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學歷：

國立臺灣大學 生命科學院 植物科學研究所博士 (2003/07~2009/06)

國立臺灣大學 理學院 植物學系碩士 (2000/07~2003/06)

中國文化大學 農學院 園藝學系學士 (1996/07~2000/06)

學位論文：

Lin H. H. and S. T. Jeng. 2009. Effect of calcium ion and carbon monoxide on the expression of wound-inducible ipomoelin gene from sweet potato. Inst. Plant Biol. PhD Diss. NTU. Taipei, Taiwan.

Lin H. H. and S. T. Jeng. 2003. The Effects of Poly(A) Signals from Tobacco Endochitinase Gene in the length of Poly(A) Sites and the Stability of mRNA. Inst. Plant Biol. MS Thesis. NTU. Taipei, Taiwan.

經歷：

國立中興大學 農藝學系 助理教授 (2022/08~迄今)

中國文化大學 園藝暨生物技術學系 副教授 (2022/01~2022/07)

中國文化大學 園藝暨生物技術學系 助理教授 (2018/08~2022/01)

中央研究院 生物多樣性中心 博士後研究員 (2012/03~2018/07)

中央研究院 基因體研究中心 博士後研究員 (2011/08~2012/02)

國立臺灣大學 園藝暨景觀學系 博士後研究員(2010/07~2011/06)

陸軍馬祖防衛指揮部 步一連 少尉排長 (2009/09~2010/06)

研究方向:

1. 利用二次訊息傳遞者增加水稻非生物性逆境之抗性。
2. 利用玉米轉錄因子增加水稻產量。
3. 利用玉米轉錄因子增加水稻耐鹽以及耐旱性。
4. 利用分子育種選育耐寒白花椰菜。
5. 耐淹水南瓜之選育。

教授科目:

作物生產概論 (3 學分)

作物生理學 (4 學分)

已發表著作:

1. Chiu C. H., K. H. Lin, **H. H. Lin**, W. X. Chu, Y. C. Lia, P. Y. Chao. **2022**.
Analysis of Chlorogenic Acid in Sweet Potato Leaf Extracts. **Plants**. 11: 2063.
(SCI IF: 3.935; Plant science ranking: 47/235).
2. *Yeh S. Y., **H. H. Lin***, Y. M. Chang, Y. L. Chang, C. K. Chang, Y. C. Huang,
Y. W. Ho, C. Y. Lin, J. Z. Zheng, W. N. Jane, C. Y. Ng, M. Y. Lu, I. L. Lai, K.
Y. To, W. H. Li, M. S.B. Ku. **2022**. Maize GLK transcription factors boost rice
chloroplast development, photosynthesis and grain yield. **Plant Physiol**. 188:
442-459. (*co-first; SCI IF: 8.340; Plant science ranking: 9/235)
3. Tsai N. C., T. S. Hsu, S. C. Kuo, C. T. Kao, T. H. Hung, D. G. Lin, C. S. Yeh, C.
C. Chu, J. S. Lin, **H. H. Lin**, C. Y. Ko, T. H. Chang, J. C. Su, Y. C. Lin. **2021**.
Large-scale data analysis for robotic yeast one-hybrid platforms and multi-

disciplinary studies using GateMultiplex. **BMC Biol.** 19: 214. (SCI IF: 7.431; Biology ranking: 6/113)

4. ***Lin H. H.**, K. H. Lin*, J. Y. Jiang, C. W. Wang, C. I. Chen, M. Y. Huang, J. H. Weng. **2021**. Comparisons between yellow and green leaves of sweet potato cultivars in chlorophyll fluorescence during various temperature regimes under high light intensities. **Sci. Hortic.** 280: 110335. (*co-first; SCI IF: 3.463; Horticulture ranking: 4/37)
5. ***Lin H. H.**, K. H. Lin*, K. F. Wu, Y. C. Chen. **2021**. Identification of Ipomoea batatas anti-cancer peptide (IbACP)-responsive genes in sweet potato leaves. **Plant Sci.** 305: 110849. (*co-first; SCI IF: 4.729; Plant science ranking: 26/235)
6. Nguyen H. C., C. C. Chen, K. H. Lin, P. Y. Chao, **H. H. Lin***, M. Y. Huang*. **2021**. Bioactive Compounds, Antioxidants, and Health Benefits of Sweet Potato Leaves. **Molecules.** 26: 1820. (*Co-correspondence; SCI IF: 4.411; Biochemistry and molecular biology ranking: 116/297)
7. Lin K. H., M. Y. Huang, W. J. Xie, S. F. Pan, Y. S. Chen, H. C. Wu, **H. H. Lin**, and C. M. Chiang. **2021**. Influences of sea water on the ethylene-biosynthesis, senescence-associated gene expressions, and antioxidant characteristics of Arabidopsis plants. **Not. Bot. Horti. Agrobi.** 49: 12205. (SCI IF: 1.444; Plant science ranking: 157/235)
8. ***Lin H. H.**, K. H. Lin, M. Y. Huang and Y. R. Su. **2020**. Use of Non-Destructive Measurements to Identify Cucurbit Species (Cucurbita maxima and Cucurbita moschata) Tolerant to Waterlogged Conditions. **Plants**, 9: 1226. (*Correspondence; SCI IF: 3.935; Plant science ranking: 47/235).

