# Kirk Jalbert, Ph.D., MFA

Curriculum Vitae, October 2022

School for the Future of Innovation in Society
Arizona State University
Tempe, AZ, 85287 PO Box 875603

www.kirkjalbert.com | www.civicfutures.org

## **EDUCATION**

Doctor of Philosophy, Rensselaer Polytechnic Institute, Science and Technology Studies, 2015.

Master of Fine Arts, Tufts University School of the Museum of Fine Arts, 2005.

Bachelor of Science, Worcester Polytechnic Institute, Computer Science, 1998.

## **ACADEMIC & PROFESSIONAL APPOINTMENTS**

## Arizona State University, Tempe AZ

2018-present Assistant Professor, School for the Future of Innovation in Society;

Senior Sustainability Scientist, Julie Ann Wrigley Global Futures Laboratory

## FracTracker Alliance, Pittsburgh PA

2015-2018 Manager of Community-Based Research & Engagement

2013-2015 Visiting Research Scientist

## Drexel University, Philadelphia PA

Oct. 2015-2018 Visiting Research Professor, Center for Science, Technology and Society

## Rensselaer Polytechnic Institute, Troy NY

2011-2013 Research Assistant, Watershed Knowledge Mapping Project

2010-2011 Project Lead, Culturally Situated Community Sensing, K-12 Triple-Helix Project

## Clark University, Worcester MA

2004-2009 Fixed-Term Faculty, Culture Studies and Communication Program;

Visual and Performing Arts Department

2007-2009 Director, Schiltkamp Gallery, Traina Center for the Arts

## Tufts University School of the Museum of Fine Arts, Boston MA

2003-2006 Instructor, Spatial and Media Arts Studios

## **PUBLICATIONS**

Legend: \*Graduate student; ~Undergraduate student; ^Community research collaborator

Metrics: h-index (11), i10-index (14)

## **Books**

Jalbert, Kirk, Anna Willow, David Casagrande, and Stephanie Paladino, eds. (2017). ExtrACTION: Impacts, Engagements, and Alternative Futures. London/New York: Routledge.

## **Refereed Journal Articles**

- **Jalbert, Kirk**, \*Sherri Wasserman, and \*Natalie Florence. (in review). "The Material Scaffolding of Civic Infrastructures: Mobilizing Civic Technoscience in Public Engagements with Oil and Gas Pipelines." *Social Studies of Science*.
- Jalbert, Kirk, Katherine L. Dickinson, Jennifer Baka, and \*Natalie Florence. (in review). "Influence in the Right-of-Way: Assessing Landowners' Risk Decision-Making in Negotiating Petrochemical Pipeline Easements." For submission to *The Extractive Industries and Society*.
- **Jalbert, Kirk**, Matthew Cutler, \*Teal Guetschow \*Noa Bruhis. (in review). "Surveillance Systems for Sustainable Fisheries: Perceptions on the Adoption of Electronic Monitoring in the Northeast Multispecies Fishery." *Surveillance & Society*.
- Cutler, Matthew, **Kirk Jalbert**, \*Katherine Ball, \*Noa Bruhis, and \*Teal Guetschow (2022). "Stakeholder dynamics and management outcomes: A social network investigation of Northeast U.S. fisheries debates in the development of Amendment 23." *Ecology and Society*, 27(3):13.
- Jalbert, Kirk, \*Sherri Wasserman, ~Homero Garza Navarro, and \*Natalie Florence (2022). "Petro-State Security Powers and Critical Infrastructure Trespass Bills: Reinforcing State Imaginaries of Environmental Extremism in Anti-Pipeline Advocacy Movements." *Environmental Justice*.
- Jalbert, Kirk, \*Katherine Ball, \*Noa Bruhis, ~Sakshi Hegde, and ^Lisa Test (2021). "Building Capacity for Action-Oriented Research in Arizona's Helium Extraction Boom: A Capabilities Model for Social Learning in Engaged STS." Engaged Science, Technology, and Society, 7(2): 33-55.
- \*Ball, Katherine, **Kirk Jalbert**, ^Lisa Test (2020). "Making the board: participatory game design for environmental action." *Journal of Environmental Studies and Sciences*. 11(1): 12-22.
- Jalbert, Kirk, Douglas Shields, Matthew Kelso, and Samantha Rubright. (2019). "The Power to Plan: Mineral Rights Leasing, Data Justice, and Proactive Zoning in Allegheny County, Pennsylvania." Special Issue, Intersectional Environmental Justice. *Environmental Sociology*, 5(2): 164-176.
- Jacquet, Jeffrey, Anne Junod, Brian Rahm, David Kay, Dylan Bugden, Grace Wildermuth, James Ladlee, Joshua Fershee, Joshua Fergen, Kai Schafft, Kathryn Brasier, **Kirk Jalbert**, Leland L. Glenna, Paige Hagley, Richard Stedman, and Timothy W. Kelsey. (2018). "A decade of Marcellus Shale: impacts to people, policy, and culture from 2008 to 2018 in the Greater Mid-Atlantic region of the United States," *The Extractive Industries and Society*, 5(4): 596-609.
- Jalbert, Kirk, Samantha Malone Rubright, and Karen Edelstein. (2017). "The Civic Informatics of FracTracker Alliance: Working with Communities to Understand the Unconventional Oil and Gas Industry," *Engaging Science, Technology, and Society*, 3: 528-559.
- Brasier, Kathy, **Kirk Jalbert**, Abby J. Kinchy, Colleen Unroe, and Susan Brantley. (2017). "Barriers to sharing water quality data: experiences from the Shale Network," *Journal of Environmental*

