

# Fay-Wei Li

Boyce Thompson Institute & Cornell University

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## Education and Appointments

- 2017- Assistant professor, Boyce Thompson Institute  
 2017- Adjunct assistant professor, Plant Biology Section, Cornell University  
 2016-17 Forschungskredit postdoc, University of Zurich  
 2015-16 Postdoctoral researcher, UC-Berkeley and Duke University  
 2010-15 Ph.D., Department of Biology, Duke University  
 2005-09 B.S., Department of Life Science, National Taiwan University

## Publications (lab members in bold)

### As a primary author:

- 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. Schlupepmann, 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](#), [Quartz](#), [Yale Environmental 360](#), [NSF Science360 News](#), [Cornell Chronicle](#), [BTI press release](#), [Faculty of 1000](#), [Nature Plants News&Views](#)
- 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.  
 \*Featured in: [AJB News and Views](#)
- Li, F.-W., and S. Mathews. 2018. Phylogenetic method to study light signaling. In A. Hiltbrunner (Ed.), *Phytochromes: Methods and Protocols*. Springer Nature (New York).
- Li, F.-W., A. Harkess. 2018. A guide to sequence your favorite plant genomes. **Applications in Plant Sciences** 6: e1030. [special issue “Methods for Exploring the Plant Tree of Life”]
- Li, F.-W., J.C. Villarreal, P. Szovenyi. 2017. Hornworts, an overlooked window into carbon-concentrating mechanism. **Trends in Plant Science** 22: 275-277.
- 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.
- Li, F.-W., L.-Y. Kuo, K.M. Pryer, C.J. Rothfels. 2016. Genes translocated into the plastid inverted repeat show marked deceleration in substitution rates and an elevated GC content. **Genome Biology and Evolution** 8: 2452-2458.
- Li, F.-W., S. Mathews. 2016. Evolutionary aspects of plant photoreceptors [invited review]. **Journal of Plant Research** 129: 115-122.
- Li, F.-W., L.Y. Kuo, Y.H. Chang, T.C. Hsu, H.C. Hung, W.L. Chiou, C.J. Rothfels, Y.M. Huang. 2016. *Asplenium pifongiae* (Aspleniaceae: Polypodiales), a new species from Taiwan. **Systematic Botany** 41: 24-31.
- Li, F.-W., M. Melkonian, C.J. Rothfels, J.C. Villarreal, D. Stevenson, S.W. Graham, G.K.-S. Wong, K.M. Pryer, S. Mathews. 2015. Phytochrome diversity in green plants and the origin of canonical plant phytochromes. **Nature Communications** 6: 7852.  
 \*Featured in: [Duke Today](#), [Science Daily](#), [Phys.org](#), [Faculty of 1000](#)
- Li, F.-W., C.J. Rothfels, M. Melkonian, J.C. Villarreal, D. Stevenson, S.W. Graham, G.K.-S. Wong, S. Mathews, K.M. Pryer. 2015. The origin and evolution of phototropins. **Frontiers in Plant Science** 6: 637.

- Li, F.-W., K.M. Pryer. 2014. Crowdfunding the *Azolla* fern genome project: a grassroots approach. **GigaScience** 3: 16.  
\*Featured in: Editor's pick
- 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.  
\*Featured in: [The Economist](#), [New York Times](#), [National Geographic](#), [Scientific American](#), [Aeon](#), [Faculty of 1000](#), [Current Biology](#), and [Nature Reviews Genetics](#)
- Li, F.-W., K.M. Pryer & M.D. Windham. 2012. *Gaga*, a new fern genus segregated from *Cheilanthes* (Pteridaceae). **Systematic Botany** 37: 845-860.  
\*Featured in: [Rolling Stone](#), [New York Times](#), [Huffington Post](#), [The Guardian](#), [Wired](#) and [National Geographic](#)
- 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.  
Kuo, L.Y.\* , F.-W. Li\*, W.L. Chiou & C.N. Wang. 2011. The first insight into fern *matK* phylogeny. **Molecular Phylogenetics and Evolution** 59: 556-566. \*Equal contributions
- Li, F.-W., L.Y. Kuo, Y.M. Huang, W.L. Chiou & C.N. Wang. 2010. Tissue-Direct PCR, a rapid and extraction-free method for barcoding of ferns. **Molecular Ecology Resources** 10: 92-95.
- 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.

