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EDUCATION AND PROFESSIONAL HISTORY

- 2023 – Associate Professor, Boyce Thompson Institute
2017 – Assistant Professor, Boyce Thompson Institute
2017 – Adjunct Assistant Professor, Plant Biology Section, Cornell University
2016 – 2017 Postdoctoral Researcher, University of Zurich
Advisor: Peter Szövényi
2015 – 2016 Postdoctoral Researcher, UC Berkeley and Duke University
Advisor: Carl Rothfels and Kathleen Pryer
2010 – 2015 Ph.D., Department of Biology, Duke University
Advisor: Kathleen Pryer
2009 – 2010 Tank platoon commander/Ammunition officer, 2nd lieutenant, ROC Army, Taiwan
2005 – 2009 B.S., Department of Life Science, National Taiwan University

PUBLICATIONS (lab members in **bold**)

IN REVIEW

Li, C.*, **D. Wickell***, **L.-Y. Kuo**, X. Chen, B. Nie, X. Liao, D. Peng, J. Ji, J. Jenkins, M. Williams, S. Shu, C. Plott, K. Barry, S. Rajasekar, J. Grimwood, X. Han, S. Sun, Z. Hou, W. He, G. Dai, C. Sun, J. Schmutz, J.H. Leebens-Mack, **F.-W. Li#**, L. Wang#. Three hundred million years of static genome evolution revealed in homosporous lycophytes. **Nature Plants** in revision. *Equally contributed; #Corresponding authors

2023

Rahmatpour, N., **L.-Y. Kuo**, J. Kang, E. Herman, L. Lei, M. Li, S. Srinivasan, R. Z, S.M. Wolniak, C. Delwiche, S. Mount, **F.-W. Li**. 2023. Analyses of *Marsilea vestita* genome and transcriptomes do no support widespread intron retention during spermatogenesis. **New Phytologist** 237: 1490–1494.

Kumar, S., Y. Wang, Y. Zhou, L. Dillard, **F.-W. Li**, C. Sciandra, N. Sui, R. Zentella, M. Borgnia, A. Bartesaghi, T.-p. Sun, P. Zhou. 2023. Structure and dynamics of the Arabidopsis O-fucosyltransferase SPINDLY. **Nature Communications** 14: 1538.

De La Cerda, G.Y., J.B. Landis, E. Eifler, A. Hernandez, **F.-W. Li**, J. Zhang, C.M. Tribble, N. Karimi, P. Chan, T. Givnish, S. Strickler, C.D. Specht. 2023. Balancing read length and sequencing depth: optimizing Nanopore sequencing for monocots with an emphasis on Liliales. **Applications in Plant Sciences** in press.

Song, M.J., C.J. Rothfels, E. Schuettpelz, J. Nitta, L. Huiet, **F.-W. Li**, K.M. Wefferling. 2023. Resolving deep relationships and revealing ancient whole-genome duplications in Pteridaceae using transcriptomic data. **American Fern Journal**. in press.

2022

Huang, X.*, W. Wang*, T. Gong*, **D. Wickell***, L.-Y. Kuo, X. Zhang, J. Wen, H. Kim, F. Lu, H. Zhao, S. Chen, H. Li, W. Wu, C. Yu, S. Chen, W. Fan, S. Chen, X. Bao, L. Li, D. Zhang, L. Jiang, X. Yan, Z. Liao, G. Zhou, Y. Guo, J. Ralph, R.R. Sederoff, H. Wei#, P. Zhu#, **F.-W. Li#**, R. Ming#, Q. Li#. 2022. The flying spider-monkey

tree fern genome provides insights into fern evolution and arborescence. **Nature Plants** 8: 500–512.

