Lin, Chia Wei Sun, National Yang Ming Chiao Tung University (Taiwan)

14:15

2024-WED-S0601-O002

**Computer-generated holography with physics-based deep learning for 3D multiphoton stimulation**

Bo-Chuan Chen, Shean-Jen Chen, Chun-Yu Lin Shang-Yang Lu, Liang-Wei Chen, National Yang Ming Chiao Tung University (Taiwan)

14:30

2024-WED-S0601-O003

**Multiplex Plasmonic Imaging Biosensor: From Laboratory to Medical Device**

Chi Lok Wong, Chang Gung University (Taiwan)

14:45

2024-WED-S0601-O004

**Using few-shot learning for global longitudinal strain analysis in Optical Coherence Tomography angiography**

Li-Hsiang Liu, Liang-Kung Chen, National Yang Ming Chiao Tung University (Taiwan); Pi-Shan Hsu, Wei-Wen Lin, Shih-Ann Chen, Taichung Veterans General Hospital (Taiwan); Kai-Shih Chiu, Chia-Wei Sun, National Yang Ming Chiao Tung University (Taiwan)

## S0602. Oral Session II

🕒 Nov 27, Wednesday, 15:15-16:45

📍 Room 504a

🗣️ Presider: Dr. Peilin Chen (Academia Sinica, Taiwan)  
Dr. Bi-Chang Chen (Academia Sinica, Taiwan)

15:15

2024-WED-S0602-I001

Invited

**Advancements in in vivo Two-Photon Microscopic Imaging in the Mouse Brain through Novel Optical Technologies**

Prof. Tomomi Nemoto, National Institute of Natural Sciences (Japan)

15:45

2024-WED-S0602-I002

Invited

**Expansion localization microscopy unravels the molecular-resolution constitution of mammalian centrioles**

Prof. T. Tony Yang, National Taiwan University (Taiwan)

16:15

2024-WED-S0602-O001

**Novel Near Infrared Fluorescence Emissions of Tricarbocyanines Dyes**

Nitzan Dar, Rinat Ankri, Ariel University (Israel)

16:30

2024-WED-S0602-O002

**Identification of Collagen Types I and II in Cartilage Utilizing Polarization-SHG**

Van-Tung Nguyen, National Yang Ming Chiao Tung University (Taiwan); Anupama Nair, University of Wisconsin-Madison (USA); Shu-Chun Chuang, Yi-Shan Lin, Chung-Hwan Chen, Kaohsiung Medical University (Taiwan); Chi-Hsiang Lien, National United University (Taiwan); Shean-Jen Chen, National Yang Ming Chiao Tung University (Taiwan)

## S0603. Oral Session III

🕒 Nov 28, Thursday, 10:45-12:00

📍 Room 504a

🗣️ **Presider:** Dr. Bi-Chang Chen (Academia Sinica, Taiwan)  
Prof. Ming-Che Chan (National Yang Ming Chiao Tung University, Taiwan)

10:45 2024-THU-S0603-O001

### Revealing intact neuronal circuitry in centimeter-sized formalin-fixed paraffin-embedded brain

Ya-Hui Lin, Li-Wen Wang, National Tsing Hua University (Taiwan); Yen-Hui Chen, Academia Sinica (Taiwan); Guan-Jie Huang, National Taiwan University (Taiwan); Shang-Da Yang, National Tsing Hua University (Taiwan); Shi-Wei Chu, National Taiwan University (Taiwan); Bi-Chang Chen, Academia Sinica (Taiwan); Li-An Chu, National Tsing Hua University (Taiwan)

11:00 2024-THU-S0603-O002

### Dual-sided metalens-based near-infrared light-sheet fluorescence microscope

Ping-Shun Hsieh, Bo-Wei Huang, Kuang-Yuh Huang, Yuan Luo, National Taiwan University (Taiwan);

