

# Bo Y. Park, PhD MPH

Assistant Professor

Department of Public Health  
California State University, Fullerton

[bopark@fullerton.edu](mailto:bopark@fullerton.edu) (657) 278-5374

## EDUCATION

2018	Postdoctoral Fellow Johns Hopkins Bloomberg School of Public Health Department of Mental Health	Baltimore, MD
2015 Ph.D.	Drexel University, Dornsife School of Public Health Department of Epidemiology and Biostatistics	Philadelphia, PA
2007 MPH	Dartmouth College, School of Medicine	Hanover, NH
2005 B.A.	UC Berkeley, Molecular Cell Developmental Biology	Berkeley, CA

## RESEARCH EXPERIENCE

08/18-Present	Department of Public Health, California State University, Fullerton Assistant Professor	
08/15-05/18	Department of Mental Health, Bloomberg School of Public Health, Johns Hopkins University. <i>Environmental and genetic factors of Autism</i> Postdoctoral Research Fellow <i>PI:</i> Dr. Heather Volk and Dr. Dani Fallin	
09/11-06/15	A.J. Drexel Autism Institute, Dornsife School of Public Health, Drexel University. <i>Androgen and endocrine disruptors and Autism risk</i> Graduate Research Assistant <i>Advisor:</i> Dr. Craig J. Newschaffer	
09/09-05/11	<i>Data Management Analyst</i> , Mount Sinai School of Medicine: The World Trade Center Medical Monitoring and Treatment Program Data and Coordination Center <i>Supervisor:</i> Dr. Hyun Kim	
09/07-06/09	<i>Recommendation Specialist</i> , US Chemical Safety Board	

## TEACHING EXPERIENCE

### California State University, Fullerton

- PUBH 115: Introduction to Environmental Health and Safety (Freshmen/Sophomore)  
Description: 3-credit undergraduate lecture on how environmental and safety hazards influence public health and sustainability. Multiple perspectives on water, air and solid waste pollutions, sustainability and public safety issues.
- PUBH 401: Epidemiology (Junior/Senior)  
Description: 3-credit undergraduate lecture on applying epidemiologic procedures to understand the occurrence and control of infectious and chronic disease, mental illness, environmental health hazards, and geriatric problems.
- PUBH 358: Contemporary Issues in Childrens' Health (Junior/Senior)

## Johns Hopkins University Teaching Institute

Certified in May 2017

Description: Three day teaching workshop to advance the development of university-level educator by enhancing classroom teaching skills.

## Graduate Teaching Assistant

2011-2015 Drexel University Dornsife School of Public Health, Philadelphia, PA

- PBHL 640: Intermediate Epidemiology  
Description: 3-credit graduate lecture which expands on basic methods used in epidemiologic thinking and research. Topics include: causal inference, bias, confounding, effect modification, and multivariable modeling approaches.
- PBHL 639: Cardiovascular Diseases Epidemiology and Prevention  
Description: 3-credit graduate lecture on pathophysiology of cardiovascular disease, well-established and emerging risk factors and major strategies for prevention and control.

## **AWARDS AND HONORS**

### Research Support

1. Pending: **BY Park (co-PI)**. AI-based Emergency Risk Technology (ALERT): Predicting Physical Health Risk for Pregnant Mothers using Social Media and Big Data. National Science Foundation CIVIC grant, 2020-2021 (\$49,990)
2. Submitted: **BY Park (co-PI)**. Harvesting Big Data to Predict and Prevent Mental and Physical Health Risk using Artificial Intelligence. STEM-NED Faculty SEED grant, 2020-2021 (\$8000)
3. **BY Park (PI)**. Advance care planning among older adults living with HIV. Planning and Engaging in Advance Care for Health. Chancellor's Office. University of Southern California, 2020-2021 (\$8000 funded).
4. **BY Park (PI)**. Effect of maternal obesity and hormone imbalance on maternal and child morbidity and mortality. Junior Grant, California State University, Fullerton Chancellor's office, 2019-2020
5. **BY Park (PI)**. Maternal metabolic syndrome and Autism Spectrum Disorder risk, Wendy Klag Center for Autism and Developmental Disabilities Student Research Award, Johns Hopkins Bloomberg School of Public Health, 2016-2017 (\$14,000 funded)
6. **BY Park (PI)**. Prenatal Fetal Testosterone and Early Autism Spectrum Related Neurodevelopmental Outcomes, Dennis Weatherstone Predoctoral Fellowship, Autism Speaks, 2013-2015. (\$58,832 funded)
7. Prenatal Antimicrobial Agent Exposure, Fetal Androgens and ASD Risk, Research Assistant and Contributing Writer (PI: Craig Newschaffer), 2015-2017, Environmental Risk Factors for Autism SEP (1 R21ES025559-01, \$156,500); Funded June 2016 by NIEHS.

