Giovanna Guerrero-Medina, Ph.D.

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SUMMARY

- Federally funded PI of science education, training, and diversity, equity, and inclusion programs
- Nationally sought expert on topics related to diversity, equity, and inclusion
- Over a decade of leadership and staff management experience as CEO and head strategist of a fast-growing nonprofit focused on science education, communication, and careers
- Since 2012 have mentored or advised >200 graduate, undergraduate, and postdoctoral scholars through Yale Ciencia, CienciaPR, and Wu Tsai Institute roles
- Experience working in government, non-profit, and academic administrative and research settings
- Mission: To develop and support communities, programs, and institutional approaches to empower scientists from historically excluded backgrounds, celebrate our cultural and social identities in science, and counter the legacy of structural racism in academia.

EDUCATION

1998 – 2004

Ph.D., Molecular and Cell Biology, University of California, Berkeley Joint Advisors: Ehud Y. Isacoff and Corey S. Goodman Dissertation: Heterogeneous synaptic transmission at the Drosophila larval neuromuscular junction revealed by single-bouton optical imaging.

1993 - 1997

B.Sc., Biology, University of Puerto Rico, Rio Piedras, PR GPA 3.97/4.00, summa cum laude

APPOINTMENTS AND PROFESSIONAL EXPERIENCE

2021 - Present

Assistant Director for Diversity, Equity, and Inclusion (DEI), <u>Wu Tsai Institute</u>, Yale University, New Haven, CT

- Inaugural DEI leader for new, philanthropically funded university-wide institute dedicated to interdisciplinary understanding of the mind and cognition. Tasked with integrating DEI process into all aspects of the Institute, from programs to scientist recruitment, to policies and processes.
- Designed new postdoctoral fellowship program to incentivize interdisciplinary research and mentoring and hiring best practices.
- Developed new summer internal and external undergraduate research program.
- Established and advice student and postdoc committee.
- Oversee review for graduate fellowship program that promotes interdisciplinary research and diversity.
- Leading inclusive faculty recruitment process to bring in at least 9 new faculty members to Yale over the next three years. Efforts have already resulted a junior female faculty member being hired to the department of Neuroscience.

2014 - Present

Yale Ciencia Director, Yale University, New Haven, CT

- Designed innovative national programs for the professional development, recruitment, and retention of historically excluded groups in biomedical and health sciences and lead teams for implementation.
- Secured >\$4.2M in external funding. Principal investigator of various NIH and NSF projects that promote participation of minoritized people in science, including the Yale Ciencia Academy, an NIH grant to support the academic and professional development of national cohorts of diverse PhD students. Renewed for a second phase, the program has trained >225 students from universities across the

US and shows statistically significant improvements in students' professional development practices and self-efficacy.

- Established NIH-funded partnership with University of Puerto Rico IPERT program for promotion of early-stage research experiences linked to Yale programs
- Developed and co-lead the Yale Program for Advancing Training in Health and Sciences (PATHS), modeled after the Yale Ciencia Academy, which has provided community and professional development support to >180 students from underrepresented backgrounds interested in pursuing MD, MD/PhD or PhD degrees. The program collaborates with the Yale BBS Diversity and Inclusion Collective (YBDIC), the Yale LMSA/SNMA Chapter, and the Yale MD/PhD Diversity, Equity and Inclusion Committee to offer mentoring opportunities to students.
- Lead recruitment initiatives in Puerto Rico that reach ~500 students each year and have increased minority representation in the Yale Biological and Biomedical Sciences PhD program. Secured Provost and funding across 8 programs and departments for major Yale sponsorship during the 2022 SACNAS conference that will bring enhanced visibility and recruitment opportunities.
- Helped found and co-advise the Yale SACNAS chapter, which has won two Chapter awards in first four years of existence.
- Inaugural Intersections Science Fellows Symposium (ISFS) Steering Committee member and Advisor for the Programming, Post-Symposium, and Mentoring committees. Co-Chair of the second ISFS, which increased the number of applications and awards from 25 to 30 and secured >\$75K in funding.
- Represent Yale at high-profile meetings and bodies, such as Universia's III International President's Meeting; various NIH, NSF, and HHMI review bodies; and two National Academies of Science, Engineering, and Medicine committees.
- Hired, supervised, and mentored 4 FTEs and several undergraduate and graduate interns at Yale (2 FTEs currently on team).

2012 – Present 2011 – 2012 2007 – 2011 Executive Director, Ciencia Puerto Rico, San Juan, PR Director of Operations, Ciencia Puerto Rico, San Juan, PR Administrative Team, Ciencia Puerto Rico, San Juan, PR

- Design and develop programs; secure federal, foundation, and donation funding; oversee staff and administrative operations; and develop and implement strategic organizational goals for this non-profit linking more than 15K scientists, students and educators interested in promoting the sciences in Puerto Rico
- Lead grant writer. Secured \$3M in funding and >\$100K in-kind services over past decade
- Grew organization from all-volunteer staff to 8 FTE staff over six years. Directly supervise 4 FTEs. Empower branch directors to manage their own teams.
- Oversee spending and payroll, manage budgets, and work with accountant to produce financial reports and submit taxes. Established best-practice systems and processes for financial accountability and responsible oversight.
- Established a collaboration with Yale University in 2014.
- Close working relationship with most higher-education institutions in Puerto Rico
- Led the development and implementation of CienciaPR's strategic plans, including its most recent one (http://bit.ly/transforming_scied_PR).
- Managed contract to develop CienciaPR.org, an innovative community networking website and science communication and science education content management system and database.