11:15 2024-THU-S0603-O003

### Light-Sheet Light-Field Macrophotography for Imaging Neuronal Structure

Kai-Lun Ting, Shean-Jen Chen, Feng-Chun Hsu, Chun-Yu Lin, Ann-Shyn Chiang, Bo-Heng Liu, National Tsing Hua University (Taiwan)

11:30 2024-THU-S0603-O004

### Intelligent Functional Near-infrared Spectroscopy for Schizophrenia and Bipolar Disorder Classification

Chun-Yeh Wang, National Yang Ming Chiao Tung University (Taiwan); Po-Han Chou, Hsinchu Cathay General Hospital (Taiwan); Chang-Yi Li, Chia-Wei Sun, National Yang Ming Chiao Tung University (Taiwan)

11:45 2024-THU-S0603-O005

### Attention U-Net for Reconstruction of Optical Properties in Breast Tumor Detection

Muhammad Reshail Raza Iftikhar, Min-Chun Pan, National Central University (Taiwan); Ya-Fen Hsu, Landseed Hospital International (Taiwan)

## S0604. Oral Session IV

🕒 Nov 28, Thursday, 13:30-14:45

📍 Room 504a

🗣️ **Presider:** Dr. Chia-Lung Hsieh (Academia Sinica, Taiwan)  
Prof. Szu-Yu Chen (National Central University, Taiwan)

13:30 2024-THU-S0604-O001

### Miniaturized two-photon fiber endoscopy for mice deep-brain functional imaging

Chung-En Huang, Yu-Shin Huang, National Taiwan University (Taiwan); Yen-Hsu Lu, National Taiwan University Children's Hospital (Taiwan); Chi-Kuang Sun, National Taiwan University (Taiwan)

13:45 2024-THU-S0604-O002

### Label-Free Detection of Bovine Serum Albumin Using a Novel Cholesteric Liquid Crystal Biosensor with Haze Measurement

Tien-Hung Peng, Wei Lee, National Yang Ming Chiao Tung University (Taiwan)

14:00 2024-THU-S0604-O003

### Enhancing Intraoperative Tumor Diagnosis: A Novel Rapid Assessment Method for Brain Tumor

Yao-Chen Tseng, National Taiwan University (Taiwan); Kuo-Chuan Wang, Huan-Chih Wang, Koping Chang, Hsin-Yi Huang, National Taiwan University Hospital (Taiwan); Chi-Kuang Sun, National Taiwan University (Taiwan)

14:15 2024-THU-S0604-O004

### Radial-balanced Phase Transfer Function in Quantitative Differential Phase Contrast Microscopy

Cheng Yu, Ching-En Lin, Sunil Vyas, Hao-Pin Chiu, Yuan Luo, National Taiwan University (Taiwan)

14:30 2024-THU-S0604-O005

### Temporal Focusing-based Light-Field Microscopy with Physics-Based Deep Image Reconstruction

Syuan Ruei Chang, Feng-Chun Hsu, Chun-Yu Lin, Shean-Jen Chen, National Yang Ming Chiao Tung University (Taiwan)

## S0605. Oral Session V

🕒 Nov 28, Thursday, 15:00-16:00

📍 Room 504a

🗣️ **Presider:** Prof. Wen-Chuan Kuo (National Yang Ming Chiao Tung University, Taiwan)  
Prof. Li-An Chu (National Tsing Hua University, Taiwan)

15:00

2024-THU-S0605-O001

### Textural Analysis for Biomarker Identification: Differentiating CNV from Normal Retinal OCT Images

Deepan Jayakumar, Tulsi Anna, Nikitha Ravichandran, Dushyanth Sabanathan, Sandeep Chakraborty, Vellore Institute of Technology (India)

15:15

2024-THU-S0605-O002

### Realization of a single-board based portable optical coherence tomography with FPGA technology

Yun-Tien Tsai, Hsing-Hsiang Ruan, Ting-Hao Chen, Chang-An Shih, Ting-Hao Tsai, Chia-Hsiang Yang, Hsiang-Chieh Lee, National Taiwan University (Taiwan)

