

Curriculum Vitae
Alexandra L. Nowak, PhD, JD, RN

EDUCATION

- 2021-present Post-doctoral fellowship
School of Nursing, Columbia University, New York, NY
- 2021 Ph.D., Nursing Science
Dissertation: *Neighborhood Disorder and Epigenetic Regulation of Stress Pathways in Preterm Birth*
College of Nursing, The Ohio State University, Columbus, OH
- 2012 Bachelor of Science in Nursing with Honors
School of Nursing, Oakland University Rochester, MI
- 2001 Juris Doctorate
Law School, Wayne State University, Detroit, MI
- 1997 Bachelor of Science with Highest Honors
Madonna University, Livonia, MI

ACADEMIC / CLINICAL EMPLOYMENT

- 2017-2021 Research Assistant, Dr. Cindy Anderson, Site PI (R01MD001575; PI Giurgescu). The Ohio State University, College of Nursing, Columbus, OH
- 2016-2017 Research Assistant for Dr. Carmen Giurgescu, PI (R01MD001575; PI Giurgescu). Wayne State University, College of Nursing, Detroit, MI
- 2016-2017 Clinical Instructor (Medical/Surgical Nursing) and Simulation Lab Instructor
Baker College of Clinton Township, MI
- 2015-2016 Research Nurse, Perinatology Research Branch, National Institute of Child Health and Human Development, National Institutes of Health, Wayne State University, Detroit, MI
- 2015-2015 Registered Nurse, Labor and Delivery, Sinai Grace Hospital, Detroit, MI
- 2013-2015 Registered Nurse, medical/surgical staff nurse and surgical nurse, Troy Beaumont Hospital, Troy, MI

CERTIFICATIONS AND LICENSING

Registered Nurse (RN), State of Ohio License No: RN.443988
Registered Nurse (RN), State of Michigan ID #4704297477
Michigan State Bar (P59201)

Professional Workshops:

Funding and Grantsmanship for Research and Career Development Activities , Columbia University (2/2022-4/2022)
Epigenetics Boot Camp, Columbia University (2/2022)
R Boot Camp, Columbia University (1/2022)

K-Award Development Seminars, Columbia University (10/2021-05/2022)
 K-Award Program for On-Time Proposal Preparation, Columbia University (9/2021)
 Stats on Your Own Workshop, Columbia University (6/2021–8/2021)
 Multi-Omics Boot Camp, Columbia University (6/2021)
 Analysis of Clustered and Hierarchical Data Workshop, Research Methodology Center, The Ohio State University (4/2018)
 Interpretation of Electrocardiograms Workshop (10/2016)
 AWHONN Fetal Heart Monitoring (3/2015)
 Trauma Care After Resuscitation (TCAR); Beaumont Hospital (6/2014)

AWARDS AND HONORS

2021 T32 Post-Doctoral Fellow, NIH/NINR Grant# T32NR007969 (PI: Bakken)
 2021 Midwest Nursing Research Society (MNRS), Perinatal, Sexual, and Reproductive Health Research Interest Group Graduate Research Award
 2020-2021 The Ohio State University College of Nursing Dissertation Grant Award
 2019 The Ohio State University College of Nursing Leona Furste Travel Scholarship Award
 2019 University of Washington Scholarship, 24th Summer Institute in Statistical Genetics (SISG)
 2019-2021 Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship (Parent F31) Grant# F31NR018363-01A1.
 2018 Distinguished Abstract Award, Midwest Nursing Research Society
 2017-2019 T32 Pre-Doctoral Fellow, NIH/NINR Grant# T32NRR014225 (MI: Pickler & Melnyk)
 2017 Summer Genetics Institute, NINR Intramural Fellowship Award
 2017 Research Grant Award, Lambda Chapter, Sigma Theta Tau International
 2016 Nursing Alumni Association Endowed Scholarship
 2014 Service Excellence Award-Beaumont Hospital
 2012 Induction, Sigma Theta Tau International
 2012 BSN, *Academic Honors*, Oakland University, Rochester, MI
 1997 BS, *Highest Honors*, Madonna University, Livonia, MI

