

CURRICULUM VITAE

Hui Hu, PhD

DATE: June 7, 2018

1. PERSONAL INFORMATION

- a. Place of Birth: Shanghai, China
- b. Marital Status: Married

2. CITIZENSHIP: China. P.R. (US Permanent Resident)

3. OFFICE CONTACT INFORMATION:

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LinkedIn: <http://www.linkedin.com/in/benhhu>

4. PRESENT POSITION:

Assistant Professor, Department of Epidemiology, College of Medicine and College of Public Health and Health Professions, University of Florida

5. EDUCATION:

2007-2008	BS student in International Economy and Trade at Shanghai JiaoTong University, Shanghai, China (transferred to Fudan University)
2008-2012	BS in Nursing at Fudan University, Shanghai, China
2012-2016	PhD in Epidemiology at University of Florida, Gainesville, FL

6. ACADEMIC POSITIONS:

UNIVERSITY OF FLORIDA, Gainesville, Florida
College of Public Health and Health Professions/College of Medicine

2016-2018	Research Assistant Scientist, Department of Epidemiology
2018-	Assistant Professor, Department of Epidemiology

7. COMMITTEE AND SERVICE:

University of Florida, Gainesville, FL

Department of Epidemiology

2016-	Curriculum Committee
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2016-2017 Fundraising Committee
College of Public Health and Health Professions
2016- PPHP Marshal

8. HONORS AND AWARDS:

2008-2009 People Scholarship (First Degree), Fudan University, China
2009-2010 Shanghai Municipal Government Scholarship
2010-2011 People Scholarship (First Degree), Fudan University, China
2012 Shanghai Municipal Government Award for “Outstanding University Graduates”
2013 Outstanding Research Award at the 2013 PPHP Research Fair, University of Florida
2013 The Graduate Student Council Travel Award, University of Florida
2014 ISEE 2014 Travel Award, International Society for Environmental Epidemiology
2015 The Graduate Student Council Travel Award, University of Florida
2016 Insight Health Data Science Scholarship, Insight Data Science

9. SKILLS

- a. **Programming Languages:** Python, R, Octave, SQL, JavaScript, SAS, Mplus, Swift
- b. **Tools:** Pandas, NumPy, scikit-learn, TensorFlow, Theano, HTML, CSS, Bootstrap, Flask, jQuery, leaflet.js, Git, AWS, JAGS, ArcGIS, SPSS
- c. **Techniques:** regularized linear models, random forests, SVM, neural networks, CNN, RNN, mixed-effect models, Bayesian hierarchical models, survival models, PCA, factor analysis, LDA, network analysis, probabilistic graphical models

10. EDITORIAL RESPONSIBILITIES

a. Editorial Board

2015- Frontiers in Public Health

b. Ad hoc Reviewer

2014- PLoS ONE
2014- Atmospheric Environment
2014- Frontiers in Public Health
2014- Journal of Women’s Health
2015- Annals of Epidemiology
2015- Journal of Testing and Evaluation
2015- Journal of Racial and Ethnic Health Disparities
2015- Acta Paediatrica
2015- Environmental International
2015- International Journal of Environment and Health
2015- Environmental Research
2015- International Journal of Environmental Research and Public Health
2015- Cities

2015- Toxins
 2015- International Archives of Endocrinology Clinical Research
 2016- Journal of Urology and Research
 2016- Sustainability
 2016- Austin Public Health
 2017- Journal of Novel Physiotherapy and Physical Rehabilitation
 2017- Journal of Cardiovascular Medicine and Cardiology
 2017- BMJ Open
 2017- BMC Medical Informatics and Decision Making
 2017- International Journal of Epidemiology
 2017- Journal of Precision Medicine and Public Health
 2017- Journal of Exposure Science and Environmental Epidemiology
 2017- BMC Pregnancy and Childbirth
 2017- BMC Public Health
 2017- World Medical and Health Policy

c. Conference Abstract Reviewer

2015 The 143rd APHA Annual Meeting and Exposition (October 31 - November 4)
 2016 The 4th Epidemiology Congress of the Americas (June 21-24)
 2017 The 50th Annual Society for Epidemiologic Research Meeting (June 20-23)
 2017 The 145th APHA Annual Meeting and Exposition (November 4-8)