15:30

2024-THU-S0605-O003

### Real-time monitoring of laser thermal therapy with dynamic optical coherence tomography

Yin Shen Cheng, Tai-ang Wang, Hsiang-Chieh Lee, National Taiwan University (Taiwan); Meng-Tsan Tsai, Chang Gung University (Taiwan)

15:45

2024-THU-S0605-O004

### Individual Variations in Melatonin Under Increasing Evening Melanopic Illuminance

Sweta Jha, MD Azaharuddin Ansari, Yuan Ze University (Taiwan); Wei Keung Lee, Taoyuan General Hospital (Taiwan); Chih-Hung Hsieh, Jonathon David White, Yuan Ze University (Taiwan)

## S0606. Oral Session VI

🕒 Nov 29, Friday, 09:00-10:45

📍 Room 504a

🗣️ **Presider:** Prof. Yuan Luo (National Taiwan University, Taiwan)  
Prof. Wen-Chuan Kuo (National Yang Ming Chiao Tung University, Taiwan)

09:00

2024-FRI-S0606-I001

### Optical real-time monitoring of complex processes

Prof. George Barbastathis, Massachusetts Institute of Technology (USA)

09:30

2024-FRI-S0606-O001

### Deep Gerchberg-Saxton Computer-Generated Holography with Temporal Focusing and Propagation Matrix for 3D Multiphoton Stimulation

Yu-Cheng Liu, Shang-Yang Lu, Liang-Wei Chen, Feng-Chun Hsu, Chun-Yu Lin, Shean-Jen Chen, National Yang Ming Chiao Tung University (Taiwan)

09:45

元利儀器股份有限公司 / YuanLi Instrument Co., Ltd.

10:00

晉弘科技股份有限公司 / Medimaging Integrated Technology Inc.

10:15

榮晶生物科技股份有限公司 / Altek Biotechnology Corp.

10:30

台灣超微光學股份有限公司 / OtO Photonics Inc

## S6. Poster Session I

🕒 Nov 27, Wednesday, 13:30-16:00

📍 Room 500

2024-WED-P0601-P001

### Facile skin phantom fabrication for systematic analysis of optical penetration depth in deep tissue imaging

Elza Susan Kochummen, Sandeep Chakraborty, Gopika Krishna Omanakuttan Sini, Tulsi Anna, Vellore Institute of Technology (India)

2024-WED-P0601-P002

### High-Resolution Two-Photon Imaging of Dopamine Neurons in the SNc: A Study on AADC deficiency Pathology

Wen-Yin Sung, National Taiwan University (Taiwan); Yen-Hsu Lu, National Taiwan University Children's Hospital (Taiwan); Ni-Chung Lee, National Taiwan University Hospital (Taiwan); Chi-Kuang Sun, National Taiwan University (Taiwan)

2024-WED-P0601-P003

### High-speed OCT imaging of the retinal architectures using the HCG laser light source

Hao-Hsun Chung, Chien-Hua Peng, Kuang-Lei Huang, Jian-Zhi Wang, Jyh-Tsung Hsieh, Hsiang-Chieh Lee, National Taiwan University (Taiwan)

2024-WED-P0601-P004

### Feature extraction method comparison for enhanced bone mineral density assessment

Chao-Yu Pin, National Yang Ming Chiao Tung University (Taiwan); Wei-Chun Chang, Taipei Municipal Wan Fang Hospital (Taiwan); Hsin-Jou Wang, Chia-Wei Sun, National Yang Ming Chiao Tung University (Taiwan); Tsai-Hsueh Leu, Taipei City Hospital Renai Branch (Taiwan)

2024-WED-P0601-P005

### Development of an SPR Sensing Chip for Early Exosome Detection in Lung Cancer Diagnosis

Jou-Chen Lin, Nan-Fu Chiu, National Taiwan Normal University (Taiwan)

