

VARUN GOEL

✉ varung@live.unc.edu | ☎ 919 579 9775 | GitHub: github.com/varungoel123

EDUCATION

current
|
2016

PhD. Candidate, Geography

University of North Carolina

 Chapel Hill, NC

- Advisor : Dr. Mike Emch
- Title : *Quantifying Spatially Heterogenous and Spillover effects of Deep Tubewell Interventions on Diarrheal Disease in Rural Bangladesh*

2013
|
2011

M.S., Geography

University of Illinois

 Urbana Champaign, IL

- Concentration in Health and Medical Geography

2011
|
2008

B.A. (hons), Geography (minor C.S.)

University of Illinois

 Urbana Champaign, IL

- Concentration in Geographic Information Science
- Awarded Highest Distinction

INDUSTRY EXPERIENCE

2016
|
2013

Chief Data Scientist

Revitalizing Rain-fed Agricultural Network

 New Delhi, India

PEER REVIEWED PUBLICATIONS

2020

What is the burden of malaria in the DRC

Journal of Infectious Diseases

- M Deutsch-Feldman, JB Parr, C Keeler, NF Brazeau, V Goel, M Emch, JK Edwards, M Kashamuka, AK Tshefu, SR Meshnick

2020

Considering Alternate Pathways of Drinking-Water Contamination: Evidence of Risk Substitution in Rural Bangladesh

International Journal of Environmental Research and Public Health

- V Goel, GJ Bell, S Sridhar, Md Islam, Md Yunus, Md Ali, Md Khan, Md Alam, ASG Faruque, Md Kabir, S Babu, K Brandt, V Shelus, MD Sobsey, M Emch

2019	Extending multilevel spatial models to include spatially varying coefficients <i>Health and Place</i> · M Janko, V Goel, M Emch
2019	False-negative malaria rapid diagnostic test results and their impact on community-based malaria surveys in sub-Saharan Africa <i>BMJ Global Health</i> · OJ Watson, KM Sumner, M Janko, V Goel, P Winskill, HC Slater, A Ghani, SR Meshnick, JB Parr
2019	Impacts of household sources on air pollution at village and regional scales in India <i>Atmospheric Chemistry and Physics</i> · B Rooney, R Zhao, Y Wang, KH Bates, A Pillarisetti, S Sharma, S Kundu, TC Bond, NL Lam, B Ozaltun, L Xu, V Goel, LT Fleming, R Weltman, S Meinardi, DR Blake, SA Nizkorodov, RD Edwards, A Yadav, NK Arora, KR Smith, JH Seinfeld
2018	Deep tubewell microbial water quality and access in arsenic mitigation programs in rural Bangladesh <i>Science of the Total Environment</i> · V Goel, MS Islam, M Yunus, MT Ali, AF Khan, N Alam, ASG Faruque, G Bell, M Sobsey, M Emch
2017	Individual and household characteristics of persons with Plasmodium falciparum malaria in sites with varying endemicities in Kinshasa Province, Democratic Republic of the Congo <i>Science of the Total Environment</i> · MK Mwandagalirwa, L Levitz, KL Thwai, JB Parr, Varun Goel, M Janko, A Tshefu, M Emch, SR Meshnick, M Carrel



MANUSCRIPTS UNDER REVIEW

2020	SARS-CoV-2 Testing in North Carolina: Racial, ethnic, and geographic disparities <i>Health and Place</i> (revise and resubmit) · K Brandt*, V Goel*, C Keeler*, GJ Bell, A Aiello, M Emch, R Boyce · * Joint first author
2020	Effectiveness of a National Mass Distribution Campaign of Long-Lasting Insecticide-Treated Nets on Clinical Malaria in Malawi, 2018-2020 <i>Lancet Global Health</i> (under review) · H Topazian, A Gumbo, JK Edwards, K Brandt, V Goel, M Emch, I Hoffman
2020	Provisional entrance, exemptions, and kindergarteners up-to-date on vaccination after a regulatory change in Pennsylvania <i>American Journal of Preventive Medicine</i> (under review) · PL Delamater, Varun Goel, CN Strack, YT Yang
2020	Individual, household and neighborhood risk factors for malaria in the Democratic Republic of the Congo support new approaches to programmatic intervention <i>Health and Place</i> (under review) · M Carrel, S Kim, MK Mwandagalirwa, N Mvuama, JA Bala, M Nkalani, G Kihuma, J Atibu, O Diallo, Varun Goel, KL Thwai, JJ Juliano, M Emch, A Tshefu, JB Parr

