

Joshua L. Konkol
Ph.D. Candidate in Plant Pathology
University of Florida
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Education

- Aug 2019 – Aug 2023 **University of Florida**
PhD student in Plant Pathology, 3.94 GPA
- Aug 2003 – May 2007 **Florida State University – cum laude**
Bachelor of Arts in English and Philosophy, 3.62 GPA

Research Experience

- Sept 2023 – Present **Postdoctoral Researcher**
University of Florida Plant Pathology Department
- Aug 2019 – Aug 2023 **Graduate Research Assistantship**
University of Florida Plant Pathology Department
- Nov 2013 – July 2019 **Biological Scientist II, Plant Pathology**
University of Florida Tropical Research and Education Center
- Nov 2009 – Nov 2013 **Laboratory Technician, Plant Pathology**
University of Florida Tropical Research and Education Center

Teaching Experience

- Fall 2020 **PLP5005: General Plant Pathology Lab**
University of Florida Plant Pathology Department
- Spring 2021 **PLP6262: Fungal Plant Pathogens Lab**
University of Florida Plant pathology Department

Awards

- Aug 2022 **Early Career Travel Award**
12th Japan-US Seminar in Plant Pathology
- Jul 2022 **Outstanding Graduate Poster**
Mycological Society of America Annual Meeting, Gainesville, FL
- Jul 2021 **Student Oral Presentation Award Winner**
17th Biennial Meeting of the Florida Phytopathological Society
- Mar 2019 **Graduate School Preeminence Award Fellowship**
University of Florida Plant Pathology Department

Nov 2018 **Outstanding Performance as a Biological Scientist**
University of Florida Tropical Research and Education Center

Conferences and Workshops Attended

Aug 2023 **American Phytopathological Society Annual Meeting, Denver, CO.**

May 2023 **Florida Phytopathological Society Biennial Meeting, Immokalee, FL.**

Aug 2022 **12th Japan-US Seminar in Plant Pathology, Ithaca, NY.**

Aug 2022 **American Phytopathological Society Annual Meeting, Pittsburgh, PA.**

Jul 2022 **Mycological Society of America Annual Meeting, Gainesville, FL.**

Mar 2022 **Genetics Society of America Fungal Genetics Conference, Pacific Grove, CA.**

Aug 2021 **American Phytopathological Society Annual Meeting (online).**

Jul 2021 **Florida Phytopathological Society Biennial Meeting (online).**

Aug 2020 **American Phytopathological Society Annual Meeting, Denver, CO (online).**

Mar 2020 **Concepts and tools for optimum selection in forest tree breeding, Gainesville, FL.**

Sept 2019 **IX World Avocado Conference, Medellin, Colombia.**

Aug 2019 **American Phytopathological Society Annual Meeting, Cleveland, OH.**

Jul 2016 **American Phytopathological Society Annual Meeting, Tampa, FL.**

Jun 2015 **Conference on Laurel Wilt Disease and Natural Ecosystems, Coral Springs, FL.**