- Under leadership, CienciaPR has become one of the largest networked communities of Hispanic scientists:
 - Increased membership to >15K
 - Visitors increased 9-fold to >50,000/month
 - Among Puerto Rico audiences, CienciaPR outperforms most popular science or jobs and education websites in the world according to Google Analytics.
- Helped design and launch the Puerto Rico Science Technology and Research Trust's (PRSTRT) grants program, which awarded \$8.5M to >50 investigators over first 4 years. Partnered with PRSTRT and AAAS Caribbean division to give ~\$100K to >65 students and scientists affected by the 2018 hurricane season and connect them with database of ~500 offers of aid received through CienciaPR
- Launched "Puerto Rico Science Policy Action Network", a scientist-led effort to advocate for science-informed policies and legislation in Puerto Rico and the US.
- Represent CienciaPR at high-profile forums such as the Clinton Global Initiative Action Network on Post-Disaster Recovery and several White House events.
- Organization received recognition in 2015 as a Bright Spot in STEM education from the White House Initiative on Educational Excellence for Hispanics, the 2016 AAAS Caribbean Division Annual Meeting, was named 2018 Science Defender by the Union of Concerned Scientists and won Public Engagement Science Breakthrough of the year at the 2021 Falling Walls conference.

2010 - 2012Head, Science Policy and Special Populations Research Branch Van Andel Research Institute, Grand Rapids, MI

- Helped coordinate among business units (e.g., Finance, Human Resources, Grants and Contracts, etc.) to establish and implement emerging research programs and partnerships, including a Pediatric Oncology Program with a personalized medicine component; a Program for Biospecimen Science; two Structural Biology and Population Genomics joint centers in China; and a Biomarkers Development Program, among others.
- Worked with Institute leadership and faculty to develop and refine faculty evaluation policies and researcher funding models
- Supported institute and investigators in drafting and editing of sections for major Federal and foundation grant and contract proposals, research collaboration agreements, etc.

2008 - 2010Health Science Policy Analyst, Office of Science Policy and Planning, National Institute of Neurological Disorders and Stroke (NINDS), National Institutes of Health (NIH), Washington, DC

- Organized three NIH roundtables with research experts on opportunities for research in the emergency care setting; developed a Request for Information (RFI) and analyzed over 150 responses to inform the roundtables on opinions of broader scientific community; prepared a report of outcomes.
- Coordinated a team of NINDS staff and extramural advisors examining the role of NINDS in basic neuroscience research as part of NINDS-wide strategic plan
- Co-led an internal team to examine the role of NINDS in health disparities research and workforce diversity. Worked with the NINDS director to select and organize a panel of extramural advisors for this planning effort.
- Helped design a funding opportunity for the broadening participation of underrepresented groups in neuroscience research, which continues to this day and has awarded >\$19M to 10 institutions over nine years (RFA-MH-10-070)

- Performed policy and portfolio analyses and program evaluations in areas such as minority health disparities, research training programs, international research, stroke, muscular dystrophy, and MS.
- Reported on the success and impact of NINDS-funded research to Congress

2006 - 2008

Science Administration and Management Intern, Department of Health and Human Services (HHS), Emerging Leaders Program (ELP), Washington, DC The ELP recruited young professionals to the HHS workforce and provides leadership training and rotation opportunities. Worked on international policy related to infectious diseases for NIAID, tracked the implementation of the International Health Regulations at the Department of Health and Human Services, performed analyses of the biomedical research workforce for NIH, and worked on flu vaccination policies with the FDA, among other projects.

2006

Christine Mirzayan Science and Technology Graduate Policy Fellow, Board on Life Sciences, The National Academies, Washington, DC Organized, coordinated, and publicized a seminar on mental health screens for children; coordinated meeting on IP issues in toxicogenomics; collaborated in the writing of an educational brochure on stem cells.

RESEARCH EXPERIENCE

Fall 2005 Visiting Research Associate, Veterinary Genomics Laboratory, University of

California, Davis, Davis, CA

Genotyped microsatellite and indel markers in the domestic dog for the identifica-

tion of linked traits

1998 – 2005 Graduate and Postdoctoral Researcher, Molecular and Cell Biology

Department, University of California, Berkeley, CA

Developed and validated genetically-encoded tools to visualize neuronal activity *in vivo*, discovered previously unsuspected spatial distribution of synaptic strength; mentored, trained, and developed projects for three graduate students and one undergraduate; two semesters of teaching experience; presented research in international and national conferences; extensive experience with fluorescence microscopy, biophysics, electrophysiology, cloning, and *Drosophila* genetics

1997 – 1998 Postbaccalaureate Intramural Research Training Award Fellow, Susan

Wray Laboratory, NINDS, NIH, Bethesda, MD

Analysis of neuroendocrine cell migration and gene expression during mouse em-

bryonic development

Summer 1996 Minority International Research Training Program Fellow (NIH- MIRT), James

Ajioka Laboratory, Cambridge University, Cambridge, UK

Differential expression analysis of *Leishmania major* transition to infective stage

Summer 1995 MIT Summer Research Program (MSRP) Participant, William Thilly

Laboratory, Massachusetts Institute of Technology, Cambridge, MA

Validation of techniques to analyze spontaneous mutation of human genes

1994 – 1997 Laboratory Assistant, Braulio D. Jiménez Laboratory, University of

Puerto Rico Medical Science Campus, Rio Piedras, PR

Mouse and rat studies of gene expression in response to toxic challenges

TEACHING EXPERIENCE

2011 - 2012 Van Andel Institute Graduate School, Course Co-Director, Responsible and Effec-

tive Conduct of Research

2011 - 2012 Van Andel Institute Graduate School, Invited Instructor, Historical Perspectives in

Molecular Biology (Drosophila)

Spring 2001 Fall 1998 University of California, Berkeley, Instructor, Neurobiology Laboratory University of California, Berkeley, Teaching Assistant, Introduction to Neurobiology

GRANTS AT YALE (selected)

09/2022 – 07/2027 NIH, 2 R25GM146264, Seeds of Success: Empowering Girls in STEM Through Mentoring, Access, and Leadership, Role: PI

STEM careers are rewarding and well remunerated, yet Latinas and African American women are significantly underrepresented. Seeds of Success provides middle-school girls from underrepresented backgrounds with relatable STEM role models who shape confident attitudes and guide formative STEM experiences that are reinforced through peer and community outreach. The long-term goal is to empower young girls to pursue future careers in STEM professions.

