

Curriculum Vitae
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Jacob B. Landis, PhD

School of Integrative Plant Science – Plant Biology
Cornell University, Ithaca, New York 14853
Email: jbl256@cornell.edu ; Website: jacoblandis.com
[Google Scholar Profile](#); ORCID: 0000-0002-5631-5365

Education

Ph.D. Botany, University of Florida, Gainesville, FL August 2016
Ph.D. Dissertation Title: “The developmental genetics of floral variation in Polemoniaceae: Linking cellular phenotypes, genetics, and pollinator shifts”
M.A. Ecology and Evolutionary Biology, University of Kansas, Lawrence, KS July 2011
Thesis: "Pollinator attractors: petaloidy and petal epidermal cell shape in close relatives of snapdragon"
B.S. Ecology and Evolutionary Biology, University of Kansas, Lawrence, KS, December 2008

Appointments

Cornell University – Research Associate January 2022 - Present
Cornell University – Postdoctoral Researcher January 2021- December 2021
Cornell University - Lecturer July 2020 – December 2020
Cornell University - Visiting Postdoctoral Scholar August 2018 – June 2020
NSF Plant Genome Postdoctoral Fellow July 2017 – June 2020
University of California Riverside - Postdoctoral Researcher August 2016 – June 2017

Research Experience

Cornell University – Chelsea Specht August 2018 – Present
Boyce Thompson Institute – Susan Strickler July 2020 – Present
Cornell University – Jeff Doyle January 2021 – Present
University of California Riverside - Daniel Koenig August 2016 – June 2020
University of Florida – Pam and Doug Soltis August 2011 – August 2016
Cambridge University - Beverley Glover August 2012 - September 2012
University of Kansas - Lena Hileman January 2009 – July 2011
University of Kansas - Sam James August 2008 – January 2009
Sam Houston State University - Raelynn Deaton and Chad Hargrave May 2008 – July 2008
KU Natural History Museum - Mike Grose and Ed Wiley August 2007 – May 2008
University of Kansas - Garrick Skalski May 2006 – August 2007

Research Interests

Evolutionary Genomics, Comparative and Applied Phylogenetics, Pollinator Strategies, Natural Selection, Parallel and Convergent Evolution, Genome Wide Association, Nanopore Sequencing

Fellowships (Total: \$318,000)

NSF Plant Genome Postdoctoral Fellow (\$216,000), 1711807 2017-2020
Title: “Elucidating the genetic control of long-term success in the agricultural environment.”

Digging Deeper Planting Science Fellow, Botanical Society of America (\$2000) 2016
 Graduate Student Fellowship, Dept of Biology, University of Florida (\$100,000) 2011-2015

Grants (Total: \$34,291)

UF Department of Biology Michael L. May Interdisciplinary Grant - \$1000 2015
 Title: "Are lichens monogamous? Variation within the *Leptogium cyanescens* complex and its associated photobiont in Florida." Co-authored with Barry Kaminsky

Southern California Botanist Annual Research Grant and Desert Grant - \$1000 2015
 Title: "Evolution of flower color and its significance in Polemoniaceae: Adding potential new Southern California species to phylogeny reconstruction and character mapping in *Leptosiphon* and *Linanthus*"

Sigma Xi Grants-in-Aid of Research - \$500 2015
 Title: "The cellular component of flower size differences in *Saltugilia* (Polemoniaceae)"

American Society of Plant Taxonomy W. Hardy Eshbaugh Research Award - \$1000 2014
 Title: "Evolution of Flower Color and its Significance in Polemoniaceae: Phylogeny Reconstruction and Character Mapping in *Leptosiphon* and *Linanthus*."

International Association for Plant Taxonomy - \$1000 2014
 Title: "Evolution of Flower Color and its Significance in Polemoniaceae: Phylogeny Reconstruction and Character Mapping in *Leptosiphon* and *Linanthus*."

NSF Doctoral Dissertation Improvement Grant, DEB-1406650 - \$19291 2014
 Title: "The developmental genetics of floral size variation in *Saltugilia* (Polemoniaceae): Linking cellular phenotypes, genetics, floral size, and pollinator shifts."

UF Department of Biology John Paul Olowo Memorial Fund Research Grant - \$300 2014
 Title: "Evolution of Flower Color and its Significance in Polemoniaceae: Integrating Phylogenetic Reconstruction and Character Mapping in *Leptosiphon*."

Desert Legacy Fund, California Desert Research Program grant - \$3200 2013
 Title: "Evolution of flower color and its significance in Polemoniaceae: Phylogenetic reconstruction and character mapping *Linanthus* and *Leptosiphon*"

Torrey Botanical Society Graduate Research Fellowship - \$2500 2013
 Title: "Evolution of flower color and its significance in Polemoniaceae"

Sigma Xi Grants-in-Aid of Research - \$500 2013
 Title: "Evolution of flower color and its significance in Polemoniaceae"

microMorph training grant to work with Dr. Beverley Glover, Cambridge - \$3500 2012
 Title: "Corolla length does matter: investigating genetic underpinnings of size"

Botanical Society of America Graduate Student Research Award - \$500 2012
 Title: "Corolla length does matter: investigating genetic underpinnings of size"

Awards (Total: \$13,999)

Org.one Pilot Program Sequencing Reagents for Three Species - \$3,600 2021

XSEDE Startup Allocation - \$1,604 2020

American Society of Plant Taxonomists Travel Award for Botany Conference - \$300 2016

UF Department of Biology Graduate Student Mentor of the Year - \$250 2016

BSA Genetics Section Travel Award - \$500 2015

BSA Vernon I. Cheadle Student Travel Award - \$500 2015

UF Department of Biology Summer Travel Award - \$175 2015

UF Graduate Student Council Travel Award - \$350 2015

UF College of Liberal Arts and Sciences Summer 2015 Graduate Travel Award - \$300 2015

American Society of Plant Taxonomists Travel Award for Botany Conference - \$300	2015
FLMNH Lockhart Fellowship Endowment - \$250	2014
UF I-Cubed 2014 Mentoring Award - \$500	2014
UF Department of Biology Summer Travel Award - \$175	2014
UF College of Liberal Arts and Sciences Summer 2014 Graduate Travel Award - \$300	2014
American Society of Plant Taxonomists Travel Award for Botany Conference - \$335	2014
American Society of Plant Taxonomists Travel Award for Botany Conference - \$335	2013
UF Graduate Student Council March Travel Award - \$250	2013
UF Department of Biology Spring Travel Award - \$150	2013
University of Florida Open Access Award	2012
Developmental and Structural BSA Student Travel Award for Botany Conference - \$100	2012
American Society of Plant Taxonomists Travel Award for Botany Conference - \$335	2012
KU Botany Endowment Summer Fellowship - \$1800	2010
Sigma Xi Research Paper Competition, 2nd Place Early Graduate Category	2010
Developmental and Structural BSA Student Travel Award for Botany Conference - \$200	2009
University of Kansas Graduate Student Botany Award - \$690	2009
American Society of Naturalists Travel Award to Evolution - \$300	2009
University of Kansas Graduate Studies Graduate Student Paper Presenter - \$400	2009

Peer Reviewed Publications (+mentee)(† equal contribution)

