

## Priscila A. Guzman

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### EDUCATION

**Doctor of Philosophy in Biology** 5<sup>th</sup> Year | GPA: 4.0 | Graduation expected May 2022  
*Kansas State University, Manhattan, Kansas*

**Bachelor of Science in Biology** 2014  
**Associate of Science in Chemistry** 2015  
*Middle Georgia State University, Macon, Georgia.*

### TEACHING EXPERIENCE

**Teaching Assistant** 2016 – Present  
BIOL 455 – General Microbiology Laboratory Techniques  
BIOL 198 – Principles of Biology  
BIOL 101 – Concepts of Biology

### PROFESSIONAL EMPLOYMENT HISTORY

**Graduate Research Assistant | Microbiology** 2016 – Present  
*Kansas State University, Manhattan, Kansas*  
Principal Investigator: Dr. Thomas Platt  
I study how plasmid dynamics affect bacterial social interactions focusing on interactions between virulent cooperators and avirulent cheater strains.

**Research Technician | Genetics** 2014  
*Middle Georgia State University, Macon, Georgia.*  
Principal Investigator: Dr. Pushpa Yadav  
I studied the effects of induction of polyploidy in *Stevia rebaudiana* plants.

**Research Technician | Limnology** 2011 –2012  
*University of Puerto Rico, Río Piedras, Puerto Rico.*  
Principal Investigator: Dr. Jorge Ortiz  
I studied the effects of urban runoff on an urban creek in San Juan, PR, and how the polluted waters were affecting the community.

**Research Technician | Ecology** 2009 –2010  
*Juan Ponce de León High School, Florida, Puerto Rico.*  
Principal Investigator: Mr. Elliot López  
I studied arthropod diversity and distribution within the caves Balcón & Viento in Florida, Puerto Rico.

### PEER REVIEWED PUBLICATIONS

van der Vlies, A.J., Barua, N., **Nieves-Otero, P.A.**, Platt, T.G. and Hansen, R.R. (2018): On Demand Release and Retrieval of Bacteria from Microwell Arrays Using Photodegradable Hydrogel Membranes. *ACS Applied Bio Materials*. 2 (1): 266-276.

Fattahi, N., **Nieves-Otero, P.A.**, Masigol, M., van der Vlies, A.J., Jensen, R.S., Hansen, R.R., Platt, T.G. (2020): Photodegradable Hydrogels for Rapid Screening, Isolation, and Genetic Characterization of Bacteria with Rare Phenotypes. *Biomacromolecules*. 21 (8): 3140-3151.

Barton, I.S., Eagan, J.L., Reynolds, I., **Nieves-Otero, P.A.** Platt, T.G., Fuqua, C. (2021): Co-Dependent and Interdigitated: Dual Quorum Sensing Systems Regulate Conjugative Transfer of the Ti Plasmid and the At Megaplasmid in *Agrobacterium tumefaciens* 15955. *Frontiers in Microbiology*. 11:605896.

## HONORS AND AWARDS

(Total: \$150,350.00)

