

Andrew D. Williams, PhD MPH

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Education

Ph.D. Maternal and Child Health
University of Maryland, College Park, MD

M.P.H. Community Public Health
New York University, New York, NY

B.S. Mass Communications: Public Relations
Minnesota State University Moorhead, Moorhead, MN

Academic & Professional Experience

- September 2019 - present **Assistant Professor**, Public Health Program, School of Medicine and Health Sciences, University of North Dakota, Grand Forks, ND
- June 2017 – June 2019 **Postdoctoral Research Fellow**, Epidemiology Branch, Division of Intramural Population Health Research, Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, MD
- August 2012 – June 2017 **Graduate Research Assistant**, Department of Family Science, School of Public Health, University of Maryland, College Park, MD
- April 2017 – June 2017 **Student Volunteer**, Division of Health and Nutrition Examination Surveys, National Center for Health Statistics, Hyattsville, MD
- August 2015 – December 2015 **Student Volunteer**, Office of Analysis and Epidemiology, National Center for Health Statistics, Hyattsville, MD
- December 2009 – July 2012 **Project Coordinator**, North Dakota Fetal Alcohol Syndrome Center, Department of Pediatrics, School of Medicine and Health Sciences, University of North Dakota, Grand Forks, ND

Current grants support

Extramural funding

3. *North and South Dakota Perinatal Quality Collaborative*. Centers for Disease Control and Prevention Statewide Perinatal Quality Collaboratives. 1 NU58DP007252-01-00. 2022-Present. My Role: Principal Investigator/Executive Director (4% effort). Award to date: \$275,000.

Purpose: Build capacity for the North and South Dakota Perinatal Quality Collaborative to implement quality improvement projects. A 5-year award, with a two-year focus on perinatal substance use disorders, then reducing maternal hemorrhage, followed by a project to reduce primary cesarean deliveries, with community and maternal mortality review committees to inform the year-5 project.

2. *COVID-19 Health Disparities*. North Dakota Department of Health. G21.255. July 2021 – Present. My Role: Principal Investigator (2% Effort). Award to date: \$135,516.

Purpose: To examine health disparities in pregnancy outcomes during the COVID-19 pandemic. We

are also examining use of telemedicine services among pregnant women in North Dakota, as well as the impact of COVID-19 hospital policies on social support during delivery and postpartum.

1. *Stress and Health in American Indian Pregnancies (SHAIP) Study*. NIH/NIGMS. 1P20GM139759 (sub award: 5898). Principal Investigator: Donald Warne (2021-2022); Jonathan Geiger (interim 2022-current). 2021-Present. My Role: Project Leader (50% Effort). Award to date: \$536,320.

Purpose: To examine the association between maternal Adverse Childhood Experiences and obstetric and infant health among American Indian women and their infants in North Dakota.

Completed grants support

Internal funding

1. *Maternal stress in pregnancy and placental function*. University of North Dakota School of Medicine and Health Sciences. 2020-2021. My Role: Principal Investigator. Total award: \$50,000.

Purpose: To examine the association between maternal perceived stress during pregnancy and placental function, as measured by placental pathology report and blood plasma analytes collected between 30-32 weeks gestation.

Student Fellowship Support

2. \$5,000 - Graduate School Summer Research Fellowship Summer 2015. University of Maryland, College Park, MD. (*Completed*)
1. \$5,000 - Dean's Fellowship 2013-2014. School of Public Health, University of Maryland, College Park, MD. (*Completed*)

Research-related awards

1. *Telehealth and pregnancy outcomes among American Indian women in North Dakota*. NIH/NIMHD. 1 L60 MD017794-01. NIH Loan Repayment Program. My Role: Principal Investigator.

Purpose: To determine if telehealth is a mechanism with which AI/AN women in ND can more easily access prenatal care early in pregnancy, thus reducing disparities in early prenatal care and obstetric outcomes in this high-risk population.

Peer Reviewed Publications

^ student/trainee

29. Stevens, D., Rohn, M., Hinkle, S., **Williams, A.D.**, Kumar, R., Lipsky, L., Grobman, W., Sherman, S., Kanner, J., Chen, Z., Mendola, P. "Maternal body composition and gestational weight gain in relation to asthma control during pregnancy." PLOS One. (accepted)
28. ^Sebens, Z. & **Williams, A.D.** "Socioeconomic barriers to early prenatal care among American Indian and white women in North Dakota." *The Journal of Rural Health*. 2022 Feb 14. doi: 10.1111/jrh.12649. Online ahead of print.
27. Ouidir, M., Tekola-Ayele, F., Canty, T., Grantz, K., Sciscione, A., Jones, R., Sundaram, R., **Williams, A.D.**, Stevens, D., & Mendola, P. "Acute Ambient air pollution and placental doppler results in the NICHD Fetal Growth Studies – Singleton Cohort." *Environmental Research* 2021;202:111728.
26. **Williams, A.D.**, Ha, S., Shenassa, E., Messer, L.C., ^Kanner, J., Mendola, P. "Joint effects of ethnic enclave residence and air pollution exposure on risk of gestational diabetes mellitus among