9. Liu W. Y., **H. H. Lin**, C. P. Yu, C. K. Chang, H. J. Chen, J. J. Lin, M. Y. J. Lu, S. L. Tu, S. H. Shiu, S. H. Wu, M. S. B. Ku, W. H. Li. **2020**. Maize ANT1 modulates vascular development, chloroplast development, photosynthesis, and plant growth. **Proc. Natl. Acad. Sci. U. S. A.** 117: 21747-21756. (SCI IF: 11.205; Multidisciplinary sciences ranking: 8/73)
10. *Weng S. T., Y. W. Kuo*, Y. C. King*, **H. H. Lin***, P. Y. Tu, K. S. Tung, and S. T. Jeng. **2020**. Regulation of microRNA2111 and Its Target IbFBK in Sweet Potato on Wounding. **Plant Sci.** 292:110391. (*co-first; SCI IF: 4.729; Plant science ranking: 26/235)
11. *Chang Y. M., **H. H. Lin***, W. Y. Liu*, C. P. Yu*, H. J. Chen, P. P. Wartini, Y. Y. Kao, Y. H. Wu, J. J. Lin, M. Y. J. Lu, S. L. Tu, S. H. Wu, S. H. Shiu, M. S. B. Ku, and W. H. Li. **2019**. A Comparative Transcriptomics Method to Infer Gene Coexpression Networks and its applications to Maize and Rice Leaf Transcriptomes. **Proc. Natl. Acad. Sci. U. S. A.** 116: 3091-3099. (*co-first; SCI IF: 11.205; Multidisciplinary sciences ranking: 8/73)
12. ***Lin H. H.**, Y. C. King*, Y. C. Li*, C. C. Lin, Y. C. Chen, J. S. Lin, and S. T. Jeng. **2019**. The p38-like MAP kinase modulated H₂O₂ accumulation in wounding signaling pathways of sweet potato. **Plant Sci.** 280: 305-313. (*co-first; SCI IF: 4.729; Plant science ranking: 26/235)
13. Huang C.F., Y. M. Chang, J. J. Lin, C. P. Yu, **H. H. Lin**, W. Y. Liu, S. Yeh, S. L. Tu, S. H. Wu, M. S. B. Ku, and W. H. Li. **2016**. Insights into the regulation of C4 leaf development from comparative transcriptomic analysis. **Curr. Opin. Plant Biol.** 30: 1-10. (SCI IF: 7.834; Plant science ranking: 10/235)
14. Bhattacharjee M. J., C. P. Yu, J. J. Lin, C. S. Ng, T. Y. Wang, **H. H. Lin**, and W.

- H. Li. **2016**. Regulatory Divergence among Beta-Keratin Genes during Bird Evolution. **Mol. Biol. Evol.** 33: 2769-2780. (SCI IF: 16.240; Genetics and heredity ranking: 5/175)
15. ***Lin H. H.**, K. H. Lin*, S. C. Chen, Y. H. Shen, and H. F. Lo. **2015**. Proteomic analysis of broccoli (*Brassica oleracea*) under high temperature and waterlogging stresses. **Bot. Stud.** 56:18. (*co-first; SCI IF: 2.163; Plant science ranking: 83/234)
16. ***Lin H. H.**, K. H. Lin*, J. Y. Syu, S. Y. Tang, and H. F. Lo. **2015**. Physiological and proteomic analysis in two wild tomato lines under waterlogging and high temperature stress. **J. Plant Biochem. Biot.** 25: 87-96. (*co-first; SCI IF: 1.175; Plant science ranking: 172/235)
17. *Yu C. P., S. C. C. Chen*, Y. M. Chang*, W. Y. Liu*, **H. H. Lin***, J. J. Lin, H. J. Chen, Y. J. Lu, Y. H. Wu, M. Y. J. Lu, C. H. Lu, A. C. C. Shih, M. S. B. Ku, S. H. Shiu, S. H. Wu, and W. H. Li. **2015**. Transcriptome dynamics of developing maize leaves and genome-wide prediction of cis elements and their cognate transcription factors. **Proc. Natl. Acad. Sci. U. S. A.** 112: E2477-E2486. (*co-first; SCI IF: 11.205; Multidisciplinary sciences ranking: 8/73)
18. *Lin J. S., **H. H. Lin***, Y. C. Li, Y. C. King, R. J. Sung, Y. W. Kuo, C. C. Lin, Y. H. Shen, and S. T. Jeng. **2014**. Carbon monoxide regulates the expression of the wound-inducible gene ipomoelin through antioxidation and MAPK phosphorylation in sweet potato. **J. Exp. Bot.** 65: 5279-5290. (*co-first; SCI IF: 6.992; Plant science ranking: 13/235)
19. Chang V. H. S., D. H. A. Yang, **H. H. Lin**, G. Pearce, C. Ryan, and Y. C. Chen. **2013**. IbACP, a sixteen-amino- acid peptide isolated from *Ipomoea batatas*