11. RESEARCH EXPERIENCES

University of Florida, Gainesville, FL

2012-2015 **Research Assistant** for Dr. Xiaohui Xu

- Conducted research on the health effects of environmental exposures, especially focus on air pollution exposure and adverse pregnancy outcomes.

2013-2014 **Research Assistant** for Dr. Maria R. Khan

- Conducted data management and analyses on the DISRUPT study.

2014-2016 **Research Assistant** for Dr. Linda B. Cottler

- Analyzed data from the Epidemiologic Catchment Area Study and HealthStreet, and involved in the beta phase of the ICD-11 field trial of disorders due to substance use and related health conditions.

Insight Data Science, Boston, MA

2016 **Fellow**

- Built NabeFinder.com, a web app to recommend neighborhoods for people with disabilities in Massachusetts using Python and Flask.
- Developed gradient boosting decision trees models to predict individual's health status, employment, and total income in different

neighborhoods in Massachusetts with Python.

- Queried data from Google Places API and Census API, and created an interactive map using leaflet.js.

12. RESEARCH SUPPORT

a. Active

17SDG33630165

(Hu)

Title: The Total Environment and Hypertensive Disorders of Pregnancy: A Precision Public Health Approach

Agency: American Heart Association

Dates: 07/01/2017 – 06/30/2020

Role: Principal Investigator

U17CE-002735

(Jeffries)

Title: Prescription Drug Overdose: Prevention for States

Agency: CDC-National Center for Injury Prevention and Control (NCIPC)

Dates: 03/01/2016 – 08/31/2019

Role: Consortium Co-Investigator

UF Shands Quasi Endowment Fund

(Hu)

Title: A Pilot Linkage between HealthStreet and the UF Health Epic Electronic Health Record

Agency: UF Shands

Dates: 01/01/2018 – 12/31/2018

Role: Principal Investigator

2018PG-T1D052

(Haller)

Title: ECHO Type 1 Diabetes: A Feasibility and Planning Proposal

Agency: Helmsley Charitable Trust

Dates: 01/22/2018 – 01/22/2019

Role: Co-Investigator

b. Pending

Years	Agency	Grant Title	Role
2018-2020	NIH/NCI	Leveraging Florida Cancer Data System to Study the Total Environment and Disparities in Breast Cancer	MPI
2018-2023	NIH/NCI	Novel Multi-Type, Multiscale, Multivariate Spatio-Temporal Analysis of Surveillance, Epidemiology, and End Results Data with Informative Missing Data	Site PI

13. TEACHING RESPONSIBILITIES

University of Florida, Gainesville, FL

a. Independent Teaching

- 2017 **Instructor**, Measurement in Epidemiology and Outcomes Research (PHC 6711)
- 2017- **Instructor**, Critical Skills in Data Manipulation for Population Science (PHC 7065)
- 2018- **Instructor**, Spatial Epidemiology (PHC 6194)

b. Guest Lectures

- 2014 **Guest Speaker**, Bayesian Disease Mapping, Spatial Epidemiology (PHC6194)
- 2015 **Guest Speaker**, Introduction to ROC Analysis, Measurement in Epidemiology and Outcomes Research (PHC6711)
- 2016-2017 **Guest Speaker**, Multilevel Approaches, Social Epidemiology (PHC6016)
- 2016-2017 **Guest Speaker**, Causal Inference, Social Epidemiology (PHC6016)
- 2017 **Guest Speaker**, Bayesian Approaches, Epidemiology Seminar II (PHC 7000)
- 2017 **Guest Speaker**, Environmental Issues in Public Health, Public Health Concepts (PHC4101)
- 2017 **Guest Speaker**, Epidemiological Evidence on the Impact of Environment on Pregnancy, Birth and Child Health Outcomes, Maternal and Child Health Epidemiology (PHC6937)
- 2017 **Guest Speaker**, Identifying Disparities Using Big Data, Translational Research and Therapeutics: Bench, Bedside, Community, and Policy (GMS6847)

