Nichole A. Ginnan, Ph.D.

Curriculum vitae

900 University Ave, Riverside, CA 92512 nginn001@ucr.edu | www.nicholeginnan.com

RESEARCH INTERESTS

- Microbiome Sciences
- Plant-microbe interactions
- Global change biology
- Sustainable agriculture
- Microbial culturing
- Plant Pathology

- Multi-omics
- Synthetic microbial communities
- Microbe-microbe interactions
- Microbial ecology and evolution
- Plant physiology
- R programming

EDUCATION

Doctor of Philosophy (Ph.D.) in Plant Pathology | September 2014 - June 2020 University of California, Riverside, CA

- Research Advisor: Dr. Caroline Roper
- Committee members: Dr. Caroline Roper, Dr. Jason Staijch, and Dr. Emma Aronson
 - Dissertation title: Pathogens, Plant Phenology, and Microbial Competition Impact the Structure and Function of the Citrus Microbiome

Bachelor of Science (B.S.) in Biology | September 2010 - January 2014 Long Island University, Brookville, NY

- Research Advisor: Dr. Kent Hatch
 - Research focus: Amphibian Ecology

EXPERIENCE

Assistant Project Scientist | July 2025 - current Department of Microbiology and Plant Pathology University of California, Riverside, CA

*Accepted offer that was withdrawn due to government hiring freeze in effect since January 2025
Research Plant Pathologist (GS-13) | offer made in December 2024
Agricultural Poscarch Services | Hired to start Microbioma-soilborno diseases interactions lab

Agricultural Research Services | Hired to start Microbiome-soilborne diseases interactions lab United States Department of Agriculture, Salinas, CA

Adjunct Researcher | November 2022 - *current* Department of Ecology and Evolutionary Biology University of Kansas, Lawrence, KS

Research Project Manager II | November 2022–May 2025 One Health Microbiome Center, Huck Institutes of the Life Sciences Pennsylvania State University, University Park, PA

Postdoctoral Scholar | September 2020 - October 2022 Department of Ecology and Evolutionary Biology University of Kansas, Lawrence, KS

Interim Postdoctoral Scholar | July 2020 - September 2020 Department of Microbiology and Plant Pathology University of California, Riverside, CA

Graduate Student Researcher | September 2014 - June 2020 Department of Microbiology and Plant Pathology University of California, Riverside, CA

Research Assistant | June 2012 - January 2014 Department of Biology Long Island University - Post Campus, Brookville, NY

FELLOWSHIPS

2019–20 University of California President's Dissertation Year Fellowship

UC Office of the President; \$22,570 stipend, tuition and fees for 1 year, and \$1,000 in travel funds. This is a highly-competitive merit-based award given to two graduate students each year from across all graduate programs at UC Riverside.

2016-19 National Science Foundation Graduate Research Fellowship

National Science Foundation; \$172,000 stipend, tuition, and fees for 3 years. This program funds graduate students who are anticipated to become experts in their field and contribute to the goal of increasing diversity in science and engineering fields.

2014–15 **Dean's Distinguished Fellowship**

University of California - Riverside; stipend, tuition, & fees for 5 yrs (declined last 3 years). This fellowship is awarded to a limited number of outstanding graduate applicants each year.

GRANTS: SUBMITTED

Title: T32: Biotechnological and Integrative Opportunities in Microbiome Sciences (BIOMS)

Funding agency: National Institutes of Health (NIH), NIGMS

Amount requested: \$2,956,485

Role: Program Director/Principal Investigator (PD/co-PI) (first author of the grant)

Others involved: Seth Bordenstein (PD/PI) and Jasna Kovac (PD/co-PI)

Date submitted: January 2024

 *Received Impact Score of 23 (PO stated that it is "highly likely" to be funded pending Council Review)

Title: BII-HEIRS: Holobiont elements influencing response to stress

Funding agency: National Science Foundation (NSF), Biology Integration Institute Program

Amount requested: \$15,000,000

Role: Senior Personnel (first author of the grant and co-advising plant-related research with Drs. Crandell and Dini-Andreote)

Others involved: Seth Bordenstein (PI), Sharifa Crandell (co-I), Francisco Dini-Andreote (co-I),

Tim Miyrashiro (co-l), Vishal Singh (co-l), Gang Fang (co-l).

