



**Congratulations to all winners!!!**

**ABRC 23<sup>rd</sup> Annual Poster Competition 2022  
Outstanding Presentation Award Winners**

(based on the evaluation of ABRC lab members)

**Integrative Plant Stress Biology (iPSB)**

**Po-Xing Zheng (鄭伯忻)**

**Protoplast Regeneration and CRISPR-Cas Genome Editing in *Brassica oleracea* Without Widespread Genome Alterations**

*Yao-Cheng Lin*<sup>1,\*</sup>, *Steven Lin*<sup>2,#</sup>, *Chen-Tran Hsu*<sup>3,#</sup>, *Po-Xing Zheng*<sup>1,#</sup>, *Qiao-Wei Cheng*<sup>3,#</sup>, *Yu-Hsuan Yuan*<sup>3,#</sup>, *Fu-Hui Wu*<sup>3</sup>, *Yu-Lin Wu*<sup>1</sup>, *Jen Sheen*<sup>4</sup>, *Ming-Che Shih*<sup>3</sup> and *Choun-Sea Lin*<sup>3,\*</sup>

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<sup>4</sup>Department of Molecular Biology and Centre for Computational and Integrative Biology, Massachusetts General Hospital, and Department of Genetics, Harvard Medical School, Boston, MA 02114, USA

# These authors contributed equally to this work

**Yu-Chun Hsiao (蕭仔君)**

**Root growth factor 1 (RGF1) controls the PLETHORA 2 (PLT2) protein stability by redox-based modification in root meristem**

*Yu-Chun Hsiao*<sup>1,2,#</sup>, *Yi-Han Weng*<sup>1,2,#</sup>, *Shiau-Yu Shiue*<sup>1,2,#</sup>, *Masashi Yamada*<sup>1,2,\*</sup>

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**Hung-Chi Liu (劉宏基)**

**Cytosolic phosphoglucose isomerase is essential for microsporogenesis and embryogenesis in *Arabidopsis***

*Hung-Chi Liu*<sup>1</sup>, *Hsiu-Chen Chen*<sup>1</sup>, *Tzu-Hsiang Huang*<sup>1</sup>, *Wei-Ling Lue*<sup>2</sup>, *Jychian Chen*<sup>2</sup>, *Der-Fen Suen*<sup>1,\*</sup>

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<sup>2</sup>Institute of Molecular Biology, Academia Sinica, Taipei, Taiwan, 115

## Solomon Antonio Jr.

### **The Role of NADPH Oxidase-Mediated ROS in Mitochondrial Status in Arabidopsis Tapetum**

*Solomon Antonio Jr.<sup>1,2,3</sup>, Tzu-Hsiang Huang<sup>1,2,3</sup>, Chia-Chen Wu<sup>1</sup>, Pei-Ying Chen<sup>1</sup>, Der-Fen Suen<sup>1,3,4\*</sup>*

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## Yi-Shu Chiu (邱乙書)

### **Fungal F8-Culture Filtrate Induces Tomato Resistance against Tomato Yellow Leaf Curl Thailand Virus**

*Yi-Shu Chiu<sup>1,#</sup> and Hsin-Hung Yeh<sup>1,2,3,\*</sup>*

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<sup>3</sup>Institute of Biotechnology, National Taiwan University, Taipei 10617, Taiwan

## **Herbal Medicine Research (HMR) or Molecular Vaccine Technology (mVT) or Enzyme Biotechnology**

## Meng-Ting Chang (張孟亭)

### **Phyto-sesquiterpene lactones DET and DETD-35 are novel GPX4 inhibitors to overcome vemurafenib resistance in cutaneous melanoma**

*Meng-Ting Chang<sup>1,2</sup>, Li-Chu Tsai<sup>3</sup>, Kyoko Nakagawa-Goto<sup>4</sup>, Kuo-Hsiung Lee<sup>5</sup>, Lie-Fen Shyur<sup>1,2,\*</sup>*

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<sup>5</sup>Natural Products Research Laboratories, Eshelman School of Pharmacy, University of North Carolina, Chapel Hill, North Carolina 27599, USA

## Jeng-Yuan Shiau (蕭証元)

### **Deoxyelephantopin and its derivative DETD-35 affect mitochondrial proteome and bioenergetics in triple negative breast cancer cells**

*Jeng-Yuan Shiau<sup>1,#</sup>, Han-Jung Huang<sup>1,2,#</sup>, Lie-Fen Shyur<sup>1,2,\*</sup>*

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## Yu-Chih Yang (楊聿智)

### Three Shots of SARS-CoV-2 Virus-like Particle (VLP) enhance BA.1 and BA.5 Neutralization Antibodies

*Yu-Chih Yang<sup>1#</sup>, Yi-Te Lin<sup>1#</sup>, Yi-Chun Yeh<sup>1#</sup>, Pei-Wen Hsiao<sup>1\*</sup>*

<sup>1</sup>Agricultural Biotechnology Research Center, Academia Sinica, Taipei, Taiwan, 115

## Chia-Chen Lu (呂佳蓁)

### Myelination relevant plasma microRNA biomarkers identified via an innovative data analytic scheme for differential diagnosis of MSA, an Oligodendroglial Synucleinopathy

*Chia-Chen Lu<sup>1</sup>, Hsiang-Hsuan Lin-Wang<sup>1</sup>, Ming-Che Kuo<sup>1-3</sup>, Yi-Tzang Tsai<sup>1</sup>, Jing-Wen Huang<sup>4</sup>, Yan-Ru Ju<sup>1</sup>, Pin-Jui Kung<sup>1,4</sup>, Frederick Kin Hing Phoa<sup>4</sup>, Yan-Han Lin<sup>1</sup>, Gabrielle Chungunco<sup>1,4</sup>, Chia-Ching Wu<sup>5</sup>, Takahiro Ochiya<sup>6</sup>, Ruey-Meei Wu<sup>1,2\*</sup>, Shau-Ping Lin<sup>1,4\*</sup>*

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<sup>5</sup>National Cheng Kung University, Taiwan

<sup>6</sup>Tokyo Medicine University, Japan

## Dorothy Kazuno So

### Engineered 4<sup>th</sup> generation CAR-NK and its effect and modulation within tumour immune microenvironment seen in multiplex imaging and single cell technologies

*Dorothy Kazuno So<sup>1,2</sup>, Shu-Han Yu<sup>1</sup>, Shih-Yu Chen<sup>2</sup>*

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