## ZHENKE WU

# zhenkewu@umich.edu

1415 Washington Heights 4623 SPH-I (inside Suite 4605) Ann Arbor, MI 48109-2029 Mobile: 410-336-9652

*Work: 734-764-7067 zhenkewu.com* 

## **EDUCATION**

# Johns Hopkins Bloomberg School of Public Health, Baltimore, MD

Ph.D. in Biostatistics

Thesis title: Statistical Methods for Individualized Health: Etiology, Diagnosis, and Intervention Evalu-

ation

Advisors: Scott Zeger and Constantine Frangakis

2009 Fudan University, Shanghai, China

B.Sc. in Mathematics

# PROFESSIONAL EXPERIENCE

2016 - present	Assistant Professor Department of Biostatistics, University of Michigan Research Assistant Professor Michigan Institute for Data Science (MIDAS), University of Michigan
2017 - present	Faculty Associate Quantitative Methodology Program, Survey Research Center Institute for Social Research (ISR), University of Michigan
2016 - present	Consultant Biostatistics Core for Global Health (GLOBAL STATCORE), Office of Global Public Health, University of Michigan
2014 - 2016	Postdoctoral Fellow Hopkins individualized Health ( <i>in</i> Health), Johns Hopkins University Department of Biostatistics, Johns Hopkins Bloomberg School of Public Health
2014 - 2016	Co-lead Statistician Pneumonia Etiology Research for Child Health (PERCH) funded by Gates Foundation, International Vaccine Access Center (IVAC), Johns Hopkins Bloomberg School of Public Health Principal Investigator: Katherine O'Brien
2015 August	Visiting Scholar Combining Health Information, Computation and Statistics (CHICAS) Lancaster University, Lancaster, England
2013 - 2014	External Consultant Child Health Research Foundation (CHRF), Dhaka, Bangladesh; National Center for Immunization and Respiratory Diseases (NCIRD), The U.S. CDC
2010 - 2014	Research Assistant

International Vaccine Access Center (IVAC), Johns Hopkins Bloomberg School of Public

Health

Advisor: Scott Zeger; Principal Investigator: Katherine O'Brien

2008 Research Scholar

California NanoSystems Institute, and Department of Mechanical and Aerospace Engi-

neering, University of California, Los Angeles

2007 - 2009 Research Scholar

Center for Computational Systems Biology, Fudan University, Shanghai, China

# PROFESSIONAL ACTIVITIES (\*upcoming)

Committee Member Eastern North American Regional Meeting of the International Biometric Society

- Regional Advisory Board (2018-2020)

- Educational Advisory Committee (2018; Atlanta, GA)

Session Chair Towards a Learning-Health System: Methods and Strategies for Data-Driven Healthcare,

Joint Statistical Meetings (July 29 - August 3, 2017; Baltimore, MD)

Member Cancer Epidemiology and Prevention (CEP) research program, Cancer Cen-

ter Core Grant Member, University of Michigan Comprehensive Cancer Center

(UMCCC)

MIDAS mobile sensor analytics working group

Hopkins in Health (HiH) Learning Methodologies Working Group

Founding Member Chinese Public Health Forum (CPHF) at Johns Hopkins, 2010-12

Consultant Studio Consultation, Johns Hopkins Institute for Clinical and Transnational Re-

search (ICTR)

Hosted Attendee Program on Statistical, Mathematical, and Computational Methods for Precision

Medicine (PMED), SAMSI, Raleigh, Durham, NC. August 13-17, 2018.

Methods Summit. PCORI Annual Meeting: Building a Patient-Centered Re-

search Community. Arlington VA. October 6-8, 2015

Panelist Foundations of Data Science. Fifth Bayesian, Fiducial and Frequentist Conference

(BFF5) (May 6-9, 2018; Ann Arbor, MI)

Referee Journals: Biometrics, Biostatistics, Journal of Business and Economic Statistics, Statis-

tics in Medicine, Annals of Statistics, Computational Statistics and Data Analysis, Statistical Science, Sankhya (The Indian Journal of Statistics), Nature Partner Journal (npj) Digital Medicine, International Journal of Epidemiology, Ophthalmic Epidemiol-

ogy, Psychiatric Services

**Books**: Cambridge University Press, Johns Hopkins University Press

**Grants**: 2017 Michigan Institute for Clinical and Health Research (MICHR) Pilot Grant; 2016 Johns Hopkins Individualized Health Initiative Request for Proposal (RFP); 2016 Methodology Research Grant, Medical Research Council, United