2024-WED-P0601-P006

### In-vivo intelligent fluorescence sectioning using meta-varifocal endo-microscopic system

Yu-Hsin Chia, Cheng Hung Chu, Sunil Vyas, Yi-You Huang, National Taiwan University (Taiwan); Din Ping Tsai, City University of Hong Kong (Taiwan); Yuan Luo, National Taiwan University (Taiwan)

2024-WED-P0601-P007

### Artifact Removal and Image Enhancement of Fiber bundle based Microendoscopy

Ming-Xuan Wang, Yu-Hsin Chia, Kuang-Yuh Huang, Yuan Luo, National Taiwan University (Taiwan)

2024-WED-P0601-P008

### Optimum regularization parameter selection for diffuse optical imaging through U-curve methods based on Edge-preserving regularization

Yu-Chain Lin, Min-Chun Pan, National Central University (Taiwan); Ya-Fen Hsu, Landseed Hospital International (Taiwan)

2024-WED-P0601-P009

### Metasurface-based light-sheet fluorescence microscope

Ping-Shun Hsieh, Hung Chuan Hsu, Sunil Vyas, Cheng Hung Chu, Kuang-Yuh Huang, Yuan Luo, National Taiwan University (Taiwan)

2024-WED-P0601-P010

### Development of a single-shot, multi-view OCT imaging system based on depth-encoded multiplexing apparatus

Pei-Chen Sung, Zi-Wen Kao, National Taiwan University (Taiwan); Fang-Ying Hua, National Taiwan University Hospital (Taiwan); Yin-Shen Cheng, Heng-Yu Li, Ting-Hao Chen, National Taiwan University (Taiwan); Yin-Lin Wang, National Taiwan University Hospital (Taiwan); Hsiang-Chieh Lee, National Taiwan University (Taiwan)

2024-WED-P0601-P011

### Metalens light-sheet fluorescence microscopy imaging system

Yuan Luo, National Taiwan University (Taiwan)

2024-WED-P0601-P012

### Analysis of Cancer Cell Images with Pleural Effusion and Their Photoelectrochemical Response on a Biosensor Chip

Chih-Hsin Tseng, Kuei-Ren Chen, National Chung Cheng University (Taiwan); Yao-Tung Wang, Chung Shan Medical University Hospital (Taiwan); Wei-Chung Chen, Yao-Kuang Wang, I-Chen Wu, Chung Kaohsiung Medical University (Taiwan); Hsiang-Chen Wang, National Chung Cheng University (Taiwan)

2024-WED-P0601-P013

### Development of a Wearable Diffuse Reflectance Spectroscopy System for Noninvasively Quantifying Hemoglobin Concentration

Hsueh-Cheng Lu, Guan-Hua Lai, National Cheng Kung University (Taiwan); Yen-Chin Liu, Kaohsiung Medical University Chung-Ho Memorial Hospital (Taiwan); Sheng-Hao Tseng, National Cheng Kung University (Taiwan)

## S6. Poster Session I

🕒 Nov 27, Wednesday, 13:30-16:00

📍 Room 500

2024-WED-P0601-P014

### A Highly Sensitive Wrist-worn Arterial Oxygen Saturation Monitoring System Based on Diffuse Reflectance Spectroscopy

Shao-Xuan Huang, Jia-Cheng Li, Ming-Lin Yang, Cheng-Yan Yang, Sheng-Hao Tseng, National Cheng Kung University (Taiwan)

2024-WED-P0601-P015

### Suppression of Two-Photon Fluorescence Signals By Ground-State Depletion

Chien-Yu Lu, Szu-Yu Chen, National Central University (Taiwan)

2024-WED-P0601-P016

### Investigation and Fabrication of Red Dragon Fruit All-Solution Process Resistive Memory Devices

Chih An Lin, Ming Yi Hu, Hsin Chieh Yu, National Yang Ming Chiao Tung University (Taiwan)

2024-WED-P0601-P017

### Convolutional Neural Network for Skin Cell Image Classification of Optical Coherence Tomography

Chun-Yeh Chen, Shiun Li, Jui-Yun Yi, National Kaohsiung Normal University (Taiwan)

