## Yuehan Zhang

423 Guardian Drive • Philadelphia, PA 19104 • 410-302-3020 • yhzhang16@gmail.com

#### **PROFILE**

Master of Science in Epidemiology and Methodology experienced in conducting population health research studies. Researcher with a strong interest in integrating epidemiological, 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)

Advisor: Dr. Elizabeth Golub

**Concentration**: General Epidemiology and Methodology **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, Gold Medal at 2012 International Genetically Engineered Competition (Asian Region)	Oct. 2012
Academic Excellence Scholarship of Shanghai Jiao Tong University, China	2009-2012

## WORK EXPERIENCE

Statistical Analyst June 2016-Present

Division of General Internal Medicine, University of Pennsylvania

Lead analyst working with health policy researchers on projects focused on access to healthcare under the Affordable Care Act

- Construct measures for provider network characteristics on the ACA Marketplaces from 2016-2019
- Examine driving time access to primary care physicians and psychiatrists by rurality using generalized linear regression
- Apply population-weighted generalized linear model to assess differences in network breadth and network participation between mental health care providers and a control group of primary care providers on the ACA Marketplaces in 2016
- Extract, summarize large datasets such as Medicare claims and geospatial data by applying non-routine macros and SAS SQL
- Perform descriptive analysis to examine changes in characteristics of qualified health plans from 2016-2018
- Manage a team of 20 analysts (administer programming test to applicants, organize monthly meeting, mentor new employee)

Research Data Analyst June 2015-June 2016

Department of Epidemiology, JHSPH

Supervisor: Dr. Gypsyamber D'Souza

Supervisor: Dr. Daniel Polsky

- Led epidemiologic and statistical analyses, including survival analysis, longitudinal analysis, and multivariate regression
- Estimated the change in the seroprevalence of HPV oncogenic antibodies after treatment of HPV-driven oropharyngeal cancer (HPV-OPC) and examined whether HPV oncogenic antibody levels at diagnosis predicted cancer recurrence
- Explored the predicators of HPV16 E6 seropositivity in people without cancer using multivariate logistic regression
- Formulated and developed an advanced STATA program to organize and summarize complex multi-infection multi-visit data
- Collaborated with Dr. Lorraine T. Dean and performed data management and data cleaning for longitudinal survey data of
  socioeconomic positions, comorbidities, SF-12 self-rated health, economic burden, self-reported credit quality among women
  with a history of breast cancer
- First author for 2 papers, responsible for literature review, data analysis, and writing of manuscript for peer review

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Research Assistant June 2014-May 2015

Supervisor: Dr. Gypsyamber D'Souza

Instructor: Dr. Lechaim Naggan

Department of Epidemiology, JHSPH

- 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
- 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 (WDMAC)

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 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)

Graduate Summer Institute of Epidemiology and Biostatistics, JHSPH

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

## **PUBLICATIONS**

Dean LT, Schmitz KH, Frick KD, Nicholas LH, **Zhang Y**, Subramanian SV, Visvanathan K. 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. Jun. 2018;12(3):306-15.

Zhu J, Polsky D, **Zhang Y**. State-Based Marketplaces Outperform Federally-Facilitated Marketplaces. LDI Issue Brief. Mar. 2018;22(2):1-6.

Yin LX, D'Souza G, Westra WH, Wang SJ, van Zante A, **Zhang Y**, Rettig EM, Ryan WR, Ha PK, Wentz A, Koch W. Prognostic factors for human papillomavirus–positive and negative oropharyngeal carcinomas. The Laryngoscope. Mar. 2018.

Rettig EM, Fakhry C, Hales RK, Kisuule F, Quon H, Kiess AP, Yin LX, **Zhang Y**, Blackford AL, Drummond MB, Gourin CG. Pilot randomized controlled trial of a comprehensive smoking cessation intervention for patients with upper aerodigestive cancer undergoing radiotherapy. Head & neck. Mar. 2018.

Dean LT, Moss SL, Ransome Y, Frasso-Jaramillo L, **Zhang Y**, Visvanathan K, Nicholas LH, Schmitz KH. "It still affects our economic situation": long-term economic burden of breast cancer and lymphedema. Supportive Care in Cancer. Jan. 2018:1-2.