Kingdom

# HONORS AND AWARDS

## UNIVERSITY OF MICHIGAN

2017 Travel Award for ENAR Junior Investigator Workshop, International Biometric Society. Washington, DC.

## JOHNS HOPKINS UNIVERSITY

2016	New Researcher Conference Travel Award, Institute of Mathematical Statistics. Madison, WI.
2015	Top Performer for 2015 Prostate Cancer DREAM Challenge 1b; As part of <i>Bmore Dream Team</i> . Press Release.
2015	Scholarship for Summer Institute in Statistics and Modeling in Infectious Diseases. University of Washington, Seattle, WA
2015	NSF Big Data Travel award for Drawing Causal Inference from Big Data. National Academy of Sciences, Washington DC
2015	Induction into Alpha Chapter of Delta Omega Public Health Honor Society
2015	Induction into Phi Beta Kappa Honor Society
2014	First Place: Biostatistics Section of the Delta Omega Poster Competition
2012, 2013	Joseph Zeger Travel Award to ENAR and JSM
2012	June B. Culley Award, for outstanding achievement on school-wide oral exam paper
2011-14	Johns Hopkins Sommer Scholar
2009-14	Department of Biostatistics Graduate Fellowship

## UNIVERSITY OF CALIFORNIA, LOS ANGELES

2008 UCLA-China Cross Disciplinary Scholarship in Science and Technology (CSST)

## FUDAN UNIVERSITY

2009	B.Sc. with First Class Honors
2007-09	Chun-Tsung Scholar, Chinese Undergraduate Research Endowment (CURE) Scholarship
2008	First Class National Scholarship, Ministry of Education, China
2007	Excellent Undergraduate Student, Government of Shanghai
2006-07	First Class People's Scholarship
2006	First Class Shi Dai Scholarship

# PUBLICATIONS (†: alphabetical order)

### JOURNAL ARTICLES (STATISTICAL METHODOLOGY)

**Wu Z**, Casciola-Rosen L, Shah AA, Rosen A, Zeger SL (2017). Estimating AutoAntibody Signatures to Detect Autoimmune Disease Patient Subsets. *Biostatistics*. In press. doi: 10.1093/biostatistics/kxx061.

**Wu Z**, Deloria-Knoll M, and Zeger SL (2017). Nested Partially-Latent Class Models (npLCM) for Dependent Binary Data; Estimating Disease Etiology. *Biostatistics*, 18 (2): 200-213. doi:10.1093/biostatistics/kxw037.

**Wu Z**, Deloria-Knoll M, Hammitt LL, and Zeger SL, for the PERCH Core Team (2016). Partially Latent Class Models (pLCM) for Case-Control Studies of Childhood Pneumonia Etiology. *Journal of the Royal Statistical Society: Series C (Applied Statistics)*, 65: 97-114. doi: 10.1111/rssc.12101.

**Bmore Dream Team**: Deng D, Du Y, Ji Z, Rao K, **Wu Z**, Zhu Y, Coley RY (2016). Predicting Survival Time for Metastatic Castration-Resistant Prostate Cancer: An Iterative Imputation Approach. *F1000Research* 2016, 5:2672. doi: 10.12688/f1000research.8628.1.

Frangakis CE, Qian T, **Wu Z**, Diaz I (2015). Deductive Derivation and Turing-computerization of Semiparametric Efficient Estimation. *Biometrics*. doi:10.1111/biom.12362. Discussion paper.

Frangakis CE, Qian T, **Wu Z**, Diaz I (2015). Rejoinder: Deductive Derivation and Turing-computerization of Semiparametric Efficient Estimation. *Biometrics*. doi:10.1111/biom.12365.

**Wu Z**, Frangakis CE, Louis TA, Scharfstein DO (2014). Estimating Treatment Effects in Cluster Randomized Trials by Calibrating Covariate Imbalances between Clusters. *Biometrics*, 70: 1014-1022. doi: 10.1111/biom.12214.

## JOURNAL ARTICLES (SUBSTANTIVE RESEARCH)

Fritsche L, Gruber SB, **Wu Z**, Schmidt E, Zawistowski M, Moser SE, Blanc VM, Brummet CM, Kheterpal S, Abecasis GR, Mukherjee B (2018). Association of Polygenic Risk Scores for Multiple Cancers in a Phenomewide Study: Results from The Michigan Genomics Initiative. *American Journal of Human Genetics*. In press. https://doi.org/10.1016/j.ajhg.2018.04.001.