Date submitted: February 2025

GRANTS: AWARDED

Title: Mining Bacterial Genomes for Genetic Factors Involved in Microbial Drought Adaptation and

Microbially-mediated Drought Tolerance in Plants

Funding agency: Seed Grant Program, Center for Genomics Research, University of Kansas

Amount funded: \$9,000

Role: Principal Investigator (PI)

Others involved: Maggie Wagner (co-PI)

Date awarded: December 2021

AWARDS & SMALL GRANTS

2024	 Staff Excellence Award, University Staff Advisory Council, Penn State Univ. (\$500) For embodying the University Values of integrity, respect, responsibility, discovery, excellence, and community.
2020	Charles W. Coggins, Jr. Endowed Scholarship, UC Riverside (\$10,000) • For research excellence and benefit to the agricultural industry.
2019	Peter/Pamela Tsao Graduate Student Scholarship, UC Riverside (\$1,000) • For excellence in soil-borne disease research.
2019	Earle C. Anthony Travel Grant, UC Riverside (\$1,500)
2019	Edmond C. Calavan Memorial Scholarship Award (\$1,000) • For research excellence in the field of plant pathology.
2018	Charles W. Coggins, Jr. Endowed Scholarship, UC Riverside (\$4,642) • For research excellence and benefit to the agricultural industry.
2018	Am. Phytopathological Society Moller Student Travel Award (\$500)
2018	Am. Phytopathological Society Mathre Education Endowment (\$1,000)
2017	European Molecular Biology Organization Travel Grant (450 €)
2016	Noble Foundation Best Poster Award, APS annual meeting (\$250)
2016	Audience Choice Award - Best Talk, UC Riverside GradSlam (\$2,000)
2015	Am. Phytopathological Soc. Don/Judy Mathre Educational Award (\$500)
2015-19	Graduate Student Assoc. Travel Grant, UC Riverside (\$300-\$600 yearly)
2015-19	Klotz Memorial Travel Award, UC Riverside (\$500-750 yearly)
2013	Frontier Award in Scientific Research, Long Island University

PEER-REVIEWED PUBLICATIONS (* equal contribution; # corresponding author)

15. **Ginnan NA**#, Crandall S, Imchen M, Dini-Andreote F, Miyashiro TI, Sign V, Ganda E, Bordenstein SR#. (2025). Ecologically Expanding the One Health Framework to Unify the Microbiome Sciences. *mBio*. 0:e03147-24. https://doi.org/10.1128/mbio.03147-24

- Featured in Matters Microbial Podcast: https://www.microbe.tv/mm/mm-094/
- Featured in Penn State News article: <u>https://www.psu.edu/news/eberly-college-science/story/qa-unifying-microbiome-s</u> ciences-global-health-and-sustainability
- 14. The Holobiont Biology Network [Bordenstein SR#, Gilbert TP, Ginnan NA, Malacrinò A, Martino ME, Bahrndorff S, Mundra S, Martin MD, Theis KR, Hird SM, Caro-Quintero A, Sharpton TJ, Kohl KD, Barnes CJ, Eisenhofer R, Aizpurua O, Andersen SB, Brealey JC, Noer CL, Medina M, Limborg MT, Alberdi A]. (2024). The disciplinary matrix of holobiont biology. Science. 10.1126/science.ado2152
- 13. Campos Freitas Vieira F, Blacutt A, Drozd C, Viravathana P, **Ginnan NA**, Roper MC. (2024). Thirteen draft genome assemblies of *Bacillus* spp. derived from the citrus microbiome. *Microbiology Resource Announcements*. https://doi.org/10.1128/mra.00602-24
- Aksenov AA#, Blacutt A, Ginnan NA, Rolshausen PE, Melnik AV, Lotfi A, Gentry EC, Ramasamy M, Zuniga C, Zengler K, Mandadi K, Dorrestein PC, Roper MC#. (2024). Spatial chemistry of citrus reveals molecules bactericidal to *Candidatus* Liberibacter asiaticus. *Scientific Reports*. 14, 20306 (2024). https://doi.org/10.1038/s41598-024-70499-z
- 11. **Ginnan NA#** and Bordenstein SR#. (2023). It is Time to Authenticate the Microbiome Sciences with accredited educational programs and departments. *PLOS Biology*. 7:21(12):e3002420. DOI: 10.1371/journal.pbio.3002420.
 - Featured in Penn State News article: https://www.huck.psu.edu/institutes-and-centers/microbiome-center/news/penn-state-researchers-propose-a-path-to-authenticate-the-microbiome-sciences
- 10. Kurbessoian T, Heimlich-Villalta G, **Ginnan NA**, Campos Freitas Vieira F, Rolshausen P, Roper MC#, Stajich J#. (2023). Genome sequence and assembly of 18 *Fusarium* isolates from Florida citrus under high Huanglongbing disease pressure and California citrus under low Huanglongbing disease pressure. *Microbiology Resource Announcements*. DOI: 10.1128/mra.00101-23
- 9. Xi M, Deyett E, **Ginnan NA**, Ashworth V, Dang T, Bodaghi S, Vidalakis G, Roper C#, Glassman S#, Rolshausen P#. (2022). Geographic location, management strategy and Huanglongbing disease affect arbuscular mycorrhizal fungal communities across US citrus orchards. *Phytobiomes*. 6:4, 342-353. DOI: PBIOMES-03-22-0014-R
- 8. **Ginnan NA**, De Anda NI, Campos Freitas Vieira F, Rolshausen P, Roper MC#. (2022). Microbial turnover and dispersal events occur in sync with plant phenology in the perennial evergreen tree crop, *Citrus sinensis*. *mBio*. 13:3, 1-18. DOI: 10.1128/mbio.00343-22
- O'Brien AM, Ginnan NA, Rebolleda-Gómez M, Wagner MR#. (2021). Microbial effects on plant phenology and fitness. American Journal of Botany. 108:10, 1-14. DOI: 10.1002/ajb2.1743

