

# David J.X. Gonzalez

Emmet Interdisciplinary Program in  
Environment and Resources  
Stanford University  
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## Research Interests

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environmental epidemiology; perinatal epidemiology; applied econometrics; ambient air quality; health disparities; global health; environmental justice

## Education

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**PhD, Stanford University**, School of Earth, Energy, and Environmental Sciences  
Emmett Interdisciplinary Program in Environment and Resources, *expected 2021*  
Co-Advisors: Gary Shaw, Marshall Burke  
Qualifying fields: Environmental Epidemiology, Applied Econometrics

**MS, Stanford University**, School of Medicine  
Epidemiology and Clinical Research, Global Health Concentration, 2018

**MESc, Yale University**, School of Forestry and Environmental Studies  
Environmental Science, Global Health Concentration, 2015

**BS, University of California, Davis**, College of Biological Sciences  
Evolution and Ecology (Honors), 2011

## Refereed Journal Articles

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[4] **Gonzalez, David J.X.**, Allison R. Sherris, Wei Yang, David K. Stevenson, Amy M. Padula, Michael Baiocchi, Marshall Burke, Mark R. Cullen, and Gary M. Shaw. 2020. Oil and gas drilling and risk of spontaneous preterm birth in the San Joaquin Valley, California: A case-control study. *Environmental Epidemiology*. ([Paper](#))

[3] **Gonzalez, David J.X.**, Aubrey Arain, and Luis E. Fernandez. 2019. Mercury exposure, risk factors, and perceptions among women of childbearing age in an artisanal gold mining region of the Peruvian Amazon. *Environmental Research*. ([Paper](#))

[2] Marklein, Alison R., Joy B. Winbourne, Sara K. Enders, **David J.X. Gonzalez**, Tiff L. van Huysen, Jorge E. Izquierdo, Derrick R. Light, Daniel Liptzin, Kimberley E. Miller, Scott L. Morford, Robert A. Norton, and Benjamin Z. Houlton. 2015 Mineralization ratios of nitrogen and phosphorous from decomposing litter in temperate versus tropical forests. *Global Ecology and Biogeography*. ([Paper](#))

[1] Farrer, Emily C., Isabel W. Ashton, Marko J. Spasojevic, Shiyang Fu, **David J.X. Gonzalez**, and Katharine N. Suding. 2015. Indirect effects of global change accumulate to alter plant diversity but not ecosystem function in alpine tundra. *Journal of Ecology*. ([Paper](#))

### Manuscripts Under Review

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[1] **Gonzalez, David J.X.**, Julio Araujo, Jesus Olivero-Verbal, Karina Caballero-Gallardo, Katy Ashe, Chris Field, and Luis E. Fernandez. Disparities in mercury exposure among subpopulations of concern in an artisanal gold mining region in the Peruvian Amazon.

### Other Publications

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[6] Treaty Does Not Stop Illicit Mercury Trade in South America. *YaleGlobal*. February 2018. **David J.X. Gonzalez**. ([Article](#))

[5] Opportunities, Not Oppression, to Stop Illegal Mining in the Peruvian Amazon. *YaleGlobal*. February 2016. **David J.X. Gonzalez**. ([Article](#))

[4] How Scientific Activism Helped Bring Flint's Lead Crisis to Light. *ActivistLab*. February 2016. **David J.X. Gonzalez**. ([Article](#))

[3] Fear in the time of Ebola. *Yale Daily News*. December 2015. **David J.X. Gonzalez** and Emma Roth. ([Article](#))

[2] Fear, Politics, and Ebola: How Quarantines Hurt the Fight Against Ebola and Violate the Constitution. American Civil Liberties Union and the Yale Global Health Justice Program. 2015. Alexander Abdo, Esha Bhandari, Jay Stanley, Samantha Batman, Ryan Boyko, Erinma Kalu, Emma Roth, Rose Carmen Goldberg, and **David J.X. Gonzalez**. ([Report](#))

[1] Wind, Bile, and Phlegm. *Sage Magazine*. March 2014. **David J.X. Gonzalez**. ([Article](#))

### Grants and Fellowships

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Diversifying Academia, Recruiting Excellence (DARE) Doctoral Fellowship, Stanford University (\$92,000 + tuition)	2019-
Stanford Graduate Fellowship in Science & Engineering, Stanford University (\$120,000 + tuition)	2016-20
Ford Foundation Predoctoral Fellowship, The National Academies of Sciences, Engineering, and Medicine (\$72,000)	2016-19
Enhancing Diversity in Graduate Education (EDGE) Doctoral Fellowship, Stanford University (\$5,500)	2016-18
Fox International Fellowship, Yale University and El Colegio de México (\$20,000)	2015-16

Regents Scholarship, UC Davis (\$30,000)

2007-11

### **Awards and Honors**

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Community Impact Award, Stanford Alumni Association	2020
Graduate Scholar-in-Residence, El Centro Chicano y Latino, Stanford University	2019
Graduate Public Service Fellowship, Haas Center for Public Service, Stanford University	2017
Alumni Association Board Scholarship, Yale School of the Environment	2015
Pinkerton Prize for Environmental Education, UC Davis	2011
Integrated Studies Honors Program, UC Davis	2007

### **Presentations**

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#### **Invited Talks**

[6] Workshop on Mercury Research Priorities in the Amazon Region. February 7, 2020. Disparities in mercury exposure among subpopulations of concern in Madre de Dios, Peru. Wake Forest University, Winston-Salem, NC, USA.