### Other Honors and Awards

1. American College of Epidemiology Award for Overall Best Paper Published for article "The association between gestational weight gain and risk of stillbirth: a population-based cohort study". December 2018.
2. Travel Award. 2017 Environmental Epidemiology of Autism Research Network, National Institute of Environmental Health Sciences, May 12, 2017.
3. Oral Presentation Award. 3<sup>rd</sup> Annual Johns Hopkins Postdoctoral Retreat, Johns Hopkins University, May 26, 2016.
4. Great Promise to Enhance Drexel's Reputation Award, Drexel University, June 11, 2015 (\$1000 award)

5. Travel Scholarship, Drexel University Graduate Studies, Society for Perinatal Epidemiologic Research Annual Meeting. Seattle, WA, June 23, 2014.
6. Travel Scholarship, 18th Annual Maternal and Child Health Epidemiology Conference. San Antonio, TX, 2012

## PUBLICATIONS

### Peer-reviewed Papers

\*Contributed equally as co-first authors

1. Heather Volk; **Bo Park**; Calliope Hollingue; Karen L. Jones; Paul Ashwood; Gayle C. Windham; Fred Lurman; Stacey E. Alexeeff; Martin Kharrazi; Michelle Pearl; Judy Van de Water; Lisa A. Croen. Maternal Immune Response and Air Pollution Exposure During Pregnancy Insights from the Early Markers for Autism (EMA) Study. *Under revision at Journal of Neuro Developmental Disorder*. (available upon request)
2. **Park BY**, Yao R, Tierney E, Brucato M, Hong x, Wang G, Ji Y, Pearson C, Fallin MD, Wang X, Volk H. The association between maternal lipid profile and offspring risk of Autism Spectrum Disorder. *Annals of Epidemiology*. 2020. <https://doi.org/10.1016/j.annepidem.2020.08.009>
3. **Park BY**, Cryer A, Betoni J, McLean L, Figueroa H, Contag S & Yao R. Outcomes of Labor Induction at 39 weeks in Pregnancies with a Prior Cesarean Delivery. *The Journal of Maternal-Fetal & Neonatal Medicine*. 2020. DOI: [10.1080/14767058.2020.1807505](https://doi.org/10.1080/14767058.2020.1807505)
4. \*Mordaunt CE, \***Park BY**, Bakulski KM, Feinberg JI, Croen LA, Newschaffer CJ, Volk HE, Ozonoff S, Hertz-Picciotto I, LaSalle, JM, Schmidt RJ, Fallin MD. A meta-analysis of two enriched-risk prospective cohort studies reveals autism-specific transcriptional changes to chromatin, autoimmune, and environmental response genes in umbilical cord blood. *Molecular Autism*. 2019. DOI: [10.1186/s13229-019-0287-z](https://doi.org/10.1186/s13229-019-0287-z)
5. Kathleen Browne, **Bo Y. Park**, Katherine R. Goetzinger, Aaron B. Caughey & Ruofan Yao. The joint effects of obesity and pregestational diabetes on the risk of stillbirth, *The Journal of Maternal-Fetal & Neonatal Medicine*. 2019. DOI: [10.1080/14767058.2019.1607287](https://doi.org/10.1080/14767058.2019.1607287)
6. **Park BY**, Misra DP, Moya J, Miller RK, Croen L, Fallin DM, Walker C, Newschaffer CJ, Salafia CM. Placental gross shape differences in a high autism risk cohort and the general population. *PLoS ONE*. 2018. 13(8): e0191276. <https://doi.org/10.1371/journal.pone.0191276>
7. Yao R, **Park B**, Foster S, Caughey A. The association between gestational weight gain and risk of stillbirth: a population-based cohort study. *Annals of Epidemiology*. 2017. Oct. 27:10. DOI: [10.1016/j.annepidem.2017.09.006](https://doi.org/10.1016/j.annepidem.2017.09.006)
8. **Park BY**, Lee BK, Burstyn I, Tabb LP, Keelan JA, Whitehouse AJO, Croen LA, Fallin MD, Hertz-Picciotto I, Montgomery O, Newschaffer CJ. Umbilical cord blood androgen levels and ASD-related phenotypes at 12 and 36 months in an enriched risk cohort study. *Molecular Autism*. 2017. Jan 31. 8:3. DOI: [10.1186/s13229-017-0118-z](https://doi.org/10.1186/s13229-017-0118-z)
9. Frey AJ, **Park BY**, Schriver ER, Feldman DR, Parry S, Croen LA, Fallin DM, Hertz-Picciotto I, Newschaffer CJ, Snyder NW. Differences in testosterone and steroid hormone precursors by sex of the offspring in meconium. *The Journal of Steroid Biochemistry and Molecular Biology*. 2017. Mar;167:78-85. doi: [10.1016/j.jsbmb.2016.11.010](https://doi.org/10.1016/j.jsbmb.2016.11.010)
10. Lyall K, Croen L, Daniels J, Fallin MD, Ladd-Acosta C, Lee BK, **Park BY**, Snyder NW, Schendel D, Volk H, Windham G, Newschaffer CJ. The Changing Epidemiology of Autism Spectrum Disorders. *ARPH*. March 2017. DOI: [10.1146/annurev-publhealth-031816-044318](https://doi.org/10.1146/annurev-publhealth-031816-044318)
11. Yao R, **Park BY**, Caughey AB. The effects of maternal obesity on perinatal outcome among those born small for gestational age. *J Maternal Fetal Neonatal Med*. 2016. Aug 23: 1-6. DOI: [10.1080/14767058.2016.1216098](https://doi.org/10.1080/14767058.2016.1216098)
12. **Park BY**, Lee BK. Use of Meconium in Perinatal Epidemiology: Potential Benefits and Pitfalls, *Annals of Epidemiology*. Dec 2014. 24. 12:878-881. <https://doi.org/10.1016/j.annepidem.2014.09.009>
13. Yao R, Ananth CV, **Park BY**, Pererira L, Plante LA. Obesity and the risk of stillbirth: a population-based cohort study. *American Journal of Obstetrics and Gynecology*. 2014; 210: <https://doi.org/10.1016/j.ajog.2014.01.044>