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

Polsky D, Weiner J, Zhang Y. Narrow Networks on the Individual Marketplace in 2017. LDI Issue Brief. Sep. 2017;21(8):1-6.

Zhu JM, **Zhang Y**, Polsky D. Networks In ACA Marketplaces Are Narrower For Mental Health Care Than For Primary Care. Health Affairs; Volume 36;Sept. 2017;1624-31

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;Sept. 2017.

**Zhang Y**, Wilson T, Adedimeji A, Merenstein D, Milam J, Cohen J, Cohen M, Golub E. The Impact of Substance Use on Adherence to Antiretroviral Therapy Among HIV-Infected Women in the United States AIDS and Behavior; May. 2017; doi:10.1007/s10461-

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017-1808-4

Polsky D, Zhang Y, Yasaitis LC, Weiner J. Trends in Physician Networks in the Marketplace in 2016. LDI Issue Brief. Dec. 2016

**Zhang Y**, Waterboer T, Haddad RI, Miles BA, Wentz A, Gross ND, Fakhry C, Quong H, Lorch J, Gourin CG, Clayburgh D, Misiukiewicz KJ, Richmon JD, Andersen PE, Posner MR, D'Souza G. Human Papillomavirus (HPV) 16 Antibodies At Diagnosis of HPV-related Oropharyngeal Cancer and Antibody Trajectories After Treatment. Oral Oncology;Feb.

2017;doi:10.1016/j.oraloncology.2017.02.004

Fakhry C, Westra WH, Wang SJ, Zante A, **Zhang Y**, Rettig E, Yin LX, Ryan WR, Ha PK, Wentz A, Koch W, Richmon JD, Eisele DW, D'Souza G. The Prognostic Role of Sex, Race, and Human Papillomavirusin Oropharyngeal and Nonoropharyngeal Head and Neck Squamous Cell Cancer. Cancer; Feb. 2017; doi:10.1002/cncr.30353

D'Souza G, **Zhang Y**, Merritt S, Gold D, Robbins HA, Buckman V, Gerber J, Eisele DW, Ha P, Califano J, Fakhry C. Patient experience and anxiety during and after treatment for an HPV-related oropharyngeal cancer. Oral Oncology;Volume 60;Sept. 2016;Pages 90–95

D'Souza G, Wentz A, Kluz N, **Zhang Y**, Sugar E, Youngfellow RM, Guo Y, Xiao W, Gillison ML.Gender Differences in Risk Factors and Natural History of Oral Human Papillomavirus (HPV) Infection. Journal of Infectious Diseases;Feb. 10th 2016;doi:10.1093/infdis/jiw063

**Zhang Y**, Waterboer T, Pawlita M, Sugar E, Minkoff H, Cranston RD, Wiley D, Burk R, Reddy S, Margolick J, Strickler H, Weber K, Gillison M, D'Souza G (2016). HPV16 E6 Seropositivity Elevated in Subjects with Oral HPV16 Infection. Cancer Epidemiology; Volume 43; Aug. 2016; Pages 30–34

## SELECTED PRESENTATIONS

**Zhang Y**, Waterboer T, Pawlita M, Burk R, Wiley D, Minkoff H, Reddy S, Jacobson L, Margolick J, Cranston R, Strickler H, Sugar E, Weber K, Gillison M, D'Souza G: HPV16 E6 Seropositivity Elevated in Subjects with Oral HPV16 Infection. Poster at the 15th International Conference on Malignancies in AIDS and other Acquired Immunodeficiencies. Oct. 2015.

**Zhang Y**, Wilson TE, Adedimeji A, Merenstein D, Milam J, Cohen J, Cohen M, Golub ET: 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. June 2015.

### PROFESSIONAL DEVELOPMENT

**Computer Skills**: SAS (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 (2015-2016), Chinese Public Health Forum (2014-present)

Languages: English and Mandarin

### SELECTED COURSES

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

### **SERVICES**

President of Chinese Public Health Forum Reviewer for Society of Epidemiologic Research Digital

2014-2015

2015