#### As a contributing co-author:

- One Thousand Plants Initiative. A phylogenomic view of evolutionary complexity in green plants. **Nature**. in review.
- Villarreal, J.C., M. Turmel, M. Bourgouin-Couture, J. Laroche, N. Salazar, F.-W. Li, S. Chen, K. Renzaglia, C. Lemieux. 2018. Genome-wide organellar analyses from the hornwort *Leiosporoceros dussii* show low frequency of RNA editing and its increase during hornwort diversification. **PLoS ONE** 13: e0200491.
- Huiet, L., F.-W. Li, T.-T. Kao, J. Prado, A.R. Smith, E. Schuettpelz, K.M. Pryer. 2018. A worldwide phylogeny of *Adiantum* (Pteridaceae) reveals remarkable convergent evolution in leaf blade architecture. **Taxon** 67: 488-502.
- Cheng, S., M. Melkonian, S. Smith, S. Brockington, J.M. Archibald, P.-M. Delaux, F.-W. Li, B. Melkonian, E.V. Mavrodiev, W. Sun, Y. Fu, H. Yang, D.E. Soltis, S.W. Graham, P.S. Soltis, X. Liu, X. Xu, G.K.-S. Wong. 2018. 10KP: A Phylodiverse Genome Sequencing Plan. **GigaScience** 7: giy013.
- Kuo L.-Y., T.-Y. Tang, F.-W. Li, H.-J. Su, W.-L. Chiou, Y.-M. Huang, C.-N. Wang. 2018. Organelle genome inheritances in *Deparia* ferns (Athyraceae, Aspleniaceae, Polypodiales). **Frontiers in Plant Science** 9: 486.
- Schilling, M.P., Z. Gompert, F.-W. Li, M.D. Windham, P.G. Wolf. 2018. Admixture, evolution, and variation in reproductive isolation in the *Boechera puberula* clade. **BMC Evolutionary Biology** 18: 61.
- Lang, D., ... F.-W. Li, ... S.A. Rensing. 2018. The *Physcomitrella patens* chromosome-scale assembly reveals moss genome structure and evolution. **Plant Journal** 93: 515-533.
- Dijkhuizen, L., P. Brouwer, H. Bolhuis, G.-J. Reichart, N. Koppers, B. Huettel, A. Bolger, F.-W. Li, S. Cheng, X. Liu, G.K.-S. Wong, K.M. Pryer, A. Weber, A. Bräutigam, H. Schluepmann. 2018. Is there foul play in the leaf pocket? The metagenome of floating fern *Azolla* reveals endophytes that do not fix N<sub>2</sub> but may denitrify. **New Phytologist** 217: 453-466.
- Rockwell, N.C., S.S. Martin, F.-W. Li, S. Mathews, J.C. Lagarias. 2017. The phycocyanobilin chromophore of streptophyte algal phytochromes is synthesized by HY2. **New Phytologist** 214: 1145-1157.