- Planning and Management, 60(12): 2103-2121.
- **Jalbert, Kirk**. (2016). "Building Knowledge Infrastructures for Empowerment: A Study of Grassroots Water Monitoring Networks in the Marcellus Shale," *Science & Technology Studies*, 29(2): 26-43.
- Kinchy, Abby J., Sarah Parks, and **Kirk Jalbert**. (2015). "Fractured Knowledge: Mapping the Gaps in Public and Private Water Monitoring Efforts in Areas Affected by Shale Gas Development," *Environment and Planning C: Government and Policy*, 34(5): 879-899.
- **Jalbert, Kirk**, and Abby J. Kinchy. (2015). "Sense and Influence: Environmental Monitoring Tools and the Power of Citizen Science," *Journal of Environmental Policy and Planning*, 18(3): 379-397.
- Malone, Samantha, Matthew Kelso, Ted Auch, Karen Edelstein, Kyle Ferrar, and **Kirk Jalbert**. (2015). "Data Inconsistencies from States with Unconventional Oil and Gas Activity," *Journal of Environment Science and Health, Part A*, 50(5): 489-498.
- Kinchy, Abby J., **Kirk Jalbert**, and Jessica Lyons. (2014). "What is Volunteer Water Monitoring Good For? Fracking and the Plural Logics of Participatory Science," *Political Power and Social Theory*, 27: 259-289.
- Jalbert, Kirk, Abby J. Kinchy, and Simona Perry. (2014). "Civil Society Research and Marcellus Shale Natural Gas Development: Results of a Survey of Volunteer Water Monitoring Organizations," *Journal of Environmental Studies and Sciences*, 4(1): 78-86.
- Wylie, Sara, **Kirk Jalbert**, Shannon Dosemagen, and Matt Ratto. (2014). "Institutions for Civic Technoscience: How Critical Making is Transforming Environmental Research," *The Information Society*, 30(2): 116-126.
- Ratto, Matt, Sara Wylie, and **Kirk Jalbert**. (2014). "Introduction to the Special Forum on Critical Making as Research Program," *The Information Society*, 30(2): 85-95.

### **Book Chapters**

Jalbert, Kirk, Anna Willow, David Casagrande, and Stephanie Paladino. (2017). "Introduction: Confronting Extraction, Taking Action," in K. Jalbert, A. Willow, D. Casagrande, and S. Paladino, eds., ExtrACTION: Impacts, Engagements, and Alternative Futures. London/New York: Routledge.

## **Non-Refereed Publications**

- Jalbert, Kirk. (2016). "Tactics of Power and Empowerment in Knowledge-Making Infrastructures," Engagement: The Nature of Infrastructure. Published by The Anthropology and Environment Society.
- **Jalbert, Kirk**. (2016). "Mobilizing Research for Action: Social Responsibility Meets Industrial-Scale Extraction," *Practicing Anthropology*, 38(3): 65-67. Published by the Society for Applied Anthropology.
- **Jalbert, Kirk**. (2011). "Culturally Situated Sensing: Peer Innovation and Citizen Sensing in Native American Communities," Commissioned paper on Technology and Social Participation. *Intel*

Corporation, Experience Insight Lab.

## **Manuscripts in Preparation**

- Baka, Jennifer, **Kirk Jalbert**, Stefan Lewellen, Harrison Cole. "Political Constructions of Hydraulic Fracturing Wastewater: Implications for Environmental Injustice in the Marcellus Shale." For submission to *Proceedings of the National Academy of Sciences*.
- \*Lerman-Sinkoff, Sarah, **Kirk Jalbert**, Sara Wylie. "Be A Gas Leak Detective." For submission to *Energy Research & Social Science*.

#### **APPLIED RESEARCH PRODUCTS**

**Legend:** \*Graduate student, ^Community research collaborator

- Cutler, Matthew, **Kirk Jalbert**, and \*Teal Guetschow. (2022). "Stakeholder Perceptions of Electronic Monitoring in Amendment 23 of the Northeast Multispecies Fishery Management Plan."

