

Christian Santos-Medellín
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EDUCATION

- 2013 - 2019** University of California, Davis (UCD)
Ph.D. Program in Integrative Genetics and Genomics, GPA: 4.00/4.00
- 2008 - 2012** Universidad Nacional Autónoma de México (UNAM)
B.S., Biology, Summa Cum Laude

RESEARCH EXPERIENCE

- 2019 - Present** Impact of the lysogenic cycle on the soil microbial communities of annual grasslands.
Plant Pathology Department, UCD
Supervisor: Dr. Joanne Emerson
- 2013 - 2019** Compositional dynamics and functional implications of root-associated microbiomes
Plant Biology Department, UCD
Supervisor: Dr. Venkatesan Sundaresan
- 2012–2013** Comparative genomics of clinical and environmental strains of *Pseudomonas aeruginosa*
Biomedical Research Institute, UNAM
Supervisor: Dr. Luis Servín González
- 2010–2012** Role of the *phz* operons in pyocyanin overproduction by *P. aeruginosa* ID4365
Biomedical Research Institute, UNAM
Supervisor: Dr. Luis Servín González

PUBLICATIONS ([Google Scholar](#))

Edwards, J.*, **Santos-Medellín, C.***, Nguyen, B., Kilmer, J., Liechty, Z., Veliz, E., Ni, J., Phillips, G. and Sundaresan, V. 2019. Soil domestication by rice cultivation results in plant soil feedback through shifts in soil microbiota. *Genome Biology* 20:221.

Edwards, J.A.*, **Santos-Medellín, C.*** and Sundaresan, V., 2018. Extraction and 16S rRNA Sequence Analysis of Microbiomes Associated with Rice Roots. *Bio-protocol*, 8(12), e2884.

Edwards, J.A., **Santos-Medellín, C.**, Liechty, Z.S., Nguyen, B., Lurie, E., Eason, S., Phillips, G. and Sundaresan, V., 2018. Compositional shifts in root-associated bacterial and archaeal microbiota track the plant life cycle in field-grown rice. *PLoS biology*, 16(2), p.e2003862.

Santos-Medellín, C., Edwards, J., Liechty, Z., Nguyen, B. and Sundaresan, V., 2017. Drought stress results in a compartment-specific restructuring of the rice root-associated microbiomes. *MBio*, 8(4), pp.e00764-17.

Edwards, J., Johnson, C.*, **Santos-Medellín, C.***, Lurie, E., Podishetty, N.K., Bhatnagar, S., Eisen, J.A. and Sundaresan, V., 2015. Structure, variation, and assembly of the root-associated microbiomes of rice. *Proceedings of the National Academy of Sciences*, 112(8), pp.E911-E920.

Grosso-Becerra, M.V.*, **Santos-Medellín, C.***, González-Valdez, A., Méndez, J.L., Delgado, G., Morales-Espinosa, R., Servín-González, L., Alcaraz, L.D. and Soberón-Chávez, G., 2014. *Pseudomonas aeruginosa* clinical and environmental isolates constitute a single population with high phenotypic diversity. *BMC genomics*, 15(1), p.318.

AWARDS

2017 Henry A. Jastro Graduate Research Award, UC Davis
2017 Elsie Taylor Stocking Memorial Fellowship, UC Davis
2013 - 2018 Complementary Fellowship for Postgraduate Education, DGRI SEP
2013 - 2018 International Doctoral Fellowship, UC MEXUS- CONACYT
2012 Gabino Barreda Medal to the Best Undergraduate Student of the Class of 2009, UNAM

RESEARCH PRESENTATIONS

2018 International Symposium on Microbial Ecology, ISME (Poster)
2017 Plant-Microbe Interactions Forum, JGI (Talk)
2017 Genome Center Halloween Symposium, UC Davis (Talk)
2017 Microbial and Plant Systems Modulated by Secondary Metabolites Meeting, JGI (Poster)
2017 Genomics of Energy & Environment Meeting, JGI (Poster)
2016 Bio International Student Workshop, NAIST (Talk)
2016 Plant Biology Training Retreat, UC Davis (Talk)
2014 Plant Biology Training Retreat, UC Davis (Talk)

TEACHING EXPERIENCE

2019 Teaching Assistant, MCB 160L Principles of Genetics Laboratory, UCD
2016 Teaching Assistant, PLB 112 Plant Growth and Development, UCD

UNDERGRADUATE MENTORING

- Bao Nguyen (now grad student at UCSC)
- Jia Yan (now grad student at UCD)
- Edward Salem (now med student at MCW)

SERVICE AND OUTREACH

- Peer review for *Microbiome*, *PeerJ*, *PLoS One*, *Frontiers in Microbiology*, *MicrobiologyOpen*, *GCB Bioenergy*, and *European Journal of Soil Biology*
- Mentor in the Summer Internship Program for Underrepresented Students, UCD / University of Arkansas at Pine Bluff