61. H Zhang, X Zhang, Y Sun, **JB Landis**, LJ Li, GW Hu, J Sun, BB Tihamiyu, TH Kuang, T Deng, H Sung and HC Wang. **2022**. Plastome phylogenomics and biogeography of the Subfam. Polygonoideae (Polygonaceae). **Frontiers in Plant Science**. 13:893201. doi: 10.3389/fpls.2022.893201
60. DJ Chen, **JB Landis**, HX Wang, QH Sun, Q Wang, and HF Wang. **2022**. Plastome structure, phylogenomic analyses and molecular dating of Arecaceae. **Frontiers in Plant Science**. 13:960588. doi:10.3389/fpls.2022.960588
59. E Valderrama†, **JB Landis**†, D Skinner, PJM Maas, H Maas-van de Kamer, T Andre, N Grunder, C Sass, MP Vargas, CJ Guan, HR Phillips, A Almeida, and CD Specht. **2022**. The genetic mechanisms underlying the convergent evolution of pollination syndromes in the Neotropical radiation of *Costus* L. **Frontiers in Plant Science**. 13:874322. doi:10.3389/fpls.2022.874322
58. C Osuna-Mascaró, R Rubio de Casas, J Gomez, J Loureiro, S Castro **JB Landis**, R Hopkins, and F. Perfectti. **2022**. Hybridization and introgression are prevalent in Southern European *Erysimum* (Brassicaceae) species. **Annals of Botany**. mcac048. doi: 10.1093/aob/mcac048
57. L Li, X Xu, H Qian, X Huang, P Liu, **JB Landis**, L Sun, H Wang, T Deng, and H Sun. **2022**. Elevational patterns of phylogenetic structure of angiosperms in a biodiversity hotspot in eastern Himalaya. **Diversity and Distributions**. doi:10.1111/ddi.13513
56. Y Ji, J Yang, **JB Landis**, S Wang, Z Yang, L Jin, L Li, JB Yang, TS Yi. **2022**. Genome skimming contributes to clarifying species limits in *Paris* section *Axiparis* (Melanthiaceae). **Frontiers in Plant Science**. 13:832034. doi:10.3389/fpls.2022.832034
55. Guo R, Y Zhang, H Zhang, **JB Landis**, H Wang, and X Yao. **2022**. Molecular phylogeography and species distribution modelling evidence of ‘oceanic’ adaptation for *Actinidia eriantha* with a refugium along the oceanic-continental gradient in a biodiversity hotspot. **BMC Plant Biology**. 22:89. doi:10.1186/s12870-022-03464-5
54. Y Zhuang, X Wang, X Li, J Hu, L Fan, **JB Landis**, SB Cannon, J Grimwood, J Schmutz, SA

- Jackson, JJ Doyle, XS Zhang, D Zhang, and J Ma. **2022**. Phylogenomics of the genus *Glycine* sheds light on polyploid evolution and life-strategy transition. **Nature Plants**. doi:10.1038/s41477-022-01102-4
53. AI Hernandez, **JB Landis**, and CD Specht. **2022**. Phylogeography and population genetics reveal ring species patterns in a highly polymorphic California lily. **Journal of Biogeography**. 49:416-430. doi:10.1111/jbi.14313
52. H Zhang, X Zhang, **JB Landis**, Y Sun, T Deng, H Sun, and H Wang. **2022**. Phylogenomic and comparative analyses of *Rheum* (Polygonaceae, Polygonoideae). **Journal of Systematics and Evolution**. doi:10.1111/jse.12814
51. XR Ke, DF Morales-Briones, HX Wang, QH Sun, **JB Landis**, J Wen, and HF Wang. **2022**. Nuclear and plastid phylogenomic analyses provide insights into the reticulate evolution, species delimitation and biogeography of the Sino-Japanese disjunctive *Diabelia* (Caprifoliaceae). **Journal of Systematics and Evolution**. doi: 10.1111/jse.12815
50. EJ Amezcuita, MY Quigley, T Ophelders, **JB Landis**, D Koenig, E Munch, and DH Chitwood. **2022**. Measuring the hidden phenotype: Quantifying the shape of barley seeds using the Euler Characteristic Transform. **In silico Plants**. 4:1-15. doi:10.1093/insilicoplants/diab033
49. QH Sun, DF Morales-Briones, HX Wang, **JB Landis**, J Wen, and HF Wang. **2022**. Phylogenomic analyses of the East Asian endemic *Abelia* (Caprifoliaceae) shed insights into the temporal and spatial diversification history with widespread hybridization. **Annals of Botany**. 129:201-216. mcab139, doi.org/10.1093/aob/mcab139
48. X Zhang†, **JB Landis**†, Y Sun, H Zhang, T Feng, N Lin, B Tiamiyu, X Huang, T Deng, H Wang, H Sun. **2021**. Macroevolutionary pattern of *Saussurea* (Asteraceae) provides insights into the drivers of radiating diversification. **Proceedings of the Royal Society B**. 288:20211575. doi: 10.1098/rspb.2021.1575
47. H Sun, Z Li, **JB Landis**, L Qian, T Zhang, and T Deng. **2021**. Effects of drainage reorganization on phylogeographic pattern in Sino-Himalaya. **Alpine Botany**. doi: 10.1007/s00035-021-00269-4
46. Q Fu†, X Huang†, **JB Landis**, P Liu, L Li, Z Lv, J Chen H Wang, J Chen, X Jiang, Y Jin, H Sun, and T Deng. **2021**. Extinction risk in vascular plants and vertebrates is negatively correlated with family size. **Global Ecology and Conservation**. 30:e01781. doi: 10.1016/j.gecco.2021.e01781
45. X Zhang, Y Sun, **JB Landis**, J Shen, H Zhang, T Feng, T Kuang, W Sun, J Sun, BB Tiamiyu, T Deng, and H Sun. **2021**. Transcriptomes of *Saussurea* (Asteraceae) provide insights into high-altitude adaptation. **Plants**. 10:1715. doi: 10.3390/plants10081715
44. Y Ji, J Yang, **JB Landis**, S Wang, Z Yang, and Y Zhuang. **2021**. Deciphering the taxonomic delimitation of *Ottelia acuminata* (Hydrocharitaceae) using complete plastomes as superbarcodes. **Frontiers in Plant Science**. 12:681270. doi: 10.3389/fpls.2021.681270
43. Carey SB, J Jenkins, S Shu, J Lovell, A Sreedasyam, F Maumus, G Tiley, N Fernandez-Pozo, K Barry, C Chen, M Wang, A Lipzen, C Daum, C Saski, AC Payton, JC McBreen RE Conrad, LM Kollar, S Olsson, S Huttunen, **JB Landis**, NJ Wickett, MG Johnson, SA Rensing, J Grimwood, J Schmutz, and SF McDaniel. **2021**. Gene-rich UV sex chromosomes harbor conserved regulators of sexual development. **Science Advances**. 7:eabh2488. doi: 10.1126/sciadv.abh2488
42. XF Zhang, **JB Landis**, HX Wang, ZH Zhu, and HF Wang. **2021**. Comparative analysis of chloroplast genome structure and molecular dating in Myrtales. **BMC Plant Biology**. 21:219. doi: 10.1186/s12870-021-02985-9
41. Lin N, **JB Landis**, Y Sun, X Huang, X Zhang, Q Liu, Z Li, H Zhang, H Wang, T Deng, and