Outreach and Extension

Feb 2020 **Bishop Middle School Family Science and Robotics Night**

Jul 2020 **Avocado Laurel Wilt-Ambrosia Beetle (LW-AB) Workshop Presentation**

Jul 2019 **Avocado Laurel Wilt-Ambrosia Beetle (LW-AB) Workshop Presentation**

Jul 2018 **Avocado Laurel Wilt-Ambrosia Beetle (LW-AB) Workshop Presentation**

Jul 2017 **Avocado Laurel Wilt-Ambrosia Beetle (LW-AB) Workshop Presentation**

Memberships

May 2022 – Present **Mycological Society of America**

Nov 2021 – Present **Genetics Society of America**

Feb 2018 - Present **American Phytopathological Society**

Publications

1. Castillo-Argaez, R., Vazquez, A., **Konkol, J.L.**, Vargas, A., Ploetz, R., Schaffer, B. 2022. "Laurel wilt susceptibility of three avocado (*Persea americana* Mill.) ecotypes in relation to xylem anatomy, sap flow and leaf gas exchange." *Trees*. **Submitted for peer review.**
2. Ángel-Restrepo, M., Ochoa-Ascencio, S., Fernández-Pavía, S., Vázquez-Marrufo, G., Equihua-Martínez, A., Barrientos-Priego, A.F., Ploetz, R.C., Parra, P.P., **Konkol, J.L.**, Saucedo-Carabez, J.R., Gazis, R. 2022. "First look into the ambrosia beetle–fungus symbiosis present in commercial avocado orchards in Michoacán, Mexico." *Crop Science*. <https://doi.org/10.1093/ee/nvab142>.
3. Aoki, T., Liyanage, P.N.H., **Konkol, J.L.**, Ploetz, R.C., Smith, J.A., Kasson, M.T., Freeman, S., Geiser, D.M., O'Donnell, K. 2021. "Three novel Ambrosia *Fusarium* Clade species producing multiseptate 'dolphin-shaped' conidia, and an augmented description of *Fusarium kuroshium*." *Mycologia*. <https://doi.org/10.1080/00275514.2021.1923300>.
4. Castillo-Argaez, R., **Konkol, J.L.**, Vargas, A.I., Ploetz, R.C., Schaffer, B. 2021. "Disease severity and ecophysiological responses of avocado (*Persea americana* Mill.) rootstock or scion cultivars of different races to laurel wilt." *Scientia Horticulturae*. <https://doi.org/10.1016/j.scienta.2021.110250>.
5. Castillo, R., Vazquez, A., **Konkol, J.L.**, Vargas, A.I., Ploetz, R.C., Etxeberria, E., Schaffer, B. 2020. "Sap flow, xylem anatomy and photosynthetic variables of three *Persea* species in response to laurel wilt." *Tree Physiology*. <https://doi.org/10.1093/treephys/tpaa137>.
6. Choudhury, R.A., Er, H.L., Hughes, M.A., Smith, J.A., Pruett, G.E., **Konkol, J.L.**, Ploetz, R.C., Marois, J.J., Garrett, K.A., van Bruggen, A.H.C. 2020. "Host density dependence and environmental factors affecting laurel wilt invasion." *Plant Pathology*. <https://doi.org/10.1111/ppa.13314>.
7. G.L. Beier, C.D. Lund, B.W. Held, R.C. Ploetz, **J.L. Konkol**, R.A. Blanchette. 2020. "Variation in xylem characteristics of botanical races of *Persea americana* and their potential influence on susceptibility to the pathogen *Raffaelea lauricola*." *Tropical Plant Pathology*. <https://doi.org/10.1007/s40858-020-00397-y>.
8. Pérez-Martínez, J.M., Ploetz, R.C. and **Konkol, J.L.** 2018. "Significant *in vitro* antagonism of the laurel wilt pathogen by endophytic fungi from the xylem of avocado does not predict their ability to control the disease." *Plant Pathology*. <https://doi.org/10.1111/ppa.12878>.
9. Saucedo, J.R., Ploetz, R.C., **Konkol, J.L.**, Carrillo, D. and Gazis, R. 2018. "Partnerships between ambrosia beetles and fungi: Lineage-specific promiscuity among vectors of the laurel wilt pathogen, *Raffaelea lauricola*." *Fungal Microbiology*. <https://doi.org/10.1007/s00248-018-1188-y>.
10. Saucedo, J.R., Ploetz, R.C., **Konkol, J.L.**, Ángel, M., Mantilla, J., Menocal, O. and Carrillo, D. 2017. "Nutritional symbionts of a putative vector, *Xyleborus bispinatus*, of the laurel wilt pathogen of avocado, *Raffaelea lauricola*." *Symbiosis*. <https://doi.org/10.1007/s13199-017-0514-3>.

