



長庚大學  
CHANG GUNG UNIVERSITY

生物醫學研究所

Graduate Institute of Biomedical Sciences

博士學位論文口試

Doctoral Oral Defence Seminar

Speaker : 黃絜莘 博士候選人

Jie-Xin Huang Ph.D. Candidate

Host : 余兆松 (Yu, Jau-Song) 教授

Advisor : 游佳融 (Chia-Jung Yu) 教授

Title : Study the regulation and function of oxidative  
stress-induced KPNA2 nucleocytoplasmic shuttling  
探討氧化壓力誘導 KPNA2核質穿梭的調節與功能

Time : 2024/10/11 13:00

Place : 第一醫學大樓九樓 9B 會議室

※※※ 歡迎參加 Welcome ※※※

生物醫學研究所

Graduate Institute of  
BioMedical Sciences

# ***CURRICULUM VITAE***

**Name :** 黃潔莘 (Jie-Xin Huang )

## **Education :**

長庚大學 生物醫學研究所生化分生組 碩士

高雄醫學大學 生物醫學暨環境生物學系 學士

## **Publication :**

1. Jie-Xin Huang, Chun-I Wang, Chia-Yu Kuo, Ting-Wei Chang, Yu-Chin Liu, Ting-Feng Hsiao, Chih-Liang Wang, Chia-Jung Yu (2024, Jul). Oxidative stress mediates nucleocytoplasmic shuttling of KPNA2 via AKT1-CDK1 axisregulated S62 phosphorylation. *FASEB BioAdvances*, 6(8):276-288.
2. Jie-Xin Huang, Yi-Cheng Wu, Ya-Yun Cheng, Chih-Liang Wang, Chia-Jung Yu (2019, Dec). IRF1 Negatively Regulates Oncogenic KPNA2 Expression Under Growth Stimulation and Hypoxia in Lung Cancer Cells. *OncoTargets and Therapy*, 12:11475-11486..

## **Posters:**

1. Jie-Xin Huang, Chun-I Wang, Chia-Yu Kuo, Ting-Wei Chang, Ting-Feng Hsiao, Chia-Jung Yu (2024, Mar). Oxidative stress regulates phosphorylation and nucleocytoplasmic distribution of import  $\alpha 1$  protein complex through AKT1 and CDK1 signaling. 2024 生物醫學聯合學術年會 The 38th Joint Annual Conference of Biomedical Science, Mar 23-24, 2024, Taipei, Taiwan.

2. Jie-Xin Huang, Chun-I Wang, Ting-Wei Chang, Ting-Feng Hsiao, Chia-Jung Yu (2023, Dec). The phosphorylation and differential protein complex of KPNA2 is regulated by AKT and CDK1 signaling under H2O2-induced oxidative stress. Cell Bio 2023-An ASCB|EMBO Meeting, Dec 2-6, 2023, Boston, MA, USA.
3. Jie-Xin Huang, Chun-I Wang, Ting-Wei Chang, Ting-Feng Hsiao, Chia-Jung Yu (2023, Nov). Kinase Screen and Quantitative Proteomics Reveal Oxidative Stress-Induced KPNA2 Phosphorylation and Functional Interactome Through AKT1 and CDK1 Signaling. 2023 多體學與精準醫學聯合會議 Multiomics and Precision Medicine Joint Conference, Nov 11-12, 2023, Taipei, Taiwan.
4. Jie-Xin Huang, Chia-Jung Yu (2022, Nov). Identification of the molecular mechanisms responsible for KPNA2 nuclear import in cancer cells under oxidative stress. 14th International Congress of Cell Biology & 9th Asian Pacific Organization for Cell Biology Joint Meeting, Nov 7-11, 2022, Taipei, Taiwan.
5. Yen-Ying Chu, Jie-Xin Huang, Chia-Jung Yu (2022, Nov). Study The Impact of Oxidative Stress-Induced Nuclear KPNA2 Complexes Formation via Proteomic Approach. Multiomics and Precision Medicine Joint Conference 2022, Nov 19- 20, 2022 , Taipei, Taiwan.
6. Jie-Xin Huang, Chia-Jung Yu (2022, Jan). Identification of the molecular mechanisms responsible for KPNA2 nuclear import in cancer cells under oxidative stress. 細胞及分子生物學會暨癌症醫學會聯合會議 (第28屆細胞及 分子生物新知研討會) 2022, Jan 14-16, 2022, Kaohsiung, Taiwan.

7. Jie-Xin Huang, Yi-Cheng Wu, Ya-Yun Cheng, Chih-Liang Wang, Chia-Jung Yu (2019, Nov). IRF1, a transcription factor reduced by epidermal growth factor and hypoxia treatment, is a novel suppressor of KPNA2 transcription in lung cancer. 台灣生物化學及分子生物學學會秋令營, Nov 15-17, 2022, New Taipei City, Taiwan

**Oral presentation :**

1. Jie-Xin Huang and Chia-Jung Yu. Oxidative stress-induced reduction of KPNA2 phosphorylation promotes its nuclear import and complex formation through AKT and CDK1 signaling. The annual Research Poster Competition of PhD Theses, Chang Gung University, Taiwan (2023).

**Awards :**

1. 2023 MOPM 多體學及精準醫學聯合會議 海報競賽特優
2. 2023 年長庚大學生醫所博士論文競賽 口頭論文競賽優選
3. 2022 MOPM 多體學及精準醫學聯合會議 海報競賽佳作