- H Sun. **2021**. Demographic history and local adaptation of *Myriopholis dioica* (Asteraceae) provide insight on plant evolution in northern China flora. **Ecology and Evolution**. 11:8000-8013. doi: 10.1002/ece3.7628
40. Osuna-Mascaró C, R Rubio de Casas, **JB Landis**, and F Perfectii. **2021**. Genomic resources for *Erysimum* spp. (Brassicaceae): Transcriptome and chloroplast genomes. **Frontiers in Ecology and Evolution**. 9:620601. doi: 10.3389/fevo.2021.620601
39. **JB Landis**†, CM Miller†, AK Broz, AA Bennett, N Carrasquilla-Garcia, DR Cook, RL Last, PA Bedinger, and GD Moghe. **2021**. Migration through a major Andean ecogeographic disruption as a driver of genotypic and phenotypic diversity in a wild tomato species. **Molecular Biology and Evolution**. 38:3202-3219. doi: 10.1093/molbev/msab092
38. X Cai, **JB Landis**, HX Wang, JH Wang, ZX Zhu, and HF Wang. **2021**. Plastome structure and phylogenetic relationships of Styracaceae (Ericales). **BMC Ecology and Evolution**. 21:103. doi: 10.1186/s12862-021-01827-4
37. Huang X, T Deng, S Chen, **JB Landis**, N Lin, Y Yang, G Hu, Z Zhou, Y Wang, H Wang, KS Tojibaev, and H Sun. **2021**. Western Tethys Origin, tropical Asia and tropical America disjunction in *Berchemia* and reinstatement of *Phyllogeiton* (Rhamnaceae, Rhamnaceae). **Taxon**. 70:515-525. doi: 10.1002/tax.12498
36. P Chen, XF Zhang, **JB Landis**, ZX Zhu, and HF Wang. **2021**. Complete plastome sequence of *Xylosma longifolium* Clos. (Salicaceae). **Mitochondrial DNA Part B: Resources**. 6:1085-1086. doi: 10.1080/23802359.2021.1899870
35. Villaneuva-Almanza L, **JB Landis**, D Koenig, and E Ezcurra. **2021**. Genetic and morphological differentiation in *Washingtonia* (Arecaceae): solving a century-old palm mystery. **Botanical Journal of the Linnean Society**. doi: 10.1093/botlinnean/boab009
34. Ji Y, C Liu, **JB Landis**, M Deng, and J Chen. **2021**. Plastome phylogenomics of *Cephalotaxus* (Cephalotaxaceae) and allied genera. **Annals of Botany**. 127: 697-708. doi: 10.1093/aob/mcaa201
33. Zhang Y†, T Deng†, L Sun†, **JB Landis**†, MJ Moore, H Wang, Y Wang, X Hao, J Chen, S Li, M Xu, P Puno, PH Raven, and H Sun. **2021**. Phylogenetic patterns and signal in secondary metabolites across the seed plant tree of life. **National Science Review** 8:nwaa105. doi:10.1093/nsr/nwaa105
32. **Landis JB**, A Kurti, AJ Lawhorn, A Litt, and EW McCarthy. **2020**. Differential gene expression with an emphasis on floral organ size differences in natural and synthetic polyploids of *Nicotiana tabacum* (Solanaceae). **Genes**. 11:1097. doi: 10.3390/genes11091097
31. Valderrama E, C Sass, M Pinilla, D Skinner, PJM Maas, H Maas-van de Kamer, **JB Landis**, CJ Guan, and CD Specht. **2020**. Unraveling the spiraling radiation: a phylogenomic analysis of Neotropical *Costus* L. **Frontiers in Plant Science**. 11:1195. doi: 10.3389/fpls.2020.01195
30. Zhang X, Y Sun, **JB Landis**, Z Lv, J Shen, H Zhang, N Lin, L Li, J Sun, T Deng, H Sung, and H Wang. **2020**. Plastome phylogenomic study of Gentianeae (Gentianeae): widespread gene tree discordance and its association with evolutionary rate heterogeneity of plastid genes. **BMC Plant Biology** 20:340. doi:10.1186/s12870-020-02518-w
29. Guo X, C Liu, G Zhang, W Su, **JB Landis**, X Zhang, H Wang, and Y Ji. **2020**. The complete plastomes of five hemiparasitic plants (*Osyris wightiana*, *Pyricularia edulis*, *Santalum album*, *Viscum liquidambaricolum*, and *V. ovalifolium*): comparative and evolutionary analyses within Santalales. **Frontiers in Genetics**. 11:597. doi: 10.3389/fgene.2020.00597
28. Zhang X, Y Sun, **JB Landis**, J Zhang, L Yang, N Lin, H Zhang, R Guo, L Li, Y Zhang, T

- Deng, H Sun, and H Wang. **2020**. Genome wide sequencing provides evidence of adaptation to heterogenous environments for the ancient relictual *Circaeaster agrestis* (Circaeasteraceae, Ranunculales). **New Phytologist** 228:285-301. doi: 10.1111/nph.16669
27. Adelalu KF, X Zhang, X Qu, **JB Landis**, Y Sun, A Meng, H Sun, and H Wang. **2020**. Plastome phylogenomic and biogeographic study on *Thuja* (Cupressaceae). **BioMed Research International**. 20: 8426287. doi:10.1155/2020/8426287
26. Sun Y, T Deng, A Zhang, MJ Moore, **JB Landis**, N Lin, H Zhang, X Zhang, T Feng, Z Zhang, H Sun, and H Wang. **2020**. The draft genome of the endangered, relictual plant *Kingdonia uniflora* (Circaeasteraceae, Ranunculales) reveals potential mechanisms and perils of evolutionary specialization. **iScience** 23:101124. doi:10.1016/j.isci.2020.101124
25. Shen J, X Zhang, **JB Landis**, H Zhang, T Deng, H Sun, and H Wang. **2020**. Plastome evolution in *Dolomiaea* (Asteraceae, Cardueae) using phylogenomic and comparative analyses. **Frontiers in Plant Science**. 11:376. doi:10.3389/fpls.2020.00376
24. Phillips HR, **JB Landis**, CD Specht. **2020**. Floral Fusion: The evolution and molecular basis of a developmental innovation. **Journal of Experimental Biology**. 71:3390-3404. doi: 10.1093/jxb/eraa125
23. Xue B, X Guo, **JB Landis**, M Sun, CC Tang, PS Soltis, DE Soltis, and RMK Saunders. **2020**. Accelerated diversification correlated with functional traits shape extant diversity of the early divergent angiosperm family Annonaceae. **Molecular Phylogenetics and Evolution** 142:106659. doi: 10.1016/j.ympev.2019.106659
22. Howard CC, **JB Landis**, JM Beaulieu and N Cellinese. **2020**. Implications of geophytism in the diversification of monocots. **New Phytologist** 225:1023-1032. doi: 10.1111/nph.16155
21. Zhang H, T Feng, **JB Landis**, X Zhang, A Meng, T Deng, H Sun, and H Wang. **2019**. Circumscription of *Sibbaldia procumbens* complex (Potentilleae, Rosaceae) based on evidence from SSR markers and morphology. **Botanical Journal of the Linnean Society** 191:305-314. doi: 10.1093/botlinnean/boz056
20. McCarthy EW, **JB Landis**, A Kurti, AJ Lawhorn, MW Chase, S Napp, SC Le Comber, AR Leitch, and A Litt. **2019**. Early consequences of allopolyploidy alter floral evolution in *Nicotiana* (Solanaceae). **BMC Plant Biology** 19:162. doi:10.1186/s12870-019-1771-5
19. Zhang H, T Feng, **JB Landis**, T Deng, H Sun, Y Sun, and H Wang. **2019**. Molecular phylogeography and ecological niche modeling of *Sibbaldia procumbens* s.l. (Rosaceae). **Frontiers in Genetics** 10:201. doi:10.3389/fgene.2019.00201
18. Zhang X, H Zhang, **JB Landis**, T Deng, A Meng, H Sun, Y Peng, H Wang, and Y Sun. **2019**. Plastome phylogenomic analysis of *Torreya* (Taxaceae). **Journal of Systematics and Evolution** 57:607-615. doi:10.1111/jse.12482
17. Sun Y, MJ Moore, **JB Landis**, N Lin, L Chen, T Deng, J Zhang, S Zhang, KS Tojibaev, H Sun, and H Wang. **2018**. Plastome phylogenomics of the early-diverging eudicot family Berberidaceae. **Molecular Phylogenetics and Evolution** 128:203-211. doi:10.1016/j.ympev.2018.07.021
16. **Landis JB**, CD Bell, M Hernandez⁺, R Zenil-Ferguson, EW McCarthy, DE Soltis, and PS Soltis. **2018**. Evolution of Floral Traits and Impact of Reproductive Mode on Diversification in the Phlox Family (Polemoniaceae). **Molecular Phylogenetics and Evolution** 127:878-890. doi:10.1016/j.ympev.2018.06.035
15. **Landis JB**, DE Soltis, Z Li, HE Marx, MS Barker, DC Tank, and PS Soltis. **2018**. Impact of whole-genome duplication events on diversification rate in angiosperms. **American**

