#### Kirk Jalbert

# Curriculum Vitae, December 2015

FracTracker Alliance 4600 Penn Ave. Pittsburgh, PA 15224 Email: kirkjalbert@gmail.com Web: www.fractracker.org www.kirkjalbert.com

#### **EDUCATION**

2015 Ph.D. Rensselaer Polytechnic Institute, Science and Technology Studies

Dissertation: Promising Data for Public Empowerment: A Study of Grassroots

Water Monitoring for Pollution from the Natural Gas Industry

Committee Chair: Abby J. Kinchy

2005 M.F.A. School of the Museum of Fine Arts, Concentrations in Media Arts and Theory

1998 B.S. Worcester Polytechnic Institute, Computer Science, Concentration in HCI

#### PROFESSIONAL APPOINTMENTS & EMPLOYMENT

# FracTracker Alliance, Pittsburgh PA

2015-present Manager of Community-Based Research & Engagement

#### Drexel University, Philadelphia PA

2015-present Visiting Research Professor, Center for Science, Technology and Society

### **Boston Architectural College, Boston MA**

2015-present Project Advisor, Design Studies Program

## FracTracker Alliance, Pittsburgh PA

2013-2015 Visiting Research Scientist

## Rensselaer Polytechnic Institute, Troy NY

2011-2013 Research Assistant for Professor Abby J. Kinchy

Department of Science and Technology Studies

Spring 2011 Teaching Assistant for Professor Edward J. Woodhouse

Department of Science Technology Society

Fall 2010- Project Manager, Culturally Situated Community Sensing

Summer 2011 Supervised by Professor Ron Eglash & The GK-12 Triple-Helix Program

Department of Science and Technology Studies

Fall 2010 Teaching Assistant for Professor Ron Eglash

Department of Science and Technology Studies

Summer 2010 Research Assistant for Professor Ron Eglash

Culturally Situated Design Tools

Department of Science and Technology Studies

# Clark University, Worcester MA

2004-2009	Instructor, Culture Studies and Communication Program
2002-2009	Instructor, Department of Visual and Performing Arts
2007-2009	Director, Schiltkamp Gallery, Traina Center for the Arts

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

2005-2007 Instructor, Sculptural Arts Studios2003-2005 Teaching Assistant, Media Arts Studios

### **PUBLICATIONS**

#### **Refereed Journal Articles**

Forth-	Kinchy, Abby J., Sarah Parks, and <b>Kirk Jalbert</b> . "Fractured Knowledge: Mapping the
coming	Gaps in Public and Private Water Monitoring Efforts in Areas Affected by Shale Gas
	Development." Environment and Planning C.

Under Jalbert, Kirk. "Grassroots Infrastructures for Civil Society Science: A Case Study of the Marcellus Shale Water Monitoring Community." Knowledge Infrastructures. Ed. Helena Karasti, Florence Millerand, Christine M. Hine, Geoffrey C. Bowker. Science & Technology Studies.

- Jalbert, Kirk, and Abby J. Kinchy. "Sense and Influence: Environmental Monitoring Tools and the Power of Citizen Science." *Journal of Environmental Policy & Planning*.
- 2015 Malone, Samantha, Matthew Kelso, Ted Auch, Karen Edelstein, Kyle Ferrar, and Kirk Jalbert. "Inconsistencies with Data from Unconventional Gas and Oil Basins." *Journal of Environment Science and Health, Part A*, 50(5):489-498.
- Kinchy, Abby J., **Kirk Jalbert**, and Jessica Lyons. "What is Volunteer Water Monitoring Good For? Fracking and the Plural Logics of Participatory Science." Fields of Knowledge: Science, Politics, and Publics in the Neoliberal Age. Ed. Scott Frickel and David Hess. *Political Power and Social Theory*, *27*: 259-289.
- Jalbert, Kirk, Abby J. Kinchy, and Simona Perry. "Civil Society Research and Marcellus Shale Natural Gas Development: Results of a Survey of Volunteer Water Monitoring Organizations." Exploring the Impacts of Marcellus Shale Development. Ed. Beth Kinne and Michael Finewood. Journal of Environmental Studies and Sciences. Volume 4(1): 78-86.
- Wylie, Sara, **Kirk Jalbert**, Shannon Dosemagen, and Matt Ratto. "Institutions for Civic Technoscience: How Critical Making is Transforming Environmental Research." Critical Making as Research Program. Ed. Matt Ratto, Sara Wylie, and Kirk Jalbert. *The Information Society*, 30:2.
- 2014 Ratto, Matt, Sara Wylie, and **Kirk Jalbert**. "Introduction to the Special Forum on Critical

Making as Research Program." Critical Making as Research Program. Ed. Matt Ratto, Sara Wylie, and Kirk Jalbert. *The Information Society*, 30:2.