08/2021 – 07/2022 Burroughs Wellcome Fund, Career Guidance for Trainees Award: Intersections Science Fellows Symposium, Role: PI

Supports the expansion and structure of the Intersections Science Fellows Symposium (ISFS), a multi-institutional program to give visibility to mid-to-late-stage postdoctoral trainees from historically marginalized backgrounds and connect them with mentors, sponsors and networking and professional development opportunities so they may secure fulfilling faculty positions that help increase the diversity of the professoriate.

08/2020 - 07/2025 NIH, 2 R25GM114000, The Yale Ciencia Academy: Enhancing Biomedical Training and Diversity Through a Peer & Role Model Professional Development Program, Role: PI

The Yale Ciencia Academy complements traditional research training by establishing a national cohort of graduate students who are more prepared for successful scientific careers through interactions with a network of culturally similar role models and peer mentors, through trainings in professional development skills, and through outreach to their communities of origin.

- 09/2015 05/2020 NIH, 1 R25GM121270, Enhancing Research Training through Empowerment, Resilience & Civic Engagement, Role: Key Personnel (PI: Godreau, UPR-Cayey) Enhance responsiveness to the changing needs of the biomedical workforce through early research training courses and mentoring for undergraduates and professional development for faculty of >15 institutions in Puerto Rico. Yale Ciencia helps develop trainings for undergraduate students and established an online platform for the registration, dissemination of information, and collection of data for the program.
- 06/2015 07/2020 NIH, 1 R25GM11400, Enhancing biomedical training and diversity through a Hispanic science network, Role: PI

The Yale Ciencia Academy complements traditional research training by establishing a national cohort of graduate students who are more prepared for successful scientific careers through interactions with a network of culturally similar role models and peer mentors, through trainings in professional development skills, and through outreach to their communities of origin.

- 02/2018 12/2019 NSF, 1823085, RAPID: Evaluation of disaster-related science lesson plans to promote learning continuity after Hurricane Maria, Role: PI

 Examining the feasibility and impact of implementing contextualized, project-based science lessons for middle school in the aftermath of a natural disaster.
- 01/2015 01/2016 **Amgen Foundation, Seeds of Success STEM Ambassadors Program, Role: PI**Engaged 160 middle school girls with STEM through workshops, interactions with Latina STEM professionals, and leadership projects that impacted >10,000

additional people. Examined the impact of these experiences on girls' interest and motivation to persist in STEM.

07/2014 - 07/2016 Puerto Rico Science & Technology Trust, Leveraging an Online Network to Develop a Grants Program, Role: PI

Leveraged the CienciaPR network to identify and engage Puerto Rican diaspora scientists in the development of a national grants program.

GRANTS AT CIENCIAPR (selected)

- *I do not receive any salary support from these grants but was involved in designing projects, leading grant writing, and in some cases overseeing programs.
- 01/2022 12/2022 Simons Foundation, Ciencia Co-Lab: Catalyzing Place-Based Community-Led Science Projects in Puerto Rico, Role: PI

 Strengthen the capacity and agency of community leaders in Puerto Rico to engage with science by providing them with training, networking and mentoring opportunities as well as financial support to catalyze place-based community-led science projects that address local challenges and priorities.
- 09/2021 08/2023 **Medtronic Foundation, Seeds of Success: Girls in STEM Program, Role: PI**Expose 120 Puerto Rican middle school girls with STEM through workshops, mentoring with Latina STEM professionals, and leadership projects that impact additional 3,600 people in their communities.
- 09/2020 08/2021 **Simons Foundation, COVID-19 Science Communication Kit, Role: PI**Engage Hispanic and underserved publics through science communication related to science topics.
- 09/2020 08/2023 **Amgen Foundation, Seeds of Success STEM Ambassadors Program, Role: PI**Expose 120 Puerto Rican middle school girls with STEM through workshops, mentoring with Latina STEM professionals, and leadership projects that impact additional 3,600 people in their communities.
- 04/2020 06/2021 **IF/THEN Program, Seeds of Success STEM Ambassadors Program, Role: PI**Expose 120 Puerto Rican middle school girls with STEM through workshops, mentoring with Latina STEM professionals, and leadership projects that impact additional 3,600 people in their communities.
- 04/2019 03/2019 **J&J Puerto Rico, Seeds of Success STEM Ambassadors Program, Role: PI**Impact 100 Puerto Rican high school girls with STEM through workshops, interactions with Latina STEM professionals, and leadership projects that impact additional 3,000 girls.
- 04/2018 03/2019 **JetBlue Foundation, Seeds of Success STEM Ambassadors Program, Role: PI** Impact 80 Puerto Rican high school girls with STEM through workshops, interactions with Latina STEM professionals, and leadership projects that impact additional 3,000 girls.
- 07/2016 06/2019 **Banco Popular Foundation, Ciencia al Servicio de Puerto Rico, Role: PI**CienciaPR's flagship science education project, which is changing the way science is taught through teacher-scientist collaborations and which impacts 40 schools in Puerto Rico and ~2,400 middle school students per year. Secured additional contributions from Jet Blue, Angel Ramos, and Intellectus Foundations
- 08/2012 07/2013 Banco Popular Foundation, Ciencia Puerto Rico: Providing Role Models for Future Generations of Scientists, Role: PI

 This award supported general administration efforts of Ciencia Puerto Rico and

provided in kind resources to develop a three-part video series about Puerto Rican scientists for a 7th-8th grade audience.

