LOURDES ANNETTE VERA

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ACADEMIC POSITIONS

Departments of Sociology and Environment and Sustainability,

SUNY University at Buffalo

2022-present Assistant Professor

2022 Visiting Assistant Professor

EDUCATION

2022 PhD Sociology, Northeastern University

Concentrations: Environment and Health; Sociology of Science, Knowledge,

and Technology

Dissertation Title: Environmental Data Justice in Action: Civically Valid Air Monitoring near Oil and Gas Extraction in the Eagle Ford Shale Play Committee: Sara Wylie, Phil Brown, Dietmar Offenhuber, Michelle Murphy

(University of Toronto), Chunrong Jia (University of Memphis)

Graduate Certificate in Data Analytics, Northeastern University

2017 MA Sociology, Northeastern University

2014 MA Teaching Earth and General Science, City University of New York,

Brooklyn College

2012 BA Urban Studies, Barnard College at Columbia University

Concentrations: Environmental Science; Anthropology

RESEARCH & TEACHING INTERESTS

Environmental Health and Justice Community-Based Participatory Research

Critical Race and Ethnic Studies Place and Space

Science, Technology, and Society Data Visualization and Analysis

PUBLICATIONS

Refereed Publications

Vera, Lourdes, Garance Malivel, Drew Michanowicz, Choong-Min Kang, and Sara Wylie. "Photopaper as a Tool for Community-level Monitoring of Industrially

- Produced Hydrogen Sulfide and Corrosion." Air Sensors International Conference Special Issue. *Atmospheric Environment: X* 5:100049.
- Vera, Lourdes, Dawn Walker, Michelle Murphy, Becky Mansfield, Ladan Mohamed Siad, Jessica Ogden, and the Environmental and Data Governance Initiative. "When Data Justice and Environmental Justice Meet: Formulating a Response to Extractive Logic through Environmental Data Justice." Data Justice Special Issue. *Information, Communication, and Society* 22(7): 1012-1028.
- Vera, Lourdes, Lindsey Dillon, Sara Wylie, Jennifer Liss Ohayon, Aaron Lemelin, Phil Brown, Christopher Sellers, Dawn Walker, and The Environmental Data and Governance Initiative. "Data Resistance: A Social Movement Organizational Autoethnography of the Environmental Data and Governance Initiative." Protesting Trump Special Issue. *Mobilization: An International Quarterly* 23(4): 511-529.
- Wylie, Sara, Elisabeth Wilder, **Lourdes Vera**, Deborah Thomas, Megan McLaughlin. "Materializing Exposure: Developing Methods for Visualizing Environmental Hazards of Unconventional Energy." *Engaging Science, Technology, and Society* no. 3: 426-463.

Other Publications

- Record, Nick and **Lourdes Vera.** "Uncovering Big Data Bias in Sustainability Science." *Spire: The Maine Journal of Conservation and Sustainability.*
- Vera, Lourdes. "Bracing for the 'Double Dose': Experiencing COVID-19 while living near oil and gas development." Shadow Magazine. www.shado-mag.com.
- Vera, Lourdes. "Imagining Alternative Politics of Experimentation and Resistance with Michelle Murphy's *The Economization of Life*." Review of The Economization of Life by Michelle Murphy. Ludwick Fleck Prize Book Forum. Somatosphere: Science, Medicine, and Anthropology. www.somatosphere.net.
- Nost, Eric, Sara Wylie, Kelsey Breseman, Gretchen Gehrke, Chris Sellers, **Lourdes Vera**, Lauren Richter, Becky Mansfield, and the Environmental Data and Governance Initiative (EDGI). A Green New Deal for Environmental Data." A People's Green New Deal, Science for the People Vol. 23 No. 2
- Nost, Eric, Kelsey Breseman, Steve Hansen, Leslie Alanis, Megan Raisle, Lourdes Vera, Maalvika Bhat, Sara Wylie, Sung-Gheel (Gil) Jang, and EDGI. "More Permission to Pollute: The Decline of EPA Enforcement and Industry Compliance during COVID."Blog Post. The Environmental Data and Governance Initiative. https://envirodatagov.org/more-permission-to-pollute-the-decline-of-epa-enforcement-and-industry-compliance-during-covid/.
- 2020 Breseman, Kelsey, Eric Nost, Gretchen Gehrke, Chris Sellers, Marcy Beck, **Lourdes Vera**, EDGI. "EPA's COVID-19 Leniency is a Free Pass to Pollute." Blog Post. The

