

Meghan E. Mitchell, M.P.H.

SENIOR EPIDEMIOLOGIST II

CONTACT INFORMATION

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PROFESSIONAL PROFILE

Ms. Meghan Mitchell is an epidemiologist with more than a decade of experience in academia and consulting. She has conducted epidemiological evaluations for numerous cancer types in multiple research arenas, and her work includes conducting systematic literature reviews and writing critical summaries. She has supported pharmaceutical companies in understanding the burden of specific cancers and health events around the world. With a background in statistics, she has managed large databases, conducted numerous statistical analyses, and interpreted results for pharmaceutical companies, as well as prepared budget impact models.

Ms. Mitchell has epidemiological field experience as well. She managed all aspects of the design and implementation of a cohort study in Bedford Stuyvesant, New York, that examined the dynamics of infectious disease transmission, including the development of a pilot surveillance program to monitor the incidence of HSV-2 and HIV at numerous locations in Brooklyn, as well as writing grant applications, managing Institutional Review Board submissions, performing data analysis and quality control, preparing manuscripts, and presenting results.

Ms. Mitchell has served as an adjunct professor at Stevenson University in Lutherville, Maryland, and she has several published conference abstracts and peer-reviewed articles.









EDUCATION

Master of Public Health in Epidemiology
 Mailman School of Public Health, Columbia University, New York

2001 Bachelor of Science in Animal Science/Pre-Veterinary Cornell University, Ithaca, New York

SELECTED PROFESSIONAL EXPERIENCE

Consulting

Provided epidemiologic evaluations for clients with regard to numerous cancer types and exposures (i.e., benzene, extremely low frequency [ELF] electric and magnetic fields [EMF], ethylene oxide, and friction products), including systematic literature reviews and critical summaries.

Assisted in analyzing the risk of secondary mesothelioma following radiotherapy for lymphoma using the US SEER database.

Provided support to pharmaceutical companies in understanding the incidence of B-cell malignancies worldwide using conventional strategies and direct solicitation of data from cancer registries.

Supported pharmaceutical companies in understanding the incidence and burden of disease, including the incidence and survival of pediatric acute lymphoblastic leukemia and the incidence of skeletal metastasis following breast, colon, and lung cancer.

Performed systematic literature reviews to support meta-analyses on numerous topics, including the potential relationship between benzene and non-Hodgkin's lymphoma and the impact of stray voltage.

Performed large database analysis projects, including statistical programming, interpretation of study results, and preparation of budget impact models for pharmaceutical clients.

Communicated health risk to the public regarding ELF EMF at public meetings and administrative hearings, nationally and internationally.

Developed material targeted to the general public summarizing the state of the evidence on the potential health effects of ELF EMF.

Performed regular systematic literature reviews on ELF EMF and cancerous, neurodevelopmental, and reproductive outcomes to support applications to utility commissions nationwide.

Academia

Managed all aspects of the design and implementation of a cohort study in Bedford Stuyvesant, New York, that examined the dynamics of sexually transmitted disease transmission.

Developed an NIH-funded pilot surveillance program to monitor the incidence of HSV-2 and HIV at numerous hospitals in Brooklyn, New York, using remnant serum samples from routine laboratory work. Responsibilities included recruitment of study centers, preparation of grant applications, management of IRB submissions, coordination between study team and centers, coordination of material collection and testing, preparation of manuscripts and presentations, data analysis, and quality control.

Performed a systematic literature review to support a meta-analysis on the efficacy of antibiotics for urinary tract infections.



Worked with the Chicago Department of Health to create a complete database of existing observational health research on Chicago-area populations.

Worked in a laboratory setting on the development of a viral vector for gene therapy related to a lysosomal storage disorder.

Taught an introductory course in laboratory methods to undergraduate students (winter 2013 and spring 2016). Independently developed and taught an introductory course on epidemiology (spring 2018).

MANUSCRIPTS

Mitchell M, Suh M, Hooda N, Bylsma LC, Cohen S. 2024. The effect of bovine dairy products and their components on the incidence and natural history of infection: A systematic literature review. Nutr J 23:26; online open access.

Suh M, **Mitchell M**, Hooda N, Bylsma LC, Cohen SS. 2024. The effects of dairy consumption on vaccine immune response and immunoglobulins: A systematic literature review. Int J Nutr 8(1):1–25; <u>DOI 10.14302/issn.2379-7835.ijn-24-4938</u>.

