

Northwestern

Economics

Jimmy Lee (Last updated: January 31, 2024)

Placement Director: Professor Alessandro Pavan (+1) 847-491-8266 alepavan@northwestern.edu
Placement Administrator: Lola May Ittner (+1) 847-491-8200 econjobmarket@northwestern.edu

Contact Information

Department of Economics
Northwestern University
2211 Campus Drive
Evanston, IL 60208

Mobile: 773-681-6337
jimmylee@u.northwestern.edu
<http://sites.northwestern.edu/sh19514>
Citizenship: Hong Kong SAR, China

Fields

Research:
Development Economics, Household Economics, Organizational Economics

Teaching:
Development Economics (undergraduate and graduate levels),
Microeconomics, Macroeconomics (undergraduate level),
International Trade, Causal Inference (undergraduate level)

Education

Ph.D., Economics, Northwestern University, 2024 (Expected)
Dissertation: Essays in Development Economics
Committee: Christopher Udry (Chair), Dean Karlan, Lori Beaman
M.A., Economics, Northwestern University, 2018
M.Phil., Economics, The Chinese University of Hong Kong, 2017
B.SSc., Economics, The Chinese University of Hong Kong, 2015

Research Grants

Weiss Fund (**\$4,900; Lead PI**) Summer 2022
--- *"Estimating the Effects of Situational Agricultural Knowledge Among African Farmers"*
USAID Development Innovation Ventures (**\$395,000; co-PI**) Summer 2022
--- ["Building a Sustainable System of Agricultural Extension in Schools"](#)
Wellspring Foundation (**\$192,185; co-PI**) Spring 2022
--- *"Building a Sustainable System of Agricultural Extension around Schools in Liberia"*
Fund for Innovation in Development (**\$1,016,641; co-PI**) Summer 2021
--- ["Building a Sustainable System of Agricultural Extension around Schools in Liberia"](#)
Food and Agriculture Organization (**\$68,000; co-PI**) Spring 2021
--- *"Agricultural Investments among farmers in Liberia"*
National Science Foundation (**\$451,135; co-PI**) January 2020
--- ["Social Norms, Trust, and Intergenerational Flow of Innovations"](#)
Weiss Fund (**\$28,815; Lead PI**) Spring 2020
--- ["Barriers to Intergenerational Flow of School-taught Agricultural Knowledge in Liberia"](#)
Global Poverty Research Lab (**\$18,807; Lead PI**) November 2019
--- *"Pilot: Evaluating a School-based Agricultural Education Program in rural Liberia"*
Buffett Institute for Global Affairs (**\$5,000; Lead PI**) October 2019
--- *"Barriers to Intergenerational Flow of School-taught Agricultural Knowledge in Liberia"*

Teaching Experience

Teaching Assistant, Northwestern University
Winter 2020, Winter 2023, Spring 2023: **Introduction to Microeconomics**
Fall 2019: **Intermediate Microeconomics II**
Fall 2020, Fall 2022: **Introduction to Macroeconomics**
Spring 2021: **Intermediate Macroeconomics**
Winter 2021: **International Trade**
Winter 2022: **Economics of Nonprofit Organizations**

Research Experience

Research Assistant, Northwestern University
 2018-19, 2020-21, 2023-24: **Prof. Christopher Udry**
 Research Assistant, The Chinese University of Hong Kong
 2016-17: **Prof. Kim-Sau Chung**

Job Market Paper

“Information Interventions and Intergenerational Responses to School-based Agricultural Extension in Liberia”
(3 out of 4 surveys completed)

Teaching improved farming practices in schools can transform the lives of rural students and their households, but students' adoption depends on what their parents expect about them, and students may be unsure of their parents' expectations. In a field experiment with 197 schools in Liberia, I study the effects of (i) a randomly assigned school-based agricultural extension program; and (ii) different strategies to engage households using information interventions. In 50 randomly selected program schools, I provide promotional videos to a parent or guardian (henceforth elder) and show that this leads elders to anticipate growth in students' farming skills. I then randomize whether to reveal elders' expected growth to students. After one year, the program increases students' adoption of soil management techniques by 0.4 standard deviations, but this increase happens only with information interventions. The video treatment increases households' adoption of soil management techniques, but revelation alters household responses --- increasing students' management of farms and adoption of a commercial-oriented cultivation style. When households receive a video that includes testimonials from authority figures, adding revelation increases students' farm incomes by 87% and school enrollment by 5 percentage points. I show that adding communication frictions in a collective household model explains household responses to information interventions. Taken together, the results highlight sizable returns from tackling intergenerational communication in information campaigns.

Work in Progress

“Evaluating a System of School-based Agricultural Extension in Liberia”
(joint with Christopher Udry, 3 out of 4 surveys completed)

We evaluate a school-based agricultural extension program in Liberia, which is unique in its systems approach — it leverages the educational infrastructure of rural schools and the efforts of science teachers and students to achieve multiple goals: amplifying the diffusion of agricultural technologies, improving students' education, skills and livelihoods, and introducing experiential elements in science pedagogy. Tackling multiple issues at once can be potentially cost-effective, especially if the program increases the retention of teachers and students and generates income for rural schools. Our randomized trial in 197 program and control schools is designed to evaluate several premises of the systems approach. First, the system as a whole can be effective in achieving its goals. Second, the program can generate positive spillovers to nearby communities as well as untrained teachers and students. Third, randomized sub-treatments (such as program promotional videos and annual farmer field day) can increase program effectiveness. Three survey rounds have been completed — the fourth round will take place in late 2024, evaluating long-term program impacts such as the functioning of schools, yields and sales of sampled households, and spillovers to untrained farmers.

“A Two-Pronged Approach to Estimating the Situational Effects of Agricultural Technologies”
(financed by Weiss Fund in Summer 2022; piloting of survey method completed)

Ample evidence suggests that the usefulness of agricultural technologies is very sensitive to the heterogeneous soil conditions in Sub-Saharan Africa, but little is known about how farmers consider such heterogeneity in adoption decisions. This project proposes a two-pronged approach to evaluate how the situation-specificity of technologies affects farmers' adoption decisions and the usefulness of technologies. First, farmers are asked whether they face agronomic situations that motivate the introduction of agricultural technologies, and whether they correctly identify promoted practices as ways of solving particular agronomic issues. Second, I randomize the timing of introduction of (or emphasis on) particular technologies across regions. Using the randomization status as instruments, this two-pronged approach allows the researcher to causally estimate how farmers' knowledge of particular practices affects their management of farms and welfare, and how such effects vary with the relevance of agronomic situations to farmers. This method can be embedded in standard household surveys and enable better feedback to agronomic research and development.

Languages English (fluent), French (beginner), Mandarin (fluent), Cantonese (native)

Programming Stata, R, Matlab, SurveyCTO

References Professor Christopher Udry (Chair)
Department of Economics
Northwestern University
2211 Campus Drive
Evanston, IL 60208
(+1) 847-491-8216
christopher.udry@northwestern.edu

Professor Dean Karlan
Department of Economics
Northwestern University
2211 Campus Drive
Evanston, IL 60208
(+1) 847-491-8706
karlan@northwestern.edu

Professor Lori Beaman
Department of Economics
Northwestern University
2211 Campus Drive
Evanston, IL 60208
(+1) 847-491-5394
l-beaman@northwestern.edu