- Environmental Data and Governance Initiative. https://envirodatagov.org/epas-covid-19-leniency-is-a-free-pass-to-pollute/.
- 2018 Mansfield, Becky, Gretchen Gehrke, Andrea Hindman, Leif Fredrickson, Lourdes Vera, Jess Ogden, and Dawn Walker. 2018. "EPA's Proposed Rule Uses the Idea of Transparency to Reduce Real Transparency and Delay Protecting Environmental and Public Health." Public Comment. https://envirodatagov.org/wp-content/uploads/2018/09/Strengthening-Transparency-in-Regulatory-Science.pdf.
- Villa, Priscilla, **Lourdes Vera**, Sara Wylie, and Sharon Wilson. "Hazards in the Air: Relating reported illnesses to air pollutants detected near oil and gas operations in and around Karnes County, Texas." Earthworks' Oil Gas Accountability Project.
- Villa, Priscilla, **Lourdes Vera**, Sara Wylie, and Sharon Wilson. "Peligros en el Aire: Relacionando enfermedades reportadas a los contaminantes del aire detectados cerca de las operaciones de petróleo y gas dentro y alrededor del Condado de Karnes, Texas." Earthworks' Oil Gas Accountability Project.
- Vera, Lourdes. "Community Health Impacts from Oil and Gas Development in Texas: The Perspective of Sharon Wilson." SSEHRI Special Issue. *New Solutions: A Journal of Environmental and Occupational Health Policy* 26(3): 496-507.

AWARDS

- Northeastern University Huntington 100 Inductee
- 2021 Robert Boguslaw Award for Technology and Humanism, American Sociological Association Environmental Sociology Section.
- Outstanding Research Paper Award, Northeastern University Department of Sociology and Anthropology.
- Outstanding Research Paper Award, Northeastern University Department of Sociology and Anthropology.
- Outstanding Contributions to Public Sociology Award, Northeastern University Department of Sociology and Anthropology.
- 2017 Distinguished Contributions to Making and Doing: "Environmental Data and Governance Initiative (EDGI): Engaged STS Responding to the U.S. Administration" Society for Social Studies of Science.

GRANTS AND FELLOWSHIPS

2021 Code for Science and Society Event Grant. Co-authored with the Environmental Data

- Northeastern University Department of Sociology Summer Research Grant, \$2,000
- 2020 Experiential PhD Fellowship, Northeastern University College of Social Sciences and Humanities. Sponsoring Organization: Earthworks' Oil and Gas Accountability Project, \$13,250.
- David and Lucile Packard Foundation Grant. Co-authored with the Environmental Data and Governance Initiative, \$450,000.
- 2019 Research Development Initiative Grant. Co-PI, Sara Wylie. Northeastern University College of Social Sciences and Humanities, \$5,000.
- 2019 Robert Patricia Switzer Foundation Environmental Fellow, \$15,000.
- National Institute of Environmental Health Sciences (NIEHS) T-32 Training Program (3 years).
- Northeastern University Distinguished Dean's Fellowship (5 years)
- 2012 AmeriCorps Grantee, \$5,000
- New York City Teaching Fellows Cohort 23

and Governance Initiative, \$20,000.

PRESENTATIONS

2020

Invited Presentations and Workshops

- "Environmental Data Justice and AI/ML." AI/ML & Environmental Justice Webinar. Social Science Environmental Health Research Institute at Northeastern University. May 18.
- "Unpacking our Data with an Environmental Data Justice Framework." Bigelow Laboratory for Ocean Sciences. May 5.
- 2020 "Environmental Data Justice: Developing Civically Valid Air Monitoring Methods with Oil and Gas Fenceline Communities." Humanities Institute Science Studies Research Workshop, State University of New York at Buffalo. October 29.
- 2020 "Storytelling for Advocacy: Tools for Uncovering Scientific Meaning and Purpose" with Leslie Alanis. Reclaiming STEM 2020 Workshop.
- 2020 Panelist at Planet Texas 2050 Resilience Roundtable. The University of Texas at Austin. Virtual. July 21.

- 2020 "Race & Equity Discussion Group: Environmental Data Justice with Lourdes Vera." The Switzer Foundation. Virtual. June 15.
- 2019 Invited Discussant for Author Meets Critics: Fleck Prize for *The Economization of Life* by Michelle Murphy. Society for Social Studies of Science Annual Meeting, Boston, MA. August 30 September 2.
- 2018 "Building a Sentinel Community in Response to Hazards from Oil and Gas Development in Karnes, Texas," Human Challenges in Extreme Environments. Hosted by iGlobes: Interdisciplinary and Global Environmental Studies and the Udall Center for Studies in Public Policy. University of Arizona. November 18.
- 2016 "D.I.Y Visualization of Exposure to Hydrogen Sulfide" Indexical Design Symposium, Northeastern University. June 25.
- 2016 "Visualizing Thermal Plumes with Thermal Fishing Bobs" Civic Art Lightning Talk, Technology, Design & Social Impact Conference, Boston Civic Media Consortium, Microsoft NERD at MIT. June 10.