- Asian/Pacific Islander women in the United States.” *Environmental Health* **20**, 56 (2021).
<https://doi.org/10.1186/s12940-021-00738-7>.
25. **Williams, A.D.**, ^Kanner, J., Grantz, K.L., Ouidir, M., Sheehy, S., Sherman, S., Robledo, C., & Mendola, P. “Air pollution exposure and risk of adverse obstetric and neonatal outcomes among women with type 1 diabetes.” *Environmental Research* 2021, 197, 111152.
<https://doi.org/10.1016/j.envres.2021.111152>
 24. Stevens, D., Grobman, W., Kumar, R., Lipsky, L.M., Hinkle, S.N., Chen, Z., **Williams, A.D.**, Rohn, M., Kanner, J., Sherman, S., & Mendola, P. “Gestational and postpartum weight trajectories among women with and without asthma.” *American Journal of Epidemiology*, 190(5), May 2021, 744-754.
 23. ^Kanner J, **Williams A.D.**, Nobles C, Ha S, Ouidir M, Sherman S, Mendola P. “Ambient temperature and stillbirth: Risks associated with chronic extreme temperature and acute temperature change.” *Environmental Research* 2020, 189. 109958 <https://doi.org/10.1016/j.envres.2020.109958>
 22. Ha, S., Nobles, C., Kanner, J., Sherman, S., Cho, SH., Perkins, N., **Williams, A.D.**, Grobman, W., Biggio, J., Subramaniam, A., Ouidir, M., Chen, Z., & Mendola, P. “Air Pollution Exposure Monitoring Among Pregnant Women with and Without Asthma.” *International Journal of Environmental Research and Public Health* 2020, 17(13), 4888.
<https://doi.org/10.3390/ijerph17134888>
 21. Shenassa, E. & **Williams, A.D.** “Concomitant exposure to area-level poverty, ambient air volatile organic compounds and cardiometabolic dysfunction: a cross-sectional study of U.S. adolescents.” *Annals of Epidemiology*, 48, August 2020, 15-22.
 20. **Williams, A.D.**, Messer, L., ^Kanner, J., Ha, S., Grantz, K. & Mendola, P. “Ethnic enclaves and pregnancy and behavior outcomes among Asian/Pacific Islanders in the United States.” *Journal of Racial and Ethnic Health Disparities*, 2020 7:224-233, <https://doi.org/10.1007/s40615-019-00650-4>
 19. Mendola, P., Nobles, C., **Williams, A.D.**, Sherman, S., Kanner, J., Seeni, I., & Grantz, K. “Air pollution and preterm birth: Do air pollution changes over time influence risk in consecutive pregnancies among low-risk women?” *International Journal of Environmental Research and Public Health* 2019, 16(18), 3365; <https://doi.org/10.3390/ijerph16183365>
 18. ^Seeni, I., **Williams, A.D.**, Nobles, C., Chen, Z., Sherman, S., Mendola, P., “Acute air pollution exposure and NICU admission: a case-crossover analysis.” *Annals of Epidemiology*, September 2019, Volume 37. 64-70.e2. <https://doi.org/10.1016/j.annepidem.2019.07.008>
 17. **Williams, A.D.**, Grantz, K., ^Seeni, I., Robledo, C., Li, S., Ouidir, M., Nobles, C. & Mendola, P. “Obstetric and neonatal complications among women with autoimmune disease.” *Journal of Autoimmunity*, 2019 Sep, 103, 102287. <https://doi.org/10.1016/j.jaut.2019.05.015>
 16. Nobles, C., **Williams, A.D.**, Ouidir, M., Sherman, S., Mendola, P., “Differential effect of ambient air pollution exposure on risk of gestational hypertension and preeclampsia.” *Hypertension*, 2019, 74, 384-390. <https://doi.org/10.1161/HYPERTENSIONAHA.119.12731>.
 15. **Williams, A.D.** & Shenassa, E. “Sex-specific associations between area deprivation and cardiometabolic dysfunction among U.S. adolescents.” *Public Health Reports*, 2019, <https://journals.sagepub.com/doi/10.1177/0033354919884303>.
 14. **Williams, A.D.**, Grantz, K., Zhang, C., Nobles, C., Sherman, S., & Mendola, P. “Ambient volatile organic compounds and racial/ethnic differences in gestational diabetes mellitus: Are Asian/Pacific Islander women at greater risk?” *American Journal of Epidemiology*, 2019, 188(2), 389-397.
<https://doi.org/10.1093/aje/kwy256>

13. Nobles, C., Grantz, K., Liu, D., **Williams, A.D.**, Ouidir, M., Seeni, I., Sherman, S. & Mendola, P. “Ambient air pollution and fetal growth restriction: physician diagnosis of intrauterine growth restriction versus population small-for-gestational age measures.” *Science of the Total Environment*, 2019, 650(2), 2641-2647. <https://doi.org/10.1016/j.scitotenv.2018.09.362>
12. †**Williams, A.D.**, Shenassa, E., Slopen, N., & Rossen, L. “Cardiometabolic dysfunction among U.S. adolescents and area-level poverty: race/ethnicity-specific associations.” *Journal of Adolescent Health*, 2018, 63(5), 546-553. <https://doi.org/10.1016/j.jadohealth.2018.07.003>
 † This manuscript was considered in an editorial in the same issue of *Journal of Adolescent Health*. Hartz, J & Powell-Wiley, TM. Locations! Location! Location? Elucidating the Social Determinants of Cardiometabolic Health Among United States Adolescents. *Journal of Adolescent Health*, 2018, 63(5), 519-520. <https://doi.org/10.1016/j.jadohealth.2018.08.001>
11. **Williams, A.D.**, Wallace, M.E., Nobles, C., & Mendola, P. “Racial Residential Segregation and Racial Disparities in Stillbirth in the United States.” *Health & Place*, 2018, 51, 208-216. <https://doi.org/10.1016/j.healthplace.2018.04.005>
10. **Williams, A.D.**, Nkombo, Y., Nkodia, G., Leonardson, G., Martsolf, K., & Burd, L. “Effectiveness of a Novel Low Cost Intervention to Reduce Prenatal Alcohol Exposure in the Congo.” *Open Journal of Pediatrics*, 2014, 4, 84-92. doi: [10.4236/ojped.2014.41012](https://doi.org/10.4236/ojped.2014.41012).
9. **Williams, A.D.**, Nkombo, Y., Nkodia, G., Leonardson, G., & Burd, L. “Prevalence of Smoking During Pregnancy and Associated Risk of Increased Prenatal Alcohol Exposure in the Republic of the Congo.” *The International Journal Of Alcohol And Drug Research*, 2014, 3(1), 105-111. <http://www.ijadr.org/index.php/ijadr/article/view/131>
8. Kim, J., Braun, B., & **Williams, A.D.** “Understanding Health Insurance Literacy: A Review of Literature.” *Family and Consumer Sciences Research Journal*, 42(1), September 2013: 3-13. <http://onlinelibrary.wiley.com/doi/10.1111/fcsr.12034/abstract>
7. **Williams, A.D.**, Nkombo, Y., Nkodia, G., Leonardson, G., & Burd, L. “Prenatal Alcohol Exposure in the Republic of the Congo: Prevalence and Screening Strategies.” *Birth Defects Research Part A: Clinical and Molecular Teratology*. 2013 Jul; 97(7):489-96. <http://www.ncbi.nlm.nih.gov/pubmed/23670862>
6. Burd, L., Miles, J., Peng, C.Z., Kerbeshian, J., & **Williams, A.D.** “A Review of Pregnancy Risk Markers in Tourette Syndrome: A Systematic Review.” *Open Journal of Pediatrics*. 2012, 2: 18-26. <http://www.scirp.org/journal/PaperInformation.aspx?paperID=17990>
5. Paintner, A., **Williams, A.D.**, & Burd, L. “Fetal Alcohol Spectrum Disorders: Implications for Child Neurology. Part 1: Prenatal Exposure and Dosimetry.” *Journal of Child Neurology*. 2012, 27 (2): 258-263. <http://www.ncbi.nlm.nih.gov/pubmed/22351188>
4. Paintner, A., **Williams, A.D.**, & Burd, L. “Fetal Alcohol Spectrum Disorders: Implications for Child Neurology. Part 2: Diagnosis and Management.” *Journal of Child Neurology*. 2012, 27 (3): 355-362. <http://www.ncbi.nlm.nih.gov/pubmed/22241713>
3. Li, Q., Fisher, W., Peng, C.Z., **Williams, A.D.**, & Burd, L. “Fetal alcohol spectrum disorders: A population based study of premature mortality rates in mothers.” *Maternal & Child Health*. 2012 Aug;16(6):1332-7. <http://www.ncbi.nlm.nih.gov/pubmed/21710184>
2. Burd, L., Fast, D., Conry, J., & **Williams, A.D.** “Fetal Alcohol Spectrum Disorders as a marker for increased risk of involvement with Correction Systems.” *The Journal of Psychiatry and Law*. Winter 2010, 38 (4): 559-584. <http://plx.sagepub.com/content/38/4/559.short>