Movva N, Reichert H, Hooda N, Bylsma LC, **Mitchell M**, Cohen SS. 2023. Dietary eating patterns, dairy consumption, and anxiety: A systematic literature review. PLoS One 18(12):e0295975. doi: 10.1371/journal.pone.0295975. PMID: 38153944.

Alexander DD, Bailey WH, Perez V, **Mitchell ME**, Su S. 2013. Air ions and respiratory function outcomes: a comprehensive review. J Negat Results Biomed 12:14; doi: 10.1186/1477-5751-12-14. PMID: 24016271; PMCID: PMC3848581.

Mitchell M, Lowe K, Fryzek J. 2012. A multisource approach to improving epidemiologic estimates: Application to global B-cell malignancies. ISRN Oncology 129713; https://doi.org/10.5402/2012/129713.

Alexander D, Weed D, Mink P, **Mitchell M**. 2012. A weight-of-evidence review of colorectal cancer in pesticide applicators: The agricultural health study and other epidemiologic studies. Int Arch Occup Environ Health 85(7):715–745.

Alexander DD, **Wagner ME**. 2010. Benzene exposure and non-Hodgkin lymphoma: A meta-analysis of epidemiologic studies. J Occup Environ Med 52(2):169–189.

Teta MJ, Wagner ME. 2009. Consistency and synergy. Blood 114(9):2000–2001 (author reply 2001).

Erdreich LS, Alexander DD, **Wagner ME**, Reinemann D. 2009. Meta-analysis of stray voltage on dairy cattle. J Dairy Sci 92(12):5951–5963.

Wagner ME, Travis LB. 2008. Letter to the editor re: "Mesothelioma and asbestos." Regul Toxicol Pharmacol 52(3):353–354 (author reply, 355).

Bailey WH, **Wagner ME**. 2008. IARC evaluation of ELF magnetic fields: Public understanding of the 0.4-IT exposure metric. J Exposure Sci Environ Epidemiol 18:233–235.

Miller M, Liao Y, Wagner M, Korves C. 2007. HIV, the clustering of sexually transmitted infections, and sex risk among African American women who use drugs. Sexually Transmit Dis 35(12).

Teta MJ, Lau E, Sceurman BK, **Wagner ME**. Therapeutic radiation for lymphoma: Risk of malignant mesothelioma. Cancer 109(7):1432–1438.



ABSTRACTS AND PRESENTATIONS

Mitchell ME, Bylsma LC, Shara NM, Fernandez SJ, Catlett JP, Lai JS, Dong K, Fryzek JP, Daver N, Allen C, Broome CM. Novel methods for the identification of a rare disease, hemophagocytic lymphohistiocytosis (HLH). Poster presented at the International Society for Pharmacoepidemiology annual meeting, Poster 166, Halifax, Nova Scotia, August 2023.

Broome CM, **Mitchell M**, Bylsma L, Shara N, Fernandez S, Catlett J, Lai J, Dong K, Fryzek J, Daver N, Allen C. Novel methods for the identification of a rare disease, hemophagocytic lymphohistiocytosis (HLH). Poster presented to European Hematology Association, EHA2023, Abstract P1202, Frankfurt, June 2023.

Mitchell M, Taylor A, Lowe K, Langeberg W, et al. Prevalence of bone metastasis in breast cancer patients and subsequent survival: A systematic and quantitative review of the literature. Presented at the San Antonio Breast Cancer Symposium, San Antonio, TX, December 2011.

Mitchell M, Taylor A, Lowe K, Langeberg W, et al. Prevalence of bone metastases among breast, lung, and prostate cancer patients. Presented at the 27th International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Chicago, IL, August 2011.

Mitchell M, Mehta J, Lau E, Fryzek J. National-level descriptive epidemiology of pediatric acute lymphoblastic leukemia (pALL). Presented at the American Society for Pediatric Hematology Oncology, Baltimore, MD, April 2011.

Yong M, Kuehn C, Kelsh M, **Mitchell M**, et al. Associations between platelet count and survival and disease progression in thrombocytopenic patients with myelodysplastic syndromes. Presented at the American Society of Hematology, Orlando, FL, December 2010.

Kaetzel R, **Wagner M**, Sweeney L, Duggan A, Gargas M, Teta MJ. An evaluation of early-life susceptibility and exposures to ethylene oxide. Presented at the Society of Toxicology Conference, Charlotte, NC, March 2007.

Hardick J, Gaydos CA, Wagner M, Hardick A, Wood BJ, Miller M. High prevalence of *Trichomonas vaginalis* among women who use drugs in New York City. National STD Prevention