Cover *Equally contributed; #Corresponding authors

Featured in: [New York Times](#), [Scientific American](#), [Science](#)

Marchant, D.B., G. Chen, S. Cai, F. Chen, **P. Schafran**, J. Jenkins, S. Shu, C. Plott, J. Webber, J. Lovell, G. He, L. Sandor, M. Williams, S. Rajasekar, A. Healey, K. Barry, Y. Zhang, E. Sessa, R. Dhakal, P. Wolf, A. Harkess, **F.-W. Li**, C. Rössner, A. Becker, L. Gramzow, D. Xue, Y. Wu, T. Tong, Y. Wang, F. Dai, S. Hua, H. Wang, S. Xu, F. Xu, H. Duan, G. Theißen, R.J. Schmitz, D. Stevenson, C. Zumajo-Cardona, B.A. Ambrose, J.H. Leebens-Mack, J. Grimwood, J. Schmutz, P.S. Soltis, D.E. Soltis, Z.H. Chen. 2022. Dynamic genome evolution in a model fern. **Nature Plants** 8: 1038–1051.

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Ke, B.-F., G.-J. Wang, P.H. Labiak, G. Rouhan, Goflag Consortium, C.-W. Chen, L. Shepherd, D.J. Ohlsen, M.A.M. Renner, K.G. Karol, **F.-W. Li**, **L.-Y. Kuo**. 2022. Systematics and plastome evolution in Schizaeaceae. **Frontiers in Plant Science** 13: 885501.

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Neubauer, A., S. Ruaud, M. Waller, E. Frangedakis, **F.-W. Li**, S.I. Nötzold, S. Wicke, A. Bailly, P. Szövényi. 2022. Step-by-step protocol for isolation and transient transformation of hornwort protoplasts. **Applications in Plant Sciences** 10: e11456.

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Chatterjee, P., **P. Schafran**, **F.-W. Li**, J.C. Meeks. *Nostoc* talks back: Differential gene expression during nitrogen starvation of *Anthoceros* and establishment of its symbiosis with *Nostoc*. **Molecular Plant-Microbe Interactions** 35: 917–932.

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2021

Wickell, D., L.-Y. Kuo, H.-P. Yang, A.D. Ashok, I. Irisarri, A. Dadras, S. de Vries, J. de Vries, Y.-M. Huang, Z. Li, M.S. Barker, N.T. Hartwick, T.P. Michael, **F.-W. Li**. 2021. Underwater CAM photosynthesis elucidated

by *Isoetes* genome. **Nature Communications** 12: 6348.

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2019

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Nelson, J.M., D.A. Hauser, J.A. Gudiño, Y.A. Guadalupe, J.C. Meeks, N. Salazar, J.C. Villarreal, **F.-W. Li**. 2019. Complete genomes of symbiotic cyanobacteria clarify the evolution of Vanadium-nitrogenase. **Genome Biology and Evolution** 11: 1959–1964.

Petlewski, A.R. and **F.-W. Li**. 2019. Ferns: the final frond-tier in plant model systems. **American Fern Journal** 109: 192–211.

Kuo, L.-Y. and **F.-W. Li**. 2019. A roadmap for fern genome sequencing. **American Fern Journal** 109: 212–223.

Eily, A.N., K.M. Pryer, **F.-W. Li**. 2019. A first glimpse at genes important to the *Azolla–Nostoc* symbiosis. **Symbiosis** 78: 149–162.

Kuo, L.-Y., T.-C. Hsu, Y.-S. Chao, W.-T. Liou, H.-M. Chang, C.-W. Chen, Y.-M. Huang, **F.-W. Li**, Y.-F. Huang, W. Shao, P.-F. Lu, C.-W. Chen, Y.-H. Chang, W.-L. Chiou. 2019. Updating Taiwanese pteridophyte checklist: a new phylogenetic classification. **Taiwania** 64: 367–395.

Li, F.-W. and S. Mathews. 2019. Phylogenetic method to study light signaling. In A. Hiltbrunner (Ed.), *Phytochromes: Methods and Protocols*. Springer Nature (New York).

Wu, C.-C., **F.-W. Li**, E.M. Kramer. 2019. Large-scale phylogenomic analysis suggests three ancient superclades of the WUSCHEL-RELATED HOMEBOX transcription factor family in plants. **PLoS ONE** 14: e0223521.