- Journal of Botany** 105(3):1-16. doi:10.1002/ajb2.1060
14. Guo R, **JB Landis**, MJ Moore, A Meng, S Jian, X Yao, and H Wang. **2017**. Development and application in population genetics of microsatellites based on the transcriptome of *Actinidia eriantha* (Actinidiaceae). **Frontiers in Plant Science** 8:1383. doi:10.3389/fpls.2017.01383
 13. **Landis JB**, DE Soltis, and PS Soltis. **2017**. Comparative transcriptomic analysis of the evolution and development of flower size in *Saltugilia* (Polemoniaceae). **BMC Genomics** 18:475. doi:10.1186/s12864-017-3868-2
 12. Hodel RG, MC Salcedo-Segovia, **JB Landis**, AA Crowl, M. Sun, X. Liu, MA Gitzendanner, NA Douglas, CC Germain-Aubrey, S Chen, DE Soltis and PS Soltis. **2016**. The report of my death was an exaggeration: a review for researchers using microsatellites in the 21st century. **Applications in Plant Sciences** 4:1600025. doi:10.3732/apps.1600025
 11. Hodel RG, MA Gitzendanner, CC Germain-Aubrey, X Liu, AA Crowl, M Sun, **JB Landis**, MC Salcedo-Segovia, NA Douglas, S Chen, DE Soltis and PS Solits. **2016**. A new resource for the development of SSR markers: Millions of loci from a thousand plant transcriptomes. **Applications in Plant Sciences** 4:1600024. doi:10.3732/apps.1600024
 10. **Landis JB**, R O'Toole⁺, KL Ventura⁺, MA Gitzendanner, DG Oppenheimer, DE Soltis and PS Soltis. **2016**. The phenotypic and genetic underpinnings of flower size in Polemoniaceae. **Frontiers in Plant Science** 6:1144. doi: 10.3389/fpls.2015.01144
 9. **Landis JB**, KL Ventura⁺, DE Soltis, PS Soltis and DG Oppenheimer. **2015**. Optical sectioning and 3D reconstructions as an alternative to scanning electron microscopy for analysis of cell shape. **Applications in Plant Sciences** 3: 1400112, DOI: 10.3732/apps.1400112
 8. Bokor JR, **JB Landis**, and KJ Crippen. **2014**. High school student learning and perceptions of phylogenetics of flowering plants. **CBE Life Sciences Education** 13: 653-665. DOI: 10.1187/cbe.14-04-0074
 7. Brockington SF, R Alvarez-Fernandez, **JB Landis**, K Alcorn, RH Walker, MM Thomas, LC Hileman, and BJ Glover. **2012**. Phylogeny and evolution of the *MIXTAs*: New targets in the study of epidermal differentiation. **Molecular Biology and Evolution** 30: 526-540. DOI:10.1093/molbev/mss260
 6. **Landis JB**, LL Barnett, and LC Hileman. **2012**. Evolution of petaloid sepals independent of shifts in B-class MADS box gene expression. **Development, Genes and Evolution** 222: 19-28. DOI: 10.1007/s00427-011-0385-1
 5. Molecular Ecology Resources Primer Development Consortium, Almany, De Arruda, Arthofer, Atallah, Beissinger, Berumen, Bogdanowicz, Brown, Bruford, Burdine, Busch, Campbell, Carey, Carstens, Chu, Cubeta, Cuda, Cui, Datnoff, Davila, Davis, Davis, Diekmann, Eizirik, Fargallo, Fernandes, Fukuda, Gale, Gallagher, Gao, Girard, Godhe, Goncalves, Gouveia, Grajczyk, Grose, Gu, Hallden, Harnstrom, Hemmingsen, Holmes, Huang, Huang, Hudman, Jones, Kanetis, Karunasagar, Karunasagar, Keyghobadi, Klosterman, Klug, Kcoh, Koopman, Koppler, Koshimizu, Krumbock, Kubisiak, **Landis** et al. **2009**. Permanent Genetic Resources added to Molecular Ecology Resources Database 1 May 2009-31 July 2009. **Molecular Ecology Resources** 9: 1460-1559. DOI: 10.1111/j.1755-0998.2009.02759.x
 4. **Landis JB**, MJ Grose, EO Wiley, and SP Hudman. **2009**. Characterization of 35 novel microsatellite loci for ecological and evolutionary studies of the bluntnose minnow (*Pimephales notatus*). **Molecular Ecology Resources** 9: 864-867. DOI: 10.1111/j.1755-0998.2008.02404.x.
 3. **Landis JB**, SP Hudman, MJ Grose, GT Skalski, and EO Wiley. **2009**. Characterization of 32

- novel microsatellite loci for population and mating system studies using *Camptostoma anomalum* (central stoneroller). **Molecular Ecology Resources** 9: 251-254. DOI: 10.1111/j.1755-0998.2008.02430.x
2. Hudman SP, MJ Grose, **JB Landis**, GT Skalski, and EO Wiley. **2008**. Twenty-three microsatellite DNA loci for population genetic studies and parentage assignment in orangethroat darter, *Etheostoma spectabile*. **Molecular Ecology Resources** 8: 1483-1485. DOI: 10.1111/j.1755-0998.2008.02312.x
 1. Skalski GT, **JB Landis**, MJ Grose, and SP Hudman. **2008** Genetic Structure of Creek Chub, a Headwater Minnow, in an Impounded River System. **Transactions of the American Fisheries Society** 137: 962-975. DOI: 10.1577/T07-060.1

Book Chapters

EW McCarthy, **JB Landis**, A Kurti, AJ Lawhorn, and A Litt. 2020. The genetic basis of flower color differences in *Nicotiana tabacum*. In “The Tobacco Genome”. Eds NV Ivanov, N Sierro, and MC Peitsch. Pages 175-193. Springer, New York City, New York.

Invited Presentations

- JB Landis**. Using genomics to unlock secrets of evolutionary relationships and adaptation: from populations to the angiosperm tree of life. University of Wisconsin Madison, May 12, 2022, Madison, WI.
- JB Landis**. Evolutionary patterns of plant adaptation illuminated with genomics: from populations to the angiosperm tree of life. Tel Aviv University, (Virtual), May 11, 2021, Tel Aviv, Israel.
- JB Landis**. Use of phylogenetics at different scales. Weber State University, (Virtual), April 9, 2021, Ogden, UT.
- JB Landis**. Evolutionary patterns of plant adaptation illuminated with genomics: from populations to the angiosperm tree of life. Rhodes College, (Virtual), March 10, 2021, Memphis, TN.
- JB Landis**. Genomic components underlying evolutionary patterns of plant adaptation: from populations to the angiosperm tree of life. Smithsonian Institution, (Virtual), July 16, 2020, Washington, DC.
- JB Landis**. Use of phylogenetics at different scales. Hobart and William Smith Colleges, (Virtual), April 10, 2020, Geneva, NY.
- JB Landis**, R Glos, M Royall, Y Seo, S Harrington, IE Edwards, CD Specht, S McCouch, and E Styger. Genome diversity of Saamaka rice varieties in Suriname. Plant and Animal Genome Conference, January 11-15, 2019, San Diego, CA.
- JB Landis**. Genomic components underlying evolutionary patterns of plant adaptation: from populations to the angiosperm tree of life. University of Rochester, November 22, 2019, Rochester, NY.
- JB Landis**. Using hybrid-assemblies of genomes and transcriptomes to address evolutionary and ecological questions in species with complex genomes. Boyce Thompson Institute, October 28, 2019, Ithaca, NY.
- JB Landis**. Genetic diversity underlying evolutionary patterns of plant adaptation: A multi scaled approach. Cornell University, March 29, 2019, Ithaca, NY.
- JB Landis**. Evidence for adaptation in California systems: examples from the gilies (Polemoniaceae) and barley (Poaceae). Rancho Santa Ana Botanic Garden, October 25, 2018, Claremont, CA.

JB Landis. Floral evolution in Polemoniaceae in light of shifts in pollinators. Stetson University, April 13, 2016, DeLand, FL.