#### **Other Publications**

Jalbert, Kirk. "Culturally Situated Sensing: Peer Innovation and Citizen Sensing in Native American Communities." Commissioned paper on Technology and Social Participation. Intel Corporation Experience Insight Lab, Portland OR.

## **Manuscripts in Preparation**

- (Book) **Jalbert, Kirk**, David Casagrande, Stephanie Paladino, Anna Willow (eds.) "ExtrACTION: Impacts, Responses and Alternative Futures," for publication by Left Coast Press.
- (Journal) Brasier, Kathy, **Kirk Jalbert**, Abby J. Kinchy, Colleen Unroe, Susan Brantley. Candie Wilderman. "Sharing Water Quality Data among Public Agencies, Citizen Scientists, Researchers, and Private Industry: Experiences from the Shale Network."
- (Journal) Jalbert, Kirk, Samantha Malone-Rubright. "Mediators for Making Oil and Gas Data Public: Assisting Fractured Communities in Data Transparency Projects through the FracTracker Alliance." Special issue: Making and Doing Politics Through Grassroots Scientific Research on the Energy and Petrochemical Industries. Ed. Sara Wylie, Max Liboiron, and Nick Shapiro. Engaging Science, Technology, and Society (ESTS).

#### **GRANTS & FELLOWSHIPS**

### **Authored Grants & Fellowships**

"Drilling into Monitoring: Building a Watershed-Based FracTracker Interactive Map," The Colcom Foundation, \$53,000, awarded to The FracTracker Alliance. Project Director stipend: \$5,000, July 2014 – August 2015.

"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 – August 2015.

"Socio-Technical Practices in the Context of Marcellus Shale Water-Quality Science," National Science Foundation, Doctoral Dissertation Improvement Grant, Award #1331080, \$15,000. September 2013 – August 2014.

"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.

## Research Support

"Mapping Knowledge Investments during the Marcellus Shale Gas Rush: A Study of Public, Private, and Academic Water Quality Monitoring Efforts," National Science Foundation, Standard Grant, Award #1126235, \$398,337, PI: Abby J. Kinchy. Research Assistant Fellowship: \$48,000, September 2011 – August 2013.

#### **INVITED TALKS**

- 2015 "FracTracker Tools for Community-Based Research and Engagement," Sierra Club Water Sentinels Campus Speaking Tour, New York Southern Tier, November 2015.
- 2015 "Energy Wise: Citizen Scientists and Open Data," Shifting Energy Cultures Series, Center for Science, Technology & Society, Drexel University, Philadelphia, PA, May 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.
- 2014 "Building Infrastructures for Civil Society Science: A Study of Data and Empowerment," Colloquium Speaker Series, Department of Science and Technology Studies, Rensselaer Polytechnic Institute, Troy, NY, September 2014.
- 2014 "Knowing our Waters: Makings Sense of Data Narratives in the Marcellus Shale Water Monitoring Community," The Western Pennsylvania Conservancy, Pittsburgh, PA, August 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.
- "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.

#### **CONFERENCE SESSIONS ORGANIZED**

- 2015 "Narratives of Empowerment in the Scientific Governance of Environmental Risk," Session organized at the annual meeting of the American Anthropological Association, Denver, CO, November 2015.
- 2015 "Extraction: Impacts, Engagements and Alternative Futures," Roundtable session organized at the annual meeting of the American Anthropological Association, Denver, CO, November 2015.
- "Communicating the Impacts of Gas Extraction in Film, Photography, and Digital Storytelling," Session organized at the annual meeting of the Society for Applied Anthropology, Pittsburgh, PA, March 2015.
- "New Data Relationalities: Publics, Practices, and Subjectivities in Public Health and Environmental Governance," Session organized at the annual meeting of the Society for Social Studies of Science, San Diego, CA, November 2013.
- "Digital STS," Session co-organized with Sara Anne Wylie at the annual meetings of the Society for Social Studies of Science, Cleveland, OH, November 2011.

# REFEREED CONFERENCE PRESENTATIONS

- "Data Culture and the Problems of Representations in Participatory Environmental Science," Presented at the annual meeting 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," Presented at the annual meeting of the Society for the Social Studies of Science, Denver, CO, November 2015.

- "Knowing Our Waters: Citizen Science and Digital Storytelling," Presented at the annual meeting 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," Presented at the annual meeting 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,"

  Presented at the biennial 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," Presented at the annual meeting of American Anthropological Association. Chicago, IL, November 2013.
- 2013 "Promising Data for Public Empowerment: Grassroots Water Monitoring for Pollution from the Natural Gas Industry," Presented at the annual meeting 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." Co-presented with Abby J. Kinchy at the annual 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."

