

Yueh CHO, Ph.D.

Tel:+886-2-2787-1066

Email:choyueh@as.edu.tw

Address: 128 Sec. 2, Academia Rd, Nankang, Taipei 115201 Taiwan, R.O.C.

I. Education

2013 - 2018 | **Ph.D.**, Molecular and Biological Agricultural Sciences (MBAS), Taiwan

International Graduate Program (TIGP), Academia Sinica (AS) & National Chung Hsing University (NCHU), Taiwan

Thesis: A study on endoplasmic reticulum homeostasis in plants

Advisor: Dr. Kazue Kanehara

2007 - 2009 | **M.Sc.**, Department of Entomology, NCHU, Taiwan

Thesis: Complementary DNA cloning and functional analysis of an insulin-like receptor in the oriental fruit fly *Bactrocera dorsalis* (Hendel)

Advisor: Dr. Kuan-Hui Lu

2003 - 2007 | **B.Sc.**, Department of Entomology, NCHU, Taiwan

II. Appointments

2025 -present | **Adjunct Assistant Professor**

Center for General Education, Chung Yuan Christian University (CYCU), Taiwan

2020 - present | **NSTC (MOST) Postdoctoral Fellow**

Institute of Plant and Microbial Biology (IPMB), AS, Taiwan

2018 - 2020 | **AS Regular Postdoctoral Fellow**, IPMB, AS, Taiwan

2012 - 2013 | **Research Assistant**

Institute of Cellular and Organismic Biology (ICOB), AS, Taiwan

2009 - 2012 | **R&D Substitute Services**

Institute of Molecular and Genomic Medicine, National Health Research Institutes (NHRI), Taiwan

III. Referees

Shu-Hsing Wu | Postdoc advisor | Distinguished Research Fellow, IPMB, AS, Taiwan, shuwu@as.edu.tw

Yuki Nakamura | Ph.D. mentor | Team Director, Plant Lipid Research Team, Center for Sustainable Resource Science, RIKEN, Japan, yuki.nakamura.yf@riken.jp

Kazue Kanehara | Ph.D. supervisor | Former Associate Research Fellow, Institute of Plant and Microbial Biology, Academia Sinica, Taiwan, kanehara@as.edu.tw

IV. Publications

*Correspondence, #Equal contribution, Citations = 304, h-index = 10, i10-index = 10