- 6. **Ginnan NA***, Dang T*, Bodaghi S, Ruegger P, McCollum G, England G, Vidalakis G, Borneman J#, Rolshausen P#, Roper MC#. (2020). Disease-induced microbial shifts in citrus indicate microbiome-derived responses to Huanglongbing across the disease severity spectrum. *Phytobiomes*. 4:375-387. DOI: PBIOMES-04-20-0027-R
 - Honorable Mention Phytobiomes Journal Best Grad. Student Paper 2020
 - Press release- HLB: The Microbiome's Role, picked up by 6 news outlets
 - https://citrusindustry.net/2021/01/13/hlb-the-microbiomes-role/
- Blacutt A, Ginnan NA, Dang T, Bodaghi S, Vidalakis G, Ruegger P, Peacock B, Viravathana P, Campos-Vieira F., Drozd, C, Jablonska B., Borneman J, McCollum G, Cordoza J, Meloch J, Berry V, Salazar L, Maloney K#, Rolshausen P#, Roper, MC#. (2020). Development of an in vitro pipeline to screen and select citrus-associated microbiota with potential anti-Candidatus Liberibacter asiaticus properties. Applied and Environmental Microbiology. 86:8. DOI: 10.1128/AEM.02883-19
- 4. Su Y, Ashworth V, Geitner N, Wiesner M, **Ginnan NA**, Rolshausen P, Roper C#, Jassby D#. (2020). Delivery, fate, and transport of silver nanoparticles in citrus trees. *ACS Nano*. 14:3, 2966-2981. DOI: 10.1021/acsnano.9b07733
- 3. Pedroncelli L#, Carter-House D, **Ginnan NA**, Andrews H, Drozd C, DiSalvo B. (2019). The consequences of drought on plant pathology. *Journal of Science Policy and Governance*. 15:1.
- Ginnan NA*, Dang T*, Bodaghi S, Ruegger P, Peacock B, McCollum G, England G, Roper MC#, Rolshausen P#, Borneman J#. (2018). Bacterial and fungal next generation sequencing datasets and metadata from citrus infected with *Candidatus* Liberibacter asiaticus. *Phytobiomes*. 2:2, 64-70.
- 1. **Ginnan NA**, Lawrence JR, Russell M, Eggett DL, and Hatch KA#. (2014). Toe clipping does not affect the survival of leopard frogs (*Rana pipiens*). *Copeia*. 2014:4, 650-653.