14. Woskie, S. R., Kim, H., Freund, A., Stevenson, L., **Park, B. Y.**, Baron, S., Herbert, R., de Hernández, M. S., Teitelbaum, S., de la Hoz, R. E., Wisnivesky, J. P. and Landrigan, P. 2011, World Trade Center Disaster: Assessment of Responder Occupations, Work Locations, and Job Tasks. *American Journal of Industrial Medicine*, 54: 681–695 DOI: [10.1002/ajim.20997](https://doi.org/10.1002/ajim.20997)

#### Conference Presentations and Published Abstracts

##### \*Mentee

1. **Park B**, Lee B. Evaluation of prenatal exposure and meconium collection methods using simulated cotinine and birth weight data. The 18th Annual CityMatCH Urban MCH Leadership Conference and the National MCH Epidemiology Conference, San Antonio, TX, December 12-14, 2012.
2. Yao R, Ananth C, **Park B**, Pereira L, Plante L. Obesity and the Risk of Stillbirth: A Population-Based Cohort Study. The 34th Annual Society for Maternal-Fetal Medicine Meeting, New Orleans, LA, February 3-8, 2014.
3. Mehta A\*, **Park B**. Does Medical Liability affect OB/GYN Resident Retention? American College of Obstetricians and Gynecologist Annual Meeting. Chicago, MI, April 29, 2014.
4. **Park B**, Lee B. Use of Meconium in Perinatal Epidemiology: Potential Benefits and Pitfalls. Society for Epidemiologic Research Annual Meeting. Seattle, WA, June 24, 2014.
5. Yao R, Irani R, Park B, Plante LA. The effect of maternal obesity on birth weight: a retrospective cohort study. Society for Perinatal Epidemiologic Research Annual Meeting. Seattle, WA, June 23, 2014.
6. **Park B**, Salafia C, Xi Z, Girardi T, Croen L, Fallin D, Hertz-Picciotto I, Walker C, Newschaffer CJ. Placental morphology and early ASD-related phenotype. Society for Perinatal Epidemiologic Research Annual Meeting. Seattle, WA, June 23, 2014.
7. **Park B**, Lee B, Burstyn I, Tabb L, Keelan J, Whitehouse A, Fallen D, Hertz-Picciotto I, Montgomery O, Newschaffer C. Umbilical Cord Blood Androgen Levels and Autism Related Phenotype. Society for Perinatal Epidemiologic Research Annual Meeting. Denver, CO, June 16-19, 2015.
8. Yao R, **Park BY**. Maternal Pre-pregnancy Obesity and Associated Perinatal Outcomes among Multifetal Gestations. World Congress of Gynecology and Obstetrics, Vancouver, Canada, Oct 4-9, 2015.
9. Yao R, **Park BY**, Foster SE, Caughey AB. Non-ideal weight gain during pregnancy and the risk of stillbirth. The 36th Annual Society for Maternal-Fetal Medicine Meeting, Atlanta, GA, February, 2016.
10. **Park BY**, Lee B, Burstyn I, Tabb L, Keelan J, Whitehouse A, Fallen D, Hertz-Picciotto I, Montgomery O, Newschaffer C. Prenatal Antimicrobial Use and ASD-Related Phenotypes. International Meeting for Autism Research. Baltimore, Maryland, May, 2016.
11. **Park BY**, Van De Water JA, Croen LA, Volk H. Prenatal air pollution exposures, maternal cytokine/chemokines, and risk of autism spectrum disorder: the early markers for autism (EMA) study. International Society for Environmental Epidemiology. Rome, Italy, September, 2016.
12. Volk HE, **Park BY**, Gong J, Croen LA, Fallin MD, Hertz-Picciotto I, Newschaffer C, Zhang J. Prenatal Diesel Exposure and Cognitive Ability in the Early Autism Risk Longitudinal Investigation. International Society for Environmental Epidemiology. Rome, Italy, September, 2016.
13. Yao R, **Park BY**, Caughey AB. The interaction between obesity and diabetes on the risk of stillbirth. . The 37th Annual Society for Maternal-Fetal Medicine Meeting, Las Vegas, NV, January, 2017.
14. **BY Park**, M Brucato, E Tierney, G Wang, X Hong, MD Fallin, X Wang, H Volk. Association of maternal lipid levels and autism spectrum disorder. The 15<sup>th</sup> International Meetings for Autism Research, San Francisco, CA, May, 2017.
15. **BY Park**, KM. Bakulski, JI Feinberg, LA Croen, I Hertz-Picciotto, C Ladd-Acosta, CJ Newschaffer, HE Volk, MD Fallin. Umbilical cord blood androgen related gene expression and risk of autism spectrum disorder in an enriched pregnancy cohort. The 15<sup>th</sup> International Meetings for Autism Research, San Francisco, CA, May, 2017.
16. **Park BY**, Van De Water JA, Croen LA, Volk H. Prenatal air pollution exposures, maternal cytokine/chemokines, and risk of autism spectrum disorder: the early markers for autism (EMA) study. The 15<sup>th</sup> International Meetings for Autism Research, San Francisco, CA, May, 2017.
17. Yao R, **Park B**, Schuh B, Caughey A. The risk of stillbirth and neonatal death associated with each additional week of expectant management compared with delivery among women of different obesity class. *American Journal of Obstetrics & Gynecology*, 2017. 216:S57-S58.