c. Teaching Assistantship

- 2013 **Teaching Assistant**, Principles of Epidemiology (PHC6001)
- 2013 **Teaching Assistant**, Public Health Concept (PHC4101)

14. MENTORING

a. MPH Advisor

- 2016- Zachary Mannes, Department of Epidemiology, University of Florida
- 2017- Benjamin Borgert, Department of Epidemiology, University of Florida

b. MS Advisor

- 2018- Erica Swilley, Department of Epidemiology, University of Florida

c. PhD Advisor

- 2018- Veronica Richards, Department of Epidemiology, University of Florida

d. PhD Mentor

- 2018- Yi Zheng, Department of Epidemiology, University of Florida

e. PhD Dissertation Committees

- 2017- Jae Min, Department of Epidemiology, University of Florida
2017- Tong Kang, Department of Biostatistics, University of Florida

15. PROFESSIONAL SOCIETIES AND ORGANIZATIONS

- 2013- Society for Epidemiologic Research
2014- International Society for Environmental Epidemiology
2014- National Association of Chronic Disease Directors
2017- American Heart Association

16. BIBLIOGRAPHY

a. Peer reviewed manuscripts

1. **Hu H**, Dailey AB, Kan H, Xu X. The effect of atmospheric particulate matter on survival of breast cancer among US females. *Breast Cancer Research and Treatment*. May 2013;139(1):217-226. PMID: 23592372
2. Xu X, **Hu H**, Kearney G, Kan H, Sheps DS. Studying the Effects of Polycyclic Aromatic Hydrocarbons on Peripheral Arterial Disease in the United States. *Science of the Total Environment*. 2013; 461-462: 341-347. PMID: 23747551
3. Xu X, **Hu H**, Dailey AB, Kearney G, Talbott EO, Cook RL. Potential Health Impacts of Heavy Metals on HIV-Infected Population in USA. *PLoS ONE*. 2013;8(9):e74288. PMID: 24023932
4. Xu X, Ha S, Kan H, **Hu H**, Curbow B, Lissaker C. Health effects of air pollution on length of respiratory cancer survival. *BMC Public Health*. 2013;13(1):800. PMID: 24004483
5. Xu X, **Hu H**, Ha S, Roth J. Ambient air pollution and hypertensive disorder of pregnancy. *Journal of Epidemiology and Community Health*. Jan 2014;68(1):13-20. PMID: 24022815
6. **Hu H**, Ha S, Roth J, Kearney G, Talbott EO, Xu X. Ambient air pollution and hypertensive disorders of pregnancy: A systematic review and meta-analysis. *Atmospheric Environment*. 2014;97(0):336-345. PMID: 25242883
7. Ha S, **Hu H**, Roussos-Ross D, Haidong K, Roth J, Xu X. The effects of air pollution on adverse birth outcomes. *Environmental research*. 2014;134(0):198-204. PMID: 25173052
8. **Hu H**, Odedina FT, Reams RR, Lissaker CT, Xu X. Racial Differences in Age-Related Variations of Testosterone Levels Among US Males: Potential Implications for Prostate Cancer and Personalized Medication. *Journal of Racial and Ethnic Health Disparities*. 2014:1-8. PMID: 26863244
9. Cottler LB, Ajinkya S, Goldberger BA, Ghani MA, Martin DM, **Hu H**, Gold MS. Prevalence of drug and alcohol use in urban Afghanistan: epidemiological data from the Afghanistan National Urban Drug Use Study (ANUDUS). *The Lancet Global Health*. 2014;2(10):e592-e600. PMID: 25304635
10. **Hu H**, Scheidell J, Xu X, Coatsworth AM, Khan MR. Associations between blood lead