Yang, E. J., C. Y. Yoo, J. Liu, H. Wang, J. Cao, **F.-W. Li**, K.M. Pryer, T.-P. Sun, D. Weigel, P. Zhu, M. Chen. 2019. NCP activates chloroplast transcription by controlling phytochrome-dependent dual nuclear and plastidial switches. **Nature Communications** 10: 2630.

Delaux, P.-M., A.J. Hetherington, Y. Coudert, C. Delwiche, C. Dunand, S. Gould, P. Kenrick, **F.-W. Li**, H. Philippe, S.A. Rensing, M. Rich, C. Strullu-Derrien, J. de Vries. 2019. Reconstructing trait evolution: A guideline for plant evo-devo studies (and beyond). **Current Biology** 29: R1105–R1121.

2018

Li, F.-W., P. Brouwer, L. Carretero-Paulet, S. Cheng, J. de Vries, P.-M. Delaux, A.N. Eily, N. Koppers, **L.-Y. Kuo**, Z. Li, M. Simenc, I. Small, E. Wafula, S. Angarita, M.S. Barker, A. Braeutigam, C. dePamphilis, S. Gould, P.S. Hosmani, Y.-M. Huang, B. Huettel, Y. Kato, X. Liu, S. Maere, R. McDowell, L.A. Mueller, K.G.J. Nierop, S.A. Rensing, T. Robison, C.J. Rothfels, E.M. Sigel, Y. Song, P.R. Timilsina, Y. Van de Peer, H. Wang, P. K.I. Wilhelmsson, P.G. Wolf, X. Xu, J.P. Der, H. Schluepmann, G.K.-S. Wong, and K.M. Pryer. 2018. Fern genomes elucidate land plant evolution and cyanobacterial symbioses. **Nature Plants** 4: 460–472. [Cover](#)

Featured in: [Discover Magazine](#), [Mongabay](#), [Cosmos](#), [Earth.com](#), [Quartz](#), [Yale Environmental 360](#), [Cornell Chronicle](#), [Faculty of 1000](#), [Nature Plants News & Views](#)

Li, F.-W., and A. Harkess. 2018. A guide to sequence your favorite plant genomes. **Applications in Plant Sciences** 6: e1030.

Kuo, L.-Y., X Qi, H. Ma, **F.-W. Li**. 2018. Order-level fern plastome phylogenomics: new insights from Hymenophyllales. **American Journal of Botany** 105: 1545–1555.

Song, M*, **L.-Y. Kuo***, L. Huiet, K.M. Pryer, C.J. Rothfels, **F.-W. Li**. 2018. A novel chloroplast gene reported for flagellate plants. **American Journal of Botany** 105: 117–121.

*Equally contributed

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2017

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Li, F.-W., C.A. Rushworth, J.B. Beck, M.D. Windham. 2017. *Boechera* Microsatellite Website: an online portal for species identification and hybrid relationship resolution. **Database** 1: baw169.

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2014

Li, F.-W., J.C. Villarreal, S. Kelly, C.J. Rothfels, M. Melkonian, E. Frangedakis, M. Ruhsam, E. M. Sigel, J.P. Der, J. Pittermann, D.O. Burge, L. Pokorny, A. Larsson, T. Chen, S. Weststrand, P. Thomas, E. Carpenter, Y. Zhang, Z. Tian, L. Chen, Z. Yan, Y. Zhu, X. Sun, J. Wang, D.W. Stevenson, B.J. Crandall-Stotler, A.J. Shaw, M.K. Deyholos, D.E. Soltis, S.W. Graham, M.D. Windham, J.A. Langdale, G.K.S. Wong, S. Mathews & K.M. Pryer. 2014. Horizontal transfer of an adaptive chimeric photoreceptor from bryophytes to ferns. **Proceedings of the National Academy of Sciences USA** 111: 6672–6677.

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Li, F.-W., K.M. Pryer. 2014. Crowdfunding the Azolla fern genome project: a grassroots approach. **GigaScience** 3: 16.