[5] Latinxs and the Environment Summit: Designing Our Future. April 27, 2019. Panel 4: Health and the Environment: Collective action for healthier communities. UC Berkeley, Berkeley, CA, USA. (*Panelist*)

[4] Epidemiology Seminar Series, Faculty of Medicine, National Autonomous University of Mexico. May 2016. A Toxic Supply Chain: The health impacts of artisanal gold and mercury mining in Latin America. Mexico City, Mexico.

[3] 2nd Forum on Mercury and Environmental Public Health in Madre de Dios, National Amazonian University of Madre de Dios. November 2015. Mercury and women's health in Madre de Dios, Peru. Puerto Maldonado, Peru. (*in Spanish*)

[2] A systematic review of studies of mercury contamination and exposure in Madre de Dios, Peru. March 2015. International Congress on Global Environmental Health, Lima, Peru. (*in Spanish*)

[1] 1st Forum on Mercury and Public Health in Madre de Dios, National Amazonian University of Madre de Dios. November 2014. Mercury exposure among women of childbearing age in urban communities of Madre de Dios, Peru. Puerto Maldonado, Peru. (*in Spanish*)

#### **Refereed Conference Presentations**

[5] **David J.X. Gonzalez**, Allison R. Sherris, Wei Yang, Marshall Burke, Mark R. Cullen, Gary M. Shaw. August 2019. Oil and gas development activity and spontaneous preterm birth risk in

California. Annual Meeting of the International Society for Environmental Epidemiology (ISEE), Utrecht, The Netherlands. *(Poster)*

[4] **David J.X. Gonzalez**, Allison R. Sherris, Wei Yang, David K. Stevenson, Michael Baiocchi, Marshall Burke, Mark R. Cullen, Gary M. Shaw. June 2019. Oil and gas drilling and spontaneous preterm birth in the San Joaquin Valley, California. Annual Meeting of the Society for Pediatric and Perinatal Epidemiologic Research (SPER), Minneapolis, Minnesota, USA. *(Poster)*

[3] **David J.X. Gonzalez** and Aubrey Langeland. July 2017. Mercury exposure in women of childbearing age in an artisanal gold mining region of the Peruvian Amazon: A cross-sectional study. International Conference on Mercury as a Global Pollutant, Providence, Rhode Island, USA. *(Poster)*

[2] **David J.X. Gonzalez** and Luis Fernandez. June 2015. Trends of mercury exposure in the Peruvian Amazon: Mercury studies of humans and the environment, 1993 to 2015. Association for Environmental Studies and Sciences (AEES), Annual Meeting, San Diego, California, USA. *(Oral)*

[1] **David J.X. Gonzalez**, Katharine N. Suding, and Benjamin Z. Houlton. August 2011. Global change effects on alpine microbial communities and nitrogen cycling. Ecological Society of America, Annual Meeting, Austin, Texas, USA. *(Poster)*

## Teaching Experience

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### Instructor of Record

**Instructor**, Urban Studies 125: Shades of Green: Redesigning and Rethinking the Environmental Justice Movements, Stanford University

- 5-unit discussion and project-based course, 28 undergraduate graduate students
- I taught this course twice, in winter 2018 and 2019
- Facilitated community-engaged learning and design thinking applied to environmental justice issues
- Facilitated quarter-long service-learning projects with eight community-based partner organizations in Northern California
- Planned and facilitated biweekly class discussion days and project workdays

**Instructor**, Undergraduate Advising and Research (UAR) 56: Building a Successful Academic Career, Stanford University

- 1-unit course, with quarterly enrollment from 10-35 undergraduate students
- I taught this course each fall and winter quarter from 2017 to 2020 (six quarters total)
- Planned and facilitated biweekly class for students enrolled in the Frosh Scholars Program at El Centro Chicano y Latino
- Facilitated discussions and guest lectures about opportunities and resources available across the university

## Teaching Assistantships

**Teaching Assistant**, Graduate School Preparation: The Rhetoric of Research, Summer 2019  
Summer Undergraduate Research in Geoscience and Engineering, (SURRGE) Stanford University

- Not for credit, 4 undergraduate students
- Planned and led weekly lessons focused on preparing for graduate school and communicating results from students' independent research projects

**Teaching Assistant**, EDUC 332: Theory and Practice of Environmental Education, Spring 2018  
School of Education, Stanford University

- 5-unit course, 12 students
- Served as liaison between community partner and student group in a project-based community engaged learning course
- Facilitated in-class discussions among students