1. **Williams, A.D.**, Zraik, D., Schiavo, R., & Hatz, D. "Raising Awareness of Sustainable Food Issues and Building Community via the Integrated Use of New Media with other Communication Approaches." *Cases in Public Health Communication & Marketing*. 2008, 2:159-177.

Submitted Manuscripts

5. ^Mauch, L. & **Williams, A.D.** "Joint exposure to urban-rural status, medically underserved area residence, and risk of severe COVID-19 outcomes in 2020."
4. ^Breigenzer, A. & **Williams, A.D.** "The Association Between Risky Sex Behaviors and Depressive Symptomology in Young Adults using NHANES, 2005-2016"
3. ^Kim, S. & **Williams, A.D.** "Roles of income and acculturation in the Hispanic Paradox: Breastfeeding among Hispanic women."
2. **Williams, A.D.** "Fetal mortality in the context of the COVID-19 pandemic."
1. Nobles, C., Purdue-Smithe, A., Kanner, J., Ouidir, M., **Williams, A.D.**, Sherman, S., Mendola, P. "Ambient air pollution exposure and infant sex: Exposure during critical windows for reproduction and the probability of male and female live birth."

Other Publications & Reports

3. **Williams, A.D.** "Sustaining Prenatal Care for Low Income Families." Prepared for Mary's Center, Adelphi, MD. June 2014.
6. **University of Maryland Extension Health Insurance Literacy Team.** "My Smart Choice Health Insurance Workbook." College Park, MD: University of Maryland. August 2013.
https://extension.umd.edu/sites/default/files/_images/uploaded/My%20Smart%20Choice%20Workbook%20with%20cover%2012.6.13.pdf
1. **Williams, A.D.**, Nkombo, Y., Nkodia, G., Leonardson, G., & Burd, L. "Summary Report: One-Question Screening Initiative." Prepared for the Congolese Ministry of Health, Brazzaville, Congo. May 2012.

Conference Presentations

**Presented by Andrew Williams; ^student/trainee*

Oral Presentations

10. ***Williams, A.D.** "Fetal mortality in the context of the COVID-19 pandemic." 33rd Annual Meeting of the Society for Pediatric and Perinatal Epidemiologic Research. Virtual. June 22, 2021.
9. Shenassa, E.D & **Williams, A.D.** "Synergy between environmental and socio-structural determinants of health." American College of Epidemiology 2020 Annual Meeting, virtual, September 21-24 2020.
8. Mendola, P., Nobles, C., **Williams, A.D.**, Ouidir, M., Sherman, S., Kanner, J., & Grantz, K. "High peak PM_{2.5} exposure during pregnancy and preterm birth risk in Utah, United States." 31st Annual Conference of the International Society for Environmental Epidemiology. August 2019.
7. Nobles, C., Schisterman, E., Ouidir, M., **Williams, A.D.**, Kanner, J., Louis, G.B., Sherman, S., & Mendola, P. "Accounting for intercourse in the relationship of ambient temperature with fecundability." 31st Annual Conference of the International Society for Environmental Epidemiology. August 2019.

6. Shenassa, E.D. & ***Williams, A.D.** “Air pollution, poverty, and cardiometabolic dysfunction among United States adolescents.” 2019 Society for Epidemiologic Research Annual Meeting, Minneapolis. June 2019.
5. ^Kanner, J., **Williams, A.D.**, Nobles, C., Ouidir, M., & Mendola, P. “Ambient temperature and acute risk of stillbirth.” 2019 Society for Epidemiologic Research Annual Meeting, Minneapolis. June 2019.
4. Nobles, C., Purdue-Smithe, A.C., Ouidir, M., **Williams, A.D.**, Kanner, J., Sherman, S., & Mendola, P. “Ambient air pollution during preconception and peri-implantation and odds of male versus female birth.” 2019 Society for Epidemiologic Research Annual Meeting, Minneapolis. June 2019.
7. ***Williams, A.D.**, Wallace, M.E., Nobles, C., & Mendola, P. “Racial Residential Segregation and Racial Disparities in Stillbirth in the United States.” 2018 Society for Epidemiologic Research Annual Meeting, Baltimore. June 2018.
2. Nobles, C., Grantz, K., Liu, D., Schisterman, E., Seeni, I., Sherman, S., **Williams, A.D.** & Mendola, P. “Ambient air pollution and fetal growth restriction: physician diagnosis of intrauterine growth restriction versus population small-for-gestational age measures.” 2018 Society for Epidemiologic Research Meeting, Baltimore. June 2018.
1. ***Williams, A.D.** & Hofferth, S. “Examining birth outcomes hotspots in Maryland.” 2015 American Public Health Association Annual Meeting, Chicago. Nov. 2015.
<https://apha.confex.com/apha/143am/webprogram/Paper324254.html>