08/2012 – 07/2013 Puerto Rico Science & Technology Trust, An Online Network for Science and Puerto Rico, Role: PI

This award supported the redesign and enhancement of the CienciaPR website and databases.

AWARDS AND HONORS (selected)				
2020	Wheaton Woman in STEM award for 2020 (Postponed due to COVID-19)			
2019	Lead the Way Fellowship, leadership program for non-profit Executive Directors			
	women of color.			
2018	Invited to Clinton Global Initiative Action Network on Post-Disaster Recovery			
2017	Travel Award – AAMC GREAT Group Professional Development Meeting			
2016	Invited by White House Office of Science and Technology Policy (OSTP) to partici-			
	pate in Conference on Inclusive STEM Education for Youth of Color			
2016	Aspen Ideas Ricardo Salinas Spotlight Health Scholar			
2016	University of Puerto Rico (UPR)'s Distinguished Alumna in Science			
2015	Selected for O'Reilly Media's <i>Science Foo Camp</i> at Google Headquarters			
2014	Invited by White House OSTP to participate in a National Workshop: Closing the			
2011	Gap: Opportunities to Expand Minority Achievement and Participation in STEM			
2013	Recognition for service to Van Andel Institute's IRB			
2010	NIH Director's Award for Volunteer Program for English Proficiency			
2009	NINDS Merit Awards for leadership in the NINDS Strategic Planning process and			
	for coordinating the Emergency Medicine Research planning efforts			
2008-2009	NIH Director's Award for coordinating evaluations for the Presidential Early Ca-			
	reer Award in Science and Engineering.			
2007	HHS Liaison to the Mexican Ministerial Delegation, Global Health Security Initia-			
	tive Ministerial Meeting, NIH, Bethesda, MD			
2006 - 2008	HHS Emerging Leader Fellow			
2006	Christine Mirzayan Science and Technology Graduate Policy Fellow, Board on Life			
	Sciences, National Research Council, National Academies, Washington, DC			
1998 - 2003	Howard Hughes Medical Institute (HHMI) Pre-doctoral Fellowship Award			
1998	Selected for the NSF Graduate Research Fellowship and the Ford Foundation Pre-			
	doctoral Diversity Fellowships. Declined due to receipt of HHMI Graduate Fellow-			
	ship Award			
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1997 – 1998

LEADERSHIP AND SERVICE (selected)				
2022 – Present	Member, National Academies of Sciences, Engineering, and Medicine (NASEM)			
	Advancing Anti-Racism, Diversity, Equity, and Inclusion in STEM Organizations:			
	A Consensus Study			
2022	Reviewer, Gilliam Fellowship Program, Howard Hughes Medical Institute (HHMI)			
2020 - Present	Intersections Science Fellows Symposium, Co-Chair, Steering Committee member			
	and Faculty Advisor for Programming and Post-Symposium Committees			
2020	Co-founder and advisory member, Puerto Rico CÓVÍD-19 Testing Work Group			
2019 - Present	NSF Engineering Research Center for Cell Manufacturing Technologies (CMaT)			
	Workforce Development Advisory Board			
2019	Peer review member, NINDS Workforce Special Emphasis Panel (ZNS1 SRB D-01)			
2019	Puerto Rico Institute of Statistics Director Search Advisory Committee			
2018 - Present	Advisor, Científico Latino			
2018 - Present	Founder and Lead Advisor, Puerto Rico Science Policy Action Network			
2017 - Present	Member, Board of Directors, ARTE Inc (New Haven Latine education non-profit)			
2017 - 2018	Member, Next Generation Researchers Initiative Committee, NASEM			
2016 - 2018	Elected Member & Programming Subcommitte Chair, Minority Affairs Committee,			
	American Society for Cell Biology,			
2015 - 2017	Peer reviewer, National Science Foundation, NSF Research Traineeship Program			
2015	Peer reviewer, NIH Training, Workforce Development, and Diversity Programs			
	Subcommittee D (TWD-D)			
2015	Member, Strategic Planning Committee, Puerto Rico Science, Technology and Re-			

Post-baccalaureate Intramural Research Training Fellow, NINDS, Bethesda, MD

2015	New Haven Public Schools Science Fair judge
2014 - 2016	Member, Grants Committee, Puerto Rico Science, Technology and Research Trust
2014 - 2015	Peer reviewer, Puerto Rico Science, Technology and Research Trust grants program
2013 - 2015	Abstract Reviewer, SACNAS
2011 - 2013	Van Andel Research Institute Institutional Review Board (IRB) member
2011 - 2012	Member of the Science Policy Committee of the International Society for Biological
	and Environmental Repositories (ISBER)
2011 - 2012	IRB Member, Calvin College Institutional Review Board
2010 - 2012	Member, Ethics Committee, DeVos Medical Ethics Colloquy
2012	Grant Reviewer (R21), RCMI Pilot Project Program, University of Puerto Rico, Med-
	ical Sciences Campus
2011	Grant Reviewer, Susan G. Komen for the Cure, Grand Rapids Affiliate
2008 - 2010	ESL Teacher, Program Co-Creator, Volunteer Program for English Proficiency
	(VPEP) at NIH - Taught English once a week to NIH housekeeping employees.
	Helped develop and expand the program across the NIH and implement organiza-
	tional processes and policies.
2008	Abstract Reviewer, NIH Summit: The Science of Eliminating Health Disparities, Na-
	tional Harbor, MD
2008	Poster Judge, Specialized Neuroscience Research Programs Conference, NYC
2007 - 2009	Tax Preparer and Translator, DC EITC Campaign, Washington DC Metro Area -
	Provided free tax preparation services to low-income individuals to help them ob-
	tain the Earned Income and Child Tax credits.