  Whitepaper, prepared for the New England Fishery Management Council.
- \*Ball, Katherine, **Kirk Jalbert**, and ^NoFrackingAZ. (2019). "Helium Futures." A board game for communicating the complex technological, political, and social systems pertinent to helium extraction in Arizona.
- \*Bruhis, Noa, and **Kirk Jalbert**. (2019). "Coconino." A participatory film project for brokered dialogue amongst stakeholders in Arizona's helium extraction boom.
- **Jalbert, Kirk**. (2018). "The Falcon Public EIA Project." An interactive digital storytelling series for expanding public engagements with the Shell Appalachia ethane cracker pipeline. Published on www.FracTracker.org.
- Kelso, Matthew, **Kirk Jalbert**, and Samantha Malone. (2017). "The FracTracker Mobile App." A smartphone app for collecting and sharing experiences with oil and gas development across the United States.
- Jalbert, Kirk, and Matthew Kelso. "The Allegheny County Lease Mapping Project." An interactive database and mapping platform for exploring oil and gas leasing trends in Allegheny County, Pennsylvania. Published on www.FracTracker.org. 2016.
- Jalbert, Kirk, Louis Gutierrez, and Chris Shing. (2014). "Culturally Situated Sensors." An open-source environmental sensing platform and learning modules for STEM education with Navajo Nation partners.
- Jalbert, Kirk. (2005). "Illusion/Elusion." An interactive installation exploring participatory gameplay in virtual environments. Aidekmann Arts Gallery, Tufts University, Medford MA.

#### **AWARDS & FELLOWSHIPS**

2021 Fellowship: Knowledge Enterprise in Washington D.C. Leadership Forum. Arizona State University.

2021	Award: Making & Doing Exhibition. For "Helium Rising" brokered film series. Noa Bruhis,
	Kirk Jalbert. Society for the Social Studies of Science.
2019	Award: Making & Doing Exhibition. For "Helium Futures" board game. Katherine Ball, Kirk
	Jalbert, and No Fracking AZ. Society for the Social Studies of Science.
2018	Fellowship: The JPB Environmental Health Fellowship. Harvard T.H. Chang School of
	Public Health and the JPB Foundation.

#### **GRANTS & FUNDING**

"Monitoring and Evaluating the Impact of API RP 1185," Pipeline Safety Trust / U.S. Department of Transportation Pipeline and Hazardous Material Safety Administration, \$354,489. 2022-2025. (Role: PI).

"Designing Just Futures for Public Engagement in Petrochemical Pipeline Infrastructure," Strengthening American Infrastructure, National Science Foundation, \$149,349. 2022-2023. (Role: PI, w/co-PIs Stacey Kuznetsov and Danae Hernández-Cortés, Arizona State University).

"The Public KEEs to Enhancing Pipeline Safety: Public Knowledge, Education, and Engagement," Pipeline Safety Technical Assistance Grant, Pipeline and Hazardous Materials Safety Administration, \$100,000. 2021-2022. (Role: co-PI, w/PI: Livelihoods Knowledge Exchange Network & The Pipeline Safety Coalition).

"Assessing Capacity for Deployments of Data and Technology in Public Engagements with Oil and Gas Pipeline Projects," The JPB Environmental Health Fellowship, Harvard T.H. Chang School of Public Health and the JPB Foundation, \$240,000. 2018-2022. (Role: PI)

"Tracking Stakeholder Perceptions and Outcomes in the Implementation of Amendment 23 of the of the Northeast Multispecies Fishery Management Plan," The JPB Environmental Health Fellowship, Harvard T.H. Chang School of Public Health and the JPB Foundation, \$94,577. 2020-2022. (Role: PI, w/co-PI Matthew Cutler, NOAA Northeast Fisheries).

"Exploring the Use of a Low-Cost Photopaper Tool for Citizen Science Detection of Urban Gas Leaks," The JPB Environmental Health Fellowship, Harvard T.H. Chang School of Public Health and the JPB Foundation, \$15,880. 2019-2021. (Role: co-PI, w/PI Sara Wylie, Northeastern University).

"Supporting Public Understanding of Ethane-Based Industry Buildout in Southwestern Pennsylvania," 11<sup>th</sup> Hour Project of the Schmidt Family Foundation, \$25,000. March 2018. (Role: PI)

"Supporting Public Understanding of Ethane-Based Industry Buildout in Southwestern Pennsylvania," Colcom Foundation, \$55,000. May 2017. (Role: PI)

"Empowering California and Colorado Communities to a Better Energy Future," 11<sup>th</sup> Hour Project of the Schmidt Family Foundation, \$200,000. February 2017. (Role: co-PI, w/PI: Kyle Ferrar, FracTracker Alliance)

"The Susquehanna Impacts Project," The Foundation for Pennsylvania Watersheds, \$20,000. May 2016. (Role: PI, w/co-PI Matthew Kelso, FracTracker Alliance)

"A Proposal to Obtain, Map, and Analyze Oil and Gas Lease Data in Allegheny County, Pennsylvania," The Heinz Endowments, \$46,000. January 2016. (Role: PI, w/co-PI Matthew Kelso, FracTracker Alliance)

"Drilling into Monitoring: Building a Watershed-Based FracTracker Interactive Map and Digital Storytelling Series," The Colcom Foundation, \$53,000. July 2014. (Role: PI)

"Promising Data for Public Empowerment: A Study of Grassroots Water Monitoring Practices for Pollution from the Natural Gas Industry," Rensselaer Polytechnic Institute School of Humanities, Arts, & Social Sciences Fellowship, \$49,000. September 2013. (Role: PI)

