**ELIZABETH PADILLA-CRESPO, PHD**

## a. Professional Preparation

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|---|---|---|
| 2015 | University of Tennessee (Knoxville, TN), Microbiology<br>*NSF GRADUATE RESEARCH FELLOWSHIP* | PhD |
| 2010 | Georgia Institute of Technology (Atlanta, GA), School of Biology<br>*NSF IGERT FELLOW* - Signals in the Sea Program in Aquatic Ecology<br>Certificate in International Affairs - Environmental Politics | MS |
| 2005 | University of Puerto Rico-Mayagüez (Mayaguez, P.R.), Industrial Biotechnology | BS |
| 2004 | University of Puerto Rico-Mayagüez (Mayaguez, P.R.), Industrial Microbiology | BS |

## b. Appointments

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|---|---|
| *Sept 2019 – Present* | Distinguished Research Professor, *Tenure Track*, Inter American University of Puerto Rico – Aguadilla (IAUPR-Ag) |
| Aug 2018 – 2019 | IAUPR-Ag Coordinator for Student Mobility, Internships, & Study Abroad |
| Aug 2016 – Present | Assistant Professor, Tenure track, IAUPR-Aguadilla |
| Jan 2016 – Aug 2016 | Environmental Science Curriculum Development Specialist – (IAUPR-Ag) |
| 2014 – 2015 | Lecturer – Inter American Univ. of Puerto Rico - San Germán |
| 2013 – 2014 | Congressional Hispanic Caucus Institute STEM Fellow,<br>*Placement #1*: U.S. House of Representatives - Committee on Science, Space& Technology, Dem. Staff; *Placement #2:* American Petroleum Institute |
| Summer 2012 | National Science Foundation, Molecular and Cellular Bioscience -Division, Duties reassembled those of a *Program Analyst* |
| 2010 – 2013 | Graduate Research Assistant, Univ. of Tennessee – Knoxville |
| 2005 – 2010 | Graduate Research Assistant, Georgia Institute of Technology |
| Summer 2004 | Undergraduate Research Fellowship at the Dept. of Microbiology and Molecular Genetics, Harvard Medical School |
| Summer 2003 | Molecular and Environmental Toxicology Trainee, University of Wisconsin Madison |
| Summer 2002 | Summer Research Fellowship DOE Lawrence Berkeley National Laboratory, Center for Environmental Biotechnology |
| Summer 2001 | REU Student at Georgia Tech, Civil and Env. Eng. Dept. |
| 2001 – 2005 | Undergraduate Research Fellowship at the University of P.R. Mayagüez sponsored by MARC-HHMI, PR-LSAMP, and the P.R. NASA Space Grant Consortium |

## c. Selected Products

1. Ceballos R.M. Drummond C., Stacy C.L., **Padilla-Crespo E.,** and K.M. Stedman. Host-dependent differences in replication strategy of the *Sulfolobus* Spindle-shaped Virus strain SSV9 (aka, SSVK1): Infection profiles in hosts of the family Sulfolobaceae (2020, July) *Frontiers in Microbiology, Extreme Microbiology*, 11, 1218 https://doi.org/10.3389/fmicb.2020.01218
2. **Padilla-Crespo, E.**, Easley, R. A., Guzman, W. I., Habtes, S., Rogers, A. A., Bonds, Q., and Johnson, A. (2018, December). A Review of MS PHD'S Impact on Increasing Diversity in the Geosciences. In *AGU Fall Meeting Abstracts*. https://ui.adsabs.harvard.edu/abs/2018AGUFMED43A..03P/abstract
3. https://ui.adsabs.harvard.edu/abs/2018AGUFMED41C1117P/abstract
4. Higgins, S.H., **Padilla-Crespo E.,** and Frank F. E. Löffler. 2018. Draft genome sequences of the 1,2-dichloropropane-respiring *Dehalococcoides mccartyi* strains RC and KS. *Microbiology Resource Announcements* 7:e01081-18. https://doi.org/10.1128/MRA.01081-18.
5. **Padilla-Crespo E**., K.M. Ritalahti and F. E. Löffler. 1, 2-dichloropropane-to-propene reductive dehalogenase genes. University of Tennessee-Knoxville. USPTO Publication number: 2014007296, Application number: US 13/607,505 http://www.google.com/patents/US20140072965
6. **Padilla-Crespo, E**. *et al.* 2014. Identification and environmental distribution of *dcpA* encoding the 1,2-dichloropropane-to-propene reductive dehalogenase in organohalide-respiring *Chloroflexi. Applied and Environmental Microbiology*. doi: 10.1128/AEM.02927 ***Paper Selected as a "Spotlight Article" by the Journal Editors*** http://aem.asm.org/content/early/2013/11/11/AEM.02927-13
7. **Padilla-Crespo, E**. *et al.* 2014. *dcpA*, a Novel Biomarker for 1,2-Dichloropropane-Reductive Dechlorination. Articles of Significant Interest Selected by the Editors. *Applied and Environmental Microbiology.* 2014;80(3):797. doi:10.1128/AEM.04069-13. http://aem.asm.org/content/80/3/797.short#sec-2
8. **Padilla-Crespo, E**. "*Towards a clean and sustainable future: Green technologies, restoration and management of contaminated sites".* Congressional Hispanic Caucus Institute. Washington D.C. 2014.