**Teaching Assistant**, URBANST 125, Shades of Green: Redesigning and Rethinking the Environmental Justice Movements, Winter 2018

Urban Studies Program, Stanford University

- 5-unit course, 18 undergraduate and master's students
- Served as liaison between community partner and student group in a project-based community engaged learning course
- Planned and facilitated a class session on environmental health science

**Teaching Assistant**, Urban Ecosystem Analysis, Summer 2015  
School of Forestry & Environmental Studies, Yale University

- 3-week short-course, 140 master's students
- Assisted with introductory field- and classroom-based learning
- Designed and facilitated introductory workshop on geospatial analyses

## Initiated Workshops

**Instructor**, How to Make Publication-Quality Maps with R, November 2019  
School of Earth, Energy, and Environmental Sciences, Stanford University

- 1-hour workshop, 4 doctoral student attendees ([Online class materials](#))

**Instructor**, Introduction to Spatial Analysis in R, May 2019  
School of Earth, Energy, and Environmental Sciences, Stanford University

- 1-hour workshop, 12 doctoral student attendees

## Research Experience

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**Research Assistant**, Center for Energy, Environment, and Sustainability, Wake Forest University 2017–

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<ul style="list-style-type: none"> <li>Analyze and interpret results from field studies of mercury exposure in Peru</li> <li>Assist in designing and planning human health studies in the Peruvian Amazon</li> </ul>	
<b>Visiting Scholar</b> , El Colegio de México	2015-16
<ul style="list-style-type: none"> <li>Participated in academic and cultural exchange as a Fox International Fellow</li> <li>Led independent research project on the mercury supply chain in Latin America and links to artisanal gold mining</li> </ul>	
<b>Mercury Specialist</b> , Department of Global Ecology, Carnegie Institution for Science	2014-15
<ul style="list-style-type: none"> <li>Conducted field work and laboratory analyses for studies of mercury contamination and exposure in the Peruvian Amazon</li> </ul>	
<b>Junior Specialist</b> , Global Ecology Lab, Department of Land, Air, and Water Resources, University of California, Davis	2011
<ul style="list-style-type: none"> <li>Conducted field work and laboratory analyses for biogeochemical studies</li> </ul>	
<b>Undergraduate Research Fellow</b> , Mountain Research Station, University of Colorado, Boulder	2010
<ul style="list-style-type: none"> <li>Conducted independent research on global change and alpine ecology as part of an NSF-sponsored Research Experience for Undergraduates (REU) program</li> </ul>	
<b>Undergraduate Research Fellow</b> , Smithsonian Environmental Research Center	2009
<ul style="list-style-type: none"> <li>Conducted independent research on climate change and wetland ecology as part of an NSF-sponsored Research Experience for Undergraduates (REU) program</li> </ul>	
<b>Departmental and University Service</b>	
Coordinator and Mentor, Frosh Scholars Program, El Centro Chicano y Latino, Stanford University	2017-
<ul style="list-style-type: none"> <li>Manage the Frosh Scholars Program, which provides instruction, community-building events, and mentorship to Latinx-identified first-year undergraduates</li> <li>Facilitate connections between Frosh Scholars and graduate student mentors</li> <li>Grew the program from 52 total participants in 2017 to 91 participants in 2019</li> <li>Serve as mentor to two undergraduates studying environmental science each year</li> </ul>	
Student Representative, Graduate Recruitment and Diversity (GRAD) Day Planning Committee, Stanford University	2017-
<ul style="list-style-type: none"> <li>Assist in organizing annual diversity recruitment event, which attracts approximately 60 prospective students annually</li> <li>Facilitate social events aimed at welcoming and connecting prospective students</li> </ul>	
Wellness Liaison, School of Earth, Energy, and Environmental Sciences, Stanford University	2018-19
<ul style="list-style-type: none"> <li>Facilitated events aimed at sustaining student mental health and well-being</li> </ul>	

### Community Service and Volunteering

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Volunteer Tutor, East Palo Alto Tennis and Tutoring, Palo Alto, CA 2017–

- Volunteer one hour each week to tutor high school students aspiring to be the first in their respective families to attend college
- Two of my former tutees successfully went on to attend college

Interpreter (Spanish-English), Stanford-Pescadero School Community Interpretation Partnership, Pescadero, CA 2017–

- Volunteer as interpreter in biannual parent-teacher conferences

Interpreter (Spanish-English), Immigrants' Rights Clinic, Stanford Law School 2017

### Society Memberships

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Interdisciplinary Association for Population Health Science (IAPHS), 2020–

International Society for Environmental Epidemiology (ISEE), 2019–

Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS), 2019–

Society for Epidemiologic Research (SER), 2019–

Society for Pediatric and Perinatal Epidemiologic Research (SPER), 2019–

### Certifications

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Wilderness First Responder, Wilderness Medicine Institute of NOLS

Rescue Diver, PADI

### Languages

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English, native speaker

Spanish, fluent, written and spoken