2024-WED-P0601-P018

### Residual Convolutional Neural Networks for Fourier Ptychography

Hao-Pin Chiu, Cheng Yu, Yi-You Huang, Yuan Luo, National Taiwan University (Taiwan)

2024-WED-P0601-P019

### Study of color recognition characteristics when using blue light-cut glasses

Marino Inada, Hiroshi Murotani, Tokai University (Japan)

2024-WED-P0601-P020

### A non-invasive hemoglobin measurement device based on a finger-clip module

Chiung-Cheng Chen, Juan-Shao Chang, Sheng-Hao Tseng, National Cheng Kung University (Taiwan)

## S6. Poster Session II

🕒 Nov 28, Thursday, 13:30-16:00

📍 Room 521

2024-THU-P0602-P001

### Multispectral Imaging System that Combines Scattering Medium and Single-Pixel Imaging

Kuan-Chen Wu, Nai-Wen Zhang, Szu-Yu Chen, Po-Kuan Lee, National Central University (Taiwan)

2024-THU-P0602-P002

### Development of Metalens-Based Spectral Domain Optical Coherence Tomography Endoscope

Li-Hsun Hsieh, Cheng Hung, Kuang-Yuh Huang, Yuan Luo, National Central University (Taiwan)

2024-THU-P0602-P003

### Improvement of the Imaging System Matrix and Resolution Enhancement by Using the Deconvolution Algorithm in Single Photon Emission Microscope

Ming-Yun Hsu, Chao-Han Hsueh, Yi-Chun Chen, National Central University (Taiwan)

2024-THU-P0602-P004

### Fourier Crosstalk Analysis and Helical Reconstruction of Single Photon Emission Microscope

Yu-Shuo Wang, Chao-Han Hsueh, Yi-Chun Chen, National Central University (Taiwan)

2024-THU-P0602-P005

### Determination of Bruise Age Based on Non-contact Diffuse Reflection Spectroscopy with Principal Component Analysis

Yu-Hsuan Wu, Tzu-Yang Hsu, Szu-Yu Chen, National Central University (Taiwan)

2024-THU-P0602-P006

### Raman Spectral Enhancement on ITO Glass Substrates with and without Gyroid Photonic Crystal Layer

Jen-Hsiang Cheng, Yu-Ju Hung, National Sun Yat-sen University (Taiwan)

2024-THU-P0602-P007

### Reconstruction of Blood Vessel Images in the Retina with a Semantic Segmentation Model using Triangular Fully C-Net Architecture

Sheng-Hsiang Lan, Hsi-Chao Chen, National Yunlin University of Science and Technology (Taiwan); Ying-Sheng Lin, National Taiwan University Hospital Yunlin Branch (Taiwan); Yi-Feng Liu, Yong-Hao Chen, National Yunlin University of Science and Technology (Taiwan)

## S6. Poster Session II

🕒 Nov 28, Thursday, 13:30-16:00

📍 Room 521

2024-THU-P0602-P008

### Optimization of Diffuse Correlation Spectroscopy for Brain Studies Through Monte Carlo Simulations: Sensitivity Analysis and Experimental Design

Ting You Liu, Kung-Bin Sung, National Taiwan University (Taiwan)

2024-THU-P0602-P009

### Automatic Segmentation of Ultrasound Images of the Neck Using Deep Learning

Jia-Rong Luo, Kung-Bin Sung, National Taiwan University (Taiwan)

2024-THU-P0602-P010

### Development of a Dual-Stage Algorithm for Optical Coherence Tomography Skin Imaging and Quantitative Analysis

Chen-An Huang, Ting-Hao Cheng, Chau-Hsiang Cheng, Cheng-Hsi Yang, National Taiwan University (Taiwan); Chau-Yee Ng, Meng-Tsan Tsai, Chang Gung University (Taiwan); Cheng-Kuang Lee, NVIDIA (Taiwan); Hsiang-Chieh Lee, National Taiwan University (Taiwan)