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18. Alvarez A\*, Phan R\*, **Park B.** California's 2017 Wildfires Effects on Air Quality. 2019 Southern California Conferences for Undergraduate Research November 23, 2019. California State University San Marcos.
19. Alicia Cryer, Ruofan Yao, **Bo Park**, Shareece Davis-Nelson, James Betoni, Lynn McLean, Heather Figueroa, and Stephen Contag. The Risks and Benefits of Induction of Labor After Cesarean Section at 39 Weeks Gestation Compared with Expectant Management. Annual Postgraduate Convention. Loma Linda University
20. Alvarez A\*, Phan R\*, **Park B.** 2017 California Wildfires and Changes in Air pollution before and during the fire. Southern California Conferences for Undergraduate Research 2019, November 23. CSU San Marcos.
21. Alvarez A\*, Phan R\*, **Park B.** Living near 2008 California wildfires during pregnancy and changes in birthweight. American Public Health Association Annual Meeting 2020, Oct 25-28.

### Invited Speaker

1. **BY Park.** Grand Round: Sex differences in brain development. Delaware Psychiatry Residency Program, November 2, 2016.
2. **BY Park.** Guest Lecture: Prenatal development insults: how do we assess it? Delaware Psychiatry Residency Program, November 2, 2016.
3. **BY Park.** Research trends in children's environmental health. The 29<sup>th</sup> Annual KSEA South-Western Regional conference. Irvine, CA April, 2019.

### PROFESSIONAL SERVICES

- Grant reviewer: Feasibility analysis of National R&D Projects at Korea Institute of S&T Evaluation and Planning. (2019)
- Undergraduate and graduate research: Faculty advisor for Perinatal Environmental Exposure Awareness Study (PEEAS) at CSUF (2018, 2019, 2020)
- Conference co-chair: Pregnancy outcomes committee. American Public Health Association. (APHA 2019, 2020)

2017-2018 Bloomberg School of Public Health Postdoctoral Association, DMH representative

2016-present Molecular Autism Journal reviewer

2012-present International Society for Autism Research

2012-present Society for Perinatal Epidemiologic Research

2009-present Korean-American Scientists and Engineers Association

### CERTIFICATIONS

2007 Lean Six Sigma Green Belt, Dartmouth College

2008 Investigating Human Fatigue Factors Certification, National Transportation Safety Board

2008 Cognitive Interviewing Certification, National Transportation Safety Board

2009 Endocrine Disruptor Certification, Society for Chemical Hazard Communication

### SKILLS

Computer Software- Word, Excel, Power Point, Endnote, Refworks

Statistical Program— R, STATA, and SAS