- leaves, induces carcinoma cell apoptosis. **Peptides** 47: 148-156. (SCI IF: 3.750; Pharmacology and pharmacy ranking: 124/275)
20. Liu W. Y., Y. M. Chang, S. C. C. Chen, C. H. Lu, Y. H. Wu, M. Y. J. Lu, D. R. Chen, A. C. C. Shih, C. R. Sheue, H. C. Huang, C. P. Yu, **H. H. Lin**, S. H. Shiua, M. S. B. Ku, and W. H. Li. **2013**. Anatomical and transcriptional dynamics of maize embryonic leaves during seed germination. **Proc. Natl. Acad. Sci. U. S. A.** 110: 3979-3984. (SCI IF: 11.205; Multidisciplinary sciences ranking: 8/73)
21. Shen Y. H., Y. H. Chen, H. Y. Liu, F. Y. Chiang, Y. C. Wang, L. Y. Hou, J. S. Lina, C. C. Lin, **H. H. Lin**, and S. T. Jeng. **2013**. Expression of a gene encoding β -ureidopropionase is critical for pollen germination in tomatoes. **Physiol. Plant.** 150: 425-435. (SCI IF: 4.500; Plant science ranking: 28/235)
22. *Tang S. Y., **H. H. Lin***, S. J. Tsao, J. T. Chen, and H. F. Lo. **2012**. The Physiological Responses of Wild Tomatoes to Flooding during the Hot Season. **J. Taiwan Soc. Horti. Sci.** 58: 167-182. (*co-first)
23. Lin J. S., C. C. Lin, **H. H. Lin**, Y. C. Chen, and S. T. Jeng. **2012**. MicroR828 regulates lignin and H₂O₂ accumulation in sweet potato on wounding. **New Phytol.** 196: 427-440. (SCI IF: 10.151; Plant science ranking: 7/235)
24. Lin C. C., P. J. Jih, **H. H. Lin**, J. S. Lin, L. L. Chang, Y. H. Shen, and S.T. Jeng. **2012**. Nitric oxide activates superoxide dismutase and ascorbate peroxidase to repress the cell death induced by wounding. **Plant Mol. Biol.** 77: 235-249. (SCI IF: 4.076; Plant science ranking: 43/235)
25. *Lin C. C., C. F. Chu*, P. H. Liu*, **H. H. Lin***, S. C. Liang, W. E. Hsu, J. S.

- Lin, H. M. Wang, L. L. Chang, C. T. Chien, and S. T. Jeng. **2011**. Expression of an Oncidium Gene Encoding a Patatin-Like Protein Delays Flowering in Arabidopsis by Reducing Gibberellin Synthesis. **Plant Cell Physiol.** 52: 421-435. (*co-first; SCI IF: 4.927; Plant science ranking: 25/235)
26. ***Lin H. H.**, L. F. Huang*, H. C. Su, and S. T. Jeng. **2009**. Effects of the multiple polyadenylation signal AAUAAA. **Planta** 230: 699-712. (*co-first; SCI IF: 4.116; Plant science ranking: 40/235)
27. *Chen Y.C., **H. H. Lin***, and S.T. Jeng. **2008**. Calcium influxes and mitogen-activated protein kinase. **Plant Cell Environ.** 31: 62-72. (*co-first; SCI IF: 7.228; Plant science ranking: 11/235)
28. Liu Y. C., **H. H. Lin**, H. M. Lai, and S. T. Jeng. **2005**. Detection of genetically modified soybean and its product tou-kan by polymerase chain reaction with dual pairs of DNA primers-proof. **Eur. Food Res. Technol.** 221: 725-730. (SCI IF: 2.998; Food science and technology ranking: 64/144)