Conference Activity

- 2021 "Developing Publicly Accessible Data Analytic Tools to Understand EPA's COVID Policy on Environmental Enforcement" (non-presenter). With Megan Raisle, Eric Nost, Sara Wylie, Kelsey Breseman, and the Environmental Data and Governance Initiative. GH024: Science to Action: Understanding and Addressing the Community Health Disparities Resulting from Air Pollution and Other Environmental Risk Factors I, American Geophysical Union (AGU) conference, Virtual. December 16th.
- "Engaging Environmental Data Justice to Conduct Civically Valid Air Monitoring with Oil & Gas Fenceline Communities." Panel on Ways of Knowing the Digital Anthropocene (Sensing and Seeing), Society for the Social Studies of Science Annual Meeting, Virtual, Prague. August 18-21.
- 2019 "Responding to the Violent and Extractive Logic of Data Mining with Environmental Data Justice." Society for the Social Studies of Science Annual Meeting, New Orleans, LA. September 4-7.
- "Citizen Science as/in Public Works: How Validating a Low Cost Air Monitoring Tool in a Sewage Treatment Plant Transformed its Metrics and Impact" (non-presenter). With Garance Malivel and Sara Wylie. Society for the Social Studies of Science Annual Meeting, New Orleans, LA. September 4-7.
- 2019 "When Data Justice and Environmental Justice Meet: Formulating a Response to Extractive Logic through Environmental Data Justice." With Dawn Walker, Michelle Murphy, Becky Mansfield, Ladan Mohamed Siad, Jessica Ogden, and the Environmental Data and Governance Initiative. American Sociological Association Annual Meeting, New York City, NY. August 10-13.

- 2018 "Photographic Paper: an Integrated Measure for Community Study of Industrially Produced Corrosive Gases?" Poster Session at Air Sensors International Conference, UC Davis. September 12-14.
- 2018 "Towards an Environmental Data Justice Framework." With Dawn Walker and the Environmental Data and Governance Initiative. Data Justice Conference, Data Justice Lab, Cardiff University. May 21-22.
- "Using Indexical Design and Counter-Mapping to Collaboratively Ground the Hazards of Oil and Gas Extraction." Panel on Tensions and Challenges for Environmental Citizen Science II: Expertise and the State. Society for Social Studies of Science Annual Meeting, Boston, MA. August 30 September 2.

Workshops and Guest Lectures

- "Environmental Data Justice in Practice at National and Local Scales" in undergraduate course *Environment, Health, and Society*, taught by Professor Phil Brown at Northeastern University.
- 2018 "Proactive Data Monitoring and Archiving with the Environmental Data and Governance Initiative (EDGI)" in graduate course *Storing, Collecting, and Retrieving Data*, taught by Professor Sara Arunagiri at Northeastern University.
- 2018 "Working with Marginalized Communities" in undergraduate course *Environmental Justice*, taught by Professor Phil Brown at Northeastern University.
- 2017, "Air Pollution" in MPH course Environmental Health, taught by Professor Sharon
- 2018 Harlan at Northeastern University.
- 2018 "Environmental Data Justice" in undergraduate course *Environmental Justice*, taught by Professor Phil Brown at Northeastern University.
- 2017 "Climate Change and Violence" in undergraduate course *Violence and Society*, taught by Professor Sylvia Dominguez at Northeastern University.
- 2016 "Civic Technoscience in STS and Environmental Health" in DrPH course *Paradigms* of *Social Science* taught by Bridget Hanna at T.H. Chan Harvard School of Public Health.
- Santo Domingo Housing and Health Workshop hosted by T.H. Chan Harvard School of Public Health and JPB Foundation. Santo Domingo Pueblo, NM. May 22-24.

Campus Talks

Invited Participant. Graduate Student Fellowships Panel. College of Social Sciences and Humanities, Northeastern University.

