BIOGRAPHICAL SKETCH

NAME: Diane Coffey

eRA COMMONS USER NAME: DC42724

POSITION TITLE: Assistant Professor, Department of Sociology

EDUCATION/TRAINING

| INSTITUTION AND LOCATION | DEGREE | COMPLETION DATE MM/YYYY | FIELD OF STUDY |
|-------------------------------------|--------|-------------------------------|-----------------------------|
| Villanova University, Villanova, PA | BA | 06/2006 | Sociology, Honors [Letters] |
| Princeton University, Princeton, NJ | MPA | 06/2010 | Development Studies |
| Princeton University, Princeton, NJ | PhD | 06/2015 | Public Affairs & Demography |

A. Personal Statement

I am a demographer who studies social influences on health in India. I will start as an assistant professor of Sociology at the PRC in January, 2017. My work spans three of the PRC's primary research areas: Family Demography and Intergenerational Relationships, Population Health, and Reproductive Health.

My research has studied the intergenerational transmission of poor population health resulting from India's exceptionally poor maternal nutrition. In particular, my work on pre-pregnancy body mass and weight gain during pregnancy among Indian women speaks to the "Asian Enigma" of why, despite being richer, Indian children are shorter and smaller than African children: large differences in *in utero* net nutrition are likely one important reason. I have also studied the consequences of young women's poor social status within families for children's health.

Another area of my research finds consequences of poor sanitation in developing countries for early life health, including for mortality, height, and anemia. I have also studied the causes of open defecation in rural India. Rural India's exceptionally high rate of open defecation has much less to do with poverty than with social forces: the ongoing renegotiation of caste and untouchability leads people to reject the inexpensive latrines that prevent disease in other developing countries.

Over the next five years, I intend to study health disparities between people from different castes and religions in India. I am investigating how discrimination leads to differences in mental health and in child height between people from different caste, tribal, and religious backgrounds.

I am looking forward to joining the PRC, and expect that the center will provide a supportive environment in which to continue my research.

B. Positions and Honors

Positions and Employment

2011 - present Co-Founder & Co-Executive Director of RICE Institute, Inc.

- 2015 2016 Visiting Fellow, Princeton University
- 2016, Spring Lecturer, Woodrow Wilson School (taught Econometrics & Public Policy, Qualitative Methods for Research & Evaluation)
- 2017, Spring Assistant Professor, Department of Sociology, The University of Texas at Austin
- 2017, Spring Faculty Research Associate, Population Research Center, The University of Texas at Austin

Other Experience and Professional Organizations

- 2012 present Member, Population Association of America
- 2013 present Referee for Demography, Economic & Political Weekly, Journal of Development Studies, Economic Development & Cultural Change, Economics & Human Biology

<u>Honors</u>

2005 Truman Scholarship C. Contributions to Science **Intergenerational transmission of poor health in India**. My research investigates the role of poor maternal nutrition and the low social status among young women for children's health outcomes in India. I have produced the first estimates of the prevalence of pre-pregnancy underweight in India, and estimated weight gain among pregnant women in India. Both indicators suggest extremely poor maternal health. I have also investigated the role of poor health in pregnancy for neonatal mortality and child height. The low social status of young women in Indian households is in part responsible for poor health and nutrition among expectant mothers, which is passed on to their children.

- Coffey, D. 2015. Pre-pregnancy body mass and weight gain during pregnancy in India & sub-Saharan Africa. *Proceedings of the National Academy of Sciences*. 112(11): 3302-3307.
- Coffey, D. Early life mortality and height in Indian states. 2015. *Economics & Human Biology*. 17: 177-189.
- Coffey, D., Khera, R., and D. Spears. 206. Intergenerational effects of women's status: Evidence from child height in joint Indian households. *working paper*.
- Coffey, D. and P. Hathi. forthcoming 2016. Underweight & pregnant: Maternity entitlements and weight gain during pregnancy. *Indian Journal of Human Development*.

Causes and consequences of poor sanitation (open defecation) in South Asia. I have investigated the effects of poor sanitation in South Asia on mortality, child height, and children's hemoglobin levels. In one paper, my co-authors and I combine DHS data on over 1 million births, and find that open defecation and population density robustly interact to predict infant mortality and child height: sanitation matters more for child survival in more densely populated places. This means that whether or not urban contexts confer a health advantage depends on the density of sanitation and open defecation. My research on the causes of exceptionally poor sanitation in India is based on original quantitative and qualitative data. In a forthcoming book on sanitation in India, my co-author Dean Spears and I describe how, in rural India, the context, legacy, and ongoing practice of untouchability interacts with affordable sanitation technology in ways that have important consequences for population health.

- Coffey, D., Hathi, P., Haque, S., Pant, L., and D. Spears. forthcoming. Place and child health: The interaction of population density and sanitation behavior in developing countries." *Demography*.
- Coffey, D., Geruso, M. and D. Spears. Sanitation, disease, and anemia: Evidence from Nepal. revise & resubmit, *Economic Journal*.
- Coffey, D., Gupta, A., Hathi, P., Khurana, N., Spears, D., Srivastav, N., and S. Vyas. 2014. Revealed preference for open defecation: Evidence from a new survey in rural north India. *Economic & Political Weekly*. Special article, XLIX:(38). (reprinted in: *Social policy: Readings on the economy, policy, and society*. (2016) Jean Drèze, editor.)
- Coffey, D. and D. Spears. Sanitized development: Abandoned toilets, stunted children, the scars of caste, and the future of India." (working title) book under contract with Harper Collins, for publication in India in 2017.

Disparities in mental and physical health among social groups in India. I am developing a new research agenda to study disparities in mental and physical health among people from different caste, tribal, and religious backgrounds in India. Although our results are preliminary, my co-authors and I find ample evidence of effects of discrimination on health among low caste people and Muslims. In the future, we aim to move beyond documenting disparities to understand the processes by which discrimination influences population health in India.

- Coffey, D., Hammer, J., Deshpande, A. and D. Spears. 2016. Local social inequality, economic inequality, and disparities in child height in India. *working paper*.
- Coffey, D. and A. Gupta. 2016. Social inequality and mental health in India. working paper.

D. Research Support

Ongoing Research Support

OPP1125318 (D. Spears and D. Coffey, PIs) Bill and Melinda Gates Foundation Evidence, solutions, advocacy, and collaboration for India's sanitation sector Center grant to r.i.c.e. to support research on population-level health consequences of open defecation in rural India and evidence-based policy advocacy. Role: Co-Principal Investigator Responsibilities: Responsible for overall leadership of research and r.i.c.e. team, as well as authorship and coauthorship of several papers.

Completed Research Support

R03HD081209 (D. Spears, PI)

National Institute of Child Health and Human Development Impacts of Sanitation on Child and Maternal Health

This research investigated how sanitation influences two important markers of health, children's height and maternal and children's hemoglobin status. We apply econometric analysis to large, representative, publicly available datasets to show an effect of change over time in sanitation coverage on children's height, and to estimate an effect of sanitation on anemia status for children. The analysis focuses on South Asia, where most of the remaining open defecation in the world is concentrated.

Role: Co-investigator

Responsibilities: Conducting quantitative analysis, paper-writing

09/22/14-08/31/16