

Interdisciplinary Speed Talks 2016

Wednesday, March 23rd 2016
6:00 pm – 7:30pm
International Affairs Building 411

– Tentative schedule –

[Eyal Frank](#) (Sustainable Development)

Title: Had They Gone Extinct: Bioprospecting in the 21st Century

Synopsis: Several medications have been developed in recent years based on genetic variation found in wildlife species. Several of these species are facing various levels of extinction risk and had they not been placed under conservation they might have gone extinct before their genes contributed to the development of different medications. What would have been the health implications of those species going extinct, and what can we learn from this about the expected value of current conservation efforts?

[Weston Anderson](#) (Earth and Environmental Science)

Title: ENSO and Pan-American crop production

Synopsis: The El Niño Southern Oscillation (ENSO) has proven to be a major driver of global crop yield variability. I'm studying how ENSO can affect multiple major crop producing regions simultaneously or in sequence. Successive crop failures in a global economy increases the risk that a regional drought will progress into a famine.

[Nandita Krishnaswamy](#) (Economics)

Title: Health effects of Exposure to Oil Flaring in the Niger Delta Region

Synopsis: Oil flaring is a common occurrence in the Niger Delta. I am interested in exploring the health impacts of exposure to oil flaring, and the resulting effects on school attendance and labor market outcomes. I can identify flare sites in the region and am looking at existing literature to investigate the geographic reach of the pollution that it causes.

[Jeffrey Paller](#) (Earth Institute)

Title: Accountability in Unexpected Places: Democratic Practices in African Slums

Synopsis: This study examines political accountability and governance in African slums. I argue that informal practices that bring representatives and their constituents together in daily life promote democratic accountability. Additionally, informal institutions that are linked to the original settlement pattern of a slum explain variation in development outcomes. Based on significant fieldwork in urban Ghana, the study intervenes in major debates about public goods provision and civic participation, ethnic politics and democratization, and the future of urban sustainability in a rapidly changing world.

[Carolyn Hayek](#) (Sustainable Development)

Title: Keeping the water flowing

Synopsis: Ensuring access to clean water and sanitation in the United States goes beyond water availability; it is highly dependent on the state of our drinking water and wastewater infrastructure. The construction of this key infrastructure in the US has improved quality of life significantly, with improvements due to reduced mortality alone estimated at about \$500 per person-year saved in 2003 dollars. At the same time, poor maintenance of that infrastructure and a continuation of current investment trends is estimated to result in

average annual per capita losses of about \$500 in 2010 dollars. How can we get a better picture of where intervention is most needed?

[Yixin Sun](#) (Economics)

Title: Aspect Ratios in Regression Discontinuity Design Figures

Synopsis: Regression Discontinuity Designs are a compelling and increasingly popular approach for recovering causal effects in the absence of controlled experiments. An additional appeal is their transparency, as the the research design and impacts are readily depicted in figures. However, "tweaking" might occur if taller figures are more likely to convey visual evidence of treatment and outcome jumps at the cutoff. We consider whether the aspect ratio of published regression discontinuity figures is systematically different from other figures in applied microeconomics.

[Kelvin Tian](#) (Earth and Environmental Science)

Title: Cherish every moment, 向死而生

Synopsis: *"If you live each day as if it was your last, someday you will certainly be right."* How, then, should we spend every second of our life?

[Sarah Bruner](#) (Ecology, Evolution, and Environmental Biology)

Title: Functions of vegetation in New York City green infrastructure

Synopsis: Cities pollute the water that surrounds them. Urban infrastructure, such as streets, sidewalks, and buildings, are traditionally impermeable to water. Little of the rain that falls is captured and most merely washes the city's waste into the ocean. As a step towards improvement, New York City has committed to invest 1.5 billion dollars into "green infrastructure": modifications to the city's streetscape that foster plant communities, absorbing, rather than deflecting, water. Current green infrastructure design incorporates little, if any, information on how the variety of planted vegetation affects performance.

[Eugénie Dugoua](#) (Sustainable Development)

Title: Science, Innovation and Sustainable Development

Synopsis: I am interested in understanding how policy making impacts innovation processes and how the diffusion of scientific knowledge impacts policy making. I intend to do this by combining text from patents and articles published in peer-reviewed journals and newly developed natural language processing. In that spirit, I have started a project on the issue of the depletion of the ozone layer which was under the spotlight in the 1980s.

[Johannes Urpelainen](#) (Political Science)

Title: Improving Accountability in Electricity Supply: A Field Experiment in Rural India

Synopsis: The poor quality of public service delivery is widely recognized as a barrier to socio-economic development. The goal of our project is to test an intervention that combines the sharing of relevant information about service quality with deliberation about this information in town hall meetings. In collaboration with an Indian NGO, we test the effects of this interventions on public opinion, rural citizens' efforts to hold service providers accountable, and, in the long run, the quality of service delivery.

[Kyle Frischkorn](#) (Earth and Environmental Science)

Title: The microbiome of a microbe

Synopsis: [unavailable]

[Tim Foreman](#) (Sustainable Development)

Title: Dust storm impacts on humans, economic systems, and agriculture

Synopsis: In this project, I am looking at the mortality and morbidity effects of dust storms, as well as their impacts on economic activity. I am particularly interested in the impacts on agriculture and transportation systems, as well as overall productivity. I focus on West Africa and East Asia, where the frequency of such storms have been increasing over the past 50 years, while the consequences are not well understood.

Divya Singh (Economics)

Title: Poll Booth Safety and (Missing) Women Voters in India

Synopsis: Economically, turnout is very important since it can affect the distribution of public goods in the equilibrium when different groups have different preferences. In this paper, I look at the effect of enhancing security at the polling booths on total turnout and women turnout during elections in one of the major states of India. To this end, I use an RD analysis to show that if a particular booth is declared critical, the total turnout percentage increases by 10 percentage points and women share of turnout goes up by 1.4 percentage points. I argue that history of violence at polling booths keeps women away from booths and undermines their suffrage. In that case, cleaning up elections empowers them both politically and economically.

Franziska Landes (Earth and Environmental Science)

Title: Deploying and adopting a new field test kit for lead (Pb) in soils

Synopsis: Although lead in soils is a public health hazard around the world, many countries do not have the resources to test for lead in soils. I will present my work on developing an affordable field test kit for lead in soils and discuss future plans to explore its impact on changing behavior to reduce exposure to lead.

Vijay Ramesh (Ecology, Evolution, and Environmental Biology)

Title: Spatial Mismatch and Range Contractions of the Western Ghats Avifauna

Synopsis: In this study, we considered the 25 diverse and endemic avifauna of the Western Ghats to test the hypothesis that the majority of their spatial extent has been overestimated and is inaccurate. Our results suggest that species distribution maps utilized by IUCN for threat assessment are largely overestimated and inaccurate. We suggest immediate extinction risk assessment using the data that was generated from this study and accordingly, take necessary conservation action. Lastly, our study has implications for conservation of ~10,000 bird species around the globe.

Jason Chun Yu Wong (Sustainable Development)

Title: Climate Change on the Fly: Transcontinental Flights in a Changing World

Synopsis: Jason's dissertation research is on the economics and sustainability of the aviation industry. In his speed talk, he will discuss the broad research themes within this topic in hopes to spark new research questions and potential collaboration with students from other PhD programs.