JB Landis. Floral evolution in Polemoniaceae in light of shifts in pollinators. New York Botanic Garden, September 12, 2014, New York, NY.

Contributed Presentations (*First author presenter unless denoted) (+ mentee)

JB Landis, M Gaynor, T O'Connor, R Deanna, K Nguyen, J Ng, and R Laport. Using RAD capture sequences to investigate the origins of the American Amphitropical disjuncts *Larrea tridentata* and *Larrea divaricata*. (Oral). Botany 2022 Conference, July 24-27, Anchorage, Alaska.

JB Landis, GY DeLaCerde⁺, AI Hernandez, J Zhang, A Powell, T Givnish, CD Specht, and SR Strickler. Utilizing the long and the short: comparison of different genome assembly programs for a 5.5 GB Liliales genome. (Oral). Botany 2022 Conference, July 24-27, Anchorage, Alaska.

JB Landis, AI Hernandez, C Tribble, E Eifler, T Givnish, SR Strickler, and CD Specht. Generating transcriptome data to reveal genetic mechanisms of floral traits in multiple species of *Calochortus* (Liliaceae). (Poster). Botany 2022 Conference, July 24-27, Anchorage, Alaska.

AG McCoy, **JB Landis,** and EW McCarthy. Are signatures of positive selection present at flower color shifts in *Nicotiana*. (Poster). Botany 2022 Conference, July 24-27, Anchorage, Alaska.

T Ostovar, **JB Landis,** EW McCarthy, J Stajich, E Waters, and A Litt. Impacts of allopolyploidy on gene expression in *Nicotiana* section Repandae. (Oral). Botany 2022 Conference, July 24-27, Anchorage, Alaska.

AI Hernandez, **JB Landis,** C Tribble, E Eifler, T Givnish, SR Strickler, and CD Specht. Comparative transcriptomics provides insights into the genetic mechanisms regulating functional floral traits across *Calochortus* (Liliaceae). (Oral). Botany 2022 Conference, July 24-27, Anchorage, Alaska.

CD Specht, **JB Landis,** E Valderrama, T Andre, D Skinner, PJM Maas, H Maas-van de Kramer, AM Almeida. Genetic mechanisms underlying the convergent evolution of pollination syndromes in the Neotropical radiation of *Costus* L. (Oral). Botany 2022 Conference, July 24-27, Anchorage, Alaska.

GY DeLaCerde⁺, **JB Landis,** AI Hernandez, C Tribble, E Eifler, FW Li, J Zhang, N Karimi, P Chan, T Givnish, SR Strickler, and CD Specht. Balancing read length and sequencing depth: optimizing Nanopore long-read sequencing for monocots with an emphasis on Liliales. (Oral). Botany 2022 Conference, July 24-27, Anchorage, Alaska.

N Karimi, AI Hernandez, AR Conterars, E Eifler, P Chan, **JB Landis,** A Lemmon, E Lemmon, SR Strickler, CD Specht, and T Givnish. Phylogenomics, patterns of species diversity and co-occurrence in the mariposa lilies (*Calochortus*; Liliaceae). (Oral). Botany 2022 Conference, July 24-27, Anchorage, Alaska.

H Phillips, **JB Landis,** and CD Specht. To fuse or not to fuse: Investigating the evolution and development of floral fusion in the Zingiberales. (Oral). Botany 2022 Conference, July 24-27, Anchorage, Alaska.

GY DeLaCerde⁺, **JB Landis,** AI Hernandez, CD Specht, and SR Strickler. Inside and out: the role of structural variation in the genome and flower morphology in the mariposa lilies. (Poster). Plant and Animal Genome 2022 Conference, January 8-12, Virtual.

JB Landis, E Valderrama, N Grunder, D Skinner, M Pinilla-Vargas, A Almeida, and CD Specht.

- Using *de novo* assemblies to identify genomic signatures of evolution between insect and hummingbird pollination in *Costus* (Costaceae). (Oral). Botany 2021 Conference, July 18-23, Virtual.
- JB Landis**, A Hernandez, M Pinilla-Vargas, J Zhang, N Karimi, P Chan, E Eifler, T Givnish, S Strickler, and CD Specht. Five gigs and then some: assembling a large reference genome in the Liliales (*Calochortus venustus*; Liliaceae). (Poster). Botany 2021 Conference, July 18-23, Virtual.
- R Laport, **JB Landis**, M Gaynor, T O'Connor, R Deanna, and K Nguyen. Using RAD capture sequences to investigate the origins of the American Amphitropical disjuncts *Larrea tridentata* and *Larrea divaricata*. (Poster). Botany 2021 Conference, July 18-23, Virtual.
- L Jensen, **JB Landis**, G Otto, and EW McCarthy. Simulating the natural world: Modeling flower color evolution in *Nicotiana*. (Oral). Botany 2021 Conference, July 18-23, Virtual.
- C Guan, **JB Landis**, E Valderrama, D Skinner, H Phillips, and CD Specht. Exploring phyllotaxis genes and one-sided spirals in *Costus* L. (Oral). Botany 2021 Conference, July 18-23, Virtual.
- H Phillips, **JB Landis**, and CD Specht. To fuse or not to fuse: Investigating the evolution and development of floral fusion in the Zingiberales. (Oral). Botany 2021 Conference, July 18-23, Virtual.
- A Grinage, **JB Landis**, E Valderrama, M Gandolfo, and CD Specht. Deciphering the tales of *Sabal* from the crypt: insights from past collections. (Oral). Botany 2021 Conference, July 18-23, Virtual.
- E Valderrama, D Skinner, P Maas, H Maas, T Andre, **JB Landis**, C Sass, M Pinilla-Vargas, C Guan, N Grunder, A Almeida, and CD Specht. Toggling between bird and insect pollination syndromes in the radiation of Neotropical *Costus* L. (Oral). Botany 2021 Conference, July 18-23, Virtual.
- X Zhang, **JB Landis**, Y Sun, T Feng, H Wang, T Deng, and H Sun. Insights into the drivers of radiating diversification in biodiversity hotspots using *Saussurea* (Asteraeae) as a model. (Oral). Botany 2021 Conference, July 18-23, Virtual.
- E Amezcuita, M Quigley, T Ophelders, **JB Landis**, D Koenig, E Munch, and DH Chitwood. Describing 'demeter': using the Euler characteristic to quantify the shape and biology. (Oral). Great Lakes Bioinformatics Conference 2021, May 10-13, Virtual.
- SL Jensen, **JB Landis**, G Otto, and EW McCarthy. Simulating evolution of flower color in *Nicotiana*. (Poster). Botany 2020 Conference, July 27-31, Virtual.
- EW McCarthy, A Kurti, A Lawhorn, A Litt, and **JB Landis**. Homeolog expression bias increases with allopolyploidy age, but does not correlate with floral color differences in *Nicotiana tabacum* allopolyploids. (Oral). Botany 2020 Conference, July 27-31, Virtual.
- E Valderrama, C Sass, M Pinilla-Vargas, D Skinner, **JB Landis**, CJ Guan, A Almeida, N Grunder, and CD Specht. Unraveling the spiraling radiation: a phylogenomic analysis of Neotropical *Costus* L. (Oral). Botany 2020 Conference, July 27-31, Virtual.
- CJ Guan, **JB Landis**, E Valderrama, H Phillips, D Skinner, and CD Specht. Pieces of the Puzzle: Investigations of spiromonostichy in the spiral ginger (*Costus*, Costaceae). (Oral). Botany 2020 Conference, July 27-31, Virtual.
- JB Landis**, E Valderrama, N Grunder, D Skinner, C Sass, M Pinilla-Vargas, CJ Guan, A Almeida, and CD Specht. The genomic signatures of convergent evolution of pollination syndromes in *Costus* (Costaceae). (Oral). Botany 2020 Conference, July 27-31, Virtual.
- A Hernandez, **JB Landis**, CD Specht. Exploring the population dynamics of the highly polymorphic California endemic *Calochortus venustus* (Liliaceae). (Oral). Botany 2020