Poster Presentations

42. ^Breigenzer, A. & ***Williams, A.D.** “The Association Between Risky Sex Behaviors and Depressive Symptomology in Young Adults using NHANES, 2005-2016” Society for Pediatric and Perinatal Epidemiologic Research 55th Annual Meeting, Chicago. June 2022.
41. ^Kanichy M, ^Schmidt L, Njau G, Schmidt M, Stepanov A, **Williams AD.** “Exposure to Domestic Violence and racial disparities in breastfeeding in North Dakota (ND PRAMS 2017-2019).” Society for Pediatric and Perinatal Epidemiologic Research 55th Annual Meeting, Chicago. June 2022.
40. ^Schmidt L, ^Kanichy M, Njau G, Schmidt M, Stepanov A, **Williams AD.** “Adverse Childhood Experiences, Domestic Violence and Racial Disparities in Early Prenatal Care in North Dakota (ND PRAMS 2017-2019)”. Society for Pediatric and Perinatal Epidemiologic Research 55th Annual Meeting, Chicago. June 2022.
39. ^Breigenzer, A. & ***Williams, A.D.** “The Association Between Risky Sex Behaviors and Depressive Symptomology in Young Adults using NHANES, 2005-2016” Society for Epidemiologic Research 55th Annual Meeting, Chicago. June 2022.
38. ^Kanichy M, ^Schmidt L, Njau G, Schmidt M, Stepanov A, **Williams AD.** “Exposure to Domestic Violence and racial disparities in breastfeeding in North Dakota (ND PRAMS 2017-2019).” 42nd Annual Frank Low Research Day, University of North Dakota School of Medicine and Health Sciences. Virtual. April 21, 2022.
37. ^Schmidt L, ^Kanichy M, Njau G, Schmidt M, Stepanov A, **Williams AD.** “Adverse Childhood Experiences, Domestic Violence and Racial Disparities in Early Prenatal Care in North Dakota (ND PRAMS 2017-2019)”. 42nd Annual Frank Low Research Day, University of North Dakota School of Medicine and Health Sciences. Virtual. April 21, 2022.

36. ^Mauch, L. & **Williams, A.D.** “Joint exposure to urban-rural status, medically underserved area residence, and risk of severe COVID-19 outcomes in 2020.” 42nd Annual Frank Low Research Day, University of North Dakota School of Medicine and Health Sciences. Virtual. April 21, 2022.
35. ^Kanichy M, ^Schmidt L, Njau G, Schmidt M, Stepanov A, **Williams AD.** “Exposure to Domestic Violence and racial disparities in breastfeeding in North Dakota (ND PRAMS 2017-2019).” 16th Annual Women’s Health Research Conference, University of Minnesota. Virtual. February 15, 2022.
34. ^Schmidt L, ^Kanichy M, Njau G, Schmidt M, Stepanov A, **Williams AD.** “Adverse Childhood Experiences, Domestic Violence and Racial Disparities in Early Prenatal Care in North Dakota (ND PRAMS 2017-2019)”. 16th Annual Women’s Health Research Conference, University of Minnesota. Virtual. February 15, 2022.
33. ***Williams, A.D.**, ^Bardwell, S., Larson, K., ^Saizy, S., Mendola, P., Grobman, W., Subramaniam, A., Mumford, S., Chen, Z., Stevens, D., Kumar, R. “Perceived stress during pregnancy and serum placental hormone levels.” 33rd Annual Meeting of the Society for Pediatric and Perinatal Epidemiologic Research. Speed talk, virtual. June 18, 2021.
32. ^Saizy, S., Mendola, P., Grobman, W., Subramaniam, A., Stevens, D., Mumford, S., Larson, K., Chen, Z., Messer, L., Duncan, V., Faye-Petersen, O., Kumar, R., **Williams, A.D.** “Prenatal exposure to perceived stress, maternal asthma, and placental size.” 33rd Annual Meeting of the Society for Pediatric and Perinatal Epidemiologic Research. Speed talk, virtual. June 18, 2021.
31. ^Kim, S. & **Williams, A.D.** “Roles of income and acculturation in the Hispanic Paradox: Breastfeeding among Hispanic women.” 33rd Annual Meeting of the Society for Pediatric and Perinatal Epidemiologic Research. Speed talk, virtual. May 27, 2021.
30. Stevens DR, Yeung E, **Williams AD**, Hinkle S, Lipsky L, Ouidir M, Kanner J, Sherman S, Rohn MCH, Grobman W, Chen Z, Mendola P. "Maternal asthma in relation to infant adiposity and growth". 33rd Annual Meeting of the Society for Pediatric and Perinatal Epidemiologic Research. Speed Talk, virtual, May 26, 2021.
29. ^Winberg, J. & **Williams, A.D.** “Seasonal Prevalence of Asian Longhorned Ticks (*Haemaphysalis longicornis* Neumann) (Acari: Ixodidae) in the Eastern United States.” 41st Annual Frank Low Research Day, University of North Dakota School of Medicine and Health Sciences. Virtual. April 22, 2021.
28. ^Saizy, S., Mendola, P., Grobman, W., Subramaniam, A., Stevens, D., Mumford, S., Larson, K., Chen, Z., Messer, L., Duncan, V., Faye-Petersen, O., Kumar, R., **Williams, A.D.** “Prenatal exposure to perceived stress, maternal asthma, and placental size.” 41st Annual Frank Low Research Day, University of North Dakota School of Medicine and Health Sciences. Virtual. April 22, 2021.
***Awarded Honorable Mention, Public Health Student
27. ^Sebens, Z. & **Williams, A.D.** “Socioeconomic barriers to early prenatal care among American Indian and white women in North Dakota (ND PRAMS 2017-2018).” 41st Annual Frank Low Research Day, University of North Dakota School of Medicine and Health Sciences. Virtual. April 22, 2021.
***Awarded Best Poster, Medical student
26. ^Breigenzer, A. & **Williams, A.D.** “The Association Between Risky Sex Behaviors and Depressive Symptomology in Young Adults using NHANES, 2005-2016” 41st Annual Frank Low Research Day, University of North Dakota School of Medicine and Health Sciences. Virtual. April 22, 2021.
25. ^Sebens, Z. & **Williams, A.D.** “Socioeconomic barriers to early prenatal care among American Indian and white women in North Dakota (ND PRAMS 2017-2018)” 15th Annual Women’s Health Research Conference, University of Minnesota. Virtual. January 26, 2021.

