

Niklas Lollo

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EDUCATION

PhD Energy & Resources

2017-2020

University of California, Berkeley

"From the Inside-Out: Evaluating Data-Centric Private Governance"

Dissertation Committee: Dara O'Rourke (Chair), David Anthoff, Massimo Mazzotti

Designated Emphasis: Science & Technology Studies

MS Energy & Resources

2015-2017

University of California, Berkeley

"Productivity, Profits, and Pay: A Field Experiment Analyzing the Impacts of Compensation Systems in an Apparel Factory"

Thesis advisors: Dara O'Rourke and Max Auffhammer

BA Economics

2008-2012

University of California, Berkeley

PEER-REVIEWED JOURNAL PAPERS [Google Scholar]

- 3. <u>Niklas Lollo</u> and Dara O'Rourke, "Factory benefits to paying workers more: The critical role of compensation systems in apparel manufacturing", *PLoS ONE* **15(2)**, e0227510 (2020).
- 2. Frances Moore, James Rising, <u>Niklas Lollo</u>, Cecilia Springer, Valeri Vasquez, Alex Dolginow, Chris Hope, and David Anthoff, "Mimi-PAGE, an open-source implementation of the PAGE09 integrated assessment model", *Scientific Data* 5, 180-187 (2018).
- 1. Dara O'Rourke and Niklas Lollo, "Transforming Consumption: From Decoupling, to Behavior, to Systems Change for Sustainable Consumption", Annual Reviews of Environment and Resources 40, 233–259 (2015).

PENDING MANUSCRIPTS

• <u>Niklas Lollo</u> and Dara O'Rourke, "The Impacts of the Higg Facility Environmental Module (FEM) on Apparel Factory Practices and Performance", In Preparation.

AWARDS & GRANTS

- 2017 NSF Graduate Research Fellowship *Honorable Mention* (\$130K)
- 2016 NSF NRT Data Science for the 21st Century Fellowship (\$30+K)
- 2016 UC Berkeley Institute for Research on Labor and Employment (\$15K, PI: Dara O'Rourke)

- 2015 Charles K. Birdsall Fellowship (\$10K)
- 2015 Precourt Fellowship for Behavior, Energy, and Climate Change Conference
- 2015 C&A Foundation (\$163K, PI: Dara O'Rourke)
- 2015 Tides Foundation (\$59K, PI: Dara O'Rourke)
- 2015 UC Berkeley Center for Responsible Business (\$30K, PI: Dara O'Rourke)
- 2010 Dean's List
- 2009 National Champion University Club Soccer

RESEARCH EXPERIENCE

PhD Student 2017-present

University of California, Berkeley

- Living Wage intervention
 - Developed proposal with an apparel company for 2-year, multi-country, and multi-factory study to raise worker wages to a living wage. (Successful, yet declined)
- Empirical analysis of 2-year multi-stakeholder wage intervention in Thai clothing factory.
 - Panel data regression analysis using Difference-in-Difference design.
 - Four site visits working directly with factory and brand managers. One visit to brand headquarters.
 - Other skills: Project management, research design, and spreadsheet modeling.
 - Paper published in PLoS ONE
- Evaluation of Sustainable Apparel Coalition's Higg Index
 - Panel data analysis of 15,000 factory audits
 - Eight factory visits and interviews in Bangladesh and China
 - Survey of 80 factories
 - Other skills: Project management, research design, presentation.
 - Paper in preparation
- Hawaii Wildfire Interactive Webapp
 - Designed and programmed an RShiny App that maps historical wildfires, risk assessments, and provides fire preparedness guidance.
 - Worked with Hawai'i Wildfire Management Organization.
- Real-Time Health Monitoring
 - Worked with Fair Tech Collective
 - Designed and programmed dynamic RShiny App for citizen-science data analysis.
 - Project aiming to link Bay Area refinery pollution data to personal health outcomes.
- Open-source programming of PAGE integrated assessment model
 - Transcription of mathematical model from published papers.
 - Programming in Julia with Mimi framework.
 - Paper published in Scientific Data
- Cool Climate Network
 - Geographically weighted regression of US carbon footprint data at census block group level.