https://chci.org/wp-content/uploads/2017/11/2014421233527696-2014STEMGraduateSummitWhitePaper-ElizabethPadilla-Crespo.pdf ***White Policy Paper***

9. **Padilla-Crespo, E**. *"From the lab bench to Capitol Hill."* Feb. 2014. LATINA Style Magazine. Vol. 20, No. 1, 2014 Page 44. http://mydigimag.rrd.com/publication/?i=198406&p=46
10. **Padilla-Crespo, E**. *Featured article on SACNAS Policy Forum, "The Importance of Funding Basic Research"* July 2013. https://medium.com/stem-and-culture-chronicle/opinion-the-importance-of-funding-basic-research-6f213b535a0a
11. *Genomics 2012,* ***13****:2* https://bmcgenomics.biomedcentral.com/articles/10.1186/1471-2164-13-200
12. Ritalahti, K. M., C. Cruz-García, **E. Padilla-Crespo**, J. K. Hatt, and F. E. Löffler. 2009. RNA extraction and cDNA analysis for quantitative assessment of biomarker transcripts in groundwater. In K. N. Timmis (ed.), ***Book chapter: Microbiology of Hydrocarbons***, Oils, Lipids, and Derived Compounds. Springer Berlin.
13. Thomas, S. H., **E. Padilla-Crespo,** *et. al* 2009. Diversity and Distribution of *Anaeromyxobacter* Strains in a Uranium-Contaminated Subsurface Environment with Nonuniform Flow. *Applied and Environmental Microbiology*. 75(11): 3679-3687. http://www.ncbi.nlm.nih.gov/pubmed/19346346

### d. Synergistic Activities

1. Science Communication and Outreach Efforts
   - 2018 NSF- OCE sponsored UNOLS Deep - Submergence Science Early Career Scientist Training Cruise – Shore participant, social media and web contributor
   - 2018 American Geophysical Union Voices of Science, Science Communication Program https://blogs.agu.org/sciencecommunication/elizabeth-padilla-crespo/
   - Ciencia Puerto Rico – Science writer, speaker, website contributor (2009 – Present)
   - Earth Science Women's Network (ESWN) - social media https://eswnonline.org/wp-content/uploads/2019/09/Elizabeth-Padilla-Crespo-Show.jpg
2. Service to the Inter American University of Puerto Rico
   - IUPR Curriculum Revision and Development Committee (2018 - May 2020)
   - Aguadilla Campus Faculty Senate Member – (2018 - May 2020)
3. Mentorship
   - *Minority Striving & Pursuing Higher Degrees of Success in Earth System Science, National Professional Development Program* – Mentor, Executive Committee (2005 – Present). Over 200 students have been mentored under this initiative https://ui.adsabs.harvard.edu/abs/2018AGUFMED43A..03P/abstract
   - Co-Director of the *Minority Institution Research Collaborative (MIRC*), in charge of Hispanic Serving Institution Engagement https://ceballoslab.uark.edu/minority-institution-research-collaborative-mirc/
   - *Seeds of Success Program, by Ciencia PR* - Mentor and Role Model, this program exposes middle/high school Puerto Rican girls with hands-on STEM activities and role models
   - *1 Million* Woman in STEM (*1MWM)* - https://www.1mwis.com/profiles/elizabeth-padilla-crespo
4. Reviewer and Panelist – NSF (GEO, EHR, GRFP), Institute of International Education (Boren Awards).

### e. Selected Honors

1. Jet Blue Foundation Science and Education Grant – One of five awardees in Puerto Rico (Nov, 2018)
2. AAAS/Linton-Poodry SACNAS Leadership Institute – 30 individuals chosen nationally as emerging STEM leaders https://www.sacnas.org/2018/06/07/cohort-for-2018-lpsli/
3. Ford Foundation Environmental Grant – One of six projects awarded in P.R. (Feb. 2018)

a. NASA Ambassadors Program (2009, 2018)

4. American Geosciences Institute Diversity Grant Recipient (2015) https://www.americangeosciences.org/workforce/dco-diversity-grant-recipients
5. Congressional Hispanic Caucus Institute (CHCI) STEM Congressional Fellowship. (2013-2014) https://chci.org/alumni/elizabeth-padilla-crespo/
6. Research Project Award Winner, at *Sustainability Live*, Birmingham, UK. (2009)
7. *Best Student Paper, 7th* International Conference on Remediation of Contaminated Sediments. (2013)
8. National Science Foundation Graduate Research Fellowship (GRFP)
9. *Best Poster, 7th* International Symposium for Subsurface Microbiology, Shizuoka, JAPAN. (2008)

### f. Research Statement

My background is very interdisciplinary, dancing in the borders of environmental microbiology, chemistry, engineering, and environmental policy. Research interests include bioremediation of chlorinated solvents and other pollutants, microbial biogeography, extreme environments, mineral-microbe interactions, design and application of microbiological/molecular tools for biomarker discovery, CERCLA (Superfund Sites), and interventions that enhance education and outreach efforts to underrepresented minority students.

**f. Professional Society Memberships.** AGU, Sigma Xi, ASM, SACNAS, CUR, AAAS, NAGT