Featured in: GigaScience Editor's pick

Sessa, E.B., J.A. Banks, M.S. Barker, J.P. Der, A.M. Duffy, S.W. Graham, M. Hasebe, J. Langdale, **F.-W. Li**, D.B. Marchant, K.M. Pryer, C.J. Rothfels, S.J. Roux, M.L. Salmi, E.M. Sigel, D.E. Soltis, P.S. Soltis, D.W. Stevenson, P.G. Wolf. 2014. Between two fern genomes. **GigaScience** 3:15.

Zhang, W.Y., L.Y. Kuo, **F.-W. Li**, C.N. Wang, W.L. Chiou. 2014. The hybrid origin of *Adiantum meishanianum* (Pteridaceae): a rare and endemic species in Taiwan. **Systematic Botany** 39: 1034–1041.

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Rothfels, C.J., A. Larsson, **F.-W. Li**, E.M. Sigel, L. Huiet, D.O. Burge, M. Ruhsam, S. Graham, D. Stevenson, G.K.S. Wong, P. Korall, K.M. Pryer. 2013. Transcriptome-mining for fern single-copy nuclear regions. **PLoS One** 8: e76957.

Li, F.-W., K.M. Pryer, M.D. Windham. 2012. *Gaga*, a new genus segregated from *Cheilanthes* (Pteridaceae). **Systematic Botany** 37: 845-860.

Featured in: [New York Times](#), [Rolling Stone](#), [Huffington Post](#), [Wired](#), [The Guardian](#)

Li, F.-W., L.Y. Kuo, C.J. Rothfels, A. Ebihara, W.L. Chiou, M.D. Windham, K.M. Pryer. 2011. *rbcL* and *matK* earn two thumbs up as the core DNA barcode for ferns. **PLoS One** 6: e26597.

Li, F.-W. 2011. Book review: Knapp, Ralf. 2011. Ferns and Fern Allies of Taiwan. **Taxon** 60: 1233-1234.

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*Equally contributed

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*Equally contributed

Li, F.-W., B.C. Tan, V. Buchbender, R.C. Moran, G. Rouhan, C.N. Wang, D. Quandt. 2009. Identifying a mysterious aquatic fern gametophyte. **Plant Systematics and Evolution** 281: 77–86.

FUNDING

LEAD PI ON 3 NSF GRANTS TOTALING \$3,452,208 (\$2,243,151 TO BTI)

External competitive funding

NSF MCB Cellular Dynamics and Function | From phylogeny to biomolecules: a cross-scale approach to understand the making of a unique carbon-concentrating mechanism in hornworts (2213841)

\$1,072,924 (2022.6.1 – 2025.5.31), Li portion: \$503,654

PI: Fay-Wei Li, Laura Gunn (Cornell Plant Biology)

NSF IOS EDGE | Developing transformation capacity for *Anthoceros agrestis* to facilitate gene function studies in hornworts, a remarkable phylum of plants (1923011)

\$548,419 (2019.9.1 – 2022.8.31)

PI: Fay-Wei Li

Co-PI: Joyce Van Eck (BTI)

NSF DEB Dimensions of Biodiversity | Integrating phylogenetics, ecophysiology, and transcriptomics to understand the diversity of hornwort-cyanobacterium symbiosis (1831428)

\$1,830,855 (2019.1.1 – 2023.12.31), Li portion: \$1,191,078

PI: Fay-Wei Li, John Meeks (University of California Davis), Jed Sparks (Cornell EEB)

Supplement #1 | Research Experience for Post-Baccalaureate Students (2139576)

\$40,750

Supplement #2 | Research Collaboration Opportunity in Europe (2034018)

\$27,005

DOE Large-Scale EMSL Research User Grant | Understanding the genetic and structural bases of hornworts' carbon-concentrating mechanism

\$118,888 in-kind support (2021.10.1 – 2023.9.30)

PI: Fay-Wei Li

Internal competitive funding

Triad Foundation Award | Understanding how ferns can withstand extreme desiccation

\$100,000 (2021.9.1 – 2022.8.31)