RESEARCH FUNDING

07/2021-06/2022 T32 Institutional Training Grant, *Reducing Health Disparities Through Informatics (RHeaDI)* Role: Post-Doctoral Fellow, Funded by the National Institutes of Health, NIH Grant# T32NR007969 (PI: Bakken)
 3/2020-3/2021 *Neighborhood Disorder and Epigenetic Regulation of Stress Pathways in Preterm Birth*. Role: Principal Investigator. Funded by The Ohio State University College of Nursing Dissertation Research Grant Award (\$2,000)
 3/2020-3/2021 *Neighborhood Disorder and Epigenetic Regulation of Stress Pathways in Preterm Birth*. Role: Principal Investigator. Funded by Sigma Theta Tau International (STTI) Epsilon Chapter Research Grant Award (\$1,000)
 2/2020-2/2021 *Neighborhood Disorder and Epigenetic Regulation of Stress Pathways in Preterm Birth*. Role: Principal Investigator. Funded by the Midwest Nursing Research Society (MNRS) Aurora Health Dissertation Grant Award (\$2,500)

- 11/2019-10/2020 *Neighborhood Disorder and Epigenetic Regulation of Stress Pathways in Preterm Birth*. Role: Principal Investigator. Funded by The Ohio State University Alumni Graduate School Grants for Graduate Research and Scholarship (AGGRS) (\$5,000)
- 10/2019-9/2020 *Neighborhood Disorder and Epigenetic Regulation of Stress Pathways in Preterm Birth*. Role: Principal Investigator. Funded by International Society of Nurses in Genetics (ISONG) Research Grant Award (\$2,000)
- 6/2019 - 5/2020 *Neighborhood Disorder and Epigenetic Regulation of Stress Pathways in Preterm Birth*. Role: Principal Investigator. Funded by the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN); Kimberly Clark Research Grant Award (\$10,000)
- 5/2019-4/2021 *Neighborhood Disorder and Epigenetic Regulation of Stress Pathways in Preterm Birth*. Role: Predoctoral Fellow. Funded by the Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship, NIH Grant# F31NR018363-01A1 (\$78,432)
- 6/2017-4/2019 T32 Institutional Training Grant, *Optimizing Health Development Across Childhood*. Role: Predoctoral Fellow. Funded by the NIH/NINR NIH Grant# T32NRR014225 (PI: Pickler & Melnyk)
- 4/2017 *Neighborhood Environment, DNA Methylation, and Preterm Birth*. Role: Principal Investigator. Funded by Sigma Theta Tau International Lambda Chapter (\$1,000)

PUBLICATIONS

*denotes data-based

1. ***Nowak, A.L.**, Anderson, C.M., Ford, J.L., Mackos, A., Ohm, J., Saadat, N., Tan, A., Zhao, Y., Misra, D., Giurgescu, C. (2022). DNA methylation patterns of glucocorticoid pathway genes in preterm birth among Black women. *Biological Research for Nursing* DOI:10.1177/2F10998004221099253
2. Schlegel, E.C., Kalvas, L.B., Sherman, J.P., Holod, A. F., Ko, E., Cistone, N., Miller, E., Sealschott, S.D., & **Nowak, A.L.** (2022). PhD student perspectives on maintaining and formalizing peer mentorship during the COVID-19 pandemic. *Journal of Professional Nursing*, 41, 65–74. <https://doi.org/10.1016/j.profnurs.2022.04.010>
3. Giurgescu C., Misra D.P., Slaughter-Acey J.C., Gillespie S.L., **Nowak A.L.**, Dove-Medows E., Engeland C.G., Zenk S.N., Lydic T.A., Sealy-Jefferson S., Ford J., Drury S., & Stemmer, P. (2022) Neighborhoods, racism, stress, and preterm birth among African American women: A review. *Western Journal of Nursing Research*, 44(1), 101-110. DOI:10.1177/01939459211041165
4. *Giurgescu, C., Wong, A.C., Rengers, B., Vaughan, S., **Nowak, A.L.**, Price, M., Dailey, R.K., Anderson, C.M., Walker, D.S., & Misra, D.P. (2022). Loneliness and depressive symptoms among pregnant Black women during the COVID-19 Pandemic. *Western Journal of Nursing Research*. 44(1), 23-30. DOI: 10.1177/01939459211043937
5. **Nowak, A.L.**, Giurgescu, C., Ford, J.L., Mackos, A., Ohm, J., Tan, A., Pietrzak, M., Anderson, C.M. (2022). Methodologic considerations for epigenomic investigation of