- Rothfels, C.J., K.M. Pryer, **F.-W. Li**. 2017. Next-generation polyploid phylogenetics: Rapid resolution of hybrid polyploid complexes using PacBio single-molecule sequencing. **New Phytologist** 213:413-429.
- Hsu, P.Y., L. Calviello, H.-Y. L. Wu\*, **F.-W. Li\***, C.J. Rothfels, U. Ohler, P.N. Benfey. 2016. Super-resolution ribosome profiling reveals unannotated translation events in Arabidopsis. **Proceedings of the National Academy of Sciences USA** 113: E7126-E7135.  
\*Equal contributions
- Jia, Q., G. Li, T.G. Köllner, J. Fu, X. Chen, W. Xiong, A. Norris, B. Crandall-Stotler, J.L. Bowman, D.J. Weston, Y. Zhang, L. Chen, Y. Xie, **F.-W. Li**, C.J. Rothfels, A. Larsson, S.W. Graham, D.W. Stevenson, G.K.-S. Wong, J. Gershenzon, F. Chen. 2016. Microbial type terpene synthase genes occur specifically in non-seed land plants. **Proceedings of the National Academy of Sciences, USA** 113: 12328-12333.
- Stevenson, S.R., Y. Kamisugi, J. Schmutz, J.W. Jenkins, J. Grimwood, W. Muchero, G.A. Tuskan, S. Rensing, D. Lang, R. Reski, C. Trinh, M. Melkonian, C.J. Rothfels, **F.-W. Li**, A. Larsson, G.K.S. Wong, T. Edwards, A.C. Cuming. 2016. Genetic analysis of *Physcomitrella patens* identifies ABCISIC ACID NON-RESPONSIVE (ANR): a regulator of ABA responses unique to basal land plants, required for desiccation tolerance. **Plant Cell** 28: 1310-1327..
- Pryer, K.M., L. Huiet, **F.-W. Li**, C.J. Rothfels, E. Schuettpelz. Maidenhair ferns—*Adiantum*—are indeed monophyletic, and sister to the shoestring ferns—vittaroids (Pteridaceae). **Systematic Botany** 41: 14-23.
- Windham, M.D., J.B. Beck, **F.-W. Li**, A. Allphin, J.G. Carman, C.A. Rushworth, E.M. Sigel, P.J. Alexander, C.D. Bailey, I.A. Al-Shehbaz. 2015. Searching for diamonds in the apomictic rough. I: A case study involving *Boechera lignifera* (Brassicaceae). **Systematic Botany** 40: 1031-1044.
- Wolf, P.G., E.B. Sessa, D.B. Marchant, **F.-W. Li**, C.J. Rothfels, E.M. Sigel, M.A. Gitzendanner, C.J. Visger, J.A. Banks, D.E. Soltis, P.S. Soltis, K.M. Pryer, and J.P. Der. 2015. An exploration into fern genome space. **Genome Biology and Evolution** 7: 2533-2544.
- Rothfels C.J., **F.-W. Li**, E.M. Sigel., L. Huiet, A. Larsson, D.O. Burge, M. Ruhsam, M. Deyholos, D. Soltis, N. Stewart, S. Shaw, L.M. Pokorny, T. Chen, C. dePamphilis, L. DeGironimo, D.W. Stevenson, S.W. Graham, G.K.-S. Wong, and K.M. Pryer. 2015. The evolutionary history of ferns inferred from 25 single-copy nuclear genes. **American Journal of Botany** 10: 1089-1107.
- 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 meisbanianum* (Pteridaceae): a rare and endemic species in Taiwan. **Systematic Botany**, 39: 1034-1041.
- 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.

## Research Grants

- 2018 **NSF Dimensions of Biodiversity**, National Science Foundation, “Integrating phylogenetics, ecophysiology, and transcriptomics to understand the diversity of hornwort-cyanobacterium symbiosis” \$1,772,655 (Li portion \$1,123,223)  
PI: Fay-Wei Li, Jed Sparks (Cornell), John Meeks (UC-Davis)
- 2018 **Triad Plants for Human Health Awards**, Triad Foundation, “Exploring native plant diversity: what a threatened *Aconitum* can teach us about changing species distributions and medicinal compounds” \$50,500  
PI: Suzy Strickler (BTI), Co-PI: Fay-Wei Li, Georg Jander (BTI), Chelsea Specht (Cornell)
- 2018 **Triad BTI-Selby Collaboration**, Triad Foundation, “Dry times call for dry adaptations: genetic and physiological responses to desiccation tolerance in ferns and lycophytes” \$50,130  
PI: Fay-Wei Li, Sally Chambers (Selby Botanic Garden)