PI: Fay-Wei Li

Co-PI: Sally Chambers (Marie Selby Botanical Gardens)

Triad Foundation Award | An "EPYC" quest to search for the Rubisco tether protein in hornwort pyrenoids

\$59,125 (2021.7.1 – 2022.6.30)

PI: Fay-Wei Li

Co-PI: Joyce Van Eck and Aleksandra Skirycz

Triad Foundation Award | Biosynthesis of cannabinoids in liverworts

\$75,000 (2020.9.1 – 2021.8.31)

PI: Georg Jander

Co-PI: Fay-Wei Li and Frank Schroeder

Triad Foundation Award | Exploring native plant diversity: what a threatened *Aconitum* can teach us about changing species distributions and medicinal compounds

\$50,500 (2018.7.1 – 2019.6.30)

PI: Suzy Strickler

Co-PI: Fay-Wei Li, Georg Jander, Chelsea Specht (Cornell Plant Biology)

FELLOWSHIPS AND AWARDS

- 2016 Forschungskredit postdoc fellowship, University of Zurich
- 2015 Perry Price (best thesis in plant science), Duke University
- 2014 Edgar T. Wherry Award, Botanical Society of America
- 2014 NSF Doctoral Dissertation Improvement Grant
- 2012 NSF Graduate Research Fellowship

INVITED SEMINARS AND SIGNIFICANT MEETING PRESENTATIONS

- 2023 **Gordon Research Conference**, "Chloroplast Biotechnology", Ventura Beach, CA (scheduled)
- 2023 **University of Arizona**, Department of Ecology & Evolutionary Biology (scheduled)
- 2022 **EMBO Workshop**, "An integrated view of early land plant evolution", Bhubaneswar, India
- 2022 **Plant Genome Online**, keynote speaker (virtual)
- 2021 **Louisiana State University**, Department of Biological Sciences (virtual)
- 2021 **University of Maryland**, UMD Plant Virtual Minisymposium (virtual)

- 2021 **University of California Davis**, Photosynthesis Mini-Symposium (virtual)
- 2021 **Laboratoire Reproduction et Développement des Plantes**, Lyon (virtual)
- 2021 **University of Goettingen**, Institute for Microbiology and Genetics (virtual)
- 2020 **Oxford University**, Oxford University Biological Society (virtual)
- 2020 **Botany 2020**, Colloquium on Mechanisms of rapid adaptation through the expression of “heterogenomicity” (virtual)
- 2020 **Ithaca College**, Department of Biology
- 2019 **Smithsonian National Museum of Natural History** (Botany), Washington DC
- 2019 **Smithsonian National Museum of Natural History** (“Phylopizza”), Washington DC
- 2019 **Marine Biological Laboratory**, Woods Hole, MA
- 2018 **Harvard University**, Herbarium Seminar Series
- 2018 **EMBO Workshop**, “New shores in land plant evolution”, Lisbon, Portugal
- 2018 **National Tsing Hua University** (Taiwan), Institute of Molecular and Cell Biology
- 2018 **7th Asian Symposium of Ferns and Lycophyte**, Keynote speaker, Taipei, Taiwan
- 2017 **University of Rochester**, Department of Biology
- 2017 **Arizona State University**, The Life Science Cafe seminar series
- 2017 **Iowa State University**, Department of Ecology, Evolution, and Organismal Biology
- 2017 **Chicago Plant Science Symposium**
- 2017 **Cornell University**, Plant Biology Section
- 2016 **Utrecht University**, Institute of Environmental Biology
- 2016 **University of Zurich**, Department of Systematic and Evolutionary Botany
- 2016 **Université Laval**, Institute for Integrative Systems Biology
- 2016 **Yale University**, Department of Ecology and Evolutionary Biology
- 2015 **North Carolina State University**, Plant & Microbial Biology Seminar

Declined/postponed due to pandemic

- 2022 **University of Florida**, Department of Biology
- 2020 **Gregor Mendel Institute of Molecular Plant Biology**

UNIVERSITY INTERACTIONS AND TEACHING

Teaching

Main Instructor

Problems in Plant Biology (PLBIO 7410), Cornell University 2022 – 2023

Graduate-level seminar course; each week a different faculty provides guest lecture.

