## 2022 年 12 月 16 日 財團法人張榮發基金會 1008

## Biology

Time	Speaker	Торіс	Affiliation
13:50~14:20	Li-An Chu	MOCAT: Combination of long-term tissue preservation and fast-speed organ-level imaging in cellular resolution	Institute of Biotechnology, National Tsing Hua University
14:20~14:35 (250037)	Dhrubajyoti Das <sup>1</sup> Cheng-Wen Lin <sup>2</sup> Han-Sheng Chuang <sup>1,3</sup>	Rotational Brownian Motion Combined with LAMP for Detection of SARS-CoV-2 On Chip	<sup>1</sup> Department of Biomedical Engineering, National Cheng Kung University <sup>2</sup> Department of Medical Laboratory Science and Biotechnology, China Medical University <sup>3</sup> Medical Device Innovation Centre, National Cheng Kung University
14:35~14:50 (250252)	Yu-Ting Lin <sup>1</sup> Kin Fong Lei <sup>1,2</sup>	Microfluidic device for combined anti-cancer drug therapy	<sup>1</sup> Department of Biomedical Engineering, Chang Gung University <sup>2</sup> Department of Radiation Oncology, Chang Gung Memorial Hospital
14:50~15:05 (250284)	Chun-Yu Lin Yu-Yu Hsueh Pen-hsiu Grace Chao	Wavy structures control vascular smooth muscle cell phenotype	Department of Biomedical Engineering, National Taiwan University
15:05~15:20 (250378)	Long Yi Chan <sup>1</sup> Chin-Yu Lin <sup>1,2,3</sup>	Cre/LoxP Genetic Recombination Sustains Cartilage Anabolic Factor Expression in Hyaluronan Encapsulated MSCs Alleviates Intervertebral Disc Degeneration	<sup>1</sup> Institute of New Drug Development, College of Medicine, China Medical University <sup>2</sup> Tsuzuki Institute for Traditional Medicine, Collage of Pharmacy, China Medical University <sup>3</sup> Master Program for Biomedical Engineering, Collage of Biomedical Engineering, China Medical University
15:20~15:40	Coffee Break		
15:40~16:10	Chen-Hui Chen	In toto imaging of skin and muscle cell dynamics in live zebrafish	Institute of Cellular and Organismic Biology, Academia Sinica
16:10~16:25 (250418)	Cheng-Hsin Wu Hsuan Hu Chin-Yu Lin	Self-assembly mRNA polymeric nanomedicine applied on calvarial bone regeneration through endochondral ossification	Institute of Translational Medicine and New Drug Development, China Medical University
16:25~16:40 (250451)	Kai Wu	Dynamic metrology of biomedical cell	ULVAC Technologies, Inc.

16:40~16:55 (250463)	Yueh-Feng Wu <sup>1</sup> Nai-Wen Chang <sup>2</sup> Li-An Chu <sup>3,4</sup> Hsin-Yu Liu <sup>5</sup> Hsin-Yuan Tan <sup>6,7</sup> Sung Jan Lin <sup>1,2,8,9</sup>	Single-cell Transcriptomics Reveals Cellular Heterogeneity and Complex Cell-cell Communication Networks in Mouse Cornea	<sup>1</sup> Department of Biomedical Engineering, College of Medicine and College of Engineering, National Taiwan University <sup>2</sup> Department of Medical Research, National Taiwan University Hospital and College of Medicine <sup>3</sup> Department of Biomedical Engineering and Environmental Sciences, National Tsing Hua University <sup>4</sup> Brain Research Center, National Tsing Hua University <sup>5</sup> Department of Ophthalmology, National Taiwan University Hospital and College of Medicine <sup>6</sup> Department of Ophthalmology, Chang Gung Memorial Hospital, Linkou <sup>7</sup> College of Medicine, Chang Gung University <sup>8</sup> Department of Dermatology, National Taiwan University Hospital and College of Medicine <sup>9</sup> Research Center for Developmental Biology and Regenerative Medicine, National Taiwan University
16:55~17:10 (250482)	Hsin-Hsiung Huang <sup>1</sup> Si-Ru Chen <sup>1</sup> An-Shun Liu <sup>2</sup> Peng-Ting Chen <sup>1</sup>	Difficulties in Biomedical Device Innovation from the perspective of innovation barriers	<sup>1</sup> Department of Biomedical Engineering, National Cheng Kung University <sup>2</sup> Taiwan Instrument Research Institute, National Applied Research Laboratories