- Conference, July 27-31, Virtual.
- H Phillips, R Bruenn, **JB Landis**, and CD Specht. To Fuse or not to Fuse: Investigating the evolution and development of floral fusion in the Zingiberales. (Oral). Botany 2020 Conference, July 27-31, Virtual.
- A Hernandez, **JB Landis**, CD Specht. Testing the ring species hypothesis with RAD-Sequencing and minion genome sequencing in the California endemic *Calochortus venustus* (Liliaceae). (Oral). Botany 2019 Conference, July 27-31, Tucson, AZ.
- H Phillips, R Bruenn, **JB Landis**, and CD Specht. Elucidating the roles of MYB-related transcription factors in Zingiberales zygomorphy. (Poster). Botany 2019 Conference, July 27-31, Tucson, AZ.
- EW McCarthy, **JB Landis**, A Kurti, A Lawhorn, and A Litt. Homeolog expression bias in floral color evolution in natural and synthetic *Nicotiana tabacum* allopolyploids. (Oral). Botany 2019 Conference, July 27-31, Tucson, AZ.
- JB Landis**, J Nguyen, I Villamor, A Guercio, CF Fiscus, M Quigley, T Ophelders, M Eithun, E Munch, DH Chitwood, and D Koenig. Integrating next-generation high resolution phenotype acquisition with genotypes to study adaptation in barley (*Hordeum vulgare*). (Oral). Botany 2019 Conference, July 27-31, Tucson, AZ.
- L Villanueva-Almanza, **JB Landis**, E Ezcurra, and D Koenig. Reviving a century-old palm (*Washingtonia*) mystery using the power of Genotyping by Sequencing (GBS). (Oral). Botany 2019 Conference, July 27-31, Tucson, AZ.
- R Glos, **JB Landis**, M Royall, S Harrington, S McCouch, CD Specht, and E Styger. Characterization of Saamakan rice diversity in Suriname. (Poster). Botany 2019 Conference, July 27-31, Tucson, AZ.
- L Kaminsky, **JB Landis**, ME Smith, and S McDaniel. A preliminary taxonomic revision of the *Leptogium austroamericanum* and *L. cyanescens* species complexes in Florida, USA. (Poster). ABLs 2018, August 12-16, University of Colorado Mountain Research Station.
- JB Landis** J Cohen. Flower size evolution and patterns of selection in organ size genes across the evolutionary history of the angiosperms. (Oral). Botany 2018 Conference, July 21-25, Rochester, MN.
- JB Landis**, A Guercio, CF Fiscus, and D Koenig. Phenotypic variation and genetic control of long-term success in a near century long study of barley (*Hordeum vulgare*). (Oral). Botany 2018 Conference, July 21-25, Rochester, MN.
- SB Carey, M Johnson, A Payton, R Conrod, **JB Landis**, S Olsson, S Huttunen, G Burleigh, and S McDaniel. Ancient sex chromosome systems in plants. (Oral). Botany 2018 Conference, July 21-25, Rochester, MN.
- CC Howard, **JB Landis**, R Folk, J Beaulieu, and N Cellinese. Global phylogenetic patterns and diversification of monocotyledonous geophytes. (Oral). Botany 2018 Conference, July 21-25, Rochester, MN.
- EW McCarthy, **JB Landis**, A Kurti, A Lawhorn, and A Litt. The genetic basis of flower color differences in *Nicotiana tabacum*. (Oral). Botany 2018 Conference, July 21-25, Rochester, MN.
- JB Landis**, A Guercio, CF Fiscus, and D Koenig. Elucidating the genetic control of long-term success in a near century long study of barley (*Hordeum vulgare*). (Oral). Evolution 2017 Conference, June 23-27, Portland, OR.
- JB Landis**, DE Soltis and PS Soltis. Comparative transcriptomic analysis of the evolution and development of flower size differences in *Saltugilia* (Polemoniaceae). (Oral). Botany 2016 Conference, July 31-August 3, Savannah, GA.

- JB Landis**, SB Carey, AC Payton, ED Woodruff, RE Conrad, K Barry, J Jenkins, J Grimwood, J Schmutz, and SF McDaniel. Sexual dimorphic expression patterns in the transcriptome of juvenile tissue of *Ceratodon purpureus*. (Oral). Botany 2016 Conference, July 31-August 3, Savannah, GA.
- SB Carey, **JB Landis**, AC Payton, ED Woodruff, RE Conrad, K Barry, J Jenkins, J Grimwood, J Schmutz, and SF McDaniel. Using a SNP corrected genome-guided approach to infer transcriptional sexual dimorphism in *Ceratodon purpureus*. (Oral) Evolution 2015 Conference, June 17-21, Austin, TX.
- JB Landis**, RD O'Toole⁺, KL Ventura⁺, DE Soltis and PS Soltis. Investigating the genetic underpinnings of corolla size and shape differences in *Saltugilia* (Polemoniaceae). (Oral). Botany 2015 Conference, July 25-29, Edmonton, Alberta, Canada.
- KL Ventura⁺, **JB Landis**, DE Soltis, and PS Soltis. Cell number or cell shape: which has a larger effect on flower size in *Gilia* (Polemoniaceae). (Poster). Botany 2015 Conference, July 25-29, Edmonton, Alberta, Canada.
- EW McCarthy, **JB Landis**, and A Litt. Does reconstructing ancestral progenitor phenotypes alter the interpretation of morphological evolution in allopolyploids? (Oral). Botany 2015 Conference, July 25-29, Edmonton, Alberta, Canada.
- M Hernandez⁺, **JB Landis**, DE Soltis, and PS Soltis. *Leptosiphon* and flower color: investigating color acquisition in Polemoniaceae using phylogenetics. (Poster). Botany 2015 Conference, July 25-29, Edmonton, Alberta, Canada.
- JR Bokor, KJ Crippen and **JB Landis**. Using scaffolding to build phylogenetic trees with high school students. (Oral). National Association for Research in Science Teaching, April 11-14, 2015, Chicago, IL.
- JB Landis**, J Broo, J Mahoney, and JR Bokor. Co-Evolution in the High School Classroom: Constructing and Applying Phylogenies to Interpret Plant and Pollinator Interactions. (Oral). National Association of Biology Teachers, November 12-15, 2014 Cleveland, OH.
- JB Landis** and JR Bokor*. Flowers, Birds, and Bees: Constructing Phylogenies and Interpreting Plant/Pollinator Interactions in the High School Classroom. (Oral). National Association of Science Teachers Area Conference on Science Education, November 6-8, 2014, Orlando, FL.
- JB Landis** and JR Bokor. Forensic Botany in the High School Classroom: Real-World Application of Molecular Techniques. (Oral). National Association of Science Teachers Area Conference on Science Education, November 6-8, 2014, Orlando, FL.
- JB Landis**, RD O'Toole⁺, DG Oppenheimer, DE Soltis, and PS Soltis. Determining the cellular component of flower size differences in *Saltugilia* (Polemoniaceae). (Oral). Botany 2014 Conference, July 26-30, Boise, ID.
- JB Landis** and JR Bokor. High school student learning and perceptions of phylogenetics of flowering plants. (Poster). Botany 2014 Conference, July 26-30, Boise, ID.
- M Hernandez⁺, **JB Landis**, DE Soltis, and PS Soltis. *Leptosiphon* and flower color: investigating color acquisition in Polemoniaceae using phylogenetics. (Poster). Botany 2014 Conference, July 26-30, Boise, ID.
- CD Bell, **JB Landis**, PS Soltis, DE Soltis. Clocks and *Phlox*: testing hypotheses of the association of life history with diversification in Polemoniaceae. (Oral). Botany 2014 Conference, July 26-30, 2014, Boise, ID.