- preterm birth in African American women. *Western Journal of Nursing Research*, 44(1), 81-93. DOI: 10.1177/01939459211030339
6. Wong, A.C., Rengers, B., **Nowak, A.L.**, Schoeppner, S., Price, M., Dailey, R.K., Anderson, C.M., Misra, D.P., & Giurgescu, C. (2020). Timing of prenatal care initiation and psychological well-being in Black women. *MCN. The American Journal of Maternal Child Nursing*, 45(6), 344-350. DOI:10.1097/NMC.0000000000000661
 7. **Nowak, A.L.**, Anderson, C.M., Mackos, A.R., Gillespie, S.L. (2020). Stress during pregnancy and epigenetic modifications to offspring DNA: A systematic review of associations and implications for preterm birth. *The Journal of Perinatal & Neonatal Nursing*, 34(2), 134-145. DOI:10.1097/JPN.0000000000000471
 8. ***Nowak, A.L.**, Giurgescu, C., Templin, T.N., Dailey, R.K., Misra, D. (2020). How depressive symptoms among African American women relate to measures of social disorder in her childhood and pregnancy neighborhood. *Journal of Urban Health*, 97(1), 26-36. DOI:10.1007/s11524-019-00409-1
 9. Giurgescu, C., **Nowak, A.L.**, Gillespie, S., Nolan, T., Anderson, C.M., Ford, J., Hood, D.B., Williams, K.P. (2019). Neighborhood environment and DNA methylation: Implications for cardiovascular disease risk. *Journal of Urban Health*, 96(Suppl 1), 23-34. DOI: 10.1007/s11524-018-00341-x
 10. *Ford, J.L., Anderson, C., Gillespie, S. Giurgescu, C., Nolan, T., **Nowak, A.**, & Williams, K.P. (2019). Social integration and quality of social relationships as protective factors for inflammation in a nationally representative sample of Black women. *Journal of Urban Health*, 96 (Suppl 1), S35–S43. DOI:10.1007/s11524-018-00337-x
 11. *Giurgescu, C., Fahmy L, Slaughter-Acey, J., **Nowak, A.**, Caldwell, C., Misra, D. (2018) Can support from the father of the baby buffer the adverse effects of depressive symptoms on risk of preterm birth in Black families? *AIMS Public Health*, 1(5): 89-98. DOI:10.3934/publichealth.2018.1.89
 12. Misra, D.P., Slaughter-Acey, J. Giurgescu, C., **Nowak, A.**, Sealy-Jefferson, S. (2017). Why do Black women experience higher rates of preterm birth? *Current Epidemiology Reports*. 4(2), 83-97. DOI:10.1007/s40471-017-0102-3
 13. **Nowak, A.** & Giurgescu, C. (2017). The built environment and birth outcomes: A systematic review. *MCN, The American Journal of Maternal Child Nursing*, 42(1): 14-20. DOI: 10.1097/NMC.0000000000000299