2024-THU-P0602-P011

### Generation of Metameric Spectra Using Practical LEDs

Md Azharuddin Ansari, Jonathon David White, Yuan Ze University (Taiwan)

2024-THU-P0602-P012

### Catheter-based Swept-Source Optical Coherence Tomography (SS-OCT) for Tracheal Imaging

Yi-Ting Yeh, Guan-Ting Li, Yu-Hung Huang, Wen-Chuan Kuo, National Yang Ming Chiao Tung University (Taiwan)

2024-THU-P0602-P013

### Evaluating RBC Deformability Changes via Inverted Microscopy in Microfluidic Channels After ILIB Treatment

Cheng-En Wu, Lung-Hao Hu, National Sun Yet-Sen University (Taiwan); Shin-Tsu Chang, Hsin-Hung Chen, Kaohsiung Veterans General Hospital (Taiwan)

2024-THU-P0602-P014

### En-face multi-parameter Polarization-sensitive optical coherence tomography for tumor margin detection

Ting Chang, Chung-Yu Chang, Yen-Wen Lin, Hiu-Ki Lai, Cheng-Chieh Yang, Wen-Chuan Kuo, National Yang Ming Chiao Tung (Taiwan)

2024-THU-P0602-P015

### The Feasibility of Lighting Design in Mitigating Nearwork-Induced Transient Myopia

Jie Wei, Chien-Yu Chen, National Taiwan University of Science and Technology (Taiwan)

2024-THU-P0602-P016

### CMTKG: A Novel Natural Magnifier for Biological Tissues & A Naked ExM

Min-Ju Tsai, Xuejiao Tian, Tzu-Yang Lin Lin, Peilin Chen, Bi-Chang Chen, Academia Sinica (Taiwan)

2024-THU-P0602-P017

### Refining Neuron Cell Segmentation via Genetic Algorithm Optimization

Wei-Ju Chen, National Tsing Hua University (Taiwan); Tsung-Ming Tai, Cheng-Kuang Lee, NVIDIA (Taiwan); Chi-Kuang Sun, National Taiwan University (Taiwan); Hung-Wen Chen, National Tsing Hua University (Taiwan)

2024-THU-P0602-P018

### Spin-enhanced lateral flow immunoassay for ultrasensitive in vitro diagnosis

Trong-Nghia Le, Yuen Yung Hui, Huan-Cheng Chang, Academia Sinica (Taiwan)

2024-THU-P0602-P019

### Novel Nucleus Fluorescence Probes Development Used for Nanometer in Centimeter Expansion (NICE) Microscopy

Chiao-Hui Tu, Academia Sinica (Taiwan); Chia-Hsuan Liang, National Taiwan University (Taiwan); Xue-Jiao Tian, Han Cheng, Jung-Hsin Lin, Bi-Chang Chen, Academia Sinica (Taiwan); Ken-Tsung Wong, National Taiwan University (Taiwan)

2024-THU-P0602-P020

### The Cross Beam Lightsheet Microscopy

Chia-Ming Lee, Xuejiao Tian, Min-Ju Tsai, Bi-Chang Chen, Academia Sinica (Taiwan)

2024-THU-P0602-P021

### A Novel Intraoperative Immunohistochemistry-Based Method to Rapidly Differentiate Primary and Metastatic Lung Carcinoma

Yao-Chen Tseng, National Taiwan University (Taiwan); Min-Shu Hsieh, Jin-Shing Chen, National Taiwan University Hospital (Taiwan); Chi-Kuang Sun, National Taiwan University (Taiwan)

## S6. Poster Session II

🕒 Nov 28, Thursday, 13:30-16:00

📍 Room 521

2024-THU-P0602-P022

### An ultra-high resolution 3D imaging platform for cleared intact mouse brain

Yip-Chun But, Yao-Chen Tseng, Bhaskar Jyoti Borah, National Taiwan University (Taiwan); Bi-Chang Chen, National Academy of Taiwan (Taiwan); Shih-Kuo Chen, Chi-Kuang Sun, National Taiwan University (Taiwan)