Research Associate 2013 – 2015

University of California, Berkeley

- Co-authored paper in Annual Reviews of Environment and Resources on sustainable consumption.
- Helped secure over \$200,000 in grants from C&A Foundation, Tides Foundation, and Center for Responsible Business
- Conducted literature review on data science for supply chain sustainability in support of a paper in Science
- Research and implementation for World Economic Forum Global Action Committee projects on behavior change and sustainability
- Devised and assisted pilot experiments on sustainable consumer behavior using GoodGuide platform

Research Assistant

2011 - 2012

University of California, Berkeley

• Conducted consumer sustainability literature reviews, which supported a Boston Review article and a Journal of Industrial Ecology article

PRESENTATIONS & PANELS

- 9. Fewer Rules, Better Governance? Understanding New Tactics in the Uncertain Quest for Clothing Global "Sustainability", CSMTS Graduate Student Symposium, UC Berkeley, 5/19
- 8. Industrial Policy and Green Goods, Key Issues in the Current Global Economy, UC Berkeley, 4/19, Panel Discussant
- 7. Hawai'i Wildfire Webapp: Building Capacity Through Data Visualization, Hawai'i Wildfire Summit: South Kohala Coast, HI, 5/18
- 6. Hawai'i Wildfire Webapp, Berkeley Institute for Data Science Faire: Berkeley, CA, 5/18, Poster
- 5. Hawai'i Wildfire Webapp, DS421 Annual Symposium: Berkeley, CA, 5/18
- 4. The Many Hands in Sustainable Clothes, Bay Area High School Green Careers Conference: Berkeley, CA, 4/18
- 3. The Role of Business in Mitigating Climate Change, Earth Action Initiative: Berkeley, CA, 4/18, Facilitator
- 2. Identifying the Potential for Impact of Higg FEM, SAC Member Meeting: Bangalore, India, 5/17
- A Historical Account of Genuine Accounts, Degrowth Conference: Budapest, Hungary, 8/16, Declined

DEPARTMENTAL WORK

- 2019-2020, Student Advocacy Committee on Equity and Inclusion
 - Helped change admissions process to advance equity goals.
 - Coordinated peer mentor program.

- 2018-2019, Master's Curriculum Redevelopment
 - Successful proposal to redesign 4-course master's sequence on 5-person team.
- 2016-2020 Board Member: Energy & Resources Group Alumni Network
 - 2018-: Initiated and grew LinkedIn and Facebook groups to 300 and 150 members.
 - 2016-2018: Developed alumni-student mentoring program that serves 15-20 students annually.
- 2016-2020, Peer Mentor
 - Supported four graduate students transition to and navigate UC Berkeley.
- 2017-2019, ERG Development Committee
 - Coordinated two Big Give donor-calling events.
- ERG Admissions Committee (2x-years withheld for privacy)
- 2015-2016, ERG Student Diversity Committee
 - Led design and coordination of first-ever Equity, Inclusion & Diversity training for all staff, researchers, students, and faculty members.
 - Wrote highly-commended NSF INCLUDES proposal to advance diversity in STEM fields.

TEACHING

UC Berkeley 3 semesters: 64 undergraduates, 16 graduate students

• Spring 2020

History C184D: Human Contexts and Ethics of Data Science Head Graduate Student Instructor

- Led weekly meetings of the teaching team (9 GSIs & 2 professors).
- Developed grading rubrics for final projects and exams.
- Edited and developed weekly teaching curricula.
- Administrative work for course with 372 students.
- Taught one section with 22 students.

• Fall 2019

History C184D: Human Contexts and Ethics of Data Science Graduate Student Instructor - 42 students

• Spring 2019

IAS 250: Data Science for the 21st Century Partner Project Course Graduate Student Instructor - 16 students

- Curriculum, rubric, and syllabus development.
- Feedback on assignments and presentations.
- Organized guest speaker series.

• Spring 2012

ERG 98/198: History of Economic Thought

Creator & Facilitator - 16 students

• Fall 2011

Sociology 98/198: Sociology of YouTube

Facilitator - 30 students

CERTIFICATIONS, TRAININGS, & WORKSHOPS

- 2020 Application in review Certificate in Teaching and Learning in Higher Education
- 2019-2020 Teaching & Mentoring
 - Syllabus & Course Design (Alternative)
 - How Students Learn
 - Creating Inclusive Classrooms
 - Creating and Using Grading Rubrics
 - Developing a Statement of Teaching Philosophy
 - Peer Review of Statement of Teaching Philosophy
 - Teaching Observation by Faculty Member
 - Online ethics course
- 2019 California Science & Technology Studies Summer Retreat
- 2018 Contemplative Environmental Practice
- 2018 DS421 Science Communication Workshop
- 2017 Degrowth & Environmental Justice
- 2017 Data Carpentry
- 2016 Graduate Assembly Equity & Inclusion Certificate
- 2015 Future Earth Research Co-design Training
- 2015 Python, R for Data Science
- 2015 Computational Text Analysis
- 2015 Spatial Analysis in R, QGIS & ArcGIS

SYNERGISTIC ACTIVITIES

- Data Science Consultant
 - D Lab, UC Berkeley, 2018-2019: Supported students and faculty with coding in R, research design, and analysis.
- Journal Referee

- Consumer Behaviour, Cleaner Production, Ecological Economics

• Mentor

 Environmentorship, UC Berkeley, 2019: Mentored one environmental science undergraduate from an underrepresented group.

