

# TRISHA R. SHRUM

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Earth Lab of the University of Colorado

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## Academic Appointments

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### University of Colorado at Boulder, 2016 - Present

Post-Doctoral Research Associate, Earth Lab at the Cooperative Institute for Environmental Sciences (CIRES)

## Education

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### Harvard University – John F. Kennedy School of Government, 2016

- ◇ Ph.D. in Public Policy, specializations in Environmental Economics & Behavioral Economics
- ◇ Dissertation: “Behavioral and Experimental Insights on Consumer Decisions and The Environment”
- ◇ Committee: Joseph Aldy, David Laibson, Todd Rogers, and Robert Stavins

### Yale University – School of Forestry and Environmental Studies, 2009

- ◇ Masters of Environmental Science with a focus on Environmental Economics
- ◇ Thesis: “Distinguishing Development in Carbon Dioxide Modeling”
- ◇ Thesis Advisor: Robert Mendelsohn

### The University of Kansas, 2006

- ◇ BA in Environmental Studies, with Honors
- ◇ BS in Ecology and Evolutionary Biology
- ◇ Minor in Economics

## Research Papers

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“Experiments in Ranching: Rain-Index Insurance and Investment in Production and Drought Risk Management,” in preparation.

“The Salience of Future Climate Impacts and the Willingness to Pay for Climate Change Mitigation,” working paper.

“Gasoline Price Volatility & Consumer Welfare: An Experimental Approach,” with Joe Aldy,

working paper.

“Managing Climate Risks on the Ranch with Limited Drought Forecasts,” lead author with co-authors William Travis, Travis Williams, and Evan Lih, in review at *Climate Risk Management*.

“Perceptions and the Energy Efficiency Gap,” Dissertation Chapter, 2016.

“Distinguishing Development in Carbon Dioxide Modeling,” Masters’ Thesis, 2009.

“Hypothetical Revealed Preference in Water Pollution Management,” Honors thesis, 2006.

## **Invited Conference and Workshop Presentations**

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**Trisha Shrum.** “Drought Risk Insurance and Ranching R (DRIR-R) Experimental Model.” Led Workshop and Presentation at the Western Water Assessment, North Central Climate Science, and Northern Plains Climate Hub Retreat. Central Plains Experimental Range, Colorado. June 22, 2017.

**Trisha Shrum** and William Travis. “Earth Lab’s Drought and PRF Model.” Presenter and co-organizer of the Modeling Rangeland Livestock, Drought, and PRF Insurance Workshop at the University of Wyoming. February 3, 2017.

**Trisha Shrum** and Jill Kubit. “DearTomorrow, a promise to the future about climate change.” Presentation at “Inspiring the Public: Climate Education & Collaboration” session of the MIT Crowds and Climate conference. September 29, 2016.

**Trisha Shrum.** “Building Public Support for Arctic Renewable Energy: Lessons from Behavioral Science.” Invited speaker at Arctic Circle Conference Plenary Session, November 2, 2014.

**Trisha Shrum.** “Mind the Gap: Expectation Biased Perception and the Energy Paradox.” Research Sketch at the Camp Resources Workshop. August 5, 2013.

Todd Rogers and **Trisha Shrum.** “Mind the Gap: Self-Perpetuating Perceptions and the Energy Efficiency Gap.” Research presentation and conference paper at the Conference on Behavioral and Environmental Economics at the University of Toulouse. October 12, 2012.

Weslyne Ashton, Ariana Bain, and **Trisha Shrum.** “Life-cycle based comparison of the reuse of agricultural residues as fuel and feedstocks in South India.” Poster presentation at the International Society for Industrial Ecology Conference, Lisbon, Portugal, June 21-24, 2009.

## Policy Papers

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“The Carbon Tax.” *A Renewable World: Energy, Ecology, Equality* by H. Girardet & M. Mendoca, book section, 2009.

“Additional Costs of the Proposed Holcomb Coal Plant Expansion under the Lieberman-Warner Bill (S.2191),” policy analysis prepared for the Kansas state legislature, 2008.

“Greenhouse Gas Emissions: Policy and Economics,” white paper prepared for the Kansas Energy Council and published by CarbonTax.org, 2007.

## Grants

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NSF Dynamics of Coupled Natural and Human Systems proposal, “Drought, Ranching, Insurance, and the Ecohydrological Response (DRIER) of Coupled Human Natural Systems in U.S. Western Rangelands.” Principal Investigator (submitted in 11/2016: Rated “Competitive” but not granted funding, under revision for fall 2017).

NSF Decision, Risk and Management Sciences proposal, “Grazing Uncertainly: Decision Making on the Ranch in the Face of Drought Risk.” Co-Principal Investigator, submitted with PI William Travis in August 2017.

