

## **Kathryn Nadine Vasilaky**

[katyavasilaky.com](http://katyavasilaky.com)

[knv4@columbia.edu](mailto:knv4@columbia.edu)

### **EDUCATION**

Ph.D. Agricultural and Resource Economics, University of Maryland, 2011

Title: "Development, Technology Adoption and Social Networks"

Certificate of Demography, Maryland Population Research Center, 2010.

B.A. Mathematics and Economics, Columbia University 2003

### **POSITIONS**

Post Doctoral Researcher, International Research Institute for Climate and Society, Columbia University 2015 - present

Post Doctoral Fellow, Earth Institute, Columbia University September 2013-2015

### **FIELDS OF INTEREST**

Development and Behavioral Economics: Social Networks, Group Learning, Gender, and Agricultural Technology Adoption using Randomized Controlled Trials, Lab Experiments in the Field, and Computational Methods.

### **GRANTS**

Co-Principal Investigator, Bill and Melinda Gates Foundation, Multimodal Satellite Rainfall Measurement for Index Insurance, \$100,000, 2016-2018

Co-Principal Investigator, World Bank, International Finance Corporation, Evaluating the Timeliness of Disaster Response \$200,000, 2015-2017

Principal Investigator, Earth Clinic Grant, Columbia University, SMS Based System for Rainfall Reports \$31,000, 2015-2017

Principal Investigator, Cross-Cutting Initiative Grant, Columbia University, India Water Depletion Study \$32,000, 2014-2016

PhD Thesis, World Bank DECRG (Markus Goldstein) Funding, \$20,000, 2009-2010

### **TEACHING**

Columbia University, Earth Institute, Co-Instructor (with Joel Cohen), SDEV W2300 Challenges of Sustainable Development, W4242 Introduction to Data Science, Spring 2016

Statistics.com, An Introduction to Queries and Data Munging in PostgreSQL and R, March 2013

U.S. Naval Academy, Annapolis, MD, Adjunct Professor, Intermediate Statistics, Spring 2011

### **GUEST LECTURES**

Columbia University, Statistics Department, Guest Lecturer, W4242 Introduction to Data Science, November 2013

### **ASSISTANT TEACHING**

University of Maryland, College Park, Graduate Teaching Assistant, AREC620-Dynamic Programming and Optimization (Required First Year PhDs), 2008

University of Maryland, College Park, Lab and Grading, ECON200-Microeconomics (Undergraduate Microeconomics), 2007

### **ADDITIONAL TEACHING**

Girls Who Code, Instructor, Programming in Python, Summer 2016

Python Workshops: Network Analysis, Webscraping, Data Mining, Neural Networks

### **ADVISEES**

Ishita Singh Kapur, Masters Research Assistant, Columbia University 2014-present

Eunice Kakor, Undergraduate Research Assistant, Columbia University, 2015-present

Mohak Mangal, Research Assistant, Jameel Poverty Action Lab 2013-2015

### **PREVIOUS POSITIONS**

Visiting Scholar, Toulouse School of Economics, Institute for Advanced Study Fall 2014

Research Professor, Maryland Population Research Center, University of Maryland, 2012-2013

Consultant, Development Prospects Group, Washington DC 2012-2013

Consultant, Development Economics Research Group, Washington DC 2009-2010

Research Associate, Clinton Health Access Initiative, Uganda 2009-2010

Assistant Economist, International Research, Federal Reserve Bank of New York 2003-2005

### **PUBLICATIONS**

Vasilaky Kathryn and Kenneth Leonard (2015), “As Good as the Networks They Keep?: Improving Outcomes through Weak Ties in Rural Uganda” Forthcoming, *Economic Development and Cultural Change*.

Vasilaky, Kathryn, Rahel Diro, Geoff McCarney, and Daniel Osgood (2016), “Scaling the Demand for Index Insurance,” Revise and Resubmit, *Journal of Development Studies*.

Vasilaky, Kathryn (2013), “Female Social Networks and Farmer Training: Can Randomized Information Exchange Improve Outcomes?” *American Journal of Agricultural Economics*, 95(2):376-383.

### **UNDER REVIEW**

Buehren, Niklas, Joao Montalvao, Markus Goldstein, Kenneth Leonard and Kathryn Vasilaky (2016), “Girls’ Empowerment, Sibling Rivalry, and Competitiveness: Evidence from a Randomized Control Trial and a Lab Experiment in Uganda.”

