

Yuehan Zhang

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PROFILE

Master of Science in Epidemiology and Methodology experienced in conducting population health research studies. Researcher with a strong interest in integrating epidemiologic, molecular, and big data perspectives into a deeper understanding of cancer development and for translation into cancer prevention.

EDUCATION

Master of Science in Epidemiology **May 2015**

Johns Hopkins Bloomberg School of Public Health (JHSPH), Baltimore, MD (Grade: 4.0/4.0)

Concentration: General Epidemiology and Methodology

Advisor: Dr. Elizabeth Golub

Certificate: Pharmacoepidemiology and Drug Safety

Bachelor of Science in Biotechnology **July 2013**

Shanghai Jiao Tong University, Shanghai, China (Grade: 3.8/4.0)

HONORS AND AWARDS

The Delta Omega Public Health Honor Society, Alpha Chapter **May 2015**

AAAS/Science Program for Excellence in Science, American Association for the Advancement of Science **May 2015**

Dorothy and Arthur Samet Student Support Fund in Epidemiology, JHSPH **May 2015**

Master's Tuition Scholarship, JHSPH **Sept. 2014**

Grand Prize Winner at 2012 International Genetically Engineered Machine Competition (Asian Region) **Oct. 2012**

Academic Excellence Scholarship of Shanghai Jiao Tong University, China **2009-2012**

WORK EXPERIENCE

Senior Statistical Analyst **July 2018 - Present**

Statistical Analyst **June 2016-July 2018**

Division of General Internal Medicine, University of Pennsylvania

Supervisor: Dr. Daniel Polsky

- Construct measures of provider network characteristics on the ACA Marketplaces from 2016-2018
- Examine driving time access to primary care physicians and psychiatrists by rurality using generalized linear regression
- Apply population-weighted generalized linear models to assess differences in network breadth and network participation between mental health care providers and a control group of primary care providers
- Build fixed effect models to explore the predictors of hospital network size among marketplace plans
- Extract and summarize large data (e.g. Medicare data and geospatial data) by applying non-routine macros and SAS SQL
- Manage a team of 20 analysts (administer programming test to applicants, organize a monthly meeting, mentor new hires)

Research Data Analyst **June 2015-June 2016**

Department of Epidemiology, JHSPH

Supervisor: Dr. Gypsyamber D'Souza

- Assessed longitudinal trends of HPV oncogenic antibodies after treatment of HPV-driven oropharyngeal cancer (HPV-OPC) and examined whether antibody levels at diagnosis predicted risk of cancer recurrence
- Explored the predictors of HPV16 E6 seropositivity in people without cancer using multivariate logistic regression
- Constructed Kaplan-Meier curves and Cox proportional hazards models to estimate survival differences among oropharyngeal and nonoropharyngeal cancer patients by tumor HPV status, gender, and race/ethnicity
- Formulated, developed an advanced STATA program to organize and summarize complex multi-infection multi-visit data
- Collaborated with Dr. Lorraine Dean and performed data management and analysis using cross-sectional survey data of comorbidities, SF-12 self-rated health, economic burden, self-reported credit quality among breast cancer survivors
- First author for 2 papers, responsible for literature review, data analysis, and writing of the manuscript for peer review

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Research Assistant

June 2014-May 2015

Department of Epidemiology, JHSPH

Supervisor: Dr. Gypsyamber D'Souza

- Conducted survival analysis to investigate the natural history of oral HPV infection among a cohort of young adults
- Performed cross-sectional analysis to assess patient psychosocial experiences and knowledge of oral HPV infection during and after treatment of HPV-OPC
- Provided data management support, generated and maintained tracking logs for participant follow-up status, vital status, sample collection at follow-up visits
- Performed literature review and developed a research-in-progress presentation on disparities in HPV infection

Research Assistant

July-Nov. 2014

Women's Interagency HIV Study (WIHS) Data Management and Analysis Center

Supervisor: Dr. Elizabeth Golub

- Assessed exchangeability in a large multicenter cohort study by reviewing eligibility criteria over four enrollment waves
- Estimated HIV incidence rate over the entire WIHS study period and summarized participants characteristics at enrollment
- Conducted exploratory longitudinal data analysis, identified and interpreted trajectories of risk behaviors between HIV-infected and uninfected participants over 20 years of follow-up
- Proposed specific research aims, hypotheses and data analysis plans for a written concept sheet proposal

Teaching Assistant

June-July 2014

Principles of Epidemiology (340.601.11)

Instructor: Dr. Lechaim Naggan

Graduate Summer Institute of Epidemiology and Biostatistics, JHSPH

- Led discussions on selected public health topics (50 students) and held weekly office hours to answer students' questions
- Member of instructor and teaching assistant team meeting weekly to coordinate teaching

PUBLICATIONS

Drake C, **Zhang Y**, Chaiyachati KH, Polsky D. The limitations of poor broadband internet access for telemedicine use in rural America: an observational study. *Annals of Internal Medicine*. In press.

Dean LT, Moss SL, Ransome Y, Frasso-Jaramillo L, **Zhang Y**, Visvanathan K, et al. "It still affects our economic situation": long-term economic burden of breast cancer and lymphedema. *Supportive Care in Cancer*. 2018 Aug 18;doi: 10.1007/s00520-018-4418-4

Dean LT, Schmitz KH, Frick KD, Nicholas LH, **Zhang Y**, Subramanian SV, et al. Consumer credit as a novel marker for economic burden and health after cancer in a diverse population of breast cancer survivors in the USA. *Journal of Cancer Survivorship*. 2018 Jun 1;12(3):306-15.