2. Published articles

- (1) **Y. Cho**, G.-H. Chen, S.-H. Wu*. Fully tunable phosphorylation of RPS6A ensures the successful development of Arabidopsis seedlings. *Plant, Cell & Environment*. 2026-01-27. doi:10.1111/pce.70426 (Plant Science, 21/559 = 3.76%, IF = 6.3).
- (2) **Y. Cho***. (2025) Arabidopsis heterotrimeric G beta variants shape plant development and modulate responses to endoplasmic reticulum stress and salt stress. *Plant, Cell & Environment*. doi:10.1111/pce.70220. (Plant Science, 21/559 = 3.76%, IF = 6.3).
- (3) **Y. Cho***. (2024) Arabidopsis AGB1 participates in salinity response through bZIP17-mediated unfolded protein response. *BMC Plant Biology* 24(1): 586. (Plant Science, 56/559 = 10.02%, IF = 4.8).
- (4) K. Kanehara*, C.-Y. Yu#, **Y. Cho**#. (2022) A lipid viewpoint on the plant endoplasmic reticulum stress response. *Journal of Experimental Botany* 73(9): 2835-2847. (Plant Science, 23/559 = 4.11%, IF = 5.7)
- (5) C.-Y. Yu, **Y. Cho**, O. Sharma, K. Kanehara*. (2022) What's unique? The unfolded protein response in plants. *Journal of Experimental Botany* 73(5): 1268-1276. (Plant Science, 23/559 = 4.11%, IF = 5.7)
- (6) C.-Y. Tsen, Y.-H. Su, S.-M. Yang, K.-Y. Lin, C.-M. Lai, E. Rastegari, O. Amartuvshin, **Y. Cho**, Y. Cai, H.-J. Hsu*. (2018) Smad-independent BMP signaling in somatic cells limits the size of the germline stem cell pool. *Stem Cell Reports* 11(3): 811-27. (Cell Biology, 43/301 = 14.28%, IF = 5.1).
- (7) **Y. Cho**#, C.-M. Lai#, K.-Y. Lin, H.-J. Hsu*. (2018) A targeted RNAi screen reveals Drosophila female-sterile genes that control the size of germline stem cell niche. *G3: Genes, Genomes, Genetics* 8(7): 2345-54. (Molecular Biology, 214/424 = 50.47%, IF = 2.2)
- (8) K.-J. Lu*, F. R. Danila, **Y. Cho**, C. Faulkner. (2018) Peeking at a plant through the holes in the wall - exploring the roles of plasmodesmata. *New Phytologist* 218(4): 1310-1314. (Plant Science, 13/559 = 2.33%, IF = 8.1)
- (9) **Y. Cho**, C.-Y. Yu, Y. Nakamura, K. Kanehara*. (2017) Arabidopsis dolichol kinase AtDOK1 is involved in flowering time control. *Journal of Experimental Botany* 68(12): 3243-3252. (Plant Science, 23/559 = 4.11%, IF = 5.7).
- (10) **Y. Cho**, K. Kanehara*. (2017) Endoplasmic reticulum stress response in Arabidopsis roots. *Frontiers in Plant Science* 8:144. (Plant Science, 52/559 = 9.30%, IF = 4.8).
- (11) **Y. Cho**, C.-Y. Yu, T. Iwasa, K. Kanehara*. (2015) Heterotrimeric G protein subunits differentially respond to endoplasmic reticulum stress in Arabidopsis. *Plant Signaling & Behavior* 10(10): e1061162. (Plant Science, 87/559 = 15.56%, IF = 3.6).
- (12) K. Kanehara*, C.-Y. Yu, **Y. Cho**, W.-F. Cheong, F. Torta, G. Shui, M. R. Wenk, Y. Nakamura. (2015) Arabidopsis AtPLC2 is a primary phosphoinositide-specific phospholipase C in phosphoinositide metabolism and the endoplasmic reticulum stress response. *PLoS Genetics* 11(9): e1005511. (Genetics, 40/357 = 11.20%, IF = 3.7).
- (13) C.-Y. Tseng, S.-H. Kao, C.-L. Wan, **Y. Cho**, S.-Y. Tung, H.-J. Hsu*. (2014) Notch signaling mediates the age-associated decrease in adhesion of germline stem cells to the niche. *PLoS Genetics* 10(12): e1004888. (Genetics, 40/357 = 11.20%, IF = 3.7).
- (14) K. Kanehara*, **Y. Cho**, Y.-C. Lin, C.-E. Chen, C.-Y. Yu, Y. Nakamura. (2014) Arabidopsis DOK1 encodes a functional dolichol kinase involved in reproduction. *Plant Journal* 81(2): 292-

303. (Plant Science, 19/559 = 3.40%, IF = 5.7).

3. Public science articles

For American Society for Plant Biologists (ASPB)

- (15) Y. Cho. Maintaining and keeping your CV updated. 2024-10-30. *Plantae Content*.
- (16) Y. Cho, J Vilasboa, A White. Fostering engagement: strategies to involve pre-university students in plant science research. 2024-07-01. *Plantae Content*.
- (17) V. Bernád, Y. Cho, A. K. Hempton. Interdisciplinary plant sciences: Integrating plant science research in other scientific fields. 2024-05-20. *Plantae Content*.

In Mandarin

- (18) Y. Cho, C.-H. Chen*. (2013) Gundam mosquito: The transgenic warrior against vector mosquitoes. *Scientific Development* 481.