Vasilaky, Kathryn, Sofia Martinez, Radost Stanimirova, and Daniel Osgood (2015), “Informal Social Networks in Index Insurance: Randomizing Social Distance in Group Insurance,” International Research Institute for Climate and Society, Columbia University.

Leonard, Kenneth, Kathryn Vasilaky, Magda Tsaneva, and Jeffrey Flory (2015), “Towards a Deeper Understanding of Female Competitiveness and the Gender Gap: Evidence from Patrilocality and Matrilocality Cultures” University of Maryland, College Park, Maryland.

Vasilaky, Kathryn and Asif Islam (2015), “By Team or By Tournament? Sharing Information Among Female Farmers in Rural Uganda.” University of Maryland, College Park, Maryland.

## RESEARCH REPORTS

Montalvao, Joao, Markus Goldstein, Kenneth Leonard and Kathryn Vasilaky (2016), “Girls’ Empowerment, Sibling Rivalry, and Competitiveness: Evidence from a Randomized Control Trial and a Lab Experiment in Uganda.” World Bank Research Paper Vol. 12, No. 33

Vasilaky, Kathryn and Kenneth Leonard (2015), “Policy Implications of Social Networks and Learning,” Gender Innovation Lab Policy Brief, World Bank Report Number 103850.

## WORKING PAPERS

Vasilaky, Kathryn (2016), “An Iterative Tikhonov Approach to the Inverse Problem,” Columbia University Academic Commons.

Shirley, Kenny, Kathryn Vasilaky, Helen Greatrix, and Daniel Osgood (2015), “Hierarchical Bayesian Estimation of Weather Index Insurance,” Columbia University Academic Commons.

Vasilaky, Kathryn and Michelle Brock (2014), “Traversing the Landscape of Economic Power Calculations,” Columbia University Academic Commons.

## ONGOING RESEARCH

Principal Investigator, Group versus Individual Incentives in Conserving Water? Columbia University, Haryana Irrigation Management Institute, Haryana, India. With Katherine Alfredo and Aurélie Harou. Dec 2014-present.

Co-Principal Investigator, Timely Disaster Response and its Impacts on Poverty in the Philippines. Columbia University. With Aurélie Harou and Chia Ying Lee. August 2015-present.

Co-Principal Investigator, Training through Digital Videos: Self Efficacy or Risk? Jameel Poverty Action Lab South Asia and Digital Green, Bihar, India. With Kentaro Toyama and Dean Karlan. May 2012-present. <https://www.socialscienceregistry.org/trials/313>

Co-Principal Investigator, Multimodal Satellite Rainfall Measurement with Sensors and Crowd Sourced Data. Ground Truth Data and Columbia University. With Ralph Lin.

## PRESENTATIONS

Seminar Speaker, “An Iterative Approach to the Tikhonov Inverse Problem with a Stopping Rule,” New York University, Applied Statistics, PRIISM Seminar, scheduled 12/7/16

Seminar Speaker, “Learning Digitally: Evaluating the Impact of Farmer Training via Mediated Videos,” Paris School of Economics, Paris, France, 4/15/16.

Speaker, “Towards a Deeper Understanding of Female Competitiveness and the Gender Gap: Evidence from Patrilocal and Matrilocal Cultures,” CSAE Conference 2016: Economic Development in Africa, St Catherine's College, Oxford University, 3/20/16.

Speaker, “An Iterative Approach to the Tikhonov Inverse Problem with a Stopping Rule,” Python Data, New York Academy of Medicine, 11/11/15.

Seminar Speaker, “Learning Digitally: Learning Digitally: Evaluating the Impact of Farmer Training via Mediated Videos?” at the Northeast Development Conference, Brown University, 11/7/15-11/8/15.

Speaker, “Childhood, Girlhood, Motherhood: Is Competitiveness Socialized?” at the Experimental Economics Association, Dallas, Texas, 10/22/15-10/23/15.

Speaker and Visitor “Informal Risk Sharing and Formal Insurance: Substitutes or Complements?” Microsoft Research Cambridge, MA, 8/17/15-8/22/15.

Seminar Speaker, “As Good as the Networks They Keep? Mechanisms of Information Exchange in Social Networks in Rural Uganda,” Microsoft Research New York, NY, 2015 4/6/15.