PUBLISHED ABSTRACTS

1. Dailey, R., Peoples, A., Rengers, B., Wong, A.C., Daughters, K., Price, M., Vaughan, S., Dove-Medows, E., **Nowak, A.**, Zhang, L., Levy, P.D., Misra, D., Giurgescu, C. (2020) Abstract 15788: Hypertensive disorders of pregnancy in urban Black women: The Biosocial Impact on Black Births (BIBB) Study. *Circulation*. 142(Suppl 3), A15788-A15788
2. ***Nowak, A.**, Engeland, C.G., Zenk, S.N., Misra, D.P., Giurgescu, C. (2018). Perceptions of neighborhood crime relate to systemic inflammation among pregnant African American women. Proceedings of the at the 42nd Midwest Nursing Research Society. *Western Journal of Nursing Research*, 40(10), 1569-1570

PRESENTATIONS

*denotes data-based

International:

1. ***Nowak, A.**, Giurgescu, C., Ford, J.L., Mackos, A., Tan, A., Anderson, C.M. (July 23, 2022) *DNA Methylation Patterns of Glucocorticoid Pathway Genes in Preterm Birth among African American Women*. Podium presentation at Sigma Theta Tau International, 33rd International Nursing Research Congress, Edinburgh, Scotland.
2. ***Nowak, A.**, Giurgescu, C., Ford, J.L., Mackos, A., Tan, A., Anderson, C.M. (November 6, 2021). *Epigenetic Implications of Neighborhood Disorder and Psychological Distress among Pregnant African American Women*. Podium presentation at the International Society of Nurses in Genetics, 2021 World Congress, Virtual Congress.
3. **Nowak, A.**, Giurgescu, C., Ford, J.L., Mackos, A., Tan, A., Anderson, C.M. (November 13, 2020). *Methodologic Considerations for Epigenetic Investigation of Preterm Birth, Neighborhood Disorder, and Distress in Pregnant African American Women*. Podium presentation at the International Society of Nurses in Genetics, 2020 World Congress, Virtual Congress.
4. **Nowak, A.L.** (2019, March 9). *Neighborhood Disorder and Epigenetic Pathways of Stress Pathways in Preterm Birth: Dissertation Methods*. Podium presentation at University of Basel Doctoral Nursing Research Exchange, Engelberg, Switzerland.
5. *Gillespie, S.L., Neal, J., Mackos, A.R., **Nowak, A.**, Giurgescu, C., & Anderson, C.M. (November 9, 2019). *Maternal Toll-Like Receptor 4 Signaling as a Function of Parity and offspring sex*. Paper presented at the International Society of Nursing in Genetics, 2019 World Congress, San Antonio, TX.
6. **Nowak, A.**, Gillespie, S., Mackos, A., Anderson, C. (October 27, 2018). *Methodological Approach to a Systematic Review of Placental DNA Methylation and Histone Modification Markers in Preeclampsia*. Poster presented at the International Society of Nursing in Genetics, 2018 World Congress, Orlando, FL.

National:

7. ***Nowak, A.**, Anderson, C.M., Ohm, J., Saadat, N., Forsman, A., Zhang, W., Sun, J., Misra, D., Giurgescu, C. (September 16, 2022). *Differential Gene Expression among African American Women with Preterm and Full-Term Births*. Podium presentation at the Council for the Advancement of Nursing Science (CANS) 2022 State of the Sciences Congress on Nursing Research: Social and Structural Determinants of Health, Washington, DC.
8. **Nowak, A.**, Gillespie, S., Mackos, A., Anderson, C.M. (September 15, 2018). *Maternal Blood DNA Methylation Markers Across Pregnancy Complicated by Preeclampsia: A Systematic Review*. Podium presentation at the Council for the Advancement of Nursing Science, Washington DC.

Regional:

9. ***Nowak, A.**, Anderson, C.M., Ohm, J., Saadat, N., Forsman, A., Zhang, W., Sun, J., Misra, D., Giurgescu, C. (April 2022). *Differential Gene Expression among African American Women with Preterm and Full-Term Births*. Podium presentation at the 46th Annual Midwestern Nursing Research Society Conference. Schaumburg, IL.