BOOK CHAPTERS

2021

Spatial Epidemiology: Challenges and methods in COVID-19 research.

COVID-19 and Similar Futures: Pandemic Geographies, Routledge (accepted, published in spring 2021)

· V Goel, M Emch

SELECTED CONFERENCE PRESENTATIONS

2020

Are Deep Tubewells Safe Drinking Water Sources? Evidence of Risk Substitution from Rural Bangladesh

UNC Water and Health Conference, Oct 26-30

 Chapel Hill, USA

2019

Measuring spillover effects from a health intervention in Rural Bangladesh

International Medical Geography Symposium, July 1-6

 Queenstown, NZ

2019

Climatic Influences on Women's Health and Mobility in Sub-Saharan Africa

Population Association of America, April 11-13

 Austin, USA

2019

Risk Substitution through Surface Water Use Among Deep Tubewell users in Rural Bangladesh

Association of American Geographers, April 4-7

 Washington D.C, USA

2018

Does Women's Empowerment Reduce the Negative Effect of Climate Change on Child Health? Empirical Evidence from Households in India

Population Association of America, April 26-28

 Denver, USA

2017

Finding Safe Drinking Water in Rural Bangladesh – Are Deep Tubewells the Answer?

Association of American Geographers, April 10-14

 New Orleans, USA

AWARDS

2020

UNC Graduate School Dissertation Completion Fellowship (\$18,000)

2020

Melinda Meade Research Award, UNC Geography (\$3000)

2019

Melinda Meade Graduate Student Summer Award, UNC Geography (\$2000)

2016

UNC Doctoral Recruitment Merit Assistantship (\$20,000)

INVITED TALKS AND PANELS

2020

Spatial and demographic patterns in SARS-CoV-2 testing and test positivity in North Carolina

Geography Colloquium (Co-presented), Nov 10

 Dartmouth College

2020

SARS-CoV-2 Testing in North Carolina: Racial, ethnic, and geographic disparities

Working Group Seminar (Co-presented), Nov 19

 NC Covid Surveillance Network

2020

Building Resilience in Water, Sanitation and Hygiene Systems in Developing Countries

STAR-TIDES Invited Panel Speaker, Oct 20

 George Mason University

2020

Spatial Components of COVID-19 viral and seroprevalence testing in North Carolina

School of Forest and Environment Resources Seminar, Oct 19

 NC State University

2018

Examining the Role of Neighborhood Definitions on Spatio-temporal Distribution of Vaccine Refusal in California

GIS Day Invited talk, Nov 16

 Duke University

TEACHING EXPERIENCE

2020

- GEOG 215: Introduction to Spatial Data Science**
University of North Carolina Chapel Hill
· Instructor of Record (Spring Semester)

2013

- GEOG 105: Digital Earth**
University of Illinois, Urbana Champaign
· Graduate Teaching Assistant

2011

- GEOG 101: Geography of Developing Countries**
University of Illinois, Urbana Champaign
· Graduate Teaching Assistant

REVIEWER ASSIGNMENTS

- Health & Place
- Malaria Journal
- Bulletin of the World Health Organization
- Science of the Total Environment
- American Journal of Public Health

MEMBERSHIP IN PROFESSIONAL SOCIETIES

- Association of American Geographers
- Population Association of America
- American Society of Tropical Medicine and Hygiene