Seminar Speaker, “Informal Networks within Index Insurance: Randomizing Social Distance in Group Insurance,” Paris Environmental and Economics Seminar, Université Paris 1 Panthéon-Sorbonne, 11/6/14.

Seminar Speaker, “Informal Networks within Index Insurance: Randomizing Social Distance in Group Insurance,” Institut National de la Recherche Agronomique (INRA), The French National Institute for Agricultural Research UMR LAMETA, Montpellier, France, 12/19/14.

Speaker, “As Good as the Networks They Keep? Mechanisms of Information Exchange in Social Networks in Rural Uganda,” CSAE Conference 2015: Economic Development in Africa, St Catherine's College, Oxford University, 3/24/15.

Chair and Speaker of Networks Session, “Informal Networks within Index Insurance: Randomizing Social Distance in Group Insurance,” at SEEDEC Choice Lab, Norwegian School of Economics, Bergen, Norway, 12/6/15.

Speaker, “Informal Networks within Index Insurance: Randomizing Social Distance in Group Insurance,” at the Northeast Universities Development Consortium, Boston University, 7/8/15.

Chair, Postdoctoral Data Science Panel at Columbia University, with Christopher Wiggins, Columbia Medical Center, 9/17/2014.

Speaker, “As Good as the Networks They Keep? Mechanisms of Information Exchange in Rural Uganda,” at the Workshop on Information in Networks, Stern Business School, New York University, New York, New York, 9/2012.

Seminar Speaker, “Mothers, Daughters and Sisters; Is Competitiveness Socialized?” at the Development Economics Research Group, World Bank, Washington, DC, 9/2011.

Seminar Speaker, “Randomizing Social Networks in Rural Uganda: New Links do Improve Outcomes,” at the Yale Development Seminar, New Haven, CT, 10/2010.

## **FIELD WORK**

Dominican Republic (Northern) Group Insurance and Informal Networks. International Research Institute for Climate and Society, Columbia University, January 2014 and September 2016.

Philippines (Manila) The Effects of Disaster Response on Poverty and Inequality. Earth Institute, Columbia University and World Bank Philippines, September 2015.

India (Punjab and Haryana) Water Measurement and Water Savings. Earth Institute, Columbia University and Haryana Irrigation Management Institute, May 2015 – March 2016.

Senegal (Koungheul) and Honduras (Tegucigalpa) The Effects of Group Size and Information in Index Insurance. International Research Institute for Climate and Society, Columbia University, May 2015.

Indonesia (Indramayu) Weather Uncertainty and Index Insurance in El Nino Years. International Research Institute for Climate and Society, Columbia University, June 2014.

India (Bihar) Video Based Extension, Self Efficacy, and Perception of Risk. Jameel Poverty Action Lab, Bihar, India May 2014 and May 2015.

Ethiopia (Northern) Weather Index Insurance. International Research Institute for Climate and Society, Columbia University, September 2013.

Uganda (Kampala) Improving Female Adolescent Outcomes. World Bank Development Economics Research Group, BRAC, and Nike Foundation, August-September 2012.

Malawi (Selemani) Gender and Competition in Matrilocal and Patrilocal Villages. National Science Foundation and University of Maryland, August-September 2011.

Uganda (Bukedea) “Evaluating the Feasibility of Introducing Malaria Diagnosis in the Private Sector.” Clinton Health Access Initiative and Harvard School of Public Health. Supervisor: Jessica Cohen, June 2009-April 2010.

Tanzania (Bududa) “Markets for Cotton By-Products.” World Bank Development Prospects Group. Supervisor: John Baffes. February 2009.

Uganda (Oyam and Bukedea) “Female Farmer Training and Agricultural Productivity.” World Bank Economics Research Group (dissertation). Supervisor: Markus Goldstein, January 2009-April 2010.

## **PROFESSIONAL SERVICE**

Reviewer, Journal of Economic Behavior and Organization

Reviewer, Climatic Change

Reviewer, International Food Policy Research Institute

Reviewer, Agriculture and Human Values

## **PROGRAMMING**

Python, Stata, R, SQL, Git

## **LANGUAGES**

English (native), Ukrainian (advanced), Russian (advanced), French (int/adv), Spanish (functional), Luganda (functional)