- STEM Advocacy Institute (SAi) Resident 2020
- Awarded the ABRCMS Conference Scholarship 2020
- Awarded the STEM Advocacy Institute (SAi) Fellowship 2020
- Selected as one of SESYNC's Graduate Pursuits Participants 2020
- Conference Scholarship to attend 2020 SACNAS 2020
- Selected to exhibit one of my research microscopy images at the Kemper Museum of Contemporary art in Kansas City as part of the Science To Art Competition Hosted by BioNexus KC 2020
- Awarded a Science Communication Certificate from Northwestern University 2020
- Selected as one of KSU Graduate Student Senators for the Student Governing Association 2020
- Competitively selected to be part of ComSciCon-SciWri 2020 cohort 2020
- Awarded the ESA SEEDS Interdisciplinary Power of Data Research Travel Award 2020
- Awarded KSU's Graduate Student Council Professional Development Certificate 2020
- Competitively selected to be 1 of 25 students in the US to participate in SESYNC's Diversity, Equity & Inclusion in Socio-Environmental Synthesis Workshop 2020
- Awarded the Yale Ciencia Academy Fellowship 2019
- Awarded "Outstanding Graduate Oral Presentation" in Microbiology at 2019 SACNAS 2019
- Recipient of the 'Family Pin' from the Diversity and Multicultural Student Association 2019
- Student liaison in KSU's President's Commission on Multicultural Affairs 2019
- Awarded a travel grant from KSU's graduate school 2019
- Awarded a travel grant from KSU's Biology Graduate Student Association (BGSA) 2019
- Awarded the BioKansas Professional Development Scholarship 2019
- Michael Scott Watkins Award for Outstanding Graduate Teaching 2019
- US Student representative for NASA StarHab Ideation Workshop for Centennial Challenges 2018
- Awarded a Science Communication Fellowship from the Sunset Zoo 2018
- Awarded the NSF Graduate Research Fellowship 2018
- Awarded Honorable Mention on Ford Foundation Predoctoral Fellowship 2018
- Competitively selected to be one of two students to represent KSU on the Catalyzing Advocacy in Science and Engineering (CASE) workshop in Washington DC 2018
- Best Presentation Style - Graduate Students on Parade (KSU) 2016 – Present

## MENTORSHIP

- Isam Madi, undergraduate student at KSU, Biology. 2016 – 2018
- Courtney Sharp, undergraduate student at KSU, Biology. K-INBRE Scholar. 2016 – 2019
- Spencer Parish, undergraduate student at Yale University. NSF-REU Scholar. 2016 – 2017
- Anabelle Dillon, undergraduate student at KSU, Biology. A&S Scholar. 2017 – 2020
- Aditi Arun, undergraduate student at KSU, Biology. A&S Scholar. 2017 – 2020
- Veronica Mateo, undergraduate student at KSU, Biology. KS-LSAMP Scholar. 2018 – Present
- Natalie Melendez, undergraduate student at KSU, Biology. KS-LSAMP Scholar. 2018 – Present
- Emireth Monarrez, undergraduate student at KSU, Biology. KS-LSAMP Scholar. 2018 – Present
- Tyler Hanson, undergraduate at KSU, Biology. K-INBRE Scholar. 2018 – Present
- Reilly Jensen, undergraduate student at KSU, Biology. K-INBRE Scholar. 2018 – Present
- Chris Carter, undergraduate student at KSU, Biology. 2018 – Present
- Jackie Hernandez, high school student at MHS. Verde Clovers President. 2019 – Present
- Lauren Lauffer, high school student at MHS. Verde Clovers Vice-President. 2019 – Present
- Liz Melendez, high school student at MHS. Verde Clovers Secretary. 2019 – Present

