

Department of Life Sciences, National Central University Master and PhD Program in Molecular and Environmental Biology



The Molecular and Environmental Biology program of Department of Life Sciences, NCU works in close partnership with the Institute of Plant and Microbial Biology (IPMB), Academia Sinica. The present research focuses of Molecular and Environmental Biology are plant sciences, stress biology, microbial biochemistry, microbial genomics, and biotechnology. The program is going to train students to employ multi-disciplinary approaches to address important questions in environmental biology and to develop emerging technologies that can contribute to future biotechnology research and development.

Faculty Research Interests

Department of Life Sciences

Dr. Shaw-Jye Wu

Plant physiology, DNA computing, plant stress, and biotechnology

Dr. Ching-Hui Yeh

Plant stress physiology, proteomics, plant tissue culture, and signal transduction

Dr. Chung-An Lu

Plant molecular biology, plant gene regulation and, post-transcriptional gene regulation

IPMB

Dr. Chung-Ju Wang

Plant meiosis and anther development

Dr. Chao-Wen Wang

Organelle architecture, dynamics, and biogenesis

Dr. Erh-Min Lai

Molecular mechanisms of plant-pathogen interactions

Dr. Na-Sheng Lin

Molecular interactions of plant viruses, satellite RNA and plants

Dr. Hong-yong Fu

Function and mechanism studies for critical components of the ubiquitin/26S proteasome system

Dr. Hsiu-An Chu

Structure and molecular mechanisms of the photosystem II reaction center

Dr. Shu-Hsing Wu

Light-mediated gene expression and signal transduction in Arabidopsis

Dr. Tuan-hua Ho

Hormone and stress signaling; function of stress proteins; lignocellulose degrading enzymes

Dr. Guang-Yuh Jauh

Genes/proteins and potential autophagic machinery involved in plant cell

Dr. Tien-Shin Yu

Function and molecular mechanism of RNA long-distance trafficking

Dr. Ming-Hsiun Hsieh

Regulation of chloroplast and mitochondrial gene expression

Dr. Wan-Sheng Lo

Epigenetics and regulatory mechanism of chromatin dynamics

Dr. Chih-Horng Kuo

Microbial genome evolution and diversity

Dr. Wolfgang Schmidt

Systems biology; molecular plant nutrition

Dr. Shih-Long Tu

Light perception in plants

Dr. Wan-Hsing Cheng

Abscisic acid, abiotic stress, and their interaction

- Qualified applicants should hold a bachelor or equivalent degree.
- For detailed requirements and information, please visit the NCU international student website (<http://www.ncu.edu.tw/~ls/english/enroll.php>).