"Socio-Technical Practices in the Context of Marcellus Shale Water-Quality Science," National Science Foundation Doctoral Dissertation Improvement Grant, \$15,000. September 2013. (Role: PI)

"Culturally Situated Sensing: Peer Innovation and Citizen Sensing in Native American Communities," Intel Corporation, Experience Insight Lab Technology & Social Participation Writing Commission, \$2,500. March 2011. (Role: PI)

## REFEREED CONFERENCE PRESENTATIONS

**Legend:** \*Graduate student, ^Community research collaborator

"Stakeholder Perceptions of Electronic Monitoring for Groundfish Fisheries Management in the Northeast US," with \*Teal Guetschow, International Association for Society and Natural Resources, San José, Costa Rica, June 2022.

"Co-Producing Civic Infrastructures in Public Engagements with Petrochemical Pipelines," meetings of the American Association of Geographers, Virtual, February 2022.

"Tracing Critical Minerals Genealogies through Arizona's Emerging Helium Boom," with Jennifer Richter (ASU) and \*Noa Bruhis, meetings of the Society for the Social Studies of Science, Toronto, CA, October 2021.

"Helium Rising: A Case Study in Envisioning Futures for Underground Resource Extraction," with \*Noa Bruhis, meetings of the Society for the Social Studies of Science, Making & Doing Exhibit, Toronto, CA, October 2021.

"Be a Gas Leak Detective! Evaluating a Do-it-Yourself Curriculum for Finding Urban Gas Leaks," with \*Sarah Lerman-Sinkoff, Amanda Dye, Sara Wylie, Nathan Phillips, and ^Mothers Out Front, meetings of the Society for the Social Studies of Science, Making & Doing Exhibit, Toronto, CA, October 2021.

"State Projections of Environmental Extremism in Anti-Pipeline Advocacy Movements: An Analysis of U.S. Critical Infrastructure Criminalization Bills," meetings of the American Association of Geographers, Seattle, WA, April 2021.

"Tracing the Timescapes of Helium Extraction in Arizona's Holbrook Basin," meetings of the Society for Applied Anthropology, Norfolk, VA, March 2021.

"Mapping Capacity for Public Engagement in Anti-Pipeline Coalition Networks," meetings of the Society for the Social Studies of Science, Prague, Czech Republic, August 2020.

"Visualizing Perspectives on Arizona Helium Extraction," with \*Noa Bruhis (ASU), meetings of the Society for the Social Studies of Science, Prague, Czech Republic, August 2020.

"Catching Amendment 23: A Social Network Analysis of Groundfish Fisheries in the North East United States," with \*Katherine Ball and Matthew Cutler, meetings of the International Marine Conservation Congress, Kiel, Germany, August 2020.

"Influence in the Right of Way: Assessing Landowner's Power, Risk, and Responsibility in Pipeline Easement Negotiations," with Katherine Dickinson, Jennifer Baka, and Natalie Banacos. International Symposium on Society and Resource Management, Cairns, Australia, July 2020.

"Technics and Tactics of Anti-Pipeline Movements: Assessing Critical Technical Engagements with Oil and Gas Pipeline Projects," meetings of the Society for the Social Studies of Science, New Orleans, LA, September 2019.

"Making the Board: Participatory Game Design for Environmental Action," with \*Katherine Ball (ASU), meetings of the Society for the Social Studies of Science, Making & Doing Exhibit, New Orleans, LA, September 2019.

"Public Participation and Perception in Pipeline Projects: Mobilizing Data and Critical Impact Assessments to Contest Energy Infrastructure Projects," International Conference on Energy Research and Social Science, Arizona State University, Tempe, AZ, May 2019.

"Pipeline Dependency vs. Data Transparency: Mobilizing Geospatial Data and Public Impact Assessments to Contest Proposed Energy Infrastructure Projects," meetings of the American Association of Geographers, Washington, DC, April 2019.

"Civic Informatics & Critical Impact Assessments: Mobilizing Data for Public Engagements in Hazardous Liquid Pipeline Debates," meetings of the Rural Sociological Society, Portland, OR, July 2018.

"Civic Informatics for Critical Environmental Impact Assessment: Mobilizing Data in Pennsylvania's Anti-Pipeline Movement," International Symposium on Society and Resource Management, Snowbird, UT, June 2018.

"Civic Discontent as 'Critical' Impact Assessment: Questioning Institutional Approval of Ethane Industry Infrastructure in Southwest Pennsylvania," presented with Leann Leiter at the meeting of the American Anthropological Association, Washington, DC, November 2017.

"Extraction Anthropology: Where We're Going and Why It Matters," roundtable discussant, meeting of the American Anthropological Association, Washington, DC, November 2017.

"Visualizing Risks of Future Oil & Gas Development: The Allegheny County Lease Mapping Project," Energy Impacts Summit, Ohio State University, Columbus, OH, July 2017.

"Routes to Data Rights: Information Transparency in Pennsylvania's Pipeline Debates," Data Power Conference, Ottawa, Ontario, Canada, June 2017.