## **PUBLIC SERVICE AND OUTREACH**

- KSU Diversity Programming Committee Graduate Student Representative 2020 – Present
- KSU Educational Opportunity Fund Committee Graduate Student Representative 2020 – Present
- Kansas Beats the Virus Conversation Facilitator & Interpreter 2020
- SelfCare@K-State Organizer 2020
- Skype a scientist volunteer scientist 2020
- CienciaPR - Científicos al Servicio SciComm & Teaching Volunteer 2020
- National Academies of Sciences, Engineering & Medicine New Voices COVID-19 Volunteer 2020
- Volunteer for the National Science Policy Network “COVID-19 Ask A Scientist Tool” 2020
- Graduate School Student Senator for KSU’s Student Governing Association 2020 – Present
- Chair of the Biology Graduate Student Association (BGSA) Workshop committee 2020 – Present
- Student liaison in KSU’s President’s Commission on Multicultural Affairs 2019 – Present
- Graduate student mentor for KSU’s microbiology club 2019 – Present
- “Crafting a competitive NSF-GRFP application” workshop presenter 2019
- Diversity Advocate for KSU Graduate School 2019 – Present
- Member of KSU’s Office for the Advancement of Women in Science and Engineering (KAWSE) Internal Advisory Board 2019 – Present
- Co-chair of KSU’s graduate school Professional Development Committee 2019 – Present
- Co-founder and Vice-President of KSU’s SACNAS Chapter 2019 – Present
- Organizer of the Summer STEM Camp for the 4H Verde Clovers Latino Club 2019
- Facilitator for KAWSE’s Girls Researching Our World (GROW) Summer Workshop 2019
- Delegate for “Más mujeres educadas, menos mujeres maltratadas” event in Florida, PR 2019
- Team member of a video made for lawmakers showcasing research in KSU 2019 – Present
- Microbiology mentor for “Girls in STEM” camp 2019 – Present
- STEM mentor for the Kickapoo & Iowa Tribes in Kansas 2019 – Present
- Writer and editor for bilingual (English & Spanish) scientific blog 2019 – Present
- Letters with a Pre-Scientist volunteer 2018 – Present
- Collaborator for NASA’s Centennial Challenges Program 2018 – Present
- Science Communication Fellow at Sunset Zoo 2018 – Present
- Travel Grants and Awards Chair of Biology Graduate Student Association (BGSA) 2018 – 2019
- Face of Kansas State Research 2018 – 2019
- Writer and editor for ‘Science Snapshots’ 2017 – Present
- Science Guest Speaker at Manhattan High School 2017 – Present
- Kansas State Science Communication Initiative (KSCI) volunteer 2017 – Present
- STEM Mentor and counselor for Manhattan, KS 4H Latino Club “Verde Clovers.” 2017 – Present
- Biology, Chemistry, Spanish & Math tutor for Latino Youth 2016 – Present
- Mentor and teaching volunteer for KAWSE 2016 – Present
- Vice-president and Secretary of the Natural Sciences Network (NSN) 2012 – 2014
- Math, Spanish & Chemistry tutor at Middle Georgia State University 2012 – 2014

## **MEMBERSHIPS/AFFILIATIONS**

- Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)
- American Society for Microbiology (ASM)
- American Association for the Advancement of Science (AAAS)0o9
- Missori ASM Branch
- CienciaPR
- National Science Policy Network (NSPN)
- Ecological Society of America (ESA)
- ComSciCom

## INVITED PRESENTATIONS

- Oral – (11/ 2020): *Cómo las dinámicas de plásmidos ayudan al control social de bacterias*. Centro de Investigación Ambiental de la Juan Ponce de León (CIAM JPL) Annual Symposium.
- Poster – (10 / 2020): *Plasmid conjugation from bacterial cooperators into cheaters as a potential policing mechanism*. 2020 SACNAS - The National Diversity in STEM Conference.
- Poster - (06 / 2020): *High-throughput screening of microbial interactions using a photodegradable hydrogel*. 2020 Microbe.
- Oral - (03 / 2020): *High-throughput screening of microbial interactions using a photodegradable hydrogel*. ASM Missouri Branch Regional Meeting
- Oral - (10 / 2019): *High-throughput screening of microbial interactions using a photodegradable hydrogel*. 2019 SACNAS - The National Diversity in STEM Conference. Outstanding Graduate Oral Presentation Award.
- Poster - (10 / 2019): *High-throughput screening of microbial interactions using a photodegradable hydrogel*. 40th Annual Crown Gall conference
- Oral - (10 / 2019): *High-throughput screening of microbial interactions using a photodegradable hydrogel*. Graduate Students on Parade, Kansas State University. Best Presentation Style Award.
- Oral - (03 / 2019): *Cheaters and Cooperators*. 2019 SciComm Conference
- Poster - (10 / 2018): *High-throughput screening of microbe-microbe interactions utilizing microwell arrays*. Microbiomes From Different Habitats: Soil, Water & Gut. NE-EPSCOR.
- Oral - (07 / 2018): *Microwell array platform for high-throughput screening of bacterial interactions*. Ecological Genomics Research Forum, Kansas State University.
- Oral - (10 / 2017): *From cheaters to cooperators*. Graduate Students on Parade, Kansas State University. Best Presentation Style Award.
- Oral - (10 / 2016): *Can conjugation stabilize cooperative traits?* Graduate Students on Parade, Kansas State University. Best Presentation Style Award.