Plant Comparative and Evolutionary Genomics (PLBIO 7420),

Cornell University 2018

Graduate-level seminar course. Syllabus: <https://sites.google.com/site/plbio7420plantgenomics>

Guest Lectures

Introductory Plant Diversity and Evolution (PLBIO 2410), Cornell University

One lecture on bryophytes 2022

Vascular Plant Systematics (PLBIO 2480), Cornell University 2020 – 2022

Two lectures on the biology of algae, bryophytes, lycophytes, and ferns

Problems in Plant Biology (PLBIO 7410), Cornell University 2017 – 2021

One lecture around a paper of interest

Medical Ethnobotany (PLBIO 1100), Cornell University 2017 – 2020

One lecture on the medicinal use of ferns

Topics in Plant Evolution (PLBIO 6560), Cornell University 2017 – 2020

Participated in weekly paper discussion

Faculty Research (PLBIO 7430), Cornell University 2017 – 2019

One lecture about my research program to the first-year graduate students

Principles of Biology (BIO 110), SUNY Cortland 2022

One lecture about seed-free plants

Mentoring

PhD. Students Advised

Tanner Robison	Cornell Plant Biology	2019-present
David Wickell	Cornell Plant Biology	2018-present
Alaina Petlewski	Cornell Plant Biology	2017-2020 (exited with a master degree)

Postdoctoral Researchers Advised

Warren Ang	2022-present
Jacob Suissa	2022-present (co-advised with Corrie Moreau, Cornell EEB)
Sylvia Kinosian	2022-present (co-advised with Michael Barker, University of Arizona)
Declan Lafferty	2022-present (co-advised with Joyce Van Eck, BTI)
Peter Schafran	2019-present
Andika Gunadi	2019-2021 (co-advised with Joyce Van Eck, BTI); now Plant Transformation and Genome-editing Scientist, J.R. Simplot Company
Nasim Nahmatpour	2019-2021; now Bioinformatics Scientist, Analytical Biosciences
Jessica Nelson	2017-2019; now Lecturer of Biology, Maastricht University (Netherlands)
Li-Yaung Kuo	2017-2019; now Assistant Professor, National Tsing Hua University (Taiwan)

Awards Received by Students

David Wickell	Smithsonian Graduate Student Fellowship, National Museum of Natural History (\$8,000)
David Wickell	Washington Biologists Field Club Research Awards (\$4,035)
David Wickell	Schmittau-Novak Integrative Plant Science Small Grants, Cornell (\$3,992)
Tanner Robison	Schmittau-Novak Integrative Plant Science Small Grants, Cornell (\$4,207)
Alaina Petlewski	R.C. Lewontin Early Award, Society for the Study of Evolution (\$2,500)
Alaina Petlewski	Andrew W. Mellon Student Research Grant, Cornell (\$780)
Alaina Petlewski	American Society of Plant Taxonomists Graduate Student Research Grant (\$1,200)

Awards Received by Postdocs

Jacob Suissa	NSF Postdoctoral Research Fellowship (Rules of Life track)
Sylvia Kinosian	NSF Postdoctoral Research Fellowship (Plant Genome track)
Peter Schafran	NSF Postdoctoral Research Fellowship (Plant Genome track)

Dissertation/Exam Committee

Ayress Grinage	Cornell Plant Biology	Advisor: Chelsea Specht
Joseph Cammarata	Cornell Plant Biology	Advisor: Michael Scanlon & Adrienne Roeder
Heather Phillips	Cornell Plant Biology	Advisor: Chelsea Specht
Thereis Choo	Cornell Plant Biology	Advisor: Kevin Nixon
Michael Song	UC Berkeley IB	Advisor: Carl Rothfels
Nikolai Hay	Duke Biology	Advisor: Kathleen Pryer
Blake Fauskee	Duke Biology	Advisor: Kathleen Pryer
Ariana Eily	Duke Biology	Advisor: Kathleen Pryer
Rizky Kafrawi	Hobart and William Smith Colleges	Advisor: Shannon Straub