PEER-REVIEWED PUBLICATIONS

Full List: https://www.ncbi.nlm.nih.gov/myncbi/giovanna.guerrero-medina.1/bibliography/public/

- 1. National Academies of Sciences, Engineering, and Medicine. 2022. Advancing Anti-Racism, Diversity, Equity, and Inclusion in STEM Organizations: A Consensus Study (Working Title). Under Review.
- 2. **National Academies of Sciences, Engineering, and Medicine**. 2018. *The Next Generation of Biomedical and Behavioral Sciences Researchers: Breaking Through*. Washington, DC: The National Academies Press. doi: https://doi.org/10.17226/25008
- 3. González-Espada, W; Díaz-Muñoz, G; Feliú-Mójer, M; Flores-Otero, J; Fortis-Santiago, Y; **GUER-RERO-MEDINA**, **G**; Lopez, M; Colón-Ramos, DA; Fernández-Repollet, E. (2015) Assessing a Graduate School Science Recruitment Symposium. *Cuaderno de Investigación en la Educación*. 30:55-70. http://cie.uprrp.edu/cuaderno/2015/12/16/assessing-a-graduate-school-science-recruitment-symposium/ PMCID: PMC4708887
- 4. Ball, R.W., Peled, E.S., **GUERRERO**, **G**., Isacoff, E.Y. (2015) BMP signaling and microtubule organization regulate synaptic strength. *Neuroscience* 16(29): 155-66. PMCID: PMC4369397. http://www.ncbi.nlm.nih.gov/pubmed/25681521
- 5. González-Espada, W; Llerandi-Román, P.A.; Fortis-Santiago, Y; **GUERRERO-MEDINA**, **G**; Ortiz-Vega, NM; Colón-Ramos, D; Feliú-Mójer, M. (2014) Impact of Culturally Relevant Contextualized Activities on Elementary and Middle School Students Perceptions of Science: An Exploratory Study. *International Journal of Science Education*. Part B: 1-21. http://dx.doi.org/10.1080/21548455.2014.881579
- 6. GUERRERO-MEDINA, G.; Feliú-Mójer, M; González-Espada, W; Díaz-Muñoz, G; Lopez, M; Díaz-Muñoz, S; Fortis-Santiago, Y; Flores-Otero, J; Craig, D; Colón-Ramos, DA (2013) Supporting diversity in science through social networking. *PLoS Biology*. 11(12): e1001740. PMCID: PMC3876968. http://dx.doi.org/10.1371%2Fjournal.pbio.1001740
- 7. González-Espada, W; Fortis-Santiago, Y; GUERRERO-MEDINA, G; Ortiz-Vega, NM; Colón-Ramos, D; Feliú-Mójer, M. (2013) Suplementando el currículo de ciencias con contenido contextual y culturalmente relevante: Lecciones de la implementación del Proyecto Ciencia Boricua. Cuaderno de Investigación en la Educación. 28: 109-127. ISSN 1540-0786. http://cie.uprrp.edu/cuaderno/ediciones/28/v28-2013-06.pdf

- 8. Wong AK, Ruhe AL, Dumont BL, Robertson KR, **GUERRERO G**, Shull SM, Ziegle JS, Millon LV, Broman KW, Payseur BA, Neff MW. (2009) A comprehensive linkage map of the dog genome. *Genetics*. 184(2):595-605. PMCID: PMC2828735. 10.1534/genetics.109.106831
- 9. **GUERRERO**, **G.**, et.al. (2005) Heterogeneity in synaptic transmission along a Drosophila larval motor axon. *Nature Neurosci*. 8(9):1188-96. *F1000 Factor of 9.0 (Evaluations by Michael Ehlers and Stuart Licht, http://f1000.com/1027684#eval335716). PMCID: PMC1402256.
- 10. Reiff, DF., Ihring, A., **GUERRERO, G.**, Isacoff, E.Y., Joesch, M., Nakai J., Borst, A. (2005) In vivo performance of genetically encoded indicators of neural activity in flies. 2005. *J. Neurosci.* 25:4766-78. DOI: https://doi.org/10.1523/JNEUROSCI.4900-04.2005
- 11. Sonnleitner, A., **GUERRERO, G.**, Mannuzzu, L., Isacoff, E.Y. (2003) Voltage Sensitive Dyes. *Biophotonics*. 10(3):48-60.
- 12. **GUERRERO**, **G.**, et.al. (2002) Tuning FlaSh: Redesign of the dynamics, voltage range, and color of the genetically encoded optical sensor of membrane potential. *Biophysical J.* 83(6):3607-18. PMCID: PMC1302436. DOI: 10.1016/S0006-3495(02)75361-7
- 13. **GUERRERO, G.**, Isacoff, E.Y. (2001) Genetically encoded optical sensors of neuronal activity and cellular function. *Curr. Opin. Neurobiol.* 11(5):601-7. http://dx.doi.org/10.1016/S0959-4388(00)00256-7
- 14. Kramer, P.R., **GUERRERO**, **G.**, Krishnamurthy, R., Mitchell, P.J., Wray, S. (2000) Ectopic expression of lutenizing hormone-releasing hormone and peripherin in the respiratory epithelium of mice lacking transcription factor AP-2alpha. *Mech. Dev.* 94:79-94. http://dx.doi.org/10.1016/S0925-4773(00)00316-6

OTHER PUBLICATIONS (selected)