- 2018 Organizer and Moderator. "Perspectives on Research as Activism" Intellectual Events Committee Panel, Department of Sociology and Anthropology, Northeastern University
- 2017 Organizer and Moderator. "The Dissertation from Pre-Proposal to Post-Defense" Professional Development Workshop, Department of Sociology and Anthropology, Northeastern University.
- Organizer and Presenter. "D.I.Y. Visualization of Toxic Exposures" Student Panel on Summer Research, Department of Sociology and Anthropology, Northeastern University.

TEACHING EXPERIENCE

Fall 2020 **Teaching Assistant, Northeastern University**

Computers and Society

DEPARTMENT AND PROFESSIONAL SERVICE

The American Sociological Association

2020-Present Elected Graduate Student Representative for the Section on Environmental

Sociology

The Environmental Data & Governance Initiative

2020- present	Environmental Enforcement Watch project co-coordinator
2018-present	Coordinating committee member
2018-2020	Environmental Data Justice working group coordinator
2017-2018	Communications coordinator
2016-2018	Webmaster
2016-present	Charter member
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Northeastern University Department of Sociology and Anthropology

2018 - 2019	Elected to the Committee on Graduate Study, Northeastern University
	Department of Sociology.
2017 2010	I II I I I I I I I I I I I I I I I I I

2016-2018 Intellectual Events Committee, Northeastern University Department of

Sociology.

Reviewer

The Society for the Study of Social Problems; Information, Communication, and Society; International Journal of Communication

COMMUNITY INVOLVEMENT

2021-P Volunteer. Buffalo Community Fridge Network

resent

- 2019 Discussant. "EJxYouth Summit," hosted by GreenRoots' Environmental Chelsea Organizers and the Environmental Data & Governance Initiative Environmental Data Justice working group.
- 2019 Co-organizer and moderator. "Environmental Data Justice: Vision and Values," hosted by the Environmental Data & Governance Initiative Environmental Data Justice working group. February 28.
- Volunteer. "Chemicals in the Creek" Data visualization performance and collaboration between MIT Media Lab, Northeastern University, and Chelsea GreenRoots. April 22.
- Volunteer. "Enacting Environmental Data Justice: A 4S Pre-Meeting Event" hosted by the Environmental Data & Governance Initiative. Northeastern University.
- Volunteer and co-organizer. Data Rescue Boston at Northeastern University, hosted by the Environmental Data and Governance Initiative and DataRefuge.
- Volunteer. Data Rescue Boston at MIT, hosted by the Environmental Data and Governance Initiative and DataRefuge.

PROFESSIONAL EXPERIENCE

2012-2015 9th-12th Grade Science Teacher

Brooklyn Theatre Arts High School, Brooklyn, NY. Earth Science, Chemistry, AP Environmental Science, Science Department Chair, Sustainability Coordinator.

MEDIA COVERAGE AND SCHOLARLY INTERVIEWS

Longdon, Joycelyn. "Environmental Data Justice." The Lancet Planetary Health 4, no. 11 (2020): e510-e511.

Russell, Adrienne, and Matthew Tegelberg. "Beyond the boundaries of science: Resistance to misinformation by scientist citizens." Journalism 21, no. 3 (2020): 327-344.

"Residentes Del Sur de Texas Afectados Por Gases de Plantas de Petróleo y Gas." *Noticias Telemundo*. February 12, 2018.

 $\frac{https://www.telemundo.com/noticias/2018/02/01/residentes-del-sur-de-texas-afectados-por-gases-de-plantas-de-petroleo-y-gas-tmvo8588181.$

Cribb, Robert, Patti Sonntag, P.W. Elliott, and Elizabeth McSheffrey. "That Rotten Stench in the Air? It's the Smell of Deadly Gas and Secrecy." *The Toronto Star*. October 1, 2017. https://www.thestar.com/news/canada/2017/10/01/that-rotten-stench-in-the-air-its-the-smell-of-deadly-gas-and-secrecy.html.

Cribb, Robert, Patti Sonntag, P.W. Elliott, and Elizabeth McSheffrey. "Is Saskatchewan Ignoring the Potentially Deadly Gas from Oil Wells?" *Global News*. October 2, 2017.

https://globalnews.ca/news/3781309/saskatchewan-deadly-gas-government-oversight/.

RELATED PROFESSIONAL SKILLS

Languages

Spanish (conversational, proficient in reading, basic writing)

Software and Programming Languages

Proficient: R, ESRI ArcMap and ArcGIS Online, QGIS, Adobe Creative Suite, WordPress Basic: HTML5, CSS, SPSS, and SQL

PROFESSIONAL MEMBERSHIPS

Society for Social Studies of Science (4S) American Sociological Association (ASA)