# Stanford



# Louis Berrios

Postdoctoral Scholar, Biology

# Bio

### BIO

Louis joined the Peay lab in 2021 after completing his Ph.D. at the University of South Carolina. His research primarily focuses on the factors that govern the spatial distributions of bacteria and fungi as a function of microbe-microbe and plant-microbe interactions. From genomes to phenomes, Louis fuses both top-down and bottom-up experimental approaches to determine the genetic architecture that undergirds plant microbiome assemblages across landscapes.

#### STANFORD ADVISORS

• Kabir Peay, Postdoctoral Faculty Sponsor

#### LINKS

- Personal Website: https://www.louisberrios.org/
- GitHub Page: https://github.com/LouisBerrios

## **Publications**

#### **PUBLICATIONS**

- Positive interactions between mycorrhizal fungi and bacteria are widespread and benefit plant growth. Current biology: CB
   Berrios, L., Yeam, J., Holm, L., Robinson, W., Pellitier, P. T., Chin, M. L., Henkel, T. W., Peay, K. G.
   2023
- Underground Heroes: Plants and Microbes Partner to Shape Our World Frontiers for Young Minds
  Berrios, L., et al
  2023
- $\bullet \ \ \textbf{Examining the genomic features of human and plant-associated Burkholderia strains.} \ \textit{Archives of microbiology}$

2022; 204 (6): 335

Berrios, L.

 Linking Reactive Oxygen Species (ROS) to Abiotic and Biotic Feedbacks in Plant Microbiomes: The Dose Makes the Poison. International journal of molecular sciences

Berrios, L., Rentsch, J. D. 2022; 23 (8)

• The genus Caulobacter and its role in plant microbiomes. World journal of microbiology & biotechnology

Berrios, L. 1800; 38 (3): 43

• S2B, a Temperate Bacteriophage That Infects Caulobacter Crescentus Strain CB15. Current microbiology

Ely, B., Berrios, L., Thomas, Q.

2022; 79 (4): 98

 Plant-growth-promoting Caulobacter strains isolated from distinct plant hosts share conserved genetic factors involved in beneficial plant-bacteria interactions. Archives of microbiology

Berrios, L. 1800; 204 (1): 43

• Complete Genome Sequence of the Plant-Growth-Promoting Bacterium Caulobacter segnis CBR1 CURRENT MICROBIOLOGY

Berrios, L

2021; 78 (8): 2935-2942

• Genes related to redox and cell curvature facilitate interactions between Caulobacter strains and Arabidopsis PLOS ONE

Berrios, L., Ely, B.

2021; 16 (4): e0249227

• NovelCaulobacterbacteriophages illustrate the diversity of the podovirus genusRauchvirus ARCHIVES OF VIROLOGY

Ely, B., Liese, J., Corley, S., Nguyen, D., Wilson, K., Berrios, L.

2020; 165 (11): 2549-2554

• Plant growth enhancement is not a conserved feature in the Caulobacter genus PLANT AND SOIL

Berrios, L., Ely, B.

2020; 449 (1-2): 81-95

• The Isolation and Characterization of Kronos, a Novel Caulobacter Rhizosphere Phage that is Similar to Lambdoid Phages CURRENT MICROBIOLOGY

Berrios, L., Ely, B.

2019; 76 (5): 558-565

Achieving Accurate Sequence and Annotation Data for Caulobacter vibrioides CB13 CURRENT MICROBIOLOGY

Berrios, L., Ely, B.

2018; 75 (12): 1642-1648