- 1. **GUERRERO, G.** (April 1, 2020) Necesitamos más pruebas moleculares en Puerto Rico (We Need More Molecular Tests in Puerto Rico), *El Nuevo Día*, https://www.elnuevodia.com/opinion/punto-de-vista/necesitamos-mas-pruebas-en-puerto-rico/
- 2. **GUERRERO**, **G.** (August 8, 2016) Puerto Rico Vota Con-Ciencia: Educación (Puerto Rico, Vote Your Conscience: Education), *El Nuevo Día*, http://www.elnuevodia.com/opinion/columnas/puertoricovotaconciencia-columna-2228835/
- 3. **GUERRERO**, **G.** (November 6, 2013) Un nuevo espacio virtual para las mujeres puertorriqueñas e hispanas en las ciencias (A new online space for Puerto Rican and Hispanic women in science) *Diáologo Digital*, http://dialogodigital.com/index.php/Un-nuevo-espacio-virtual-para-las-mujeres-puertorriquenas-e-hispanas-en-las-ciencias.html
- 4. Colón-Ramos, D. and **GUERRERO**, **G.** (March 21, 2013) We are not starfish *PBS.org*, http://www.pbs.org/wnet/need-to-know/opinion/we-are-not-starfish/16536/
- 5. **GUERRERO, G.** (February 12, 2013) En riesgo la ciencia en Puerto Rico (Science in Puerto Rico is at risk) *El Nuevo Día*, http://www.elnuevodia.com/enriesgolacienciaenpr-1446278.html.
- 6. **GUERRERO**, **G**. (December 12, 2011) Los retos de la investigación científica en Puerto Rico (Challenges to scientific research in Puerto Rico) *Diálogo Digital*, http://www.dialogodigital.com/index.php/Los-retos-de-la-investigacion-cientifica-en-Puerto-Rico.html. *Also published in English as "Summertime: A chance for reciprocal summer research programs", http://www.cienciapr.org/monthly-story/summertime-chance-reciprocal-summer-research-programs

PRESENTATIONS (selected)

Invited or Conference Talks

1. November 4, 2021 – Understanding Culture & Incorporating Cultural Differences, *Enabling Scientific Societies to Support Inclusive, Diverse, Equitable, and Accepting (IDEA) Scientific Environments conference,* virtual

- **2. October 6, 2021** Addressing diversity, equity, and inclusion in science through empowerment and visibility of marginalized groups, *Radiation Research Society Annual Meeting*, virtual
- **3.** October 31, 2019 Yale Ciencia Academy Program and Outcomes (speaker), part of the Preparing Scientists to Make a Difference: Leadership and Professional Development Training at All Stages session (organizer), *SACNAS Conference*, Honolulu, HI
- **4. September 13, 2019** Enhancing PhD Training and Professional Development Through a Diverse Peer and Role Model Network, *AAMC GREAT Group Meeting*, Seattle, WA
- **5. July 31, 2019 -** Yale Ciencia Academy Program and Outcomes, 2019 NIGMS Training, Workforce Development and Diversity Program Directors' Meeting, Bethesda, MD
- **1. March 1, 2019** Promoting the development of Boricua science, *University of Puerto Rico RISE Program*, San Juan, PR
- **2. February 16, 2019** Preparing scientists to make a difference: Scientific Leadership Programs, *AAAS Annual Meeting*, Washington, DC (Symposium organizer & presenter)
- **3. November 10, 2018** Rebuilding a Sustainable and Resilient Puerto Rico through Science, *National Science Policy Symposium*, New York, NY
- **4. October 13, 2018** Post hurricane María help, for & by researchers, *SACNAS Conference*, San Antonio, TX
- **5. February 23, 2018** The State of STEM Research in 2017 Hurricane Areas and Lessons Learned, *Emerging Researchers National Conference*, Washington, DC
- **6. February 21, 2018** From Neuronal Connections to Scientific Connections: My trajectory as an advocate for science and underserved communities, *Yale Minority Researchers Science Network*, New Haven, CT
- **7. February 19, 2018** Rethinking a Resilient and Sustainable Puerto Rico Through Science, Technology and Innovation, *AAAS Annual Meeting*, Austin, TX
- **8. October 20, 2017** Open Session: Perspectives on How to Advance the Next Generation of Researchers, *SACNAS Conference*, Salt Lake City, UT
- **9. June 18, 2017** Highlighting Outcomes from the NIH-IPERT Program: The Yale Ciencia Academy, *TWD Program Directors' Meeting*, Baltimore, MD
- **10. September 10, 2016 -** Connecting science and Puerto Rico to bring about cultural change, *AAAS-Caribbean Division Annual Meeting*, San Juan, PR
- **11. April 12, 2016 -** Yale Ciencia Academy: Leveraging a Hispanic science network to enhance graduate biomedical training, career success and diversity, *NIGMS/NIH Symposium on Catalyzing the Modernization of Graduate Education*, Bethesda, MD
- **12. March 5, 2016** Keynote Address, Puerto Rican Junior Technical Meeting and Interdisciplinary Scientific Meeting, Ponce, PR
- **13. January 29, 2016** CienciaPR: A network for equal access and Latino achievement in STEM, 1st *PKAL Puerto Rico Regional Meeting*, Humacao, PR
- **14. October 30, 2015** Opportunities for promoting inclusion and persistence in STEM through networked communities, *SACNAS Conference*, Washington DC
- **15.** July 28, 2014 Redes Científicas: Puentes para la democratización de la ciencia y el desarrollo de la capacidad de investigación, *Universia's III International President's Meeting: Investigation, Innovation and Transference Debate*, Rio de Janeiro, Brazil

Workshops

- **1. January 20, 2022** Mentoring-Up: Establishing and Nurturing Your Mentoring Relationships, *Yale PATHS Program*, Online (Instructor)
- **2. November 9, 2021** Networks and Recommenders, *Yale PATHS Program*, Online (Instructor)
- **3.** May 12, 2021 Mentoring-Up: Establishing and Nurturing Your Mentoring Relationships, *Yale PATHS Program*, Online (Instructor)
- **4. April 20, 2021** Mentors, Peers, and Champions: Building a Community of Support, *Yale PATHS Program*, Online (Instructor)