- level and substance use and sexually transmitted infection risk among adults in the United States. *Environmental Research*. 2014;135c:21-30. PMID: 25261860
11. **Hu H**, Kan H, Kearney G, Xu X. Associations between exposure to polycyclic aromatic hydrocarbons and glucose homeostasis as well as metabolic syndrome in nondiabetic adults. *Science of the Total Environment*. 2015; 505: 56-64. PMID: 25310882
 12. Khan MR, Golin C, Friedman S, Scheidell JD, Adimora AA, Monk S, Hobbs M, Dockery G, Brown S, Oza K, Hammond M, Meyers D, **Hu H**, Wohl DA. STI/HIV Sexual Risk Behavior and Prevalent STI Among Incarcerated African American Men in Committed Partnerships: The Significance of Poverty, Mood Disorders, and Substance Use. *AIDS and Behavior*. Apr 12 2015. PMID: 25863467
 13. Ha S, **Hu H**, Roth J, Kan H, Xu X. Associations Between Residential Proximity to Power Plants and Adverse Birth Outcomes. *American Journal of Epidemiology*. 2015;182(3):215-224. PMID: 26121989
 14. **Hu H**, Ha S, Henderson BH, Warner TD, Roth J, Kan H, Xu X. Association of Atmospheric Particulate Matter and Ozone with Gestational Diabetes Mellitus. *Environmental Health Perspectives*. 2015;123(9):853-859. PMID: 25794412
 15. Chen R, Qiao L, Li H, Zhao Y, Zhang Y, Xu W, Wang C, Wang H, Zhao Z, Xu X, **Hu H**, Kan H. Fine particulate matter constituents, nitric oxide synthase DNA methylation and exhaled nitric oxide. *Environmental Science & Technology*. 2015 Sep 24;49(19):11859-65. PMID: 26372312
 16. Xu X, Chen X, **Hu H**, Dailey AB. Current Opinion in the Role of Testosterone in the Development of Prostate Cancer: A Dynamic Model. *BMC Cancer*. 2015 Oct 26; 15(1): 806. PMID: 26502956
 17. Kearney GD, **Hu H**, Xu X, Hall M, Balanay JA. Estimating the Prevalence of Heat-Related Symptoms and Sun Safety Related Behavior among Latino Farmworkers in Eastern North Carolina. *Journal of Agromedicine*. 2016 Jan 2;21(1):15-23. PMID: 26479455
 18. Cottler LB, **Hu H**, Smallwood BA, Anthony JC, Wu L, Eaton WW. Nonmedical Opioid Pain Relievers and All-Cause Mortality: A 27-Year Follow-Up From the Epidemiologic Catchment Area Study. *American Journal of Public Health*. 2016 Mar; 106(3). PMID: 26691106
 19. Ha S, **Hu H**, Mao L, Roussos-Ross D, Roth J, Xu X. Potential Selection Bias Associated With Using Geocoded Birth Records for Epidemiological Research. *Annals of Epidemiology*. 2016 Mar 31; 26(3):204-11. PMID: 26907541
 20. Shen Y, **Hu H**, Taylor B, Kan H, Xu X. Early Menarche and Gestational Diabetes Mellitus: Results from the NHANES 2007-2012. *Maternal and Child Health*. 2016 Jul 25: 1-6. PMID: 27456304
 21. Xu X, **Hu H**, Hong YA. Body Burden of Heavy Metals among HIV High Risk Population in USA. *Environmental Pollution*. 2016 Nov 14. PMID: 27856018
 22. Xu X, **Hu H**, Ha S, Han D. A Smartphone-assisted Spatial Data Collection Method to Improve Geographic Information Quality: A Pilot Study Using Birth Dataset. *Geospatial*