- JB Landis**, M Hernandez*⁺, DE Soltis, and PS Soltis. Floral and pollinator evolution in light of a near-complete phylogeny for Polemoniaceae. (Poster). Evolution Conference 2014, June 20-24, Raleigh, NC.
- JB Landis**, ML Gredler, DE Soltis, and PS Soltis. Corolla length does matter: investigating the phenotypic and genetic underpinnings of flower size in Polemoniaceae. (Oral). Botany 2013 Conference, July 28-31, 2013, New Orleans, LA.
- JB Landis**, M Hernandez*⁺, DE Soltis, and PS Soltis. Floral and pollinator evolution in light of a near-complete phylogeny for Polemoniaceae. (Poster). Botany Conference, July 28-31, 2013, New Orleans, LA.
- JB Landis**, DE Soltis, and PS Soltis. All in the family: Pollination syndromes and floral traits in the flowering plant family Polemoniaceae. (Oral). Botany 2012 Conference, July 7-11, 2012, Columbus, OH.
- JB Landis**. Phenotypic and genetic components associated with pollinator shifts in the Phlox family (Polemoniaceae). (Oral). microMorph "The Microevolution of Flower Form and Function" workshop, May 11, 2012, Boston, MA.
- JB Landis** and LC Hileman. The birds and the bees: testing for correlated evolution between petal shape and pollinators. (Oral). KU EEB Department seminar, January 25, 2011, Lawrence, KS.
- JB Landis** and LC Hileman. The birds and the bees: investigating the role of *MIXTA* genes in pollinator shifts. (Oral). Botany 2010 Conference, July 3-August 4, 2010, Providence, RI.
- JB Landis** and LC Hileman. The birds and the bees: investigating the role of *MIXTA* genes in pollinator shifts. (Oral). Evolution 2010 Conference, June 25-29, 2010, Portland, OR.
- JB Landis**, LL Baldrige, and LC Hileman. Determining the genetic basis for petal-like sepals in a close relative of snapdragon. (Oral). Sigma Xi University of Kansas Chapter Research paper competition, April 24th, 2010, Lawrence, KS.
- JB Landis**, LL Baldrige, and LC Hileman. Determining the genetic basis for petal-like sepals in a close relative of snapdragon. (Poster). Ecological Genomics, November 13-15, 2009, Kansas City, MO.
- JB Landis**, LL Baldrige, and LC Hileman. Determining the genetic basis for petal-like sepals in a close relative of snapdragon. (Oral). Natural History Museum/Ecology and Evolutionary Biology Graduate Student Retreat, October 31, 2009, Lawrence, KS.
- JB Landis**, LL Baldrige, and LC Hileman. Determining the genetic basis for petal-like sepals in a close relative of snapdragon. (Poster). Botany 2009 Conference, July 25-29, 2009, Snowbird, UT.
- JB Landis**, LL Baldrige, and LC Hileman. Determining the genetic basis for petal-like sepals in a close relative of snapdragon. (Poster). Evolution Conference, June 12-16, 2009, Moscow, ID.
- JB Landis**, JC Cureton, EA Lamb, S Stoops, and R Deaton. An Analysis of Time and Environmental Conditions on Peak Mating Behavior in the Western Mosquitofish (Poeciliidae): It Matters When But Not Where... (Oral). Texas Academy of Science, March 6, 2009, Junction, TX.
- JC Cureton II, **JB Landis**, EA Lamb, C Kroll, R Lewis, SK Rosado, S Sendelbach, A Titlow, S Stoops, J West, and R Deaton. An Analysis of Time and Environmental Conditions on Peak Mating Behavior in the Western Mosquitofish (Poeciliidae): It Matters When But Not Where... (Oral). Third Triennial OK-TX Aquatic Research Group Meeting and 35th Annual Great Plains Limnology Conference, September 26, 2008, Norman, OK.

SK Rosado, **JB Landis**, R Deaton, and CW Hargrave. Predator-induced Phenotypic Plasticity in the Western Mosquitofish (*Gambusia affinis*). (Oral). Third Triennial OK-TX Aquatic Research Group Meeting and 35th Annual Great Plains Limnology Conference, September 26, 2008, Norman, OK.

Teaching Experience

Instructor of Record

Plant Systematics PLBIO 2480 – Cornell University	Fall 2021
Plant Systematics PLBIO 2480 – Cornell University	Fall 2020

Workshops and Webinars

<i>de novo</i> Genome Assembly and Annotation Workshop – Botany 2022	July 2022
<i>de novo</i> Genome Assembly and Annotation Workshop – Botany 2021	July 2021
CyVerse Agricultural Genome to Phenome Initiative SNP Calling Workshop	May 2021
<i>de novo</i> Genome Assembly and Annotation Workshop – BTI/CyVerse	May 2021
Got Variants? Downstream SNP Analyses... - CyVerse Webinar	February 2021
Hit the Ground Running with SNP Calling... - CyVerse Webinar	September 2020
<i>de novo</i> Genome Assembly and Annotation Workshop – Botany 2020	July 2020
<i>de novo</i> Genome Assembly and Annotation Workshop – Cornell University	July 2020

Guest Lectures at Cornell University

Long-read sequencing and genome assembly for PLBIO 4000	Spring 2022
Long-read sequencing and genome assembly for PLBIO 4000	Spring 2021
Hyb-Seq lecture for PLBIO 4000	Spring 2020
Forensic botany lecture PLSCI 1150	Spring 2020
Beast and divergence time estimation lab PLBIO 6410	Fall 2019
Maximum likelihood phylogenetics lab PLBIO 6410	Fall 2019
Beast and divergence time estimation, lab and lecture PLBIO 4400	Spring 2019
Bayesian phylogenetics and model testing, lab and lecture PLBIO 4400	Spring 2019
Trait evolution and comparative phylogenetics for PLBIO 4831	Fall 2018
Bayesian phylogenetics lab module PLBIO 6410	Fall 2018
Comparative phylogenetics and diversification lab PLBIO 6410	Fall 2018

Graduate Teaching Assistant at the University of Florida

Head TA for Integrated Principles of Biology 2	Spring 2016
Head TA for Integrated Principles of Biology 2	Fall 2015
Created and implemented molecular phylogenetics module for Bio 2 lab	Summer 2015
Three lab sections of Integrated Principles of Biology 2	Fall 2014
Guest Lecture in Broader Impacts	Fall 2014
Online instructor for lecture of Integrated Principles of Biology 2	Fall 2013
Three lab sections of Integrated Principles of Biology 2	Spring 2013
Three lab sections of Integrated Principles of Biology 2	Spring 2012

Interdisciplinary Honors Seminar in Scientific Inquiry: Evolution with an Evo-Devo Emphasis, Co-taught with Bonnie Kircher	Summer 2015
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Graduate Teaching Assistant at the University of Kansas

J.B. Landis

Three lab sections of Intro to Cell and Molecular Biology	Spring 2011
Three lab sections of Honors Introduction to Cellular and Molecular Biology	Fall 2010
Guest Lecture for Honors Introduction to Cellular and Molecular Biology	Fall 2010
Two lab sections of Honors/one section of Intro to Cell and Molecular Bio	Spring 2009

Undergraduate Teaching Assistant at the University of Kansas	
Introduction to Biology lab for non-science majors	Spring and Fall 2008
Biostatistics lecture grader and lab assistant	Fall 2008