24. ***Williams, A.D.**, Ha, S., Shenassa, E., Messer, L.C., ^Kanner, J., Mendola, P. “Joint effects of ethnic enclave residence and air pollution exposure on risk of gestational diabetes mellitus among Asian/Pacific Islander women in the United States.” 2020 Society for Pediatric and Perinatal Epidemiologic Research Annual Meeting, virtual speed posters, November 20, 2020.
23. ***Williams, A.D.**, Ha, S., Shenassa, E., Messer, L.C., ^Kanner, J., Mendola, P. “Ethnic enclaves, air pollution and gestational diabetes among Asian/Pacific Islanders.” American College of Epidemiology 2020 Annual Meeting, virtual, September 21-24 2020.
22. Stevens, D., Perkins, N., Chen, Z., Kumar, R., Grobman, W., Subramaniam, A., Grantz, K., Rohn, M., **Williams, A.D.**, Sherman, S., & Mendola, P. “Race and asthma control during pregnancy.” American College of Epidemiology 2020 Annual Meeting, virtual, September 21-24 2020.
21. Stevens, D., Rohn, M., **Williams, A.**, Kumar, R., Grobman, B., Lipsky, L., Kanner, J., Sherman, S., Chen, Z., & Mendola, P. “Asthma control associated with anthropometry and adiposity in the Breathe, Wellbeing, and Lung Function Study (B-WELL-Mom).” 2020 Meeting of the Society for Epidemiologic Research, virtual. December 15-18, 2020.
20. Ha S., Kanner J., Nobles C., Sherman S., Stevens D., **Williams A.D.**, Grobman W., Biggio J., Subramaniam A., Ouidir M., Chen Z., Mendola P. “Local mobility among pregnant women with and without asthma.” Poster presentation at the 32nd Annual Conference of the International Society for Environmental Epidemiology, Virtual, August 24-27, 2020.
19. Shenassa, E.D. & **Williams, A.D.** “Air pollution, poverty, and cardiometabolic dysfunction among United States adolescents.” 2019 American College of Epidemiology Meeting, Pasadena, CA. September 2019.
18. Mendola, P, Kanner, J., **Williams, A.D.**, Nobles, C., Ha, S, & Ouidir, M. “Ambient temperature and acute risk of stillbirth.” 2019 American Society for Reproductive Medicine Scientific Congress & Expo, Philadelphia, PA, September 2019.
17. Ha S, Nobles C, Kanner J, Sherman S, Cho SH, Perkins N, **Williams A**, Grobman W, Biggio J, Subramaniam A, Ouidir M, Chen Z, & Mendola P. “Air pollution exposure monitoring among pregnant women with and without asthma.” 2019 American College of Epidemiology Annual Meeting, Pasadena, CA, September 2019.
16. ***Williams, A.D.**, Messer, L., ^Kanner, J., Ha, S., Grantz, K. & Mendola, P. “Ethnic enclaves and obstetric outcomes among Asian/Pacific Islanders in the United States.” Society for Epidemiologic Research 52nd Annual Meeting, Minneapolis. June 2019.
15. ***Williams, A.D.**, Ouidir, M., Li, S., Sherman, S., ^Kanner, J., Robledo, C., & Mendola, P. “Does prenatal exposure to air pollution impact obstetric outcomes among women with type 1 diabetes mellitus?” 2019 Society for Pediatric and Perinatal Epidemiologic Research Annual Meeting, Minneapolis. June 2019.
14. Ouidir, M., Tekola-Ayele, F., Grantz, K., Jones, R., Sundaram, R., **Williams, A.D.**, & Mendola, P. “Acute Ambient air pollution and uterine artery doppler notching in the NICHD Fetal Growth Studies – Singleton Cohort.” 2019 Society for Pediatric and Perinatal Epidemiologic Research Annual Meeting, Minneapolis. June 2019.
13. ***Williams, A.D.**, Grantz, K., ^Seeni, I., Robledo, C., Sheehy, S., Ouidir, M., Nobles, C. & Mendola, P. “The risk of obstetric and neonatal outcomes among women with autoimmune disease in the US