- 2017 **Arnold Arboretum Genomics Initiative and Sequencing Award**, “Developing Genomic Resources for North American Beech” \$9,287  
 PI: Eric Richards (BTI), Co-PIs: Fay-Wei Li, Susan Strickler (BTI)
- 2017 **Smithsonian Tropical Research Institute and Simons Foundation**, “Genetic diversity and genomic commonalities among symbiosis-capable nitrogen-fixing cyanobacteria” \$3,600  
 PI: Noris Salazar (Smithsonian Tropical Research Institute), Co-PIs: Fay-Wei Li, Juan Carlos Villarreal (Laval University)
- 2016 **Forschungskredit postdoc**, University of Zurich
- 2014 **Graduate Student Research Fellowship**, Torrey Botanical Society (US \$2,500)
- 2014 **NSF Doctoral Dissertation Improvement Grant**, National Science Foundation (US \$20,410)
- 2014 **Duke Biology Grant-in-Aid**, Department of Biology, Duke University (US \$1,000)
- 2013 **Shirley and Alan Graham Graduate Student Research Grant**, American Society of Plant Taxonomists (US \$1,000)
- 2013 **Duke Biology Grant-in-Aid**, Department of Biology, Duke University (US \$1,000)
- 2012 **NSF Graduate Research Fellowship**, National Science Foundation (US \$30,000/year for 3 years)
- 2012 **Duke Biology Grant-in-Aid**, Department of Biology, Duke University (US \$1,000)
- 2012 **Sigma Xi Matching Grant**, Duke Graduate School (US \$1,000)
- 2012 **Sigma Xi Grant-in-Aid of Research**, Sigma Xi (US \$1,000)
- 2011 **Awards for Graduate Student Research**, Society of Systematic Biologists (US \$1,700)
- 2008 **Undergraduate Research Grant**, National Science Council, Taiwan (US \$1,400)
- 2007 **Undergraduate Research Grant**, National Science Council, Taiwan (US \$1,400)

### **Awards**

- 2015 **Perry Price**, Best thesis in plant science, Duke University
- 2014 **Edgar T. Wherry Award**, Botanical Society of America
- 2009 **Dr. AT Chen Research Scholarship**, National Taiwan University (US \$2,400)
- 2009 **Dean Award**, College of Life Science, National Taiwan University
- 2009 **Scientific Research Award**, College of Life Science, National Taiwan University

### **Invited Seminars**

- 2018 **Harvard University**, Herbarium Seminar Series
- 2018 **EMBO Workshop**, “New shores in land plant evolution”
- 2018 **National Tsing Hua University (Taiwan)**, Institute of Molecular and Cell Biology
- 2018 **7th Asian Symposium of Ferns and Lycophyte** (Keynote speaker)
- 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**
- 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
- 2015 **North Carolina State University**, Plant & Microbial Biology Seminar

### **Public Engagement**

- 2018 **Sciencenter After Dark: Wicked Plants**  
 Lead hands-on activities in a cocktail party.

- 2018 **Sciencenter Members' Night**, "Wicked ferns — Ferns that killed the early Australian explorers"  
The opening talk for the Wicked Plants exhibition.
- 2018 **Judy's Day** at Cornell Botanic Gardens  
My lab has two booths: "Ferntastic Azolla and Lycophytes" and "Amazing Bryophytes". Jessica Nelson (my postdoc) did several botanical drawing 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 **Arts@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; [podcast link](#)

## Professional Activities

### Editorial Service

Associate Editor, Molecular Phylogenetics and Evolution

### Journal Reviewer

American Fern Journal (x2), American Journal of Botany, Annals of Botany, Applications in Plant Sciences, BMC Evolutionary Biology, BMC Plant Biology, BMC Research Notes, Current Genetics, Frontiers in Plant Science, GigaScience (x2), Heredity, Journal of Molecular Evolution, Molecular Biology and Evolution, Molecular Ecology Resources, Molecular Phylogenetics and Evolution (x2), Nature Plants, New Phytologist, PeerJ, Phytotaxa (x2), Plant and Cell Physiology, Plant Systematics and Evolution (x2), PNAS, Scientific Reports, Symbiosis, Systematic Botany, Taxon