"Public Engagement in Extraction Transparency: Sharing Knowledge through the FracTracker Alliance," Citizen Science Association Conference, St. Paul, MN, May 2017.

"The Allegheny County Lease Mapping Project: The Power to Plan Through Accessible Oil & Gas Leasing Data," meetings of the American Association of Geographers, Boston, MA, April 2017.

"Intersectional Environmental Justice and the US Shale Gas Industry: Bridging the Rural-Urban Divide," International Symposium on Society and Resource Management, Michigan Technological University, Houghton, MI, June 2016.

"Revealing the Risks of Oil and Gas Extraction at the Intersection of Research, Public Participation, and Environmental Communication," meetings of the Association for Environmental Studies and Sciences, Washington, DC, June 2016.

"Data Culture and the Problems of Representations in Participatory Environmental Science," meetings of the American Anthropological Association, Denver, CO, November 2015.

"Data Publics as Information Advocates: Demanding Transparency in the Management of the Oil and Gas Industry," meetings of the Society for the Social Studies of Science, Denver, CO, November 2015.

"Knowing Our Waters: Citizen Science and Digital Storytelling," meetings of the Society for Applied Anthropology, Pittsburgh, PA, March 2015.

"Grassroots Infrastructures for Civil Society Science: A Case Study of the Marcellus Shale Water Monitoring Community," meetings of the American Anthropological Association, Anthropology & Environment Section's Rappaport Prize Panel, Washington, DC, December 2014.

"Scientific Citizenship or Instrumental Environmentalism: Interventions of Technoscientific vs. Sociopolitical Knowledge in Working to Understand Natural Gas Extraction Impacts," meetings of the Society for Cultural Anthropology, Detroit, MI, May 2014.

"Scientific Narratives for Public Empowerment: Institutional Reconstructions of Volunteer Water Monitoring Knowledge in Natural Gas Extraction Communities," meetings of American Anthropological Association. Chicago, IL, November 2013.

"Promising Data for Public Empowerment: Grassroots Water Monitoring for Pollution from the Natural Gas Industry," meetings of Society for Social Studies of Science. San Diego, CA, October 2013.

"What is Volunteer Water Monitoring Good For? Fracking and the Plural Logics of Participatory Science," presented with Abby J. Kinchy at the meetings of the Society for Social Studies of Science. San Diego, CA, October 2013.

"Ignorance about the Impacts of Shale Gas Development: A Study of Spatial Knowledge Gaps," presented with Abby J. Kinchy at the meetings of American Sociological Association, New York, NY, August 2013.

"Volunteer Monitoring for Watershed Sustainability: Making Environmental Sense of Natural Gas Extraction Impacts in the Marcellus Shale," Sensing Environments Festival, Rensselaer Polytechnic Institute, Troy, NY, April 2013.

"Civic Technoscience for Surface Water Quality: The Rise of Volunteer Watershed Monitoring in the Marcellus Shale Natural Gas Boom," meetings of the Society for Applied Anthropology, Denver, CO, March 2013.

"Frames, Layers, and Subjective Ecologies: Cinematic Constructions and Geographic Information Systems," High-Tech Heritage Conference, University of Massachusetts, Amherst, MA, May 2011.

"Ways of Practice in Participatory Sensing: Indigenous Knowledge Systems and Culturally Situated Design," meetings of Society for Social Studies of Science, Cleveland, OH, November 2011.

"Social Networking Nature: Publicly Defined Environments in Privatized Participatory Sensing," meetings of American Anthropological Association, Montreal, Quebec, Canada, November 2011.

"Culturally Situated Sensing: Participatory Design and Citizen Sensing in Native American Communities," Political Sociology of Science and Technology Conference, Rensselaer Polytechnic Institute, Troy, NY, April 2011.

#### **INVITED TALKS**

"Accelerating Decarbonization in the United States: Technology, Policy, and Societal Dimensions | Local Benefits & Compensation Strategies for Deep Decarbonization Infrastructure," webinar hosted by the Committee on Accelerating Decarbonization in the United States: Technology, Policy, and Societal Dimensions; National Academies of Science, Engineering, and Medicine, October 2022.

"The Impacts of Helium Extraction," hosted by Dooda Helium Extraction, Navajo Nation, February, 2022.

"Assessing Landowner Perceptions of Pipeline-Related Environmental and Public Health Risks," 2021 Shale and Public Health Conference, Pittsburgh, PA, November, 2021.

"Community Perspectives and Responses to Pipeline Development and Public Health Risks," 2020 Shale Network Workshop, Penn State University, State College, PA, May, 2020.

"Technics and Tactics of Anti-Pipeline Movements: Assessing Critical Technical Engagements with Oil and Gas Pipelines," Science Environmental Health Research Institute, Northeastern University, Boston, MA, November 19, 2019.

"Making Interventions in Engaged Science and Technology Studies," Enlightening Lunch Series, School for the Future of Innovation in Society, Arizona State University, November 6, 2019.