- Health*. 2016;11(482):342-348. PMID: 27903063
23. **Hu H**, Ha S, Xu X. Ozone and Hypertensive Disorders of Pregnancy in Florida: Identifying Critical Windows of Exposure. *Environmental Research*. 2017;2(153):120-125. PMID: 27940104
 24. Xu X, **Hu H**, Kearney G, Kan H, Carrillo G, Chen X. A Population-based Study of Smoking, Serum Cotinine, and Exhaled Nitric Oxide among Asthmatics and a Healthy Population in the U.S. *Inhalation Toxicology*. 2016 Dec;28(14):724-730. PMID: 27973944
 25. Khan MR, El-Bassel N, Golin CE, Scheidell JD, Adimora AA, Coatsworth AM, **Hu H**, Judon-Monk S, Medina KP, Wohl DA. The Committed Intimate Partnerships of Incarcerated African-American Men: Implications for Sexual HIV Transmission Risk and Prevention Opportunities. *Archives of Sexual Behavior*. 2017 Mar 22:1-3. PMID: 28332036
 26. **Hu H**, Eaton WW, Anthony JC, Wu L, Cottler LB. Age of First Drunkenness and Risks for All-cause Mortality: a 27-year Follow-up from the Epidemiologic Catchment Area Study. *Drug and Alcohol Dependence*. 2017 Jul 1;176:148-53. PMID: 28535457
 27. Chen X, **Hu H**, Xu X, Gong J, Yan Y, Fang L. Probability Sampling By Connecting Space with Households using GIS/GPS Technologies. *Journal of Survey Statistics and Methodology*. 2018 Jan 23.
 28. Chen X, **Hu H**. Rejoinder to the Discussion by Steven Heeringa. *Journal of Survey Statistics and Methodology*. 2018 Apr 18.
 29. Zazzi M, **Hu H**, Prosperi M. The global burden of HIV-1 drug resistance in the past 20 years. *PeerJ*. 2018 6:e4848 <https://doi.org/10.7717/peerj.4848>

b. Letter to the Editor:

1. **Hu H**. Re: "Prospective Study of Ultraviolet Radiation Exposure and Mortality Risk in the United States". *American Journal of Epidemiology*. November 15, 2013. PMID: 24243741

Papers in publication:

1. Khan MR, Scheidell JD, Golin CG, Friedman SR, Adimora AA, Lejuez CW, **Hu H**, Quinn K, Wohl DA. Dissolution of Committed Partnerships during Incarceration and STI/HIV-related Sexual Risk Behavior after Prison Release among African American Men. In Press: *J Urban Health*.

Papers under review/revision:

1. **Hu H**, Cottler LB, Roth J, Power CM, Kan H, Xu X. The Neighborhood Socioeconomic Status and Hypertensive Disorders of Pregnancy in Florida (*Under Revision*)
2. **Hu H**, Cottler LB, Xu X. Racial Disparities in Hypertensive Disorders of Pregnancy Mediated by Neighborhood Environmental Factors (*Under Revision*)
3. Gurka KK, **Hu H**, Linn HI, Thompson GL, Christy DM. Changes in Drug-Related Fatal

Overdoses following Passage of Senate Bill 437 in West Virginia: Heterogenous Effects by Type and Combination of Opioids (*Under Revision*)

4. **Hu H**, Xiao H, Zheng Y. A Bayesian Spatio-temporal Analysis on Racial Disparities in Hypertensive Disorders of Pregnancy in Florida, 2005-2014 (*Under Revision*)