PREPRINTS, SUBMITTED, & IN PREPARATION MANUSCRIPTS

(* equal contribution; # corresponding author)

- Ginnan NA*, Custódio V*, Gopaulchan D*, Ford N, Salas-González I, Jones D, Wells D, Moreno Â, Castrillo G#, Wagner MR#. Persistent legacy effects on soil metagenomes facilitate plant adaptive responses to drought. *Under revisions at Nature Microbiology*. *BioRxiv preprint: https://doi.org/10.1101/2024.08.26.609769*
- Rodriguez C*, Sanderson B*, Tso F, Wagner MR#, Ginnan NA#. Geographic and genetic patterns of local adaptation to osmotic and drought stress in Luteibacter species. In preparation. Target: mSystems
- 3. **Ginnan NA**, Kural C, Wagner MR#. Comparison of maize, teosinte, and eastern gamagrass physiological responses to water limitation. *In preparation. Target: New Phytologist*

- 4. De Anda NI*, **Ginnan NA***, Roper MC#. Microbial competition for iron governs plant microbiome assembly. *In preparation. Target: Nature Ecology and Evolution*
- 5. Garrell A, Swift J, **Ginnan NA**, Tso F, Pal G, Tang C, Hahnke R, Kleiner M#, Wagner MR#. Representative collection of maize root-associated microbes. *In preparation*.

INVITED TALKS

2024	USDA-ARS Special Seminar Salinas, CA
2024	Applied Hologenomics Conference Copenhagen, Denmark
2023	Corporate Council, American Society for Microbiology Houston, TX
2023	Penn State University, Microbiome Center Seminar State College, PA
2022	Phytobiomes Conference Denver, CO
2022	Oregon State University, Botany and Plant Pathology Seminar Corvallis, OR
2021	Kansas Microbiomes of Aquatics, Plants, and Soils symposium Virtual
2020	McGill University Plant Sciences seminar Montreal, Quebec, Canada
2020	University of California Davis MMI seminar Davis, CA
2019	USDA NIFA grant advisory meeting Riverside, CA
2019	International Research Conference on HLB (IRCHLB) Riverside, CA
2019	UCR Microbiome Initiative Symposium Riverside, CA
2016	GradSlam Finals Riverside, CA
2015	GradSlam Semi-finals Riverside, CA
2013	LIU Faculty Research Seminar Brookville, NY

PRESENTATIONS

<u>Talks</u>	
2022	Genetics of Maize-Microbe interactions research network Virtual
2020	Genetics Seminar, Univ. of Kansas Lawrence, KS
2019	UCR Plant Pathology seminar Riverside, CA.
2017	UCR Plant Pathology seminar Riverside, CA
2016	UCR Plant Pathology Seminar Riverside, CA
<u>Posters</u>	
2021	Nature Conferences: Harnessing the plant microbiome Davis, CA
2019	Congress of Molecular Plant-Microbe Interactions Glasgow, Scotland
2018	International Conference of Plant Pathology Boston, MA
2018	Citrus Day Riverside, CA
2017	EMBO Plant Microbiota Practical Course Cologne, Germany
2017	Citrus Day Riverside, CA
2016	Phytobiomes: From Microbes to Plant Ecosystems Santa Fe, NM
2016	American Phytopathological Society Annual Meeting Tampa, FL
2015	American Phytopathological Society Annual Meeting Pasadena, CA
2015	Phytobiomes: New Paradigm for Crop Improvement Washington, DC
2013	National Meeting of Ichthyologists and Herpetologists Albuquerque, NM
2013	William Paterson University Scientific Research Symposium Wayne, NJ
2013	Long Island University Research Symposium Brookville, NY

TEACHING & MENTORING

Workshops:

2024 (Fall) **Co-Chair and presenter**, Kickstart workshop: introduction to microbiome data analysis (5-days), Penn State University

2023 (Fall) **Co-Chair and presenter,** Kickstart workshop: introduction to microbiome data analysis (3-days), Penn State University

Seminar Organizer:

2025 (Spring)	Microbiome Center Seminar Series (MBIOM 550), Penn State University
2024 (Fall)	Microbiome Center Seminar Series (MBIOM 550), Penn State University
2024 (Spring)	Microbiome Center Seminar Series (MBIOM 550), Penn State University
2023 (Fall)	Microbiome Center Seminar Series (MBIOM 550), Penn State University
2023 (Spring)	Microbiome Center Seminar Series (MBIOM 550), Penn State University

Teaching assistant

2016 Introduction to Microbiology Laboratory (MCBL121L), UC Riverside

• Received an Outstanding Teaching Assistant Award from the Graduate Division

Guest lectures

2024	Advances in Ecology (ECLGY 515; Graduate Level), Penn State University
2024	Current events in Biotechnology (MCIBD 571; Graduate Level), Penn State University
2024	Environmental Microbiology (SOILS 512; Graduate level), Penn State University
2023	Current events in Biotechnology (MCIBD 571; Graduate Level), Penn State University
2022	Introduction to Honors Research (BIOL 499; Undergraduate level), Univ. of Kansas
2018	Plant Virology and Bacteriology (PLPA 203; Graduate level), UC Riverside
2016	Arlington High School Biology Class, Riverside, CA