- Consortium on Safe Labor, 2002-2008.” 2018 American College of Epidemiology Annual Meeting. Cincinnati, OH. September 2018.
12. Nobles C.J., Schisterman E.F., Grantz K., Liu D., **Williams A.**, Ouidir M., Sherman S., & Mendola P. “Ambient air pollution and hypertensive disorders of pregnancy: is parity an important consideration?” 2018 American College of Epidemiology Annual Meeting. Cincinnati, OH. September 2018.
 11. ***Williams, A.D.**, Shenassa, E., Slopen, N., & Rossen, L. “Cardiometabolic dysfunction among U.S. adolescents and area-level poverty: race/ethnicity-specific associations.” 2018 Society for Epidemiologic Research Annual Meeting, Baltimore. June 2018.
 10. ***Williams, A.D.**, Grantz, K., Zhang, C., Nobles, C., Sherman, S., & Mendola, P. “Asian/Pacific Islanders experience higher risk for gestational diabetes than other U.S. women exposed to volatile organic compounds in ambient air.” 2018 Society for Pediatric and Perinatal Epidemiologic Research Annual Meeting, Baltimore. June 2018.
 9. Nobles, C., Grantz, K., Liu, D., Schisterman, E., Seeni, I., Sherman, S., **Williams, A.D.** & Mendola, P. “Ambient air pollution and fetal growth restriction: physician diagnosis of intrauterine growth restriction versus population small-for-gestational age measures.” 2018 Society for Pediatric and Perinatal Epidemiologic Research Meeting, Baltimore. June 2018.
 8. Mendola, P., Nobles, C., **Williams, A.D.**, Liu, D., Sherman, S., Seeni, I. & Grantz, K. “Air pollution and preterm birth: Do air pollution changes over time influence risk in consecutive pregnancies among low-risk women?” 2018 Society for Pediatric and Perinatal Epidemiologic Research Meeting, Baltimore. June 2018.
 7. ^Seeni, I., **Williams, A.D.**, Nobles, C., Sherman, S., & Mendola, P. “Acute air pollution exposure and NICU admission: a case-crossover analysis.” 2018 Society for Pediatric and Perinatal Epidemiologic Research Meeting, Baltimore. June 2018.
 6. Mendola, P., Nobles, C., **Williams, A.D.**, Liu, D., Sherman, S., Seeni, I. & Grantz, K. “Air pollution and preterm birth: Do air pollution changes over time influence risk in consecutive pregnancies among low-risk women?” 2018 Society for Epidemiologic Research Meeting, Baltimore. June 2018.
 5. ***Williams, A.D.** & Hofferth, S. “Poverty, Race, and Birth Outcomes: An Ecologic Study in Maryland.” 2014 Population Association of America Annual Meeting, Boston. May 2014. <http://paa2014.princeton.edu/abstracts/141504>
 8. ***Williams, A.D.**, Nkombo, Y., Nkodia, G., & Burd, L. “Improving estimates of prenatal alcohol consumption in Brazzaville, Congo.” American Public Health Association Annual Meeting, Boston. Nov. 2013. <https://apha.confex.com/apha/141am/webprogram/Paper277998.html>
 3. ***Williams, A.D.**, Nkombo, Y., Nkodia, G., Peng, C.Z., & Burd, L. “When was your last drink? – A prenatal screening in Brazzaville.” American Public Health Association Annual Meeting, San Francisco. Oct. 2012. <https://apha.confex.com/apha/140am/webprogram/Paper258996.html>
 2. Paintner, A., **Williams, A.D.**, & Burd, L. “Drinking and Reproductive Health: A Statewide Screening Initiative.” Taking the Next Step: Innovative Interventions for Fetal Alcohol Spectrum Disorders, Atlanta, GA, Oct. 2010.
 1. Burd, L. & **Williams, A.D.** “Juvenile Corrections Screening for Fetal Alcohol Spectrum Disorders.” Taking the Next Step: Innovative Interventions for Fetal Alcohol Spectrum Disorders, Atlanta, GA, Oct. 2010.

Other conference participation

2. Session Co-organizer. Indigenous Health (oral abstract session). 2022 Annual Meeting of the Society for Epidemiology Research. June 2022.
1. Session Moderator. Mental Health Speed Talks. 33rd Annual Meeting of the Society for Pediatric and Perinatal Epidemiologic Research. June 4, 2021.

Invited Talks and Lectures

20. **Williams, AD.** “Stress and Health in American Indian Pregnancies.” 1st Annual Indigenous Trauma & Resilience Research Center Symposium.” Virtual. April 22, 2022.
19. **Williams, AD.** “Healthy Start CIGNAL for Maternal and Child Health in Rural Communities - Expert Meeting.” National Institute for Children’s Health Quality. Virtual. March 23, 2022.
18. **Williams, AD.** “Focus on skills, not degrees.” University of North Dakota Public Health Association. Virtual. February 4, 2022.
17. **Williams, AD.** “Stress during pregnancy and placental function.” Faculty Fridays, UND Public Health Program. Virtual. October 15, 2021.
16. **Williams, A.D.** “Introduction to Hierarchical Models.” PH 533 Advanced Biostatistics (master’s course). University of North Dakota School of Medicine & Health Sciences, Public Health Program, March 30, 2021.
15. **Williams, A.D.** “Is segregation bad for you? It depends.” FMSC 710 Maternal and Child Health from a Life Course Perspective (doctoral course). University of Maryland School of Public Health. November 17, 2020.
14. **Williams, AD.** “Ethnic enclaves and pregnancy outcomes among Asian and Pacific Islander women in the United States.” Asian/Pacific American Heritage Month seminar. Division of Reproductive Health of the National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention. May 27, 2020.
13. **Williams, A.D.** “Introduction to Hierarchical Models.” MPH 533 Advanced Biostatistics (master’s course). University of North Dakota School of Medicine & Health Sciences, Public Health Program, April 1, 2020.
12. **Williams, A.D.** “Predoctoral and postdoctoral career options.” Preparing Future Faculty and Family Professionals, University of Maryland, Department of Family Science. April 3, 2019.
11. **Williams, A.D.** “You’re still working on that? *Or* I published my dissertation!” FMSC 710 Maternal and Child Health from a Life Course Perspective (doctoral course). University of Maryland, School of Public Health. November 19, 2018.
10. **Williams, A.D.** “Big Data Epidemiology: Examples of Racial Health Disparities.” GCH 732 Chronic Disease Epidemiology (master’s course). George Mason University, College of Health and Human Services. October 29, 2018.
9. Shenassa, E.D. & **Williams, A.D.** “Air pollution, residence in low-SES areas, and cardiometabolic function: A case of double jeopardy.” Division of Health and Nutrition Examination Surveys, National Center for Health Statistics, Hyattsville, MD. May 24, 2018.