獲獎:

1. 中國文化大學績優導師 (2019)
2. 植物科學與生質能源前瞻學術研討會壁報論文特優 (2007)
3. 植物分子生物學及植物科技新知研討會壁報論文特優 (2006)

執行計畫:

1. 花椰菜 BoMYB2 基因在寒害逆境誘導花球花青素累積之功能性分析 (科技部新進人員研究計畫; 111-2313-B-005 -054 -; 計畫主持人: 林信宏博士)
2. 以維管束接和情形探討番茄接穗與茄子根砧的嫁接親和性 (科技部大專學生研究計畫; 111-2813-C-034-044-B; 計畫主持人: 林信宏博士)

3. 探討寒害逆境下花椰菜中 BoMYB 轉錄因子與花青素累積之關係 (科技部新進人員研究計畫; 110-2313-B-034-001-;計畫主持人: 林信宏博士)
4. 次世代轉錄體定序應用於篩選高指標成分之薑黃品系(二)(行政院農業委員會主管一般科技計畫; 110 農科-1.3.2-科-a1;計畫主持人: 林信宏博士)
5. Functional analysis of maize ANT1 transcription factor in arabidopsis (科技部大專學生研究計畫; 110-2813-C-034-011-B; 計畫主持人: 林信宏博士)
6. 次世代轉錄體定序應用於篩選高指標成分之薑黃品系(行政院農業委員會主管一般科技計畫; 109 農科-1.1.5-科-a1; 計畫主持人: 林信宏博士)
7. Improved drought tolerance in Arabidopsis by ZmGLK Transcription Factors (科技部大專學生研究計畫;109-2813-C-034-015-B; 計畫主持人: 林信宏博士)
8. 利用玉米 ZmSCR 上游轉錄因子以增加水稻產量 (科技部新進人員研究計畫; 108-2311-B-034 -001 -;計畫主持人: 林信宏博士)

邀請演講:

1. 林信宏. 2021. My strategies for constructing C4 rice. 國立高雄師範大學理學院教育部高教深耕計畫
2. 林信宏. 2020. Maize ANT1 regulates vascular and chloroplast development and overexpressing it in rice increases grain yield. Summer Mtg. Plant Mol. Biol.
3. 林信宏. 2020. 南瓜知識. 社區創生綠色苗圃工作坊

研討會議海報:

1. Lin C. C, C. H. Chen, T. H. Hung, Y. C. J. Lin, and **H. H. Lin**. 2021. Comparative Transcriptome Analysis of Eight Curcuma Cultivars Contrasting in Curcuminoid Contents. Annual Meeting of Taiwan Society for Horticultural

Science.

2. 石晏齊、蘇奕如、林信宏. 2021. 非破壞性光譜檢測方法用於南瓜淹水逆境之研究. 文化大學園藝暨生物技術學系壁報論文展
3. 葉芮彤、林信宏. 2021. 以花椰菜(*Brassica oleracea* var. *botrytis*)之子葉及下胚軸為培植體進行體外再生.文化大學園藝暨生物技術學系壁報論文展
4. 姜東成、葉俊偉、林冠宏、林信宏. 2021. 葉施 β -葡聚糖對青花菜在高溫逆境下抗氧化系統之影響. 文化大學園藝暨生物技術學系壁報論文展
5. 蔡欣妤、王政鈞、林冠宏、林信宏. 2021.非破壞性檢測方法用於洋香瓜淹水逆境之研究. 文化大學園藝暨生物技術學系壁報論文展
6. 張貽閔、林信宏. 2021. 外施甲基茉莉酸對小白菜生長與淹水逆境之影響. 文化大學園藝暨生物技術學系壁報論文展
7. 林嘉璋、洪子桓、蘇奕如、林盈仲、林信宏. 2020. 次世代轉錄體定序應用於篩選高指標成分之薑黃品系. 台灣園藝學會年會
8. 蘇奕如、林冠宏、黃盟元、林信宏. 2020. 非破壞性光譜檢測方法用於南瓜淹水逆境之研究. 台灣園藝學會年會
9. 洪筱琄、鄭璇、阮素芬、林信宏. 2020. 溫度對薤菜生長與細胞增生之影響. 台灣園藝學會年會
10. 伍增、林信宏、林冠宏、黃盟元. 2020. 光質對水耕水菜生長的影響. 台灣園藝學會年會
11. Lin C. C.⁺, T. H. Hung⁺, Y. R. Su, Y. C. J. Lin*, and H. H. Lin*. 2020. Transcriptomic analysis of turmeric cultivars reveals the SNPs related to curcuminoids production. Summer Mtg. Plant Mol. Biol.