17. CONFERENCE ABSTRACTS

1. **Hu H**, Xu X. Health Effects of Traffic-related Air Pollution on Length of Respiratory Cancer Survival. 2013 PPHP Research Fair, University of Florida, Gainesville, FL, USA – April 2013
2. **Hu H**, Dailey A, Kan H, Xu X. The effect of atmospheric particulate matter on survival of breast cancer among US females. The 46th Annual Society for Epidemiologic Research Meeting, Boston, MA, USA – June 2013
3. Xu X, **Hu H**. Ambient Air Pollution and Hypertensive Disorders of Pregnancy in Jacksonville, Florida. The joint ISEE, ISES and ISIAQ Environmental Health Conference, Basel, Switzerland – August 2013
4. Ha S, **Hu H**, Xu X. The Effects of Airborne Lead Exposure on Adverse Birth Outcomes. 2014 PPHP Research Fair, University of Florida, Gainesville, FL, USA – April 2014
5. **Hu H**, Ha S, Roth J, Xu X. Association of Ambient Air Pollution with Hypertensive Disorders of Pregnancy in Florida. 2014 PPHP Research Fair, University of Florida, Gainesville, FL, USA – April 2014
6. **Hu H**, Scheidell J, Coatsworth A, Xu X, Khan M. Associations between Blood Lead Level and Substance Use among Adults in the United States. The College on Problems of Drug Dependence 2014, San Juan, Puerto Rico – June 2014
7. **Hu H**, Kan H, Kearney G, Xu X. Association of Polycyclic Aromatic Hydrocarbons with Glucose Homeostasis, Metabolic Syndrome, and Diabetes in USA Adults. The 47th Annual Society for Epidemiologic Research Meeting, Seattle, WA, USA – June 2014
8. **Hu H**, Xu X. Association of Blood Cadmium and Lead with Prostate-Specific Antigen Levels: Results from the 2001-2010 National Health and Nutritional Examination Survey. ISEE 2014, Seattle, WA, USA – August 2014
9. Xu X, **Hu H**, Ha S, Roth J, Henderson B. Health Effects of Air Pollution on Gestational Complications. *Oral Presentation*, ISEE 2014, Seattle, WA, USA – August 2014
10. Shen Y, **Hu H**, Xu X. Early Menarche and Gestational Diabetes Mellitus: Results from the NHANES 2007-2012. The 48th Annual Society for Epidemiologic Research Meeting, Denver, CO, USA – June 2015
11. **Hu H**, Xu X. Smoking, Serum Cotinine, and Exhaled Nitric Oxide in U.S. Asthmatic and Healthy Population: Results from the National Health and Nutrition Examination Survey 2007-2012. The 48th Annual Society for Epidemiologic Research Meeting, Denver, CO, USA – June 2015
12. Varma DS, Kwaitkowski E, **Hu H**, Striley CW, Cottler LB. Research Participant Recruitment Using Text Messaging and Social Media. APHA 2016 Annual Meeting & Expo, Denver, CO, USA – October 2016

13. **Hu H**, Striley CW, Cottler LB. The Association between Neighborhood Deprivation and Past Month Prescription Opioid Use. The College on Problems of Drug Dependence 79th Annual Scientific Meeting, Montréal, Canada – June 2017
14. **Hu H**. Use of Urinary Lead as a Proxy for Blood Lead: A Predictive Model. The 50th Annual Society for Epidemiologic Research Meeting, Seattle, WA, USA – June 2017
15. **Hu H**, Shen Y. Gender Differences in the Association between Cadmium Exposure and Metabolic Syndrome in Non-diabetic Adults. The 50th Annual Society for Epidemiologic Research Meeting, Seattle, WA, USA – June 2017
16. Gurka KK, **Hu H**, Linn HI, Thompson GL, Christy DM. Changes in Drug-Related Fatal Overdoses following Passage of Senate Bill 437 in West Virginia: Heterogenous Effects by Type and Combination of Opioids. The Society for the Advancement of Violence and Injury Research Meeting, Ann Arbor, MI, USA – September 2017
17. **Hu H**, Xiao H, Zheng Y. A Bayesian Spatio-temporal Analysis on Racial Disparities in Hypertensive Disorders of Pregnancy in Florida, 2005-2014. The 51st Annual Society for Epidemiologic Research Meeting, Baltimore, MD, USA – June 2018