- **5. October 21, 2020** Letters of Recommendations: Helping Your Mentors Help You, *Yale PATHS Program*, Online (Instructor)
- **6. February 16, 2019** From a Moment to a Movement: Building Infrastructure to Sustain Scientist Advocacy, *AAAS Annual Meeting*, Washington, DC (Panelist and Presenter)
- **7. October 12, 2018** Be a Proactive Mentee: Taking an Active Role in Your Research Training, *SACNAS Conference*, San Antonio, TX (Organizer & Presenter)
- **8. September 1, 2018** Ciencia en Acción: Science Policy Workshop at the *AAAS Caribbean Annual Meeting*, San Juan, PR (Annual Meeting lead-organizer, Speaker)
- **9. December 2, 2017** Science learning for all: Inclusive teaching strategies, *ASCB Annual Meeting*, Philadelphia, PA (Workshop Organizer & Moderator)
- **10. December 2, 2017** Getting the most out of your thesis committee, *ASCB Annual Meeting*, Philadelphia, PA (Workshop Organizer & Moderator)
- **11. December 2, 2017** Planning your exit from grad school, *ASCB Annual Meeting*, Philadelphia, PA (Workshop Organizer & Moderator)
- **12. October 21, 2017** Goal-Setting Skills for Academic and Career Success, *SACNAS Conference* (Organizer & Presenter)
- **13. July 17, 2017** Science Outreach: Opportunities for Research Intensive Programs, 12th ASCB MAC Jr. Faculty & Postdoc Workshop, Seattle, WA (Instructor)
- **14. November 11, 2016** Being a Proactive Mentee: Taking Control of Your Research Experience, *Annual Biomedical Research Careers Minority Conference (ABRCMS)*, Tampa, FL (Instructor)
- **15. October 15, 2016** The Postdoc Hunt: Tools and Strategies for a Smooth PhD Transition, *SAC-NAS Conference*, Los Angeles, CA (Organizer, Moderator)
- **16. July 15-17, 2016** American Society for Cell Biology Minority Affairs Committee 11th Junior Faculty and Postdoc Workshop, *University of North Carolina*, Raleigh, NC (Panelist and Presenter)
- **17. June 18, 2016** Scientific Communication Workshop for REU Participants, *University of Puerto Rico, Mayagüez*, Mayagüez, PR (Instructor)
- **18. October 19, 2013** Ciencia Puerto Rico 2nd CienciaPR Educational Symposium: Charting a Map for Success, Skills and Strategies for Graduate Students in STEM, San Juan, PR (Co-Organizer)
- **19.** September 2011 Ciencia Puerto Rico Educational Symposium on Graduate Studies and Scientific Careers, San Juan, PR (Co-Organizer)

Panels

- 1. September 30, 2020 COVID-19 y la Comunidad Latina (organizer and moderator), Online
- 2. September 29, 2020 COVID-19 and the Latinx Community (organizer and moderator), Online
- **3.** October 19, 2019 Science careers in non-profits, What Can You Be with a PhD Conference, New York, NY
- **4. May 1, 2018 -** Eye of the Storm: #WOCin STEM Leading Post-Hurricane Recovery *Vanguard STEM videochat* https://www.facebook.com/vanguardSTEM/videos/405957919877862/
- **5. April 7, 2018** Funding Opportunities, *Biomedical Science Careers Student Conference*, Boston, MA
- **6. November 4, 2017 -** Science careers in non-profits, *What Can You Be with a PhD Conference*, New York, NY
- **7. April 8, 2017** The Urgency of Civic Responsibility: Building a Movement to Leverage Scholar-Activism in the Academy, *Yale University Bouchet Conference on Diversity and Graduate Education*, New Haven, CT
- **8. November 6, 2017 -** March for Science, American Association for the Advancement of Science, Facebook Live https://www.facebook.com/AAAS.Science/videos/10155071129458097/
- **9. September 17, 2016** Funding and Research Opportunities, *Forward Research & Innovation Summit*, San Juan, PR
- **10. April 4, 2016** Mentoring Workshop Panel, Annual Yale Bouchet Conference on Diversity and Graduate Education, *Yale University*, New Haven, CT
- **11. March 30, 2016** Among Borinqueñas: The Contributions of Puerto Rican Women in STEM, Puerto Rico, Via Skype, Puerto Rico Science Technology and Research Trust, San Juan, PR

- **12. March 16, 2016** A Conversation on STEM Education with Bright Spots Across the Country. Online https://www.youtube.com/watch?v=aflmTdQ3DOk&feature=youtu.be
- **13.** May 28, 2015 Women in Science Career Panel, Yale University, New Haven, CT
- **14. June 6, 2014** Live Q&A, Developing Scientific Networks to Improve Education. *iBiology Hangouts*. Online https://www.youtube.com/watch?v=zppOc8dHKXU

SELECTED PRESS AND MEDIA COVERAGE (Selected. CienciaPR/YaleCiencia/Guerrero-Medina)