11. Ploetz, R.C., **Konkol, J.L.**, Pérez-Martínez, J.M., Fernandez, Randy. 2017. "Management of laurel wilt of avocado, caused by *Raffaelea lauricola*." *Eur J Plant Pathol*. <https://doi.org/10.1007/s10658-017-1173-1>.
12. Ploetz, R.C., **Konkol, J.L.**, Narvaez, T., Duncan, R.E., Saucedo, R.J., Campbell, A., Mantilla, J., Kendra, P.E. and Carrillo, D. 2016. "Presence and prevalence of *Raffaelea lauricola*, cause of laurel wilt, in different species of ambrosia beetle in Florida USA." *Econ. Entomol*. <http://10.1093/jee/tow292>.
13. O'Donnell, K., Sink, S., Libeskind-Hadas, R., Hulcr, J., Bateman, C., Kasson, M.T., Ploetz, R.C., **Konkol, J.L.**, Ploetz, J.N., Carrillo, D., Campbell, A., Duncan, R.E., Liyanage, P.N.H., Eskalen, A., Na, F., Geiser, D.M., Freeman, S., Mendel, Z., Sharon, M., Aoki, T., Cossé, A.A. and Rooney, A.P. 2016. "Invasive Asian *Fusarium* – *Eumwallacea* ambrosia beetle mutualists pose a serious threat to forests, urban landscapes and the avocado industry." *Phytoparasitica*. <https://doi.org/10.1007/s12600-016-0543-0>.
14. Ploetz, R.C., Thant, Y.Y., Hughes, M.A., Dreaden, T.J., **Konkol, J.L.**, Kyaw, A.T., Smith, J.A. and Harmon, C.L. 2016. "Laurel wilt, caused by *Raffaelea lauricola*, is detected for the first time outside the southeastern USA." *Plant Disease*. <http://dx.doi.org/10.1094/PDIS-03-16-0411-PDN>.
15. Sanahuja, G., Ploetz, R.C., Lopez, P., **Konkol, J.L.**, Palmateer, A.J. and Pruvost, O. 2016. "Bacterial canker of mango, *Mangifera indica*, caused by *Xanthomonas citri* pv. *mangiferaeindicae*, confirmed for the first time in the Americas." *Plant Disease*. <http://dx.doi.org/10.1094/PDIS-03-16-0412-PDN>.
16. Ploetz, R.C., Freeman, S., **Konkol, J.L.**, Naser, Z., Shalan, K., Barakat, R., Israeli, Y. 2015. "Tropical race 4 of Panama disease in the Middle East." *Phytoparasitica*. <https://doi.org/10.1007/s12600-015-0470-5>
17. Ploetz, R.C., Schaffer, B., Vargas, A.I., **Konkol, J.L.**, Salvatierra, J., and Wideman, R. 2015. Impact of laurel wilt, caused by *Raffaelea lauricola*, on leaf gas exchange and xylem sap flow in avocado, *Persea americana*. *Phytopathology*. <http://dx.doi.org/10.1094/PHYTO-07-14-0196-R>.
18. F. García-Bastidas, N. Ordóñez, **J. Konkol**, M. Al-Qasim, Z. Naser, M. Abdelwali, N. Salem, C. Waalwijk, R. C. Ploetz, and G. H. J. Kema. 2014. "First Report of *Fusarium oxysporum* f. sp. *cubense* Tropical Race 4 associated with Panama disease of banana outside Southeast Asia." *Plant Disease*. <https://doi.org/10.1094/PDIS-09-13-0954-PDN>.
19. O'Donnell, K., Sink, S., Libeskind-Hadas, R., Ploetz, R.C., **Konkol, J.L.**, Ploetz, J.N., Carrillo, D., Campbell, A., Duncan, R.E., Kasson, M.T., Liyanage, P.N.H., Eskalen, A., Geiser, D.M., Hulcr, J., Bateman, C., Freeman, S., Mendel, Z., Campbell, P.R., Geering, A.D.W., Aoki, T., Cossé, A.A., and Rooney, A.P. 2014. "Discordant phylogenies suggest repeated host shifts in the *Fusarium*–*Eumwallacea* ambrosia beetle mutualism." *Fungal Genetics and Biology*. <http://dx.doi.org/10.1016/j.fgb.2014.10.014>.
20. Kasson, M.T., O'Donnell, K., Rooney, A.P., Sink, S., Ploetz, R.C., Ploetz, J.N., **Konkol, J.L.**, Carrillo, D., Freeman, S., Mendel, Z., Smith, J.A., Black, A., Hulcr, J., Bateman, C., Black, A.W., Campbell, P.R., Geering, A.D.W., Dann, E.K., Eskalen, A., Mohotti, K., Short, D.P.G., Aoki, T., Fenstermacher, K.A., Davis, D.D., Geiser, D.M. 2013. "An inordinate fondness for *Fusarium*: Phylogenetic diversity of fusaria