Deloria-Knoll M, Fu W, Shi Q, Prosperi C, **Wu Z**, Hammitt LL, Feikin DR, Baggett HC, Howie SRC, Scott JAG, Murdoch DR, Madhi SA, Thea DM, Brooks WA, Kotloff KL, Li M, Park DE, Lin W, Levine OS, O'Brien KL, Zeger SL (2017). Bayesian Estimation of Pneumonia Etiology: Epidemiologic Considerations and Applications to PERCH. *Clinical Infectious Diseases*, 64 (suppl 3): S213-S227. doi: 10.1093/cid/cix144.

Georgiades C, Geschwind J-F, Neil H, Hines-Peralta A, Liapi E, Hong K, **Wu Z**, Kamel I, Frangakis CE (2012). Lack of response after initial chemoembolization for hepatocellular carcinoma: Does it predict failure of subsequent treatment? *Radiology*, 265:115-123.

### JOURNAL ARTICLES (SUBSTANTIVE RESEARCH; GROUP AUTHORSHIP)

**Wu Z** as part of the PERCH Study Group (2017). <u>16 articles</u> in *Clinical Infectious Diseases*; 64 (suppl 3). Link to the complete list: <a href="https://goo.gl/3egRN1">https://goo.gl/3egRN1</a>.

Seyednasrollah F et al. - **Wu Z** in Prostate Cancer DREAM Challenge Community (2017). A DREAM Challenge to Build Prediction Models for Short-Term Discontinuation of Docetaxel in Metastatic Castration-Resistant Prostate Cancer. *JCO Clinical Cancer Informatics* 1, 1-15. doi: 10.1200/CCI.17.00018

Guinney J et al. - **Wu Z** in PCC DREAM Consortium (2017). Prediction of Overall Survival for Patients with Metastatic Castration-Resistant Prostate Cancer: Development of A Prognostic Model Through A Crowdsourced Challenge with Open Clinical Trial Data. *The Lancet Oncology*, 18 (1): 132-142. doi: 10.1016/S1470-2045(16)30560-5.

#### OTHER REFEREED PUBLICATIONS

Xu, G, **Wu**, **Z** and Murphy, SA (2018). Micro-Randomized Trial. In Wiley StatsRef: Statistics Reference Online (eds N. Balakrishnan, T. Colton, B. Everitt, W. Piegorsch, F. Ruggeri and J. L. Teugels). doi:10.1002/9781118445112.stat08050

### UNDER REVIEW/REVISION

**Wu Z**, Casciola-Rosen L, Rosen A, Zeger SL (2018+). A Bayesian Approach to Restricted Latent Class Models for Scientifically-Structured Clustering of Multivariate Binary Outcomes. *Submitted*. https://doi.org/10.1101/400192.

PERCH Study Group<sup>‡</sup> (**Wu Z** as PERCH Co-Lead Statistician) (2018+). Aetiology of serious hospitalised pneumonia in HIV-uninfected children from Africa and Asia: the Pneumonia Etiology Research for Child Health (PERCH) Case-Control Study. *Submitted*.

† : No separate authors listed (group authorship only); First ever application of partially-latent class analysis for pneumonia etiology research; Data:  $\sim 5,000$  cases and  $\sim 5,000$  controls from 7 Sub-Saharan African and Southeast Asian Countries.

### **SOFTWARE**

baker: Bayesian Analysis Kit for Etiology Research - Fitting and visualizing Bayesian nested

partially-latent class models for estimating disease etiology

https://github.com/zhenkewu/baker

**mpcr**: Robust covariate-calibrated estimation of treatment effect in matched-pair cluster random-

ized trials.

https://github.com/zhenkewu/mpcr

**spotgear**: Subset Profiling and Organizing Tools for Gel Electrophoresis Autoradiography in R

https://github.com/zhenkewu/spotgear

rewind: Reconstructing Etiology with Binary Decomposition

https://github.com/zhenkewu/rewind

## TEACHING AND ADVISING (see website for materials)

### ADVISING (\*expected graduation)

2019\* Tim NeCamp, PhD student (co-advisor with Edward Ionides). NSF Graduate Research Fellow.