12. Kuo S. C.⁺, C. C. Lin⁺, C. C. Chu, C. Shih, C. C. Tung, J. H. Yu, P. C. Liou, **H. H. Lin***, Y. L. Chen*, J. C. Su*, Y. C. J. Lin*. 2020. Structural Annotation for Stem Differentiating Xylem Expressed Genes in Angiosperm. Summer Mtg. Plant Mol. Biol.
13. Yu J. H., C. C. Tung, C. C. Lin⁺, S. C. Kuo, C. Shih, P. C. Liou, T. S. Hsu, C. E. Huang, **H. H. Lin**, J. C. J. Su and Y. C. J. Lin. 2020. Revealing a Core Transcriptional Regulatory Network Involved in Wood Formation in Angiosperms. Summer Mtg. Plant Mol. Biol.
14. Chang Y. L., S. Y. Yeh, **H. H. Lin**, Y. M. Chang, C. K. Chang, J. Z. Zheng, I. L. Lai, W. H. Li and M. S.B. Ku. 2020. Maize GLK genes boost rice chloroplast development, photosynthetic efficiency and grain yield. Summer Mtg. Plant Mol. Biol.
15. 蘇奕如、**林信宏**. 2020. 外施一氧化氮對南瓜淹水逆境之影響. 文化大學園藝暨生物技術學系壁報論文展
16. 陳泰佑、蔡汶庭、**林信宏**. 2020. 利用玉米 *GLK* 轉錄因子能增加阿拉伯芥對逆境的耐受性. 文化大學園藝暨生物技術學系壁報論文展
17. 洪筱琿、周原毅、劉宇璇、鄭璇、**林信宏**、阮素芬. 2020. 溫度對薺菜生長與細胞增生之影響. 文化大學園藝暨生物技術學系壁報論文展
18. 蘇奕如、蔡汶庭、**林信宏**. 2019. 外施一氧化氮對高溫淹水逆境小白菜的影響. 文化大學園藝暨生物技術學系壁報論文展
19. **林信宏**、金禹圻、翁小婷、郭芸瑋、涂品揚、董桂書、鄭石通. 2019. 傷害逆境下甘藷 microRNA2111 與其目標基因 IbFBK 之調控. 台灣園藝學會年會

20. 林信宏、金禹析、李昱錡、林治清、陳玉琪、林振祥、鄭石通. 2019. 甘藷中 p38-like MAPK 對於傷害誘導基因 IPO 表現的影響. 台灣園藝學會年會
21. Chang Y. M., **H. H. Lin**, and W. H. Li. 2018. Cis-trans evolution of chloroplast development regulator genes in plants. Soc. Mol. Biol. Evol. Conf.
22. **Lin H. H.**, H. J. Chen, P. P. Wartini, and W.H. Li. 2016. Maize GOLDEN2-LIKE transcription factors reveal different functions during flowering time. Int. Conf. Arabidopsis Res.
23. **Lin H. H.** and W. H. Li. 2014. Physiological characteristics of ZmGLK2 transgenic rice plants. Int. Symp. Rice Funct. Genomics
24. Lin C. C., **H. H. Lin**, and S. T. Jeng. 2009. Expression of an *Oncidium* gene encoding a patatin-like protein delays flowering in *Arabidopsis* by reducing Gibberellin synthesis. Annu. Mtg. Am. Soc. Plant Biol.
25. **Lin H. H.**, L. F. Huang, H. C. Su, and S. T. Jeng. 2008. The effects of polyA signals from tobacco Endochitinase gene on the polyA site formation and mRNA stability. Annu. Mtg. Am. Soc. Plant Biol.
26. **Lin H. H.**, Y. C. Chen, and S. T. Jeng. 2007. Calcium influxes and mitogen-activated protein kinase kinase activation mediate ethylene inducing ipomoelin gene expression in sweet potato. Symp. Fron. Plant Sci.
27. **Lin H. H.**, C. F. Chu, and S. T. Jeng. 2006. Expression and Analysis of an Orchid (*Oncidium* Gower Ramsey) Lipid Acyl Hydrolase-like Gene in *Arabidopsis thaliana*. Summer Mtg. Plant Mol. Biol.
28. **Lin H. H.**, Y. H. Chou, and S. T. Jeng. 2005. Investigation of SUMO signal transduction pathway in sweet potato. Annu. Mtg. Am. Soc. Plant Biol.