"How to Measure Success in Research Engagements with Non-Governmental Organizations," with Darshan Karwat and Faheem Hussain, Social Embeddedness Network Conference, Arizona State University, Tempe, AZ, March 2019.

"Bringing Public Perspectives into Energy Projects," New Tools for Science Policy Series, Consortium for Science, Policy & Outcomes, Washington, DC, December 2018.

"Mobilizing Civic Informatics for 'Critical' Impact Assessments of Oil & Gas Pipelines," Urban Humanities Lecture Series, Worcester Polytechnic Institute, Worcester, MA, February 2018.

"Building Infrastructures for a Civic Information Science: Studies in Data for Empowerment," Cyberlaw Clinic, Berkman Klein Center for Internet & Society, Harvard University, Cambridge, MA, April 2017.

"Building Infrastructures for a Civic Information Science: Studies in Data for Empowerment," School for the Future of Innovation in Society, Arizona State University, Tempe, AZ, April 2017.

"FracTracker Tools and Resources for Civic Engagement," Philadelphia Futures Energy Summit, Drexel University, Philadelphia, PA, November 2016.

"Assessing Environmental Justice in PA Oil & Gas Communities," School of Social Work, University of Pittsburgh at Johnstown, Johnstown, PA, October 2016.

"Building Capacity to Understand the Impacts of Unconventional Oil & Gas Development," Stop the Frack Attack Summit, Denver, CO, October 2015.

"Knowing Our Waters," Northern Appalachian Network, California University of Pennsylvania, California, PA, September 2015.

"Energy Wise: Citizen Scientists and Open Data," Shifting Energy Cultures Speaker Series, Center for Science, Technology & Society, Drexel University, Philadelphia, PA, May 2015.

"Building an Appalachian Agenda for Economic and Environmental Justice," roundtable discussant, Society for Applied Anthropology, Pittsburgh, PA, March, 2015.

"Working with Data, Maps, and Participatory GIS Research to Understand the Impacts of Oil and Gas Extraction," Democratizing Technologies: Assessing the Roles of NGOs in Shaping Technological Futures, Center for Nanotechnology in Society, University of California, Santa Barbara, CA, November 2014.

"Building Infrastructures for Civil Society Science: A Study of Data and Empowerment," colloquium speaker, Department of Science and Technology Studies, Rensselaer Polytechnic Institute, Troy, NY, September 2014.

"Knowing our Waters: Makings Sense of Data Narratives in the Marcellus Shale Water Monitoring Community," The Western Pennsylvania Conservancy, Pittsburgh, PA, August 2014.

"Fracking in Pennsylvania," discussion panelist, NEW Leadership Institute. Center for American Women and Politics, Chatham University, Pittsburgh, PA, June, 2014.

"Analyzing Appropriate Data, and What Should be the Roadmap for the Future," discussion panelist, Shale Network Workshops, Penn State University, State College, PA, May, 2014.

"Collaborative Efforts for Capacity Building Across the Marcellus Shale Water Monitoring Community," Second Annual Sierra Club NY Water Sentinels Summit, Binghamton University, Binghamton, NY, April 2014.

"ExtrACTION Roundtable: Anthropology, Extractive Industries, and Unconventional Energy," discussion panelist, meeting of American Anthropological Association. Chicago, IL, November, 2013.

"Living in a Fracked World: Differential Effects of Shale Gas Development on Rural, Peri-urban and Urban Ecologies," discussion panelist, meeting of the Association for Environmental Studies and Sciences. Duquesne University, Pittsburgh, PA, June, 2013.

"Watershed Knowledge Mapping Project: Investigating Efforts to Monitor the Water Quality Impacts of Marcellus Shale Development," First Annual Sierra Club NY Water Sentinels Summit. Binghamton University, Binghamton, NY, January 2013.

"Sociopolitical Dynamics of Volunteer Watershed Monitoring in the Marcellus Shale Natural Gas Boom," Boom & Bust Symposium, Duquesne University, Pittsburgh, PA, November 2012.

#### SESSIONS, WORKSHOPS, CONFERENCES ORGANIZED

"Gas Leaks and Energy Justice: A Virtual Conference Linking Civic Science to the Push for a Just Transition," Co-hosted with Sara Wylie (Northeastern University Social Science Environmental Health Research Institute) and Sarah Lerman-Sinkoff (Clark University Marsh Institute), virtual conference, December 2020.

"Extraction: Impacts, Engagements and Alternative Futures," roundtable session organized at the meetings of the Society for Applied Anthropology, Vancouver, British Columbia, Canada, April 2015.

"Narratives of Empowerment in the Scientific Governance of Environmental Risk," panel session organized at the meetings of the American Anthropological Association, Denver, CO, November 2015.

"ExtrACTION: Impacts, Engagements and Alternative Futures," panel session organized at the meetings of the American Anthropological Association, Denver, CO, November 2015.

"ExtrACTION Topical Interest Group", multi-session conference track, organized at the meetings of the Society for Applied Anthropology, Pittsburgh, PA, March 2015.