### Grant Proposal Reviewer

Czech Science Foundation, Society of Systematic Biologists Graduate Student Research Awards

### Workshop/Symposium Organizer

**Plant genome evolution from the very beginning**, co-organized with Charles Delwiche (U of Maryland), XIX International Botanical Congress, Shenzhen, China

### Fieldwork

>1,500 accessions of plant specimens (mostly ferns) collected from Taiwan, USA, Costa Rica, Guatemala, Belize, Lanyu, Ryukyus, and Luzon islands.

## Teaching

- 2018 Instructor, **Plant Comparative and Evolutionary Genomics** (PLBIO 7420), Cornell University  
Syllabus: <https://sites.google.com/site/plbio7420plantgenomics/>
- 2018 Guest lecturer, **Problems in Plant Biology**, Cornell University

- 2018 Guest lecturer, **Medical Ethnobotany**, Cornell University
- 2017 Guest lecturer, **Medical Ethnobotany**, Cornell University
- 2014 Instructor, **Practical Phylogenetics**, Duke University  
Co-taught with D. Swofford and K.M. Pryer.
- 2012 Teaching assistant, **Genetics and Evolution**, Duke University

## Mentoring

### Dissertation Committee

Joseph Cammarata, Cornell University  
Thereis Choo, Cornell University  
Ariana Eily, Duke University  
Michael Song, UC-Berkeley

### Undergraduate/High School Student Mentoring

Marazzano Colon, Duke University  
Harry Hou, Kimball Union Academy

## Computer Programs

### *Boeckera* Microsatellite Database (<http://biology.duke.edu/windhamlab>)

The database houses collection metadata and microsatellite genotypes from >3,000 *Boeckera* specimens (including many types). The web portal has various search algorithms for species identification, and can automatically deduce the genomic makeup of hybrid individuals. It also has the capacity to link high-resolution images to each specimen. I generated the majority of the microsatellite data and wrote all the codes (Python and HTML). Publication: Li et al., Database (2017).

### PURC: Pipeline for Untangling Reticulate Complexes

A pipeline for extracting alleles from amplicon sequencing data (PacBio, Illumina, ... etc), and is geared toward analyzing polyploid species complexes. The input is raw sequencing reads and the output are clustered allele sequences. I am the main program developer. Publication: Rothfels et al., New Phytologist (2017).

## Conference Papers (presenting author underlined)

- Li, F.-W., L.-Y. Kuo, S. Poplawski, T.-C. Lin, Y.-M. Huang, T.-C. Wu, C.-N. Wang, W.-Y. Kao, T. Michael. 2018. A reference genome for *Isoetes* and the evolution of aquatic CAM photosynthesis. Botany 2018, Rochester, MN, USA.
- Hay, N., L. Allphin, F.-W. Li, M.D. Windham. 2018. Relationships and conservation status of the Fremont County rockcress (Brassicaceae). Botany 2018, Rochester, MN, USA.
- Wu, C.-C., F.-W. Li, E. Kramer. 2018. Evolution of the WUSCHEL-RELATED (WOX) homeobox transcription factors in plants. Botany 2018, Rochester, MN, USA.
- Kuo, L.-Y., C.-W. Chen, Y.-L. Hung, C.-W. Ko, F.-W. Li, W.-L. Chiou, C.-N. Wang, Y.M. Huang. 2018. Heterochronic response to antheridiogen could explain the mating behavior shifts in polyploid ferns. Botany 2018, Rochester, MN, USA.
- Eily, A., K.M. Pryer, F.-W. Li. 2018. A glimpse at genes critical to the *Azolla-Nostoc* symbiosis. Botany 2018, Rochester, MN, USA.
- Li, F.-W., J. Nelson, J.C. Villarreal. 2018. Understanding the diversity and genetic basis of hornwort-cyanobacteria symbiosis. iMOSS 2018, St. Petersburg, FL, USA.
- Li, F.-W. 2017. A genomic approach to understand the molecular basis of plant-cyanobacterium symbiosis. XIX International Botanical Congress, Shenzhen, China.
- Kuo L.-Y., T.-Y. Tang, W.-L. Chiou, F.-W. Li, Y.-M. Huang, C.-N. Wang. 2017. Organelle genome inheritances in *Deparia* ferns (Athyraceae, Aspleniineae, Polypodiales). Botany 2017, Fort Worth, TX, USA.