FORMAS (Sweden) research proposal, “Closing the psychological distance to future climate impacts,” submitted jointly with Aaron Malthais, Björn Nykvist, Matthew Osborne, and Åsa Persson in August 2017.

KR Foundation (Denmark) Grant, 2016-2018

Harvard GSAS Dissertation Completion Fellowship, 2015-2016

Foundations of Human Behavior Research Grant, 2015

Harvard Office of Sustainability Grant, 2015

Harvard Environmental Economics Program Research Grant, 2015

Harvard Real Estate Academic Initiative Fellowship, 2011

Tropical Resources Institute Fellowship, 2008

## Honors

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Grist 50: Top Innovative Environmental Leaders, 2017

MIT Climate CoLab “Shifting Behavior for a Changing Climate” Winner, 2016

Top Creative in the Climate Issue of Origin Magazine, December 2015

Rising Star in Renewable Energy & Climate Change, Arctic Circle, 2014

## **Professional Memberships**

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Association of Environmental and Resource Economics, 2017-Present  
Socio-Environmental Immersion Program with SESYNC, 2016-2017  
Analyst Group of the Analyst Institute, 2015-Present  
Climate Advocacy Lab, 2015-Present  
American Economic Association, 2009-Present  
Phi Beta Kappa Society, 2006-Present  
Behavioral Insights Group, Harvard University, 2014-2016  
Harvard Environmental Economics Program Pre-Doctoral Fellow, 2009-2016

## **Professional Service**

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Reviewer for the *Energy Journal* and the *Journal of Environmental Economics and Management*, 2017  
Interview Committee for the Associate Director for Science of CIRES, 2017  
Advisory Committee for CU Boulder Masters Student, Travis Williams, 2017  
Research Intern Mentor for CU Earth Lab Project Risk Undergraduates, 2016-2017  
Harvard President Faust's Complementary Mechanisms Advisory Committee, 2015

## **Teaching Experience**

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### **Teaching Fellow**, Harvard University

Fundamentals of Environmental Economics and Policy (Professor Robert Stavins), Spring 2015  
Energy Policy Analysis (Dr. Henry Lee), Fall 2014  
Economic Analysis of Public Policy (Professor Joseph Aldy), Spring 2013  
Economics of the Environment, Natural Resources, and Climate Change (Professor Martin Weitzman), Spring 2011

### **Section Leader**, Harvard University

Principles of Economics (Professor Greg Mankiw), Fall 2011- Fall 2013

### **Teaching Fellow**, Yale School of Forestry and Environmental Studies

Economics of Sustainable Development (Professor Gary Yohe), Spring 2009  
Economics of Pollution (Professor Robert Mendelsohn), Fall 2008

## **Relevant Work Experience**

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### **Co-Founder of DearTomorrow**, 2014-present

- ◇ Covered by Living on Earth (Public Radio International), Vox, Al Jazeera Plus, Climate Central, Yale Climate Communications, Origin, Sierra, TakePart, TED and Mongabay.

- ◇ Former Director, currently serving as the Chair of the Advisory Council

#### **Research Assistant, 2010-2015**

- ◇ Research assistant to Hunt Allcott, Todd Rogers, and Joseph Aldy

#### **Research Consultant for Mark Parkinson, Governor of Kansas, 2008**

- ◇ Assisted in researching a book by the Governor on long-term policy planning

#### **Research Fellow at the Kansas Energy Office, 2007**

- ◇ Advised the directors of the Energy Office, the Energy Council, and the Lieutenant Governor on economic, scientific, and policy issues related to climate change
- ◇ Assisted in organizing multi-stakeholder policy development meetings

### **Technical and Analytical Skills**

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Environmental economics, behavioral economics, and experimental economics (expert)

Econometric analysis (advanced)

Field, lab, and online experimental planning, management and analysis (advanced)

Machine learning analysis (beginner)

Coding Languages: R (intermediate/advanced), Stata (intermediate), Python (beginner)

High performance and cloud computing (beginner)

### **Civic Leadership, Public Outreach and Volunteer Work**

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Featured in Sierra Magazine, 2017

Invited speaker at Switch in Boulder, CO, 2016

Volunteer organizer for the Behavioral Exchange conference at Harvard, 2016

[Editorial in Lawrence Journal World](#) on the Efficiency Kansas Program, 2011

Interview on CBC As it Happens – “Carbon Taxes Around the World,” 2008

Political campaign volunteer, 2008 - Present

### **References (Contact Information Available Upon Request)**

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Joseph Aldy

Harvard Kennedy School

David Laibson

Harvard University

Todd Rogers

Harvard Kennedy School

Robert Stavins

Harvard Kennedy School

William Travis

University of Colorado