  Co-presented with Abby J. Kinchy at the annual meeting 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," Presented at the 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," Presented at the annual meeting of the Society for Applied Anthropology, Denver, CO, March 2013.
- "Sociopolitical Dynamics of Volunteer Watershed Monitoring in the Marcellus Shale Natural Gas Boom," Presented at the Boom & Bust Symposium, Duquesne University, Pittsburgh, PA, November 2012.
- 2012 "Frames, Layers, and Subjective Ecologies: Cinematic Constructions and Geographic Information Systems," Presented at the High Tech Heritage Conference, University of Massachusetts, Amherst, MA, May 2011.
- "Ways of Practice in Participatory Sensing: Indigenous Knowledge Systems and Culturally Situated Design," Presented at the Annual Meeting of Society for Social Studies of Science, Cleveland, OH, November 2011.
- "Social Networking Nature: Publicly Defined Environments in Privatized Participatory Sensing," Presented at the annual meeting of American Anthropological Association, Montreal, QC, November 2011.
- "Culturally Situated Sensing: Participatory Design and Citizen Sensing in Native American Communities," Presented at the Political Sociology of Science and Technology Conference, Rensselaer Polytechnic Institute, Troy, NY, April 2011.

## **OTHER CONFERENCE & WORKSHOP ACTIVITIES**

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

- ExtrACTION Topical Interest Group, Conference Special Track Convener, Society for Applied Anthropology, Pittsburgh, PA. March, 2015.
- 2015 "Building an Appalachian Agenda for Economic and Environmental Justice," Roundtable Discussant, Society for Applied Anthropology, Pittsburgh, PA. March, 2015.
- 2014 "Grassroots Network Workshops." Invited workshop participant. Cary Institute of Ecosystem Studies. Millbrook, NY. November 2014.
- "Fracking in Pennsylvania." Discussion Panelist. NEW Leadership Institute. Center for American Women and Politics, Chatham University, Pittsburgh, PA. June, 2014.
- 2014 "Analyzing appropriate data, and what should be the roadmap for the future." Discussion panelist. Shale Network Workshops, Penn State University. May, 2014.
- "Conceptualizing Environmental Exposure: From Data to Decisions." Invited workshop participant. Drexel University Center for Science, Technology & Society and the Chemical Heritage Foundation. Philadelphia, PA. April, 2014.
- 2014 "Infrastructural Worlds: A Workshop on Ethnographic Studies of the Built Environment." Invited workshop participant. Duke University, Cultural Anthropology Department. Durham, NC. March, 2014.
- "Extraction Roundtable: Anthropology, Extractive Industries, and Unconventional Energy."
  Discussion panelist. Annual 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, Annual Meeting of the Association for Environmental Studies and Sciences. Duquesne University, Pittsburgh, PA. June, 2013.

## **MEDIA COVERAGE**

- Schiffman, Richard. "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.
- Thomason, Robert. "Collection of 'Big Data' by Citizens Helps Shape Debate on Marcellus Shale Fracking," *Bloomberg Water Law & Policy Monitor*. January 17, 2014.

#### **TEACHING EXPERIENCE**

## Rensselaer Polytechnic Institute, Science and Technology Studies

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

### **Clark University, Culture Studies and Communication**

Image Theory (Spring semesters 2005-2009)

Animation in Film Seminar (Spring 2009)

Computer Mediated Communications (Fall semesters 2005-2008)

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

### **Clark University, Visual and Performing Arts**

Studio Art Senior Thesis Seminar (Fall 2009)

Digital Imaging (Fall & Spring semesters 2004-2009)

Introduction to Photography (Fall & Spring semesters 2002-2008)

### School of the Museum of Fine Arts

Electronic/Kinetic Sculpture (Fall 2004, Spring 2005, Spring 2006)

(TA) Advanced New Media Seminar (Fall 2003, Spring 2004)

(TA) Remade, Recycled, Reconfigured (Fall 2003)

# PROFESSIONAL MEMBERSHIP/AFFILIATIONS

Society for Social Studies of Science
Association for Environmental Studies & Sciences
American Sociological Association (Section on Science Knowledge and Technology)
American Anthropological Association (Section on Anthropology & Environment)
Society for Applied Anthropology (ExtrACTION Topical Research Interest Group)

# PROFESSIONAL SERVICE & COMMUNITY OUTREACH

2015-present	Technical Advisor
2014-present	Program Committee, Society for Applied Anthropology
2012-present	Scientific Advisory Committee, Sierra Club New York Water Sentinels
2013-present	Water Monitoring Coordinator Group, Foundation for PA Watersheds
2013-2015	Planning Committee, Penn State University Shale Network
2013-2014	Publications Committee, Science Knowledge and Technology Section, American
	Sociological Association
2012-2013	Member, Sustainability Task Force, RPI
2006-2009	Faculty Advisor, Caesura Literary Magazine, Clark University
2006-2009	Faculty Advisor, Media Arts Residence House, Clark University