Zhu J, Polsky D, **Zhang Y**. State-based marketplaces outperform federally-facilitated marketplaces. *LDI Issue Brief*. 2018 Mar 21;22(1):1-7.

Rettig EM, Fakhry C, Hales RK, Kisuule F, Quon H, Kiess AP, et al. Pilot randomized controlled trial of a comprehensive smoking cessation intervention for patients with upper aerodigestive cancer undergoing radiotherapy. *Head & Neck*. 2018 Mar 15;40(7):1534-47.

Yin LX, D'Souza G, Westra WH, Wang SJ, van Zante A, **Zhang Y**, et al. Prognostic factors for human papillomavirus-positive and negative oropharyngeal carcinomas. *The Laryngoscope*. 2018 Mar 14;128(8):E288-E296.

Zhang Y, Wilson TE, Adedimeji A, Merenstein D, Milam J, Cohen J, et al. The impact of substance use on adherence to antiretroviral therapy among HIV-infected women in the United States. *AIDS and Behavior*. 2018 Mar 1;22(3):896-908.

Polsky D, Weiner J, **Zhang Y**. Exploring the decline of narrow networks on the 2017 ACA marketplaces. *LDI Issue Brief*. 2017 Nov 1;21(9):1-6.

Zhu JM, **Zhang Y**, Wu B, Polsky D. Association between number of insurers and premium rates in the Affordable Care Act marketplace. *JAMA Internal Medicine*. 2017 Nov 1;177(11):1684-6.

Polsky D, Weiner J, **Zhang Y**. Narrow networks on the individual marketplace in 2017. *LDI Issue Brief*. 2017 Sep;21(8):1-6.

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Zhu JM, **Zhang Y**, Polsky D. Networks in ACA marketplaces are narrower for mental health care than for primary care. *Health Affairs*. 2017 Sep 1;36(9):1624-31.

Fakhry C, Westra WH, Wang SJ, van Zante A, **Zhang Y**, Rettig E, et al. The prognostic role of sex, race, and human papillomavirus in oropharyngeal and nonoropharyngeal head and neck squamous cell cancer. *Cancer*. 2017 May 1;123(9):1566-75.

Zhang Y, Waterboer T, Haddad RI, Miles BA, Wentz A, Gross ND, et al. Human papillomavirus (HPV) 16 antibodies at diagnosis of HPV-related oropharyngeal cancer and antibody trajectories after treatment. *Oral Oncology*. 2017 Apr 1;67:77-82.

Polsky D, **Zhang Y**, Yasaitis LC, Weiner J. Trends in physician networks in the marketplace in 2016. *LDI Data Brief*. 2016 Dec 6;1-5

D'Souza G, **Zhang Y**, Merritt S, Gold D, Robbins HA, Buckman V, et al. Patient experience and anxiety during and after treatment for an HPV-related oropharyngeal cancer. *Oral Oncology*. 2016 Sep 1;60:90-5.

Zhang Y, Waterboer T, Pawlita M, Sugar E, Minkoff H, Cranston RD, et al. Human papillomavirus (HPV) 16 E6 seropositivity is elevated in subjects with oral HPV16 infection. *Cancer Epidemiology*. 2016 Aug 1;43:30-4.

D'souza G, Wentz A, Kluz N, **Zhang Y**, Sugar E, Youngfellow RM, et al. Sex differences in risk factors and natural history of oral human papillomavirus infection. *The Journal of Infectious Diseases*. 2016 Feb 10;213(12):1893-6.

SELECTED PRESENTATIONS

Zhang Y, Waterboer T, Pawlita M, Burk R, Wiley D, Minkoff H, et al. HPV16 E6 seropositivity elevated in subjects with oral HPV16 infection. Poster at the 15th International Conference on Malignancies in AIDS and other Acquired Immunodeficiencies. 2015 Oct.

Zhang Y, Wilson TE, Adedimeji A, Merenstein D, Milam J, Cohen J, et al. The impact of illicit drug use on antiretroviral therapy (ART) adherence among HIV-infected women in the United States. Oral presentation at the 48th Annual Meeting of the Society for Epidemiologic Research. 2015 June.

PROFESSIONAL DEVELOPMENT

Computer Skills: SAS (Certified Advanced Programmer for SAS 9), SAS SQL, STATA, Java, OCaml, Bash, Eclipse, Microsoft Office Suite, Microsoft Office Access

Membership: Delta Omega Public Health Honor Society (2015-present), American Association for the Advancement of Science (2015-present), Society for Epidemiologic Research (2015-present), Chinese Public Health Forum (2014-present)

Languages: English and Mandarin

SELECTED COURSES

Epidemiology Methods, Statistical Methods, Analysis of Longitudinal Data, Multilevel Statistical Models, Survival Analysis, SAS Statistical Package, STATA Programming, Causal Inference, Public Health Surveillance, Programming Languages and Techniques I, Introduction to Microeconomics

SERVICES

President of Chinese Public Health Forum, JHSPH

2014-2015

Reviewer for Society of Epidemiologic Research Digital

2015