2024-THU-P0602-P023

### Determining Population Neuronal Activity from Human Brain Organoids and Surgically Dissected Brain Tissues Using Multiphoton Imaging Systems

Chih-Yu Lee, Hsin-Yu Cheng, Ming-Yi Chou, Guan-Ying Chen, Shu-An Huang, Yao-Chen Tseng, National Taiwan University (Taiwan); Kuo-Chuan Wang, National Taiwan University Hospital (Taiwan); Chi-Kuang Sun, Hsien-Sung Huang, National Taiwan University (Taiwan)

2024-THU-P0602-P024

### Enhanced In Vivo Skin Diagnostics: A Comparative Study of Reflective Confocal Microscopy and Harmonic Generation Microscopy

Yu-Yang Chang, Shih-Hsuan Chia, Jyun-Ping Kao, Connie Liu, Xin Lin, National Yang Ming Chiao Tung University (Taiwan)

2024-THU-P0602-P025

### Applying Transformer Models and Custom Attention Mechanisms to Enhance Super-Resolution

Bo-Ya Pan, Po-Jui Chiang, National Kaohsiung University of Science and Technology (Taiwan)

2024-THU-P0602-P026

### Multi-View Image Registration of Cell Mitosis Images by Lightsheet Expansion Microscopy

Hsin Chen, Xuejiao Tian, Min-Ju Tsai, Yi-Ching Tung, Bi-Chang Chen, Academia Sinica (Taiwan)

2024-THU-P0602-P027

### Simultaneous Detection of Two Cardiac Biomarkers via Guided-Mode Resonance-Enhanced Upconversion Luminescence Immunoassay

Van-Dai Pham, Yen-Ta Tseng, Lai-Kwan Chau, Michael WY Chan, National Chung Cheng University (Taiwan); Yu-Han Jiang, Wen-Cheng Chao, Taichung Veterans General Hospital (Taiwan); Hung-Chih Kan, Jiunn-Yuan Lin, Chia-Chen Hsu, National Chung Cheng University (Taiwan)

2024-THU-P0602-P028

### Toward Simultaneous Two-Photon Scanning and Holographic Two-Photon Optogenetics Using a Single Laser Source

Chia-Lin Chung, Shih-Hsuan Chia, National Yang Ming Chiao Tung University (Taiwan)

2024-THU-P0602-P029

### In-vivo acquisition and processing of near-infrared spectra for quantifying internal jugular venous blood oxygen saturation

Kuang Yang, Kung Bin Sung, National Taiwan University (Taiwan)

2024-THU-P0602-P030

### A Novel Two-Photon 3D Pathology Imaging System Combined with Tissue Clearing for Advanced Deep Tissue Visualization and 3D Reconstruction

Qian-Yu Lin, National Taiwan University (Taiwan); Ming-Yang Wang, Yi-Husan Lee, National Taiwan University Hospital (Taiwan); Chi-Kuang Sun, National Taiwan University (Taiwan)

## S6. Poster Session III

🕒 Nov 29, Friday, 09:00-11:00

📍 Room 521

2024-FRI-P603-P001

### Enhancing Deep Tissue Imaging and Scattering Analysis by Varying Excitation Laser Pulse Width in Multiphoton Fluorescence Microscopy

Hong-Yu Chou, Je-Chi Jang, Shao-Hsuan Wu, Lu-Ting Chou, National Yang Ming Chiao Tung University (Taiwan); Ting-Chen Chang, Chung-Ming Chen, Shi-Wei Chu, Heng Chang, Li-An Chu, National Tsing Hua University (Taiwan); Shih-Hsuan Chia, National Yang Ming Chiao Tung University (Taiwan)

2024-FRI-P603-P002

### Suppression of evening dim light melatonin onset using circadian effective light

Sweta Jha, MD Azaharuddin Ansari, Yuan Ze University (Taiwan); Wei Keung Lee, Taoyuan General Hospital (Taiwan); Jonathon David White, Yuan Ze University (Taiwan)