Undergraduate/High School Students Advised

Jenna Sins	Gannon University	2022
Anna Lipari	Grinnell College	2022
Makaila Weir	Ohio Wesleyan University	2021
Isa Johnson	Ohio Wesleyan University	2021
Ariel Patterson	Reeds College	2019 (Best poster; BTI REU symposium)
Victor Cai	Duke University	2019
Marazzano Colon	Duke University	2018
Harry Hou	Kimball Union Academy	2018

Other Contributions and Interactions

- Graduate student recruitment committee, Plant Biology Field, Cornell University (2023)
- Graduate student recruitment committee, Plant Biology Field, Cornell University (2019)
- Graduate student admission committee, Plant Biology Field, Cornell University (2018)

PROFESSIONAL ACTIVITIES**Internal***Committee Services*

2020 – 2022	Monday Morning Research Updates Committee
2020 – 2021	Research Reactivation Committee
2017 – 2020	Monday Morning Seminar Committee
2017 – 2020	BTI Computational Biology Center (BCBC) Committee
2017	BTI Communication Associate Hiring Committee

Presentations

2022	BTI Monday Morning Research Updates
2019	BTI Monday Morning Seminar (x2)
2017 – 2020	BTI REU Seminar Series
2017, 2022	BTI Board of Directors meeting

2017, 2019 BTI Scientific Advisory Board meeting

Other Services

2019 Organizer of BCBC nanopore symposium (with Suzy Strickler)

2019 Participated in BTI Leadership Organizational Retreat

2019 Participated in BTI Post-graduate Society mock faculty interview

External

Public Outreach

2021 **Art at BTI**, “Dead Plant Wisdom: Exploring identity, colonialism and climate change through art and herbaria”

Conversation with Zachari Logan and AJ Bouchie. [Recording](#).

2020 **Fundraising campaign for Cayuga Lake harmful algal bloom research**

Working closely with Aly Evans to put together a fundraising proposal. We held four info sessions to engage with the local communities and pitch the project idea.

2020 **BTI Breaking Ground Discussion Series**, “Spooky Plants”

[Recording](#).

2019 **Finger Lakes Native Plant Society**, “Ferntastic Ferns and Lycophytes”

Talked about the natural history of ferns and lycophytes.

2019 **Science on Screen: Little shop of horrors**

Gave a pre-show presentation “Killer Plants!” in Cinemapolis as a part of the Science on Screen program. [Recording](#).

2018 **Sciencenter After Dark: Wicked Plants**

Engage with the public with hands-on activities

2018 **Sciencenter Members’ Night**, “Wicked ferns—Ferns that killed the early Australian explorers”

The opening talk for the Wicked Plants exhibition. 75% of the audience were children.

2018 **Judy’s Day** at Cornell Botanic Gardens

My lab has two booths: “Ferntastic Azolla and Lycophytes” and “Amazing Bryophytes”. Jessica Nelson (postdoc) did several botanical drawings for the stickers, and I helped make sure the tree of life figure (this year’s theme) is correct

2018 **Workshop on Pteridophyte Reproductive Biology** at Dr. Cecilia Koo Botanic Conservation Center (Taiwan)

A training workshop for researchers in Southeast Asia. I gave a lecture on “High-level classification of ferns and lycophytes”

2018 **NSF INCLUDE** at Cornell University, “Biodiversity!”

To high school students from underserved school districts

2017 **Ithaca Garden Club**, “Ferntastic ferns and where to find them”

To members of the garden club

2017 **NSF INCLUDE** at Cornell University, “Biodiversity!”