Department of Statistics, University of Michigan

2019\* Mengbing Li, MS student. Department of Biostatistics, University of Michigan

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PRELIMINARY ORAL PARTICIPATION					
2018 Yuqi Gu (Statistics), April Cho (Statistics), Tim NeCamp (Statistics)					
FINAL OF	RAL PARTICIPATION				
2018 Jun Guo (Statistics)					
MENTOR					
2017 Summer Big Data Summer Institute, NIH BD2K R25 (PI: Mukherjee) Undergraduate Projects on Statistical Methods for Electronic Health Records (data: Michigan Genomics Initiative). Department of Biostatistics, University of Michigan					
<u>INSTRUC</u>	TOR				
2019 Fal	Applied Generalized Linear Models (to be offered through Coursera; Applied Statistical Modeling Concentration; Online MPH Program at University of Michigan School of Public Health)				
2018 Fall	'				
2017 Fal	Statistical Methods in Epidemiology (BIOSTAT 523), Department of Biostatistics, University of Michigan. 84 Master/Doctoral Students.				
2016 Fall	Statistical and Computational Methods for Learning through Graphical Models (Advanced Topics in Biostatistics; BIOSTAT 830), Department of Biostatistics, University of Michigan. 11 Doctoral Students.				
2014	Statistical Methods for Individualizing Health (Short course taught with Scott Zeger), Mayo Clinic, Department of Health Sciences Research, November 17, Rochester, MN.				
GUEST LECTURER					
2019*	TBA. Summer Camp (Math, Art and Data Science) for High School Students, MIDAS, University of Michigan. August 14.				
2018	Causal Inference. Big Data Summer Institute, Department of Biostatistics, University of Michigan. June 28.				
2017	Network. Big Data Summer Institute, Department of Biostatistics, University of Michigan.				

June 22. Link: http://bigdatasummerinst.sph.umich.edu/wiki/index.php/Main\_

2016	Predicting Survival Time for Metastatic Castration Resistant Prostate Cancer: An Iterative Imputation Approach. Cancer Biostatistics Seminar Course (BIOSTAT 803), Department of Biostatistics, University of Michigan (Instructor: Jeremy M G Taylor). October 28.
2016	Data Visualization for Individualized Health via ggplot2. Public Health Studies, Undergraduate Seminar Course, Johns Hopkins University (taught by Yates Coley). March 1.
2016	Methods in Biostatistics (140.653; Master-level). Johns Hopkins University. February 11.
2015	A Survey of Automatic Bayesian Software and Why You Should Care. Hopkins Biostatistics Student Computing Club.
2015	Exploring the Posterior Distribution by Markov chain Monte Carlo. Hopkins Biostatistics Student Computing Club.
2014	Introduction to Empirical Processes and Semiparametric Inference. SLAM Working Group.
2012	Advanced Special Topics in Statistical Machine Learning, 140.840 (taught by Han Liu).
TEACHING	GASSISTANT
2014	Multilayal Statistical Models Craduate 140 (56 (tought by Elizabeth Colombusoni)

Multilevel Statistical Models, Graduate, 140.656 (taught by Elizabeth Colantuoni).

Analysis of Longitudinal Data, Graduate, 140.655 (taught by Elizabeth Colantuoni).

Biostatistics in Public Health, Undergraduate, 280.346 (taught by Scott Zeger).

Case-based Introduction to Biostatistics, www.coursera.org (taught by Scott Zeger;~ 23,000 global enrollments).

Bayesian Methods I-II, Graduate, 140.762-763 (taught by Gary Rosner).

Biostatistics in Public Health, Undergraduate, 280.346 (taught by Scott Zeger).

2011-12 Advanced Probability Theory **I-II**, Graduate, 550.620 - 621 (taught by James Fill).

2010-11 Essentials of Probability and Statistical Inference **I-IV**, Graduate, 140.646-649 (taught by Michael Rosenblum and Charles Rohde).

## PRESENTATIONS (\*upcoming)

## ORAL: INVITED

- Estimating clusters from multivariate binary data via hierarchical Bayesian Boolean matrix factorization. 2nd International Conference on Econometrics and Statistics (EcoStat 2018). June 19-21, The City University of Hong Kong.
- 2018 Partially Observed Dynamic Models for Tracking Therapeutic and Engagement Outcomes. "Statistics Methods and Applications in Mobile Health", Applied Statistics Symposium. International Chinese Statistical Association (ICSA). June 14-17, New Brunswick, NJ, USA.
- Junior Faculty Lightning Talks. Cancer Control and Population Sciences (CCPS), University of Michigan Cancer Center. May 4.