Undergraduate Mentoring

Ava Robillard	Spring 2022 - Present
Yuna Seo	Spring 2019 – Spring 2020
Dan Nichols	Fall 2018 – Spring 2019
Hrushikesh Gore – EEB Mentor Match	Fall 2018 – Spring 2019
Asa Peters – BSA Junior Plants Mentor	July 2018
Imma Villamor	Summer 2017 – Spring 2018
Jessica Nguyen	Summer 2017 – Spring 2018
Selena Burke (co-mentored with Christopher Fiscus) REU student	Summer 2017
Kayla Ventura	Spring 2013 – Spring 2016
BSA Young Botanist Award 2016	
HHMI scholar 2014-2015	
BSA Undergraduate Student Research Award 2014	
Rebecca O'Toole	Spring 2013 – Fall 2015
BSA Young Botanist Award 2016	
NSF Research Experience for Undergraduates 2014 – Auburn University	
Margarita Hernandez	
NSF GFRP recipient	Fall 2012 – Spring 2015
BSA Young Botanist Award 2015	
Undergraduate Diversity Evolution Travel Award 2014	
Beckman scholars 2013-2014	
BSA Undergraduate Student Research Award 2013	
Kimberly Segovia	Spring 2014 – Summer 2014
Milda Stanislauskas	Summer 2013
David Syckle – BSA Junior Plants Mentor	July 2013
Megan Galarza	Fall 2012 - Spring 2013
Jacob Holland	Summer and Fall 2012
Rylan Sprague – BSA Junior Plants Mentor	July 2012
Alejandra Rodriguez	Summer 2011
Michelle Mezger	Fall 2009
Nicole Nebitsi	Summer 2009

Postbaccalaureate Mentoring

Gisel De La Cerda	Fall 2021- Present
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Memberships in Professional Societies

Botanical Society of America	March 2009 - Present
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J.B. Landis

American Society of Plant Taxonomists	February 2012 - Present
California Botanical Society	August 2018 - Present
Society for the Study of Evolution	March 2010-December 2010; October 2016 - Present
Sigma Xi	May 2013 – December 2020
National Association of Biology Teachers	August 2014 - December 2015
American Society of Naturalists	March 2009 - March 2010; January 2014 - December 2014
Society of Integrative Comparative Biology	October 2013 - January 2014
Torrey Botanical Society	January 2013 - December 2013
Society of Systematic Biologists	March 2012 - December 2013

Professional Development

RevBayes for Botanist: Introduction to Bayesian Inference in Phylogenetics	July 2018
Short Course on the Analysis of Diversification Rates from Phylogenies	June 2017
Florida Museum of Natural History Science Communication Workshop	October 2014
University of Florida TA Workshop: “Using Technology to Enhance Learning”	Fall 2013
Bodega Bay Applied Phylogenetic Workshop	March 2013
microMorph workshop: The Microevolution of Flower Form and Function	May 2012

Outreach

Letters to a Pre-Scientist	October 2017 – August 2020
Planting Science Scientist Mentor and Liaison	September 2017 – December 2018
Judy’s Day: Plants have families too at Cornell Botanical Garden	September 2018
Scientist participant for Girls Build LA STEM Career Fair Equitas Academy	March 2018
Guest Lecturer at Paideia High School, Atlanta, GA	March 2016
Plant Evolution lecture to two 9 th grade biology classes; Plant phylogenetics module for two AP Biology classes; lecture on getting involved with research to upper level students	
Florida Museum of Natural History Ask a Scientist Presenter	May 2015
CPET STEM Immersion, University of Florida	July 2014
Design and led 2-day plant systematics module for students from rural Florida high schools	
Assessments: http://www.cpet.ufl.edu/students/stem-immersion/stem-immersion-2014/	
CPET Summer Science Institute: Advanced Topics in Evolution	June 2014
Full day module with 10 high school teachers covering plant systematics in the classroom	
CPET Summer Science Quest, University of Florida	June 2014
Design and led a full day forensic module for rising Florida 10th graders	
PlantingScience Master Plant Science Team (MPST)	September 2013 – April 2014
CPET STEM Immersion, University of Florida	July 2013
Design and led 2-day plant systematics module for students from rural Florida high schools	
CPET Summer Science Quest, University of Florida	June 2013
Design and led 2-day plant systematics module for rising 10th graders	

Cornell University Service

Reviewer for Undergraduate Honors Thesis	April 2022
Speed Networking for Undergraduates Interested in Research	March 2019

University of California, Riverside Service

Riverside Postdoctoral Association President	April 2017 – March 2018
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Organizer for Riverside Postdoctoral Symposium

University of Florida Service

Graduate Student Advisory Council	February 2014 – August 2016
Mentoring/Teaching subcommittee chair	February 2015 – December 2015
President	May 2014 – March 2015
Vice President	April 2014
Biology Department Graduate Student Council Rep	August 2012 – April 2015
Graduate Student Senator, UF Student Government	February 2014 – August 2014
Rules and Ethics committee	May 2014 – August 2014
Grant reviewer for Graduate Student Council travel grants	July 2013 – May 2014
Poster Judge Graduate Student Research Day 2013	October 2013
University of Florida Library Committee	September 2012 - May 2013
Biology Department Awards Committee	January 2012- May 2013
Biology Department Undergraduate Research Symposium Poster Judge	April 2012

University of Kansas Service

Ecology & Evolutionary Biology Grad Student Organization President	August 2010-July 2011
Graduate and Executive Council voting member (GradEx)	February 2010-August 2010
Graduate and Professional Affairs Committee voting member	August 2009-August 2010
Women's and Non-Revenue Intercollegiate Sports Adv. Board	September 2009-May 2010
Ecology & Evolutionary Biology Grad. Student Organization Treasurer	Aug 2009-July 2010

Broad Scientific Service

Associate Editor Systematic Botany	April 2021 - Present
Associate Editor Botanical Journal of the Linnean Society	November 2021 - Present
CV Reviewer during Botany 2022	July 2022
NSF Panel Reviewer 2022	January 2022
Ad hoc Proposal Reviewer for National Science Foundation	September 2021
CV Reviewer during Botany 2021	July 2021
Associate Editor BMC Genomics – Section Plant Genomics	March 2018 – April 2021
Reviewer for ASPT Graduate Student Research Grants	March 2021
CV Reviewer during Botany 2020	July 2020
External Referee for PhD Thesis – University of Granada	July 2020
Reviewer for ASPT Graduate Student Research Grants	March 2020
Reviewer for SSB Graduate Student Research Awards	January 2020
Reviewer for ASPT Graduate Student Research Grants	March 2019
Ad hoc Proposal Reviewer for Czech Science Foundation	July 2018
Reviewer for ASPT Graduate Student Research Grants	March 2018
Journal Article Reviewer (https://publons.com/researcher/1273678/jacob-landis)	

Agromony; American Journal of Botany; Annals of Botany; Applications in Plant Science; Austral Ecology; Biotropica; BMC Evolutionary Biology; BMC Genomics; BMC Plant Biology; BMC Research Notes; Botany; Cladistics; Diversity; Ecology and Evolution; EvoDevo; Evolution Letters; Frontiers in Plant Science; G3 Genes, Genome, Genetics; Genes; Genetica; Genomics; Industrial Crops and Products; International Journal of Molecular Science; International Journal of STEM Education; Journal of Systematics and Evolution; Molecular Ecology; National Academy Science Letters; New Phytologist; PeerJ;

Perspectives in Plant Ecology, Evolution and Systematics; Plant Biotechnology Journal;
 Plant Direct; Plant Diversity; Plant Science; Plants - Open Access Journal; Scientific Reports

Other Service

Judge for Regeneron-Westchester Science and Engineering Fair, New York	March 2022
Expert Witness for Florida State Prosecutor, Tampa, FL	September 2019
Judge for Riverside (CA) Unified School District Science and Engineering Fair	February 2018
Judge for Riverside (CA) Unified School District History Day, Senior Division	January 2018
Judge for Southern California Junior Science and Humanities Symposium	January 2017
Reviewer for Florida Regional Jr Science, Engineering, & Humanities Symp.	December 2016
Science Fair Judge Gainesville, FL	December 2012, 2013, and 2015
Reviewer for Florida Regional Jr Science, Engineering, & Humanities Symp.	December 2015
Assist Hillsborough County Sheriff's Office with a Forensic Botany case	June 2014
Assist St. Johns County Sheriff's Office with a Forensic Botany case	August 2013–January 2014
Panel 51 st Florida Regional Jr Science, Engineering, & Humanities Symposium	January 2014