cultivated by ambrosia beetles in the genus *Euwallacea* on avocado and other plant hosts.” *Fungal Genetics and Biology*. <https://doi.org/10.1016/j.fgb.2013.04.004>.

21. Ploetz, R.C., **Konkol, J.L.** 2013. “First report of gulf licaria, *Licaria trianda*, as a suscept of laurel wilt.” *Plant Disease*. <https://doi.org/10.1094/PDIS-01-13-0027-PDN>.

Presentations

1. **Konkol, J.L.** and Rollins, J.A. (2023, May). “Comparisons of tree colonization by the laurel wilt pathogen, *Harringtonia lauricola*, and the closely related non-pathogen, *H. aguacate*.” Presented at the Florida Phytopathological Society Biennial Meeting, Immokalee, FL.
2. **Konkol, J.L.** and Rollins, J.A. (2022, October). “Winning the Race: *Harringtonia lauricola* and colonization of the xylem.” Presented at the University of Florida Department of Plant Pathology Seminar, Gainesville, FL.
3. **Konkol, J.L.**, Wang, Q., Rollins, J.A. (2022, March). “Alternative sulfur scavenging and host colonization by the plant pathogen *Raffaelea lauricola*.” Presented at the Fungal Genetics Society of America Fungal Genetics Conference, Pacific Grove, CA.
4. **Konkol, J.L.**, Wang, Q., Rollins, J.A. (2022, March). “Colonization and Pathogenicity of *Raffaelea lauricola*.” North Central Coordinating Committee, Pacific Grove, CA.
5. **Konkol, J.L.**, Wang, Q., Rollins, J.A. (2020, July). “Spatiotemporal production of tyloses in swamp bay (*Persea palustris*) during colonization by *Raffaelea lauricola*.” Presented at the Florida Phytopathological Society Biennial Meeting (online).
6. **Konkol, J.L.**, R. Castillo-Argaez, A. Vazquez, R. Fernandez, A. I. Vargas, R. C. Ploetz, B. Schaffer. (2019, September). “Clonal and seedling avocado rootstocks exhibit similar variability in their responses to laurel wilt disease.” Presented at the IX World Avocado Conference, Medellín, Columbia.
7. Ploetz, R.C., **J.L. Konkol**, J.R. Saucedo, B. Schaffer¹, D. Carrillo, J. Rollins, J. Smith, and R. Blanchette. (2019, September). “Laurel wilt: A global threat to avocado production.” Presented at the IX World Avocado Conference, Medellín, Columbia.
8. Castillo-Argaez, R., **J.L. Konkol**, A. Vazquez, R. Fernandez, A.I. Vargas, R.C. Ploetz, B. Schaffer. (2019, September). “Laurel wilt susceptibility related to physiology of grafted avocado trees.” Presented at the IX World Avocado Conference 2019, Medellín, Columbia.