- **1. April 20, 2022** Participants from Two Pipeline Programs Visit YSM for Conference. *Yale School of Medicine*. https://bit.ly/3wYdx1B
- **2. March 30, 2022** Wu Tsai Institute postdocs bridge disciplines in the study of cognition. *Yale News*. https://bit.ly/3LsC9Ej
- **3.** March 1, 2022 Yale Psychiatry Faculty Co-Found Group Aimed At Fostering Community Among Latinas in Academia. *Yale School of Medicine*. https://bit.ly/3AuPZCi
- **4. November 16, 2021 -** CienciaPR nabs 'Breakthrough of the Year' award at Falling Walls Science Summit. *News is my Business.* https://bit.ly/3cy2Z1Q
- **5. September 27, 2021** Increasing Access: Giovanna Guerrero-Medina, PhD. *Yale School of Medicine*. https://bit.ly/3lWGCoL
- **6. August 20, 2021** Intersections Science Fellowship Symposium Gets a Boost. *Yale School of Medicine*. https://bit.ly/3G3ka5u
- **7. June 24, 2021** The Yale Ciencia Academy Welcomes a New Class of Young Science Leaders. *Yale School of Medicine*. https://bit.ly/3pjZu3o
- **8.** May 10, 2021 PATHS helps students from underrepresented backgrounds realize med school dreams. *Yale School of Medicine*. https://bit.ly/3vuEw2H
- **9. April 19, 2021** Taking Care of Each Other, With Science and Solidarity. *Science Sandbox News*. https://bit.ly/3RiFiJV
- **10. December 10, 2020** Yale's New Virtual Program to Train and Diversify the Next Generation of Doctors and Scientists. *Yale School of Medicine*. https://bit.ly/2Z2aBTh
- **11. June 19, 2020** The Yale Ciencia staff and fellows help Puerto Rico fight COVID-19. *Yale School of Medicine*. https://bit.ly/3ARNxE0
- **12. May 24, 2019** Episodio 9: Giovanna Guerrero-Medina, PhD. *Caminos en Ciencia Podcast*. http://bit.ly/2WG9Ooc
- **13. December 18, 2018** CienciaPR recognized as a science defender by Union of Concerned Scientists *News is My Business* https://newsismybusiness.com/recognized-concerned-scientists/
- **14. November 8, 2018** The JetBlue Foundation Celebrates National STEM Day by Awarding Grants to Power STEM Initiatives in Puerto Rico *Business Wire* http://bit.ly/2HZvUdM
- **15. September 24, 2018** Puerto Rico: Maria's Laboratory for Scientific Collaboration *UCS Blog* http://bit.ly/2JOHtXx
- **16. September 10, 2018** Puerto Rican Scientists and the Communities They Serve: "Resistance is Resilience" *UCS Blog* http://bit.ly/2FIURbG
- **17. March 20, 2018 -** One Scientist's Quest to Improve Science Education in Puerto Rico *Got Science? Union of Concerned Scientists podcast* http://bit.ly/2OzGwkx
- **18. March 14, 2018** Yale and Puerto Rico group receive federal grant to strengthen science education following natural disasters *Yale News* http://bit.ly/2JP5xJX
- **19. January 30, 2018** Rebuilding Puerto Rico May Help Improve Science Education *Voice of American Blog* http://bit.ly/2GAXHxs
- **20. December 29, 2017** Rebuilding Science Education in Puerto Rico *Scientific American* http://bit.ly/2JNnvN6
- **21.** March 7, 2017 Boricuas exitosas en carreras STEM *Primera Hora* http://bit.ly/2U3DATp
- **22. January 6, 2017 -** In Conversation with Daniel Colon-Ramos and Giovanna Guerrero-Medina *Yale Spectrum podcast* http://bit.ly/312b7NH
- 23. June 8, 2016 Meet a scientific community manager *Trellis*, *AAAS* http://bit.ly/2Ulpxry

- **24. November 20, 2015** CienciaPR gets \$1.6M grant to develop science experts *News is My Business* http://bit.ly/2V45GdA
- **25. September 30, 2015** White House recognizes Yale-led diversity initiative *Yale Daily News* http://bit.ly/1lT8CYb
- **26. February 19, 2015** Yale launches minority outreach program in STEM *Yale Daily News* http://bit.ly/2jcNpuB
- **27. July 28, 2014** Experts call for more cooperation between universities *Exame* http://exame.abril.com.br/mundo/noticias/especialistas-pedem-mais-cooperacao-entre-universidades
- **28. January 31, 2014** Online network compensates for Puerto Rico's brain drain *SciDevNet* http://www.scidev.net/america-latina/economia-del-conocimiento/noticias/red-en-l-nea-compensa-la-fuga-de-cerebros-de-puerto-rico.html
- **29. June 7, 2013** Who Will Remake Puerto Rico for the 21st-Century Social Economy? *Forbes* http://www.forbes.com/sites/giovannirodriguez/2013/05/27/who-will-remake-puerto-rico-for-the-21st-century-social-economy/

JOB-RELATED TRAINING (selected)

0.0.2010

May 8-9, 2019	Yale Great Manager Training Program, Yale University, New Haven, CT
Summer 2014	Yale National Academies Summer Institute (scientific teaching), Yale University, New Haven, CT
Spring 2013	Certificate in Non-profit Management (78 contact hours), University of Puerto Rico, Mayagüez
September 2010	Curriculum Development Workshop, Van Andel Education Institute, Grand Rapids, MI
July 24, 2008	Project Management, USDA Graduate School, Washington DC
August 2006 - May 2008	Emerging Leaders Program, HHS Competencies and Leadership Training, Washington DC
February 25, 2008	Introduction to the Principles and Practice of Clinical Research, National Institutes of Health, Bethesda, MD
March 23, 2007	Congressional Operations Seminar, The Government Affairs Institute, Washington DC

SUMMARY OF SKILLS AND EXPERTISE

- Mentoring developing scientists
- Leading and managing teams
- Strategic planning
- Program development and project management
- Non-profit management
- Grant writing
- Budget development and management
- Leading inclusive faculty recruitment process
- Scientific conference, symposia, and event planning
- Survey assessments and program evaluation
- Lay and technical scientific writing

- Scientific teaching
- Culturally relevant science communication
- Excellent proficiency with social media (Twitter, Facebook, LinkedIn, Instagram), Drupal, WordPress, SquareSpace, Qualtrics, AirTable, Slack, Asana, Zoom, Microsoft Excel, Word, Power Point, Outlook, among others
- Extensive knowledge of scientific funding and workforce databases
- Experience with biomedical techniques, concepts, and culture
- Fully bilingual in English and Spanish; Can act as translator and interpreter
- Intermediate proficiency speaking, reading, and writing in French and Italian