V. Honors & Awards

1. International recognition, fellowship, scholarship

- 2025 | **Early career plant scientist award**, ASPB, USA (USD \$500)
- 2024 | **Plantae fellow**, ASPB, USA
- 2018 | **Young scientist fellowship**, International Union of Biochemistry & Molecular Biology (USD \$800)
- 2013 - 2016 | **TIGP entrance scholarship**, AS, Taiwan (USD \$36,000)

2. Research excellence awards

- 2025, 2023 | **Silver and Golden poster award**, IPMB, AS, Taiwan (NTD 3,000, NTD 5,000)
- 2022, 2018 | **1st Place** (oral), Young scientist competition, IPMB, AS, Taiwan (NTD 50,000)
- 2013 | **2nd Place** (poster), Young scientist competition, ICOB, AS, Taiwan. (NTD 80,000)
- 2013 | **Honorable mention** (poster), Symposium on recent advances in cellular and molecular biology, Taiwan (NTD 3,000)

3. Competitive travel grants

- 2026, 2019 | **Taiwan Society of Plant Biologists** (NTD 15,000, NTD 15,000)
- 2025, 2024, 2023 | **ASPB**, (USD \$300, USD \$100, USD \$875)
- 2023 | **Foundation for the Advancement of Outstanding Scholarship** (NTD 54,000)
- 2023 | **Society of Experimental Biology** (£800)
- 2023, 2018, 2016 | **NSTC/ MOST** (NTD 45,000, NTD 45,000, NTD 20,000)
- 2023, 2017 | **AS**, Taiwan (NTD 60,000, NTD 60,000)
- 2020, 2017 | **European Molecular Biology Organization (EMBO)** (€300, €800)
- 2017 | **MBAS-TIGP, AS-NCHU**, Taiwan (NTD 50,000)
- 2013 | **Gordon Research Conference**, Hong Kong (USA \$1,100)

VI. Invited talks & Presentations

1. Invited seminars

2026 | Recruitment seminar, Bachelor Program of Biotechnology and Food Nutrition, National Taiwan University, Taiwan.

Title: **Orchestrating plant stress resilience: Translational control and proteostasis**

2026 | Recruitment seminar, Department of Life Science, National Chung-Hsing University, Taiwan.

Title: **Orchestrating plant stress resilience: Translational control and proteostasis**

2025 | Recruitment seminar, Bachelor Program in Interdisciplinary Studies, National Chung-Cheng University, Taiwan.

Title: **Organelle and organismic protein homeostasis across kingdoms**

2025 | Recruitment seminar, Master Program of Plant Medicine of National Taiwan University, Taiwan

Title: **Spatiotemporal changes in plant responses to abiotic stress**

2025 | Recruitment seminar, Dept. of Tropical Agriculture and International Cooperation, National Pingtung University of Science and Technology, Taiwan.

Title: **Organelle and organismic protein homeostasis across kingdoms**

2025 | Conference talk, 5th Annual Congress on Plant Science and Biosecurity, Czech Republic.

Title: **Arabidopsis AGB1 participates in salinity response through bZIP17-mediated unfolded protein response**

2023 | Seminar, Institute of Plant Biology, National Taiwan University, Taiwan.

Title: **Dynamic phosphorylation of ribosomal protein S6A ensures the successful development of young Arabidopsis seedlings**

2023 | Workshop speaker, Satellite Workshop of 33rd ICAR for Early Scientist Researchers, Japan.

Title: **Dynamic phosphorylation of ribosomal protein S6A ensures the successful development of young Arabidopsis seedlings**

2021 | Symposium speaker, International Symposium on the Application of Biotechnology in Agriculture, Vietnam.

Title: **Relieve stress for better crop production**

2020 | Recruitment seminar, Dept. of Plant Medicine, National Chiayi University, Taiwan.

Title: **Protein stability in wounded tomato**

2017 | Flash talk, 7th Asia Symposium of Plant Lipids, Taiwan

Title: **Arabidopsis DOK1 encodes a functional dolichol kinase involved in flowering time control and reproduction**

2. Selected international conference presentations

2026 | Japan-Taiwan Plant Biology, Japan (Poster)

2025 | Plant Biology, Milwaukee, USA (Poster)

2024 | Plant Biology, Hawaii, USA (Posters)

2023 | Taiwan-Japan Plant Biology, Taipei, Taiwan (Flash Talk & Poster)