Posters

1. **Konkol, J.L.**, Pisani, C., Brawner, J. and Rollins, J.A. (2023, August). “The transcriptomic interactions of *Harringtonia lauricola* with *Persea americana* and the evaluation of avocado for laurel wilt disease tolerance.” Presented at the American Phytopathological Society Annual Meeting, Denver, CO.

2. **Konkol, J.L.**, Rollins, J.A. (2023, August). “Comparisons of tree colonization by the laurel wilt pathogen, *Harringtonia lauricola*, and the closely related non-pathogen, *H. aguacate*.” Presented at the American Phytopathological Society Annual Meeting, Denver, CO.
3. **Konkol, J.L.**, Rollins, J. A. (2022, August). “Exploring the pathogenicity of *Harringtonia lauricola* by comparison with both a nonpathogenic phylogenetic relative and a sulfur utilization mutant.” Presented at the 12th Japan-US Seminar in Plant Pathology, Ithaca, NY.
4. **Konkol, J.L.**, Rollins, J.A. (2022, August). “Xylem movement, colonization and pathogenicity: a comparison of inoculations of *Persea palustris* with *Raffaelea lauricola* and *Raffaelea aguacate*.” Presented at the American Phytopathological Society Annual Meeting, Pittsburgh, PA.
5. **Konkol, J.L.**, Rollins, J.A. (2022, Jul). “The rapid xylem colonization of *Raffaelea lauricola* of *Persea palustris*.” Presented at the Mycological Society of America Annual Meeting, Gainesville, FL.
9. **Konkol, J.L.**, Wang, Q., Rollins, J.A. (2022, March). “Alternative sulfur scavenging and host colonization by the plant pathogen *Raffaelea lauricola*.” Presented at the Fungal Genetics Society of America Fungal Genetics Conference, Pacific Grove, CA.
6. **Konkol, J.L.**, Wang, Q., Rollins, J.A. (2021, August). “Spatiotemporal pathogen tracking and histological responses of swamp bay, *Persea palustris*, during colonization by *Raffaelea lauricola*.” Presented at the American Phytopathological Society Annual Meeting, (online).
7. **Konkol, J.L.**, Wang, Q., Rollins, J.A. (2020, August). “Transformation of *Raffaelea lauricola* with GFP to visualize its colonization of swamp bay, *Persea palustris*.” Presented at the American Phytopathological Society Annual Meeting, Denver, CO (online only).
8. Beier, G.L., Lund, C.D., Held, B.W., Ploetz, R.C., **Konkol, J.L.**, Blanchette, R.A. (2020, August). “Variation in xylem characteristics for botanical races of avocado.” Presented at American Society for Horticultural Sciences Annual Conference, Orlando, FL.
9. Saucedo, J.R., Ploetz, R.C., **Konkol, J.L.**, Ángel, M., Mantilla, J., Menocal, O. and Carrillo, D. (2018, July). “Nutritional symbionts of a putative vector, *Xyleborus bispinatus*, of the laurel wilt pathogen of avocado, *Raffaelea lauricola*.” Presented at the International Congress of Plant Pathology, Boston, MA.
10. Pérez-Martínez, J.M., Ploetz, R.C. and **Konkol, J.L.** (2018, July). “Significant *in vitro* antagonism of the laurel wilt pathogen by endophytic fungi from avocado does not predict their ability to control the disease.” Presented at the International Congress of Plant Pathology, Boston, MA.
11. Ploetz, R.C., **Konkol, J.L.**, Pérez-Martínez, J.M. (2017, August). “Management of laurel wilt of avocado, caused by *Raffaelea lauricola*.” Presented at the American Phytopathological Society Annual Meeting, San Antonio, TX.
12. Ploetz, R.C., **Konkol, J.L.**, Navarez, T., Duncan, R., Saucedo, J.R., Campbell, A., Carrillo, D., Kendra, P. (2017, August). “Presence and prevalence of *Raffaelea lauricola*, cause of laurel wilt, in different species of