8. **Williams, A.D.** “Big Data Epidemiology: Examples of Racial Health Disparities.” FMSC310 Maternal, Child and Family Health (undergraduate course). University of Maryland, School of Public Health. April 30, 2018.
7. **Williams, A.D.** “Big Data Epidemiology: Examples of Racial Health Disparities.” GCH 732 Chronic Disease Epidemiology (master’s course). George Mason University, College of Health and Human Services. October 30, 2017.
6. **Williams, A.D.** “Place and Health: An example of area-level poverty.” EPIB 301 Epidemiology in Public Health Practice (undergraduate course). University of Maryland, School of Public Health. February 16, 2017; September 21, 2017.
9. **Williams, A.D.** “Stress and Allostatic Load” FMSC 710 Maternal and Child Health from a Life Course Perspective (doctoral course). University of Maryland, School of Public Health. November 22, 2016.
4. **Williams, A.D.** “Writing a Literature Review” FMSC 710 Maternal and Child Health from a Life Course Perspective (doctoral course). University of Maryland, School of Public Health. September 27, 2016.
3. **Williams, A.D.** “Causal criteria in practice: Can we determine causation in observational studies?” Maryland Population Research Center. Special Topics Working Group, Child Health. March 3, 2016.
2. **Williams, A.D.** “Place and Health: An example of stress during adolescence” FMSC410, Maternal, Child and Family Health (undergraduate course). University of Maryland, School of Public Health March 22, 2016.
1. **Williams, A.D.** “Area Deprivation, Stress, and Adolescent Health: A hierarchical analysis of pathways to disease.” FMSC410, Maternal Child and Family Health (undergraduate course). University of Maryland, School of Public Health, March 26, 2015.

Other Presentations

3. **Williams, A.D.** & Hofferth, S. “Social Observatories Coordinating Network.” 2017 Coalition of National Science Funding, Capitol Hill Exhibit. Washington, DC. May 2017.
2. **Williams, A.D.** & Hofferth, S. “Examining birth outcomes hotspots in Maryland.” Public Health Research@Maryland 2015; University of Maryland, College Park, MD. April 2015
1. **Williams, A.D.** & Hofferth, S. “Poverty, Race, and Birth Outcomes: An Ecologic Study in Maryland.” 2014 Graduate Research Interaction Day, University of Maryland, College Park, MD, April 2014.

Teaching Experience

University of North Dakota

- Fall 2021 – Present **Course Instructor**, PH550, Population Health Research Methods. Responsible for all teaching, grading, office hours. (synchronous; 3 credits; 46 hours instruction).
- Summer 2021 **Course Instructor**, PH 762, Quantitative Research Methods. Designed new course for the PhD Indigenous Health program, including all lectures and assignments. Responsible for all teaching, grading, office hours. (synchronous; 3 credits; 48 hours instruction)

- Spring 2021 - Present **Course Instructor**, PH 552, Epidemiology 2. Designed new course for the MPH program, including all lectures and assignments. Responsible for all teaching, grading, office hours. (synchronous; 3 credits; 48 hours instruction)
- Spring 2021 – Present (Fall & Spring) **Research Mentor**, PH995, Integrative Learning Experience. Supervise student ILE projects, including literature review, data analysis, writing and oral presentation. (2 credits; 30 hours per student)
- Spring 2021 - Present **Course Instructor**, PH 751, Applied Epidemiology. Designed new course for the PhD Indigenous Health program, including all lectures and assignments. Responsible for all teaching, grading, office hours. (synchronous; 3 credits; 48 hours instruction)
- Fall 2020 – Present (Fall, Spring & Summer) **Course Co-Instructor**, PH594, Applied Practice Experience. Responsible for overseeing student development of APEX proposal, assisting students to find placement sites, communication with APEX preceptors, and for all grading. (3 credits; 5-10 hours per student)
- Fall 2020 **Course Instructor**, PH 510, Public Health & Health Care Systems. Responsible for all teaching, grading, office hours. (asynchronous & synchronous; 2 credits; 32 hours instruction)

^^^above since initial appointment at UND^^^

University of Maryland

- Fall 2015 – Spring 2017 **Course Instructor**, FMSC 302 Research Methods in Family Science Department of Family Science, School of Public Health, University of Maryland. Undergraduate course.
- Spring 2013 – Spring 2015 **Teaching Assistant**, FMSC 302 Research Methods in Family Science Department of Family Science, School of Public Health, University of Maryland. Undergraduate course.

Mentoring Experience

University of North Dakota

Graduate Research Assistants

Current

Amy Stiffarm (PhD student, *Stress and Health in American Indian Pregnancies*)

- Co-organizer on SER 2022 oral presentation session

Lexie Schmidt (MPH student, *State of North Dakota COVID-19 Health Equity*)

- Authorship on 2 conference presentations

Julia Wilson-Peltier (PhD student, *State of North Dakota COVID-19 Health Equity*)

Previous

Sadia Saizy (MPH student, *Maternal stress in pregnancy and placental function*)

- Authorship on 3 conference presentations

Siri Bardwell (B.S. student, *Maternal stress in pregnancy and placental function*)

- Authorship on 1 conference presentation

MichaeLynn Kanichy (MPH student, *State of North Dakota COVID-19 Health Equity*)

- Authorship on 2 conference presentations
- First author on manuscript
- Co-author on manuscript

Population Health Research & Analytics MPH Students - primary scholarly advisor

Current Students

Isaac Karikari
 Karen Davis
 Cody Ingle
 Kelly Schultz

Graduated students

Jessica Winberg, May 2021
 Amy Breigenzer, May 2021
 Soojung Kim, May 2021
 Sadia Saizy, December 2021
 Lakin Mauch, May 2022
 Katarina Domitrovich, May 2022

MPH Applied Practice Experience mentorship

Angie Novak, Fall 2020
 Natalie Reed, Fall 2020

Indigenous Health PhD Students – primary scholarly advisor

Amy Stiffarm
 Lannesse Baker
 Michelle Rodriguez
 Tara Stiller

Medical Students – research mentor

Regina Schlichting, Summer 2022
 Courtney Hanson, Summer 2022
 Danielle O’Hare, Summer 2022
 Zachary Sebens, Summer 2020 – present

- First author on 1 manuscript
- Authorship on 2 conference presentations

PhD Dissertation Committee service – invited member

Nadia Kyeremah, Department of Communication

External student advising

Anna Ross (George Washington University), MPH capstone research, Summer 2022-Present

^^^above since initial appointment at UND^^^

Eunice Kennedy Shriver National Institute of Child Health and Human Development

Jenna Kanner, Post-Baccalaureate Research Fellow, 2018-2019

- 2019 NICHD Three Minute Talk Award
- 2019 Outstanding poster, NIH Postbac Poster Day

Indu Seeni, Post-Baccalaureate Research Fellow, 2017-2018

University of Maryland

Undergraduate Students

Youmna Ansari: Fall 2016 Undergraduate Honors Project

Awards and Honors

UND Work-Integrated Knowledge and Skills (WIRKS) initiative award for integration of Riipen into PH 594 Applied Practice Experience in Summer 2021 & Fall 2021

2019 Fellows Award for Research Excellence (FARE), “Racial Residential Segregation and Racial Disparities in Stillbirth in the United States.” National Institutes of Health.