- 2023 | Plant Biology, Savannah, USA (Posters)
- 2023 | SEB Centenary Conference, Edinburgh, UK (Poster)
- 2023 | International Conference on Arabidopsis Research (ICAR), Chiba, Japan (Poster)
- 2019 | EMBO Workshop: Proteostasis, Portugal (Poster)
- 2018 | Gordon Research Conference: Plant Molecular Biology, Boston, USA (Poster)
- 2017 | EMBO Workshop: Intercellular Communication, Berlin, Germany (Poster)
- 2016 | International Conference on Arabidopsis Research, Gyeongju, Korea (Poster)
- 2013 | Cold Spring Harbor Meeting, Germ Cell Meeting, New York, USA (Poster)
- 2013 | Gordon Research Conferences: Germline Stem Cell, Hong Kong, China (Poster)
- 2013 | Taiwan-Japan Bilateral Meeting, Taipei, Taiwan (Oral)

Vii. International professional services

Editor

- 2025 | Frontiers in Plant Science, Main Topic: "Lipid regulation in plants: A spatiotemporal approach to environmental stress adaptation".
- 2023 - | Member, Proceedings B Preprint Editorial Team

Journal reviewer:

New Phytologist, The Plant Cell, Plant Physiology, The Plant Journal, Journal of Experimental Botany, Frontiers in Plant Sciences, Frontiers in Genetics, PLoS Genetics

Community leadership:

- 2024 | Organizer, "Achieving recognition in the lab without burning out" Webinar, ASPB

Research article introducer

- 2024 | Plant fellow to highlight selected journal articles, ASPB
- 2023 | Fellow, Accelerating Science and Publication in Biology (ASAPbio)
- 2023 | preLighter to highlight selected preprints, The Company of Biologists

VIII. TEACHING EXPERIENCE

2025 - present | **Instructor**

Course: **Introduction of nature science and artificial intelligence**, General Education Center, CYCU.

1 semester; 2 hours per week; 121 non-STEM undergraduate freshmen

Designed a "Zero-to-One" curriculum guiding biology students to AI tools for scientific inquiry and data visualization. Bridged the gap between wet-lab biology and computational analysis.

2007 - 2009 | **Teaching assistant**

(1) Courses: **General Biology**, Dept. of Entomology, NCHU.

3 semesters; 4 hours per week, 120 STEM undergraduate freshman

Role: Supporting lead teachers with classroom support, student guidance, lesson preparation, and grading.

(2) Courses: **Experiments in Insect Physiology**, Dept. of Entomology, NCHU.

2 semesters, 3 hours per week, 60 undergraduate juniors majoring in Entomology

Role: Instructed laboratory techniques and facilitated discussion sessions for undergraduate students.

IX. MENTORSHIP

2022 - 2023 | **International mentor**, The SEB Centenary Mentoring Program

Mentored 2 Ph.D. candidates on experimental design and career development.

Lab Supervision:

2022, 2024 | Mentored 2 BSc students and 1 visiting scholar (Dr. Shu-Hsing Wu's Lab)

2015 - 2021 | Mentored 2 PhD students and 3 research assistants (Dr. Kazue Kanehara's Lab)

2007 - 2009 | Mentored 3 MSc and 3 undergraduate students (Dr. Kuang-Hui Lu's Lab)

X. Technical expertise

Core Competencies in Biotechnology & Biochemistry

I. Molecular Biology & Genetic Engineering

- CRISPR-Cas9 design and implementation
- Arabidopsis transformation and genetic manipulation
- MicroRNA construct design and validation
- Microinjection techniques for RNAi in model insects

II. Translatomics & Proteostasis

- Disome-seq library construction for genome-wide translational analysis
- Ribosome profiling (Ribo-seq) for translational control studies
- IP-MS-Parallel Reaction Monitoring phosphoproteomics for dynamic phosphorylation profiling
- Protein stability and turnover analysis

C. Experimental Multi-Omics

- Next-generation DNA/RNA sequencing library preparation
- Lipidomics sample preparation and optimization
- RNA/DNA quality control and RT-qPCR
- Integrated data analysis combining genomics, transcriptomics, and proteomics