- ambrosia beetle in Florida.” Presented at the American Phytopathological Society Annual Meeting, San Antonio, TX.
13. Sanahuja, G., Ploetz, R.C., Lopez, P., **Konkol, J.L.**, Palmateer, A. (2016, August). “Bacterial black spot of mango, *Mangifera indica*, caused by *Xanthomonas citri* pv *mangiferaeindicae*, is confirmed in the Western Hemisphere.” Presented at the American Phytopathological Society Annual Meeting, Tampa, FL.
 14. Ploetz, R.C., Thant, Y., Hughes, M., Dreaden, T., **Konkol, J.L.**, Kyaw, A., Smith, J., Harmon, C. (2016, August). “Laurel wilt, caused by *Raffaelea lauricola*, is detected for the first time outside the southeastern USA.” Presented at the American Phytopathological Society Annual Meeting, Tampa, FL.
 15. Saucedo, J., Ploetz, R.C., Carrillo, D., **Konkol, J.L.**, Smith, J., Rollins, J., Ochoa, S. (2016, August). “*Raffaelea arxii* may be the primary symbiont of *Xyleborus affinis*.” Presented at the American Phytopathological Society Annual Meeting, Tampa, FL.
 16. Ploetz, R.C., Carrillo, D., **Konkol, J.L.**, Fernandez, R., Pérez-Martínez, J.M., Wideman, R., Duncan, R. (2015, August). “Laurel wilt of avocado: Epidemiology of a recalcitrant disease of an important crop.” Presented at the American Phytopathological Society Annual Meeting, Pasadena, Ca.
 17. Ploetz, R.C., Schaffer, B., Vargas, A., **Konkol, J.L.**, Salvatierra, J., Inch, S., Campbell, A., Wideman, R. (2013, August). “Physiological impacts of laurel wilt on avocado.” Presented at the American Phytopathological Society Annual Meeting, Austin, TX.
 18. Er, H.L., Hughes, M., Smith, J., Pruett, G., **Konkol, J.L.**, Ploetz, R., Marois, J., van Bruggen, A. (2013, August). “Epidemiological study on laurel wilt.” Presented at the American Phytopathological Society Annual Meeting, Austin, TX.
 19. Ploetz, R., Ploetz, J., **Konkol, J.L.**, O’Donnell, K., Campbell, A., Duncan, R. (2013, August). “*Fusarium* symbionts of an ambrosia beetle (*Eunwallacea* sp.) in southern Florida are pathogens of avocado, *Persea americana*.” Presented at the American Phytopathological Society Annual Meeting, Austin, TX.
 20. Kasson, M.T., O’Donnell, K., Rooney, A.P., Sink, S., Ploetz, R.C., Ploetz, J.N., **Konkol, J.L.**, Carrillo, D., Freeman, S., Mendel, Z., Smith, J.A., Black, A.W., Hulcr, J., Bateman, C., Stefkova, K., Campbell, P.R., Geering, A.D.W., Dann, E.K., Eskalen, A., Mohotti, K., Short, D.P.G., Aoki, T., Fenstermacher, K.A., Davis, D.D., Geiser, D.M. (2013, August). “An inordinate fondness for *Fusarium*: Phylogenetic diversity of fusaria cultivated by *Eunwallacea* ambrosia beetles on avocado and other plant hosts.” Presented at the American Phytopathological Society Annual Meeting, Austin, TX.

Workshops Hosted

1. Yu, P., Fulton, J., **Konkol, J.L.**, Gitto, A.J., Hudson, O.H., Quello, K., Stack, A., Brawner, J. (2022, August). “Oxford Nanopore Sequencing Applications for Plant Pathologists.” Scheduled to host at the American Phytopathological Society Annual Meeting, Pittsburgh, PA.