"New Data Relationalities: Publics, Practices, and Subjectivities in Public Health and Environmental Governance," panel session organized at the meetings of the Society for Social Studies of Science, San Diego, CA, November 2013.

"Digital STS," panel session co-organized at the meetings of the Society for Social Studies of Science, Cleveland, OH, November 2011.

#### **INVITED WORKSHOPS**

"Energy and Environmental Justice: A Multidisciplinary Workshop," Institute of Environmental Science and Technology (ICTA), Barcelona, Spain, October 21-22, 2019.

"Harvard JPB Environmental Health Fellows Program Workshop," University of Montana, Missoula, MT, June 9-13, 2019.

"Pipeline Safety Regulatory Training," Hosted by the Pipeline Safety Trust, Houston, TX, May 8-10, 2019.

"Harvard JPB Environmental Health Fellows Program Workshop," University of Memphis, Memphis, TN, March 17-22, 2019.

"Harvard JPB Environmental Health Fellows Program Workshop," Harvard University, Cambridge, MA, November 5-9, 2018.

"Citizen Science for Environmental Protection: More Important than Ever," Harvard University Law School, Cambridge, MA, October 13, 2017.

"Engaging the Public: Best Practices for Crowdsourcing Across the Disciplines," The Crowd Consortium. University of Maryland, College Park, MD, May 6-8, 2015.

"Grassroots Network Workshops," Cary Institute of Ecosystem Studies. Millbrook, NY, November 2014.

"Conceptualizing Environmental Exposure: From Data to Decisions," Drexel University Center for Science, Technology & Society and the Chemical Heritage Foundation. Philadelphia, PA, April 2014.

"Infrastructural Worlds: A Workshop on Ethnographic Studies of the Built Environment," Duke University, Cultural Anthropology Department. Durham, NC, March 2014.

#### **SELECT MEDIA COVERAGE**

"The complicated world of fracking from experts' point of view," Payson Roundup, August, 31, 2018.

"Data to the people: Activists use explosion of information to bring oil and gas projects home to citizens," *The Pittsburgh Post-Gazette*, February, 16, 2018.

"Study Fills in Missing Data on Homes, Schools, Habitats at Risk from Shell's Falcon Pipeline," *DESMOG*, January, 29, 2018.

"Some drilling allowed to resume on Mariner East pipeline after spills," *The Pittsburgh Post-Gazette,* August, 4, 2017.

"Pittsburgh Is Going Green, But Who Is Getting Left Behind?" Gizmodo.com, September 1, 2017.

"Is fracking an environmental justice issue?" The Allegheny Front, June 30, 2017.

"Many Allegheny County cities, municipalities unprepared for shale gas drilling rebound," *The Pittsburgh Post-Gazette*, May 30, 2017.

"Environmental justice in the fracking era," The Allegheny Front, July 15, 2016.

"Oil and gas endangers neighborhood Hispanic children," Entravision.com, July 12, 2016.

"Don't frack the rich? Comment puts focus on environmental justice," NPR State Impact, June 6, 2016.

"Lack of action from state and federal government means that community organizations are picking up the slack of monitoring the effects of fracking in the Northeast," *American Politics and Policy Blog, London School of Economics*, February 26, 2016.

"Stop the Frack Attack," EcoWatch. October 12, 2015.

"Tracking Frackers from the Sky: Citizen scientists eyeing Pennsylvania's natural gas drillers in aerial images may help determine if there is a link between fracking and certain illnesses," *Smithsonian.com*. November 10, 2014.

"Collection of 'big data' by citizens helps shape debate on Marcellus Shale fracking," *Bloomberg Water Law & Policy Monitor*, January 17, 2014.

#### **PROFESSIONAL SERVICE**

### **Appointed Advisory Boards**

Member, Recommended Practice 1185 "Pipeline Public Engagement" Task Group, American Petroleum Institute & Pipeline and Hazardous Materials Safety Administration, 2021-present

Member, Board of Directors, Pipeline Safety Coalition, 2020-present

Member, Environmental Justice Advisory Board, Pennsylvania Department of Environmental Protection, 2016-2018.

#### **Technical Advisor**

"Oil and Gas Siting, Housing Choices, and Environmental Justice in Colorado," National Science Foundation Research project, Colorado School of Public Health, University of Colorado, Boulder. 2020-2023.

## **Program Building**

Chair, Public Engagement Working Group, ASU School for the Future of Innovation in Society, 2021present

Member, Human and Social Dimensions of Science and Technology Graduate Program Committee, ASU School for the Future of Innovation in Society, 2018-present

Member, Justice, Diversity, Equity and Inclusion Faculty Hiring Committee, ASU School for the Future of Innovation in Society, 2020-2021

Faculty Advisor, ASU Sunrise Sustainability Student Club, 2020-2021

Member, Making & Doing Exhibition Organizing Committee, Society for Social Studies of Science, 2019present

Member, Making & Doing Exhibition Awards Committee, Society for Social Studies of Science, 2019present

Member, Informatics Undergraduate Program Committee, ASU School of Computing, Informatics, and Decision Systems Engineering, 2018-2019