Volunteer

- Chaparral House, 2019-: Led exercise activities and spent time with nursing home residents.
- Insight Retreat Center, 2019-: Volunteer at monthly workdays
- Conference volunteer: Society for the Advancement of Socio-Economics (2016), Slow Money (2011)
- Radio Producer (KALX, UC Berkeley, 2017): Produced four episodes of Method to the Madness about innovations at the interface between society and environment
- Organizer (Berkeley Flextime Initiative): Member of core organizing committee that successfully pushed for flexible work legislation in Berkeley

• Meditation

- 2019: Hosted weekly neighborhood meditations and discussions with 3-12 participants
- Insight Retreat Center: 3 retreats of 4-7 days
- Vipassana: 3 retreats of 10 days; volunteer for 2 other retreats
- Spirit Rock: 1 retreat of 3 days

• Dance Performances

- 2019: UC Berkeley Dance Showcase
- 2018: Joe Goode Annex, The Exploratorium, Fort Mason, Earth Action Initiative Conference (Choreographer), Pulitzer Arts Foundation (Stagehand)
- 2017: Pro Arts Gallery, The Octopus Literary Salon, 63 Bluxome St.

REFERENCES

Dr. Dara O'Rourke orourke@berkeley.edu

Associate Professor, Environmental Science, Policy, and Management University of California, Berkeley

Dr. David Anthoff anthoff@berkeley.edu

Assistant Professor, Energy & Resources Group

University of California, Berkeley

Dr. Margarita Boenig-Liptsin mboenigliptsin@berkeley.edu - Teaching Reference

Lecturer, Division of Data Sciences

University of California, Berkeley

Dr. Massimo Mazzotti mazzotti@berkeley.edu

Professor, History of Science

University of California, Berkeley

 ${\bf Dr.\ Richard\ Norgaard\ norgaard@berkeley.edu}$

Professor Emeritus, Energy & Resources Group University of California, Berkeley

COURSES

• Graduate Methods

- Econometrics: Multiple Equation Estimation
- Reproducible and Collaborative Data Science
- Spatial Data Analysis
- Social and Ecological Modeling
- Environmental Problem Solving
- Social Science Research Methods

• Graduate Content

- Sociology of Globalization
- Climate Change Economics
- Environmental Engineering
- History of Quantification
- Energy & Society
- Science & Technology Studies
- Biopolitics

• Graduate Other

- Science and Technology Studies Research Seminar
- Pedagogy
- Linear Algebra and Differential Equations
- Academic Writing for Graduate Students
- Book editing with Professor Richard B. Norgaard
- Readings in Theravada Texts (at the Institute for Buddhist Studies with Gil Fronsdal & Diana Clark)
 - * 2019 Liberation and the Path to Liberation
 - * 2018 Connected Discourses

• Undergraduate Economics

- Applied Econometrics to Development Projects
- Econometrics
- Behavioral Economics
- International Monetary Economics

• Undergraduate Political Economy

- Classical Political Economy
- Ecological Economics
- The Chinese Economy
- Environmental Justice
- Development Studies
- Capitalisms and Cultures
- Individual Morality and Social Justice

OTHER WORK EXPERIENCE

Regulatory Analyst

2013

Advanced Energy Economy, San Francisco

- Expanded backend content, surveyed members and assisted design of PowerPortal.
- Data compilation and chart preparation for presentation of advanced energy industry data to Midwestern PUC commissioners.
- Research and writing for article on utility energy-efficiency behavior-change programs.
- Market research, due-diligence, quality assurance and roll-out preparation for DocketDash.
- Analyzed energy markets, state regulation and industry trends for internal and external use.

Economic Justice Intern

Winter 2012-2013

The Agenda Project, New York, NY

• Produced video content and managed TopWonks database.

Community Development Coordinator

2011

B Lab, San Francisco, CA

- Developed pilot program for prospect outreach. Performed initial due-diligence on companies and managed data entry into Salesforce.
- \bullet Managed 1.5K prospect accounts. Outreach to 1K companies to secure 5 certifications.
- Data-driven presentation to CEO Jay Coen Gilbert.
- Assisted development of university outreach program.

English Tutor 2010

OY English, Shenzhen, People's Republic of China

- Taught preparatory courses for SAT and GRE to 20 students.
- Personal tutor.