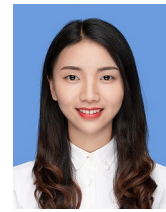


Jie Lin

Ph.D., in Plant Metabolic Bioengineering

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EDUCATION & WORK EXPERIENCE

- 2020–present ● Ph.D. program in Biology
York University, Toronto, Canada
- 2017–2020 ● Master's Degree of Ornamental Horticulture
Southwest University, Chongqing, China
- 2013–2017 ● Bachelor of Horticulture (Ornamental Horticulture)
Hunan Agricultural University, Changsha, China

RESEARCH OUTLINES

- (1) Identifying the regulatory networks of glyceollin transcription factors in soybean (*Glycine max* L. Merr), using RNAseq data to search for the potential positive regulators base on the previous research in our lab.
- (2) Studying the protein-protein interactions using yeast two-hybrid, Bimolecular fluorescence complementary assay. And the protein-DNA interactions using yeast-one hybrid, protoplast transient assay.
- (3) Investigating the transcription factors' function by overexpressing and RNA interference silencing them in soybean hairy root system individually.

TECHNICAL EXPERTISE

- Gene cloning and *Agrobacteria* transformation.
- Use and basic maintain of various analytical instruments, such as UPLC and RT-qPCR.
- Data analysis, such as ANOVA and T-test.

LEADERSHIP & COLLABORATIONS

- Taking a leadership role in the 'Phytoalexin gene regulatory networks' project.
- Training students, developing their lab skills of molecular biology, and providing support in experiment and data analysis.
- Collaborating and liaising with partners, including Agriculture and Agri-food Canada.

PUBLICATIONS

- Lin, J.,** Wi, D., Ly, M., Jahan, M. A., Pullano, S., Martirosyan, I., Kovinich, N. Soybean Hairy Root Transformation for the Analysis of Gene Function. *JoVE* (195), e65485, doi:10.3791/65485 (2023).
- Lin, J.,** Monsalvo, I., Ly, M., Jahan, M. A., Wi, D., Martirosyan, I., & Kovinich, N. (2023). RNA-Seq Dissects Incomplete Activation of Phytoalexin Biosynthesis by the Soybean Transcription Factors GmMYB29A2 and GmNAC42-1. *Plants*, 12(3), 545.
- Lin, J.,** Liu, D., Wang, X., Ahmed, S., Li, M., Kovinich, N., & Sui, S. (2021). Transgene CpNAC68 from wintersweet (*Chimonanthus praecox*) improves Arabidopsis survival of multiple abiotic stresses. *Plants*, 10(7), 1403.
- Yousefi-Taemeh, M., **Lin, J.,** Ifa, D. R., Parrott, W., & Kovinich, N. (2021). Metabolomics Differences of Glycine max QTLs Resistant to Soybean Looper. *Metabolites*, 11(10), 710.
- Wang, X., Liu, D., **Lin, J.,** Zhu, T., Liu, N., Yang, X., ... & Sui, S. (2021). Carotenoid cleavage dioxygenase genes of *Chimonanthus praecox*, CpCCD7 and CpCCD8, regulate shoot branching in Arabidopsis. *International Journal of Molecular Sciences*, 22(16), 8750.

Papers currently undergoing peer-review

- Lin, J.,** Monsalvo, I., Ly, M., Wi, D., Jahan, MA., Martirosyan, I., Jahan, I., and Kovinich, N. ABA-regulated JAZ1 Proteins Bind NAC42 Transcription Factors to Suppress the Activation of Phytoalexin Biosynthesis in Plants Submitted to *Plant physiology* on February 17, 2023.

CONFERENCE PRESENTATIONS

- Lin, J.,** Monsalvo, I., Ly, M., Wi, D., Jahan, MA., Martirosyan, I., Jahan, I., and Kovinich, N. JAZ1 proteins bind NAC42 transcription factors to suppress the biosynthesis of diverse phytoalexins in plants. Canadian Society of Plant Biologists, Quebec City, Quebec, Canada, June 18–21, 2023
- Lin, J.,** Monsalvo, I., Ly, M., Wi, D., and Kovinich, N. Identifying the regulatory networks of glyceollin transcription factors in soybean (*Glycine max* L. Merr). Association of Graduate Students in the Biological Sciences Symposium, Toronto, ON, Canada, May 11, 2023
- Lin, J.,** Monsalvo, I., Ly, M., and Kovinich, N. Identifying missing glyceollin transcription factors in soybean (*Glycine max* L. Merr). Phytochemistry Society of North America, Blacksburg, VA, USA, July 24-28, 2022. (Online presentation due to US Visa issue)