<u>Undergraduate research mentor</u>

1.	Carmen Rodriguez Univ. of Kansas	2021-2025
2.	Natalie Ford Univ. of Kansas	2021-2022
3.	Hannah Reid (REU student) Univ. of Kansas	2021
4.	Felicity Tso (transition into full-time technician) Univ. of Kansas	2020-2022
5.	Matthew Guevara UC Riverside	2019-2020
6.	Rohan Subramanian UC Riverside	2019
7.	Norma Itzel De Anda UC Riverside	2018-2020
8.	Tim Smith UC Riverside	2018-2020
9.	Yona Mizrahi UC Riverside	2017
10.	Hannah Way UC Riverside	2016-2019
11.	Anisah Kabbara UC Riverside	2016-2017
12.	Chi Lok Leung UC Riverside	2015-2016

Mentoring Programs

2017 **Graduate Peer Mentor,** Grad. Success/Grad. Division, UC Riverside

- Mentored incoming graduate students participating in the 3-month summer "GradEdge/Jump Start" program, which provides underrepresented STEM graduate students a "jump start" on professional/academic development.
- Mentees:

- 1. Yair Sanchez Juarez (Mechanical Engineering)
- 2. Aidan Shands (Plant Pathology)
- 3. Pablo Unzueta (Chemistry)
- 4. Daniel White (Chemical and Environmental Engineering)
- 2015–16 **High School Mentor**, Association for Women is Science, UC Riverside
 - Mentored high school students from rural areas through the Mecca Program
- 2012–13 **International Student Mentor**, Conversations Helping and Teaching Students (CHATS), Long Island University

SPECIALIZED TRAINING

2021-22 2021 2021 2020 2018 2018	Maize Genetics Industry Mentor Program (6 mo.), <i>Mentor: Chris Kafer, BASF</i> Population Genetics Discussion Group (12 weeks), University of Kansas Software carpentry workshop, University of Kansas Microbial 'Omics Online Seminar Series (6 weeks), Univ. of Chicago Statistical modeling in R for Biologists, UC Riverside Science to Policy communications workshop, UC Riverside
2017	 Plant Microbiota practical course, Max Planck Institute, Cologne, Germany 2-week course on experimental/computational techniques. Led by Paul Schulze-Lefert, Stephane Hacquard, and Ruben Garrido-Oter. Competitive application process, received EMBO travel grant
2016	PMA/EMA-qPCR for quantifying bacterial cells in hosts, Lake Alfred, FL • Led by Nian Wang.
2015	Programming in R workshop, UC Riverside

INTERNAL LEADERSHIP & SERVICE

Penn State University, University Park, PA

2023-25	Curriculum committee member, Dual Title PhD in Microbiome Sciences program
2023-25	Exec committee member, Dual Title PhD in Microbiome Sciences programm
2023-24	Co-chair, One Health Microbiome Symposium organizing committee
2022-25	Member, Center for Root and Rhizosphere Biology

University of Kansas, Lawrence, KS

2021–22 **Co-organizer,** Center for Genomics Symposium organizing committee

University of California, Riverside, CA

- 2017–18 **Graduate Rep.**, Dean of Students Search Committee
- 2017–18 Vice President of Academic Affairs, Graduate Student Association
 - Paid <u>elected</u> position: Represented and advocated for >3,200 graduate students. Managed a team of seven academic affairs officers. Oversaw the status, funding, and activities of 56 departmental graduate student organizations, an event/conference funding program, and an outreach funding program.
- 2016–19 **Co-founder & Communications Coordinator**, Outreach Committee, Plant

	Pathology Graduate Student Association
2015-18	Graduate Rep., Faculty Academic Senate's Graduate Council
2015 -17	Conference Travel Grant Coordinator, Graduate Student Association
	 Paid <u>appointed</u> position: Directed the conference travel grant program
	(budget ≈\$250,000) by organizing, reviewing, and awarding hundreds of
	awards to individuals.
2015-17	Vice Chair, Highlander Union Board of Governors
2014-16	Graduate Rep., Global Food Initiative, Food Security Committee
2014-15	Graduate Rep., Faculty Academic Senate's Extension Committee
2014-15	Academic Affairs Officer, Graduate Student Association
	 Paid <u>appointed</u> position: Served as a liaison between the College of
	Natural and Agricultural Sciences and graduate student association.
2014-20	Member, Plant Pathology Graduate Student Association

PROFESSIONAL AFFILIATIONS & SERVICE

Manuscript review

International Society of Microbial Ecology (ISME) Journal; Plant Pathology Journal (x2); Phytobiomes Journal (x2); New Phytologist; Journal of Ecology; FEMS Microbiology Ecology (x2); Plant, Cell & Environment; FEMS Microbiology Letters (x2); Canadian Journal of Microbiology (x2); Global Change Biology; ISME Communications.