10. ***Nowak, A.**, Giurgescu, C., Ford, J.L., Mackos, A., Tan, A., Anderson, C.M. (March 2021) *DNA Methylation Patterns of Glucocorticoid Pathway Genes in Preterm Birth among African American Women*. Poster presentation at the 45th Annual Midwestern Nursing Research Society Conference. Virtual Conference. <https://mnrs.org/annual-conference/2021-annual-research-conference-2/>
11. ***Nowak, A.L.**, Misra, D., Templin, T., Giurgescu, C. (March 2020). *Childhood Neighborhood Disorder Relates to Depressive Symptoms among Pregnant African American Women*. Symposium podium presentation at the 34th annual research conference for the Southern Nursing Research Society (SNRS). New Orleans, LA. (Conference canceled)
12. ***Nowak, A.**, Misra, D., Templin, T., Giurgescu, C. (March 2019). *Childhood Neighborhood Disorder Relates to Depressive Symptoms among Pregnant African American Women*. Poster presented at the 43rd Midwest Nursing Research Society Annual Conference, Kansas City, MO.
13. ***Nowak, A.**, Engeland, C.G., Zenk, S.N., Misra, D.P., Giurgescu, C. (April 2018). *Perceptions of Neighborhood Crime Relate to Systemic Inflammation Among Pregnant African American Women*. Poster presented at the 42nd Midwest Nursing Research Society Annual Conference, Cleveland, OH. Awarded Distinguished Abstract.
14. *Giurgescu, C., Fahmy, L., Slaughter-Acey, J., **Nowak, A.**, Caldwell, C., Misra, D.P. (April 2018). *Can Support from the Father of the Baby Buffer the Adverse Effects of Depressive Symptoms on Risk of Preterm Birth in Black Families?* Paper presented at the 42nd Midwest Nursing Research Society conference, Cleveland, OH.

Local:

15. **Nowak, A.**, Giurgescu, C. & Krouse, H. (March 8, 2017). *Residential Greenness and Birth Outcomes: A Systematic Review*. Poster presented at the Graduate and Postdoctoral Research Symposium, Wayne State University, Detroit, MI.

Invited:

16. ***Nowak, A.**, Giurgescu, C., Ford, J.L., Mackos, A., Tan, A., Anderson, C.M. (March 17 & October 20, 2021). *Epigenetic Implications of Neighborhood Disorder and Psychological Distress among Pregnant African American Women*. Presentation: Men's and Women's Health Day. Indiana University School of Nursing, Fort Wayne, IN.

TEACHING EXPERIENCE

Guest Lecturer, University of Central Florida, Orlando, FL (March 17, 2021). *Neighborhood Disorder and Epigenetic regulation of Stress pathways in Preterm birth*.

Guest Lecturer, Texas Women's University, College of Nursing, Denton, TX (July 29, 2020). *Neighborhood Disorder and Epigenetic regulation of Stress pathways in Preterm birth*.

Med/Surg Clinical I, Baker College, Clinton Twp., MI (Eight Students; Autumn Semester, 2016)

PROFESSIONAL ORGANIZATIONS MEMBERSHIP

Sigma Theta Tau International Honor Society of Nursing (STTI)
Midwest Nursing Research Society (MNRS)
International Society of Nurses in Genetics (ISONG)

Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN)
American Informatics Association (AIMA)
Michigan Bar Association, Attorney

PROFESSIONAL SERVICE ACTIVITIES

2022	Abstract Reviewer, International Society of Nurses in Genetics
2021	Grant Reviewer, International Society of Nurses in Genetics
2020-2021	Co-Chair, Perinatal, Sexual, and Reproductive Health Research Interest Group Midwest Nursing Research Society
2019-present	Research Committee member, International Society for Nurses in Genetics
2020-present	Ethics Committee member, International Society for Nurses in Genetics
2019-2020	Graduate Services Committee, The Ohio State University, College of Nursing
2020	PhD Committee, The Ohio State University, College of Nursing
2018	Dean's Advisory Council member, The Ohio State University, College of Nursing
2017	Council of Graduate Services member, The Ohio State University