To high school students from underserved school districts

2017 **Art at BTI**, “Tamed Wonders: Ferns and humans as seen from the BTI atrium”

To artists and art-lovers; [video recording](#)

2017 **BTI Giving Tuesday Livestream**

Live video interview with Keith Hannon

2017 **Fascination of Plants Day Livestream**

Live video interview with Keith Hannon

2017 **BTI Science Bomb Podcast**

Audio interview with Keith Hannon

Media Appearance

2022 Interviewed and featured by New Scientist "Horizontal gene transfer happens more often than anyone thought"

2022 Quoted by New Scientist "Genes from bacteria may have helped plants colonise the land"

2022 Quoted by Nature Plants Research Briefing "The evolutionary mechanisms of mycoheterotrophic orchids"

2019 Quoted by The Mercury News "Genetic code for California's iconic trees uncovered"

Editorial Service

2022 **Associate Editor**, Molecular Phylogenetics and Evolution (handled 10 manuscripts)

2021 **Associate Editor**, American Fern Journal (handled 1 manuscript)

2021 **Associate Editor**, Molecular Phylogenetics and Evolution (handled 16 manuscripts)

2020 **Associate Editor**, Molecular Phylogenetics and Evolution (handled 24 manuscripts)

2019 **Associate Editor**, Molecular Phylogenetics and Evolution (handled 17 manuscripts)

2018 **Associate Editor**, Molecular Phylogenetics and Evolution (handled 7 manuscripts)

Journal Reviewer

2022 Nature Plants, Nature Communications, PNAS (x2), Current Biology, New Phytologist, Molecular Plant, American Journal of Botany, Genome Biology and Evolution, Plants People Planet, Frontiers in Plant Science, Review of Palaeobotany and Palynology

2021 Nature Plants (x5), Nature Ecology and Evolution, Nature Communications, Current Biology, Molecular Biology and Evolution, New Phytologist (x2), Plant Systematics and Evolution, Applications in Plant Sciences

2020 Nature Plants, PNAS, Genome Biology, New Phytologist (x2), Plant Journal, American Journal of Botany, Journal of Systematics and Evolution

2019 Nature Plants (x2), Nature Communications, Scientific Reports, Genome Biology and Evolution, G3

2018 Nature Plants, New Phytologist, Molecular Biology and Evolution, Applications in Plant Sciences, Frontiers in Plant Science, GigaScience (x2), Heredity, Molecular Phylogenetics and Evolution (x2), Plant and Cell Physiology, Scientific Reports, Symbiosis, Systematic Botany

2017 New Phytologist, American Journal of Botany, BMC Plant Biology, Journal of Molecular Evolution, Scientific Reports

2016- PNAS, Taxon, Plant Systematics and Evolution (x2), Molecular Phylogenetics and Evolution (x2),

2011 PeerJ, Phytotaxa (x2), Current Genetics, BMC Research Notes, BMC Evolutionary Biology, American Fern Journal (x2), Molecular Ecology Resources, Annals of Botany

Grant Proposal Reviewer

2020 The Royal Society University Research Fellowship (UK)

2020 Czech Science Foundation

2020 Academia Sinica Thematic Research Program (Taiwan)

- 2020 American Society of Plant Taxonomists Graduate Student Research Grants
- 2020 Society for the Study of Evolution Rosemary Grant Awards
- 2018 Czech Science Foundation
- 2018 Society of Systematic Biologists Graduate Student Research Awards

Symposium/workshop Organizer

- 2022 **Botany 2022 workshop: *de novo* genome Assembly and Annotation with an Emphasis on Phylogenetic and Population Genetic Studies**, co-organized with Suzy Strickler and Jacob Landis
- 2021 **Hornworts: the Next Generation**, Bryophytes and Lichens BL2021 (virtual)
- 2021 **Botany 2021 workshop: *de novo* genome Assembly and Annotation with an Emphasis on Phylogenetic and Population Genetic Studies**, co-organized with Suzy Strickler and Jacob Landis (virtual)
- 2020 **Botany 2020 workshop: *de novo* genome Assembly and Annotation with an Emphasis on Phylogenetic and Population Genetic Studies**, co-organized with Suzy Strickler and Jacob Landis (virtual)
- 2017 **Plant genome evolution from the very beginning**, co-organized with Charles Delwiche (University of Maryland), XIX International Botanical Congress, Shenzhen, China