- Allphin, L., F.-W. Li, and M.D. Windham. 2017. Systematics and conservation status of the Hells Canyon rock cress (Brassicaceae). Botany 2017, Fort Worth, TX, USA.
- Li, F.-W. 2016. Fern genomes on the horizon. Botany 2016, Savannah, GA, USA.
- Rothfels, C.J., K.M. Pryer, F.-W. Li. 2016. Next-generation polyploid phylogenetics: Low-cost, high-throughput resolution of hybrid polyploid complexes using PacBio and PURC. Botany 2016, Savannah, GA, USA.
- Der, J.P., N. Koppers, M. Simenc, S. Cheng, X. Liu, G.K.S. Wong, A. Brautigam, H. Schluepmann, K.M. Pryer, F.-W. Li. 2016. The genome and annotation of *Azolla filiculoides*. Botany 2016, Savannah, GA, USA.
- Eily, A., F.-W. Li, G. Gillian, K.M. Pryer. 2016. Insider trading: Understanding nutrient exchange in the *Azolla*-*Nostoc* symbiosis. Botany 2016, Savannah, GA, USA.
- Li, F.-W., L.Y. Kuo, M. Simenc, J.P. Der, C.J. Rothfels, K.M. Pryer. 2016. *Salvinia cucullata*: The smallest fern genome known. Plant and Animal Genome XXV, San Diego, CA, USA.
- Brautigam, A., N. Koppers, M. Simenc, F.-W. Li, L. Dijkhuizen, P. Brouwer, S. Cheng, X. Liu, B. Song, G.K.S. Wong, A. Webber, K.M. Pryer, J.P. Der, H. Schluepmann. 2016. The *Azolla* genome Project. Plant and Animal Genome XXV, San Diego, CA, USA.
- Schluepmann, H., L. Dijkhuizen, P. Brouwer, H. Bolhuis, G.-J. Reuchert, N. Koppers, B. Huettel, F.-W. Li, X. Liu, G.K.S. Wong, K.M. Pryer, A. Weber, A. Brautigam. 2016. The *Azolla* Metagenome: Foul play in the pocket? Annotating the nuclear genome of *Azolla filiculoides*. Plant and Animal Genome XXV, San Diego, CA, USA.
- Simenc, M., F.-W. Li, N. Koppers, S. Cheng, B. Song, X. Liu, S. Xu, L. Dijkhuizen, B. Huettel, A. Brautigam, G.K.S. Wong, H. Schluepmann, K.M. Pryer, J.P. Der. 2016. Annotating the nuclear genome of *Azolla filiculoides*. Plant and Animal Genome XXV, San Diego, CA, USA.
- Li, F.-W., S. Cheng, J.C. Villarreal, J.P. Der, S. Mathews, X. Liu, C.J. Rothfels, G.K.S. Wong, J. Palmer, K.M. Pryer. 2015. Evolutionary genomics of plant-cyanobacteria symbiosis and its role in nitrogen fixation. Plant Genome Evolution, Amsterdam, Netherlands.
- Rothfels, C.J., F.-W. Li, E.M. Sigel, L. Huiet, A. Larsson, S. Graham, G.K.S. Wong, K.M. Pryer. 2015. Curated phylogenomics and the first single-copy nuclear phylogeny of the ferns. Botany 2015, Edmonton, AB, Canada.
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