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Grant	review

2019 American Phytopathological Society travel grants (5 applications)

Moderator

2022 IS-MPMI Early career showcase (2-day virtual event)

<u>Membership</u>

2024-	Plant Microbiome Working Group member, International Phytobiomes Alliance
2024-	Animal Microbiome Working Group member, International Phytobiomes Alliance
2023-	Coordinating Committee member, International Phytobiomes Alliance
2023-	Member, American Society of Microbiology (ASM)
2023-	Member, One Health Task Force, Commonwealth of Pennsylvania
2020-	Member, Genetics of Maize-Microbe interactions research network
2020-	Member, International Society of Microbial Ecology (ISME)
2019-	Member, International Society for Molecular Plant-Microbe Interactions
2017-20	Member, UC Riverside Microbiome Initiative
2015-	Member, American Phytopathological Society (APS)
	Participated on Craduate student committee Pastarialesu

 Participated on Graduate student committee, Bacteriology committee, and Early career professionals committee.

OUTREACH & COMMUNITY SERVICE

2024	Panelist, National Institute of Antimicrobial Resistance Research & Education
	(NIAMRRE) meeting, Virtual
2024	Panelist, Antimicrobial Resistance Awareness Day, State College, PA

SEMI-TECHNICAL PUBLICATIONS & OTHER SCIENTIFIC COMMUNICATIONS

1. **Ginnan NA**. (2024). One Health Microbiome Center launches new video series. Penn State News.

Mayor's office to improve relations between students and the city.

- 2. **Ginnan NA**. (2024). Microbiome Kickstart Workshop will assist newcomers to the field. Penn State News.
- 3. **Ginnan NA**. (2023). New USDA grant to support graduate reproductive microbiome training program. Penn State News.
- 4. **Ginnan NA**. (2023). One Health Microbiome Center honors creativity and mentoring with award series. Penn State News.
- 5. **Ginnan NA**. (2023). One Health Microbiome Center's 2023-24 Interdisciplinary Innovation Fellows. Penn State News.
- 6. **Ginnan NA**. (2023). Penn State's renamed One Health Microbiome Center affirms broad expertise. Penn State News.
- 7. Lovelace A, Read A, **Ginnan NA**, Cox K. (2023). The 2022 Early Career Showcase: A Model for Future Virtual Symposiums. International Society for Molecular Plant-Microbe Interactions *Interactions*.

- 8. **Ginnan NA**. (2023). Habitat split may impact disease risk in amphibians and other vertebrates. Penn State News.
- 9. **Ginnan NA** and Bordenstein S. (2023). Free film and panel discussion reveals 'invisible' crisis of the microbial world. Penn State News.
- 10. **Ginnan NA**. (2022-23). Diverse Trainee features. One Health Microbiome Center webpage.
 - a. Luana Bresciani April 25, 2023
 - b. Mallorie Smith April 11, 2023
 - c. Josue Ceron March 28, 2023
 - d. Victoria Pearce March 14, 2023
 - e. Tarik Acevedo February 22, 2023
 - f. Erica Ryu January 31, 2023
 - g. Jenn Harris January 17, 2023
 - h. Terry Torres-Cruz December 13, 2022
 - i. Sterling Wright December 6, 2022
 - j. Colin Howe November 29, 2022
 - k. Taejung Chung November 22, 2022
- 11. **Ginnan NA**. (2022). 2022 Top 10 Most Popular Microbiome Center News Articles. Penn State Huck Institutes of the Life Sciences eNews.
- 12. Rolshausen P, Dang T, Bodaghi S, **Ginnan NA**, Ruegger P, Peacock B, Roper MC, Borneman J, McCollum G, Vidalakis G, England GK. (2018). Correlating citrus tree health with microbes. *Citrograph*. 9:4, 52-56.