Member, Program Committee, Society for Applied Anthropology, 2014-2016

Member, Publishing Committee, Science Knowledge and Technology section of the ASA, 2014-2015

Member, Planning Committee, Penn State University Shale Network, 2013-2015

Member, Sustainability Task Force, Rensselaer Polytechnic Institute, 2012-2013

#### **Peer Reviewer**

## **Grant Reviewer**

National Science Foundation, Division of Social and Economic Sciences

Science and Technology Studies, Panel Reviewer (2022)

Science and Technology Studies Program, External Reviewer (2016-present)

Research Traineeship Program, Panel Reviewer (2021)

New York State Sea Grant (2018)

#### Manuscript Reviewer

American Ethnologist; Citizen Science; Ecoscience; Energy Research & Social Science; Environment & Planning E; Environmental Justice; Environmental Pollution; Environmental Sociology; Environmental Studies and Sciences; Engaging Science, Technology, and Society; Geoforum; Middle State Geographer; Rural Sociology; Science as Culture; Sociological Forum

#### **Professional Membership**

American Anthropological Association (AAA), Anthropology and Environment Section

Association for Environmental Studies & Sciences (AESS)

Association of American Geographers (AAG)

Citizen Science Association (CSA)

International Association for Society and Natural Resources (IASNR)

Society for Applied Anthropology (SfAA), ExtrACTION Topical Interest Group

Society for Social Studies of Science (4S)

## **Community Service**

Grassroots Grantmaking Committee, Neighborhood Allies, Pittsburgh, PA, 2016-2017
Advisory Board, EcoDistrict Plan Air Quality Study, Millvale, PA, 2016-2017
Topical Advisory Group, CREATE Lab Data Fluency Project, Carnegie Mellon University, 2016-2017
Scientific Advisory Committee, Sierra Club New York Water Sentinels, 2012-2015
Water Monitoring Coordinator Group, Foundation for Pennsylvania Watersheds, 2013-2015

#### **TEACHING**

(U = Undergraduate, G = Graduate,  $\Diamond$  = designed/re-designed course,  $\approx$  = team taught)

#### Arizona State University, Tempe AZ

School for the Future of Innovation in Society

Next-Generation Sustainability Governance Design: Spring 2022 (G◊)

Ways of Knowing (research methods): Spring 2022 (U◊)

Science, Technology, and Inequality: Fall 2021 (U◊)

Science, Power, and Politics: Spring 2019, 2020, 2022 (G◊≈)

Human and Social Dimensions of Science and Technology: Fall 2019, 2020, 2022 (G◊≈)

Environmental Justice Reading Group: Fall 2019, 2020 (G◊)

Methods for Research in Global Development: Spring 2019 ( $G\lozenge \approx$ )

Designing Knowledge: Fall 2018 (U)

School of Computing, Informatics, and Decision Systems Engineering

Civic Informatics: Spring 2019, 2020 (UG◊)

## Rensselaer Polytechnic Institute, Troy NY

Science and Technology Studies Department

Science, Technology and Society (TA): Spring 2011 (U) Design and Innovation Studio V (RA): Fall 2010 (U)

### Clark University, Worcester MA

**Culture Studies and Communications Program** 

Computer Mediated Communications: Spring/Fall 2005-2008 (U◊)

History of American Broadcasting and Electronic Media: Fall 2007, 2008 (U)

Image Theory: Spring 2005-2009 (U♦)

## Visual and Performing Arts Department

Digital Imaging Studio: Spring 2004-2009 (U♦) Photography Studio: Fall 2002-2008 (U)

Sculpture and the Found Object: Fall 2006, 2007 (U)

Studio Art Senior Seminar: Fall 2005 (U)

## Tufts University, School of the Museum of Fine Arts, Boston MA

Electronic/Kinetic Media: Fall, Spring 2004-2007 (UG\(0))

#### STUDENT CAREER ADVANCEMENT

Doctoral Committees, Completed:

- Co-Chair, Noa Bruhis (Human and Social Dimensions of Science, Summer 2022)
- Member, Sherri Wasserman (Human and Social Dimensions of Science, Summer 2022)
- Member, Robert Sickler (Human and Social Dimensions of Science, Spring 2021)
- Member, Matthew Evans (Education, Spring 2020)

## **Doctoral Committees, Expected:**

- Member Sarah Geren (Human and Social Dimensions of Science, Spring 2022)
- Member, Nivedita R. Biyani (Civil, Environmental & Sustainable Engineering, Spring 2022)
- Member, Katherine Ball (Human and Social Dimensions of Science, Spring 2023)
- Member, Natalie Florence (Human and Social Dimensions of Science, Spring 2023)
- Member, Sean Dudley (Human and Social Dimensions of Science, Spring 2024)

## Masters Committees:

Chair, Katherine Ball (Science, Technology and Policy MA, completed Spring 2019)

#### Undergraduate Honors Thesis Committees:

- Chair, Samantha Maas (Barrett Honors College / Sustainable Engineering, completed Spring 2022)
- Chair, Sakshi Hegde (Barrett Honors College / Sustainability, completed Spring 2019)