Honorable Mention, Poster Session A, “Asian/Pacific Islanders experience higher risk for gestational diabetes than other U.S. women exposed to volatile organic compounds in ambient air.” 2018 Society for Pediatric and Perinatal Epidemiologic Research Annual Meeting.

School of Public Health nominee – 2018 Charles A. Caramello Distinguished Dissertation Award, University of Maryland, College Park.

2017 *Preventing Chronic Disease* Top Reviewer (top 5% of reviewers).

2017 Han Soo Chae Memorial Research Award (outstanding research addressing health disparities), School of Public Health, University of Maryland, College Park (competitive application process).

2016 Dean’s Doctoral Scholar Award, School of Public Health, University of Maryland, College Park.

Honorable Mention, Outstanding Academic Poster, “Examining birth outcomes hotspots in Maryland.” Public Health Research@Maryland 2015, University of Maryland, College Park.

First Place (\$450), Health Session, 2014 Graduate Research Interaction Day, University of Maryland.

Travel Award (\$500), 2014 Environmental Demography Workshop, University of Colorado (competitive application process).

Professional Development

Scientists Teaching Science, National Institutes of Health, Bethesda, MD, March – May 2018

NIH Grant Writing Workshop, National Institutes of Health, Bethesda, MD, March – May 2018

2017-2018 Science Policy Discussion Group, National Institutes of Health, Bethesda, MD (competitive application process)

2015-2016 U.S. Policy Communication Training Workshop, Population Reference Bureau Washington, DC, July 2015-2016 (competitive application process)

Environmental Demography Graduate Student Workshop, University of Colorado Population Center Boulder, CO, May 12-13, 2014 (competitive application process)

Student Leadership Institute, Association of Schools and Programs of Public Health Annual Meeting Boston, MA, November 4, 2013 (competitive application process)

SESYNC Short Course: Interactive Visualization Tools for Socio-Environmental Data. Annapolis, MD, August 15-16, 2013 (competitive application process)

Maternal and Child Health Bureau Epidemiology Training Course Minneapolis, MN, May 31 – June 4, 2011 (competitive application process)

Professional Memberships

- American Public Health Association 2012 - Present
 - Maternal and Child Health Section
 - Epidemiology Section
- North Dakota Public Health Association 2019 - Present
- Society for Pediatric and Perinatal Epidemiologic Research 2017 - Present
- Society for Epidemiologic Research 2017 - Present

Service Activities

Ad Hoc Reviewing

- American Journal of Epidemiology
- American Journal of Public Health
- BMC Medical Research Methodology
- BMC Pregnancy and Childbirth
- BMC Pulmonary Medicine
- Environmental Research
- Epidemiology
- Fertility and Sterility
- Human Reproduction
- International Journal of Environmental Research and Public Health
- Journal of Developmental Origins of Health and Disease
- Journal of Health Care for the Poor and Underserved
- Journal of Obstetrics and Gynaecology Research
- Journal of Pediatrics and Mother Care
- Journal of Racial and Ethnic Health Disparities
- Maternal and Child Health Journal
- PLOS One
- Preventing Chronic Disease
- Science of the Total Environment
- Scientific Reports
- Social Science and Medicine – Population Health
- Women's Health Issues

State of North Dakota

- North Dakota Pregnancy Risk Assessment Monitoring System (ND PRAMS) Advisory Committee, 2019 – Present
- Work As One: Maternal and Child Health Needs Assessment, 2020 - Present

University of North Dakota

- Online and Distance Education Committee, August 2021 – August 2022
- Task Force on the Future of Education at the University of North Dakota, December 2020-May 2021
- Alice T. Clark Scholars Mentoring Program (Year 1) September 2020 – May 2021
- Graduate Research Achievement Day, Judge, March 2020

School of Medicine & Health Sciences, University of North Dakota

- Community Engagement and Outreach Core Director search committee, Summer 2021
- Service Learning Day, Judge, January 2020

Master of Public Health Program, School of Medicine & Health Sciences, University of North Dakota

- MPH Program Director search committee, chair, Spring 2022
- Research Methods Tenure Track Faculty search committee, chair, Summer 2021
- MPH Admissions Committee, Population Health Research & Analytics 2019 – Present
- Self-study Sub-Committee (ad hoc), 2020 – Present
- Faculty Council, 2019-Present

Department of Indigenous Health, School of Medicine & Health Sciences, University of North Dakota

- PhD Program Admissions Committee, 2020 – Present
- Faculty Council, 2020 - Present

North Dakota Public Health Association

- Governing Council, 2021-Present
- Maternal and Child Health Section, Founding Chair, 2021-Present

National Institutes of Health

- Fellows Award for Research Excellence (FARE) awards, Cultural, Social, and Behavioral Sciences, Chief Judge, 2020 awards

National Institute of Child Health and Human Development

- Maternal Fetal Medicine/Epidemiology Journal Club, Coordinator, 2018-2019

University of Maryland

- Student Affairs Committee, Graduate Student Representative, 2014-2015
- General Education Committee, Graduate Student Representative, 2013-2014
- Campus Student Technology Fee Advisory Committee, Member, 2012-2013

Maryland Population Research Center, University of Maryland

- Student Research Affiliate 2012-2017
- Graduate Student Journal Club, Co-Leader, 2015-2016

School of Public Health, University of Maryland

- Council of Student Leaders, Maryland Council on Family Relations Representative, 2014-2015
- School of Public Health Reaccreditation Student Panel, Member, 2015

Family Science Department, University of Maryland

- Maternal, Child and Family Health and Well Being Faculty Search Committee, Member, 2015-2016
- Maryland Council on Family Relations, President, 2014-2015
- Maryland Council on Family Relations, Vice President, 2013-2014