- 2018 Predicting mood using multivariate mobile sensor data streams for medical interns. Health Sciences Challenge Symposium. Michigan Institute for Data Sciences, University of Michigan. May
  1
- 2018 Bayesian Hierarchical Methods to Power Disease Discovery and Improve Clinical Decisions. Michigan Student Symposium for Interdisciplinary Statistical Sciences (MSSISS) University of Michigan. Apr 2-3. **Junior Faculty Keynote Speaker**.
- 2017 Partially Observed Dynamic Models for Therapeutic and Engagement Outcomes. Statistical Reinforcement Learning Lab. December 22. Department of Statistics, Harvard University, Cambridge, MA.
- 2017 Estimating AutoAntibody Signatures to Detect Autoimmune Disease Patient Subsets.
  - Rheumatology Data Science Meeting. December 1, Johns Hopkins School of Medicine, Bayview Medical Center.
  - International Biometric Society, Brazilian Regional Meeting. July 24 July 28, Federal University of Lavras (UFLA), Lavras, MG, Brazil. Conference Plenary Talk.
  - Big Data Summer Institute, University of Michigan. July 10, Ann Arbor, MI.
  - Interdisciplinary Group Seminar (IGS), Center for Statistical Genetics, University of Michigan. November 29, 2016, Ann Arbor, MI
- 2016 Statistical Methods for Individualized Health. Annual School of Public Health Excellence in Research Symposium, University of Michigan. November 11, Ann Arbor, MI.
- Bayesian Nested Partially-Latent Class Models for Dependent Binary Data; Estimating Disease Etiology.
  - 9th International Conference of the ERCIM WG on Computational and Methodological Statistics. December 9-11, University of Seville, Spain.
  - Department of Biostatistics, University of Michigan. February 25, Ann Arbor, MI.
  - Department of Biostatistics, University of Massachusetts, Amherst. February 5, Amherst, MA.
  - Biostatistics Research Branch, Division of Clinical Research, National Institute of Allergy and Infectious Diseases, NIH. February 1, Rockville, MD.
- Sparse Latent Class Regression for Multivariate Binary Data; A Bayesian Approach. Survival, Longitudinal and Multivariate Data Working Group. Department of Biostatistics, Johns Hopkins University. May 6, Baltimore, MD.
- 2015 Informative Bayes Models for Estimating Disease Etiology.
  - Biostatistics Grand Rounds, Johns Hopkins Bloomberg School of Public Health. November 9, Baltimore, MD.
  - CHICAS, Medical School, Lancaster University. August 17, Lancaster, England.
  - Department of Biostatistics, Brown University. February 17, Providence, RI.
- 2014 Partially Latent Class Models (npLCM) for Case-Control Studies of Childhood Pneumonia Etiology. SLAM Working Group. December 12, Baltimore, MD.

- Partially Latent Class Models (npLCM) for Case-Control Studies of Childhood Pneumonia Etiology. Pneumonia Etiology Research for Child Health (PERCH) Executive Committee Meeting. December 2, London, England.
- 2013 Estimating Infectious Etiology from Hierarchical Dirichlet Process Perspective. Pneumonia Etiology Research for Child Health (PERCH) Executive Committee Meeting. December 2, London, England.
- 2013 Partially Latent Class Models (pLCM) for Case-Control Studies of Childhood Pneumonia Etiology. US Centers for Disease Control and Child Health Research Foundation: Aetiology of Neonatal Infection in South Asia (ANISA) Project Committee Meeting. November 10, San Diego, CA.
- 2012 Revealing and Addressing Existing Basic Inadequacies in the Use of Paired Cluster Randomized Trials. Department of Biostatistics. Johns Hopkins Biostatistics Causal Inference Working Group. December 6, Baltimore, MD.

#### ORAL: CONTRIBUTED

- Estimating clusters from multivariate binary data via hierarchical Bayesian Boolean matrix factorization. Joint Statistical Meeting. July 28-August 2, Vancouver, Canada.
- 2018 Mixed Membership Regression Models for Estimating Autoimmune Disease Patient Subsets. Eastern North American Regional meeting of the International Biometric Society. March 25-28, Atlanta, GA.
- 2017 Detecting Autoimmune Disease Subsets for Estimated Autoantibody Signatures. Eastern North American Regional meeting of the International Biometric Society. March 12-15, Washington, DC.
- Sparse Latent Class Regression for Multivariate Binary Data; A Bayesian Approach. Joint Statistical Meetings. July 31-August 4, Chicago, IL.
- 2016 Bayesian Regression Analysis for Estimating Disease Etiology. Eastern North American Regional meeting of the International Biometric Society. March 6-9, Austin, TX.
- Bayesian Nested-Partially Latent Class Models for Estimating Disease Etiology. Eastern North American Regional meeting of the International Biometric Society. March 15-18, Miami, FL.
- Nested Partially Latent Class Models (npLCM) for Case-Control Studies of Childhood Pneumonia Etiology. Joint Statistical Meetings. August 7, Boston, MA.
- 2014 Estimating Treatment Effects in Cluster Randomized Trials by Calibrating Covariate Imbalances between Clusters. Eastern North American Regional meeting of the International Biometric Society. March 18, Baltimore, MD.
- Estimating Treatment Effects in Cluster Randomized Trials by Calibrating Covariate Imbalances between Clusters. Joint Statistical Meeting. August 4, Montreal, QC, Canada.

- A Bayesian Approach to Restricted Latent Class Models for Scientifically-Structured Clustering of Multivariate Binary Outcomes.
  - 25th Model-Based Clustering Workshop. July 16-20, University of Michigan, Ann Arbor, MI.
  - Program on Statistical, Mathematical, and Computational Methods for Precision Medicine (PMED), SAMSI. August 14, Raleigh, NC.
- 2017 Estimating AutoAntibody Signatures to Detect Autoimmune Disease Patient Subsets. Data Science Research Forum. December 1, University of Michigan, Ann Arbor, MI.
- 2016 Bayesian Nested-Partially Latent Class Models for Estimating Disease Etiology. 18th Meeting of New Researcher Conference in Statistics and Probability. July 28-30, University of Wisconsin, Madison.
- 2014 Estimating Childhood Pneumonia Episodes Attributable to Putative Pathogens from Indirect Measurements: Seasonality and Impact of HIV Infection. Delta Omega Scientific Poster Competition. Feburary 8, Baltimore, MD.
- 2013 Hierarchical Bayesian Model for Combining Information from Multiple Biological Samples with Measurement Errors: An Application to Children Pneumonia Etiology Study. Eastern North American Regional meeting of the International Biometric Society. March 12, Orlando, FL.

### RESEARCH GRANT PARTICIPATION

FUNDED		

Co-I, NIH 2R01MH101459 (PI: Sen; U of Michigan)

07/01/2018 - 03/31/2023

Mobile Technology to Identify Mechanisms Linking Genetic Variation and Depression Effort: 10%.

Subcontract PI, NIH R01AR073208 (PIs: Casciola-Rosen and Shah; Hopkins) 04/01/2018 - 03/31/2023 Autoantibodies Define Scleroderma Subgroups with Distinct Relationships to Cancer Subcontract to UMich 18-PAF07330; Effort: 15%.

Co-Investigator, NIH UO1 (PI: Nahum-Shani, ISR, U of Michigan) 09/01/2018 - 08/31/2022 Novel use of mHealth data to identify states of vulnerability and receptivity to JITAIs

Co-Investigator, MIDAS Challenge Awards (PI: Sen)

03/01/2017-02/28/2019

Identifying Real-Time Data Predictors of Stress and Depression Using Mobile Technology.

Funding for methodological research in the area of health sciences, Michigan Institute for Data Science (MIDAS), University of Michigan

Effort: 10%. \$521,051.

Subcontract PI, PCORI ME-1408-20318 (PI: Zeger)

07/01/2015 - 08/31/2018

Bayesian Hierarchical Models for Design and Analysis of Studies to Individualize Healthcare.

Funding for Methodological Research, Patient-Centered Outcomes Research Institute.

Subcontract to UMich 17-PAF02898; Effort: 27%. \$890, 032.

## COMPLETED

Co-lead Statistician, Gates Foundation 305215 (PI: O'Brien)

09/01/2014-12/31/2017

Pneumonia Etiology Research for Child Health (PERCH).

Subcontract to UMich 17-PAF02901; Effort: 32%.

Investigator, Project Data Sphere, LLC (PDS) by AstraZeneca Prostate Cancer DREAM Challenge Educational Program Award 10/01/2015-03/31/2016

\$2307.69.

## **ACADEMIC SERVICE**

## DEPARTMENT OF BIOSTATISTICS, UNIVERSITY OF MICHIGAN

2018 - Rod Little Distinguished Lectureship Organizing Committee

2018 - Computing, Social Media and Website Reform

2017 - Qualifying Exam Modernization Proposal

2017 - 18 Faculty Search

2017 - Seminars/Brown Bag

2016 - 17 Admissions

## SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF MICHIGAN

2018 - Health Informatics

### MICHIGAN INSTITUTE OF DATA SCIENCE

2016 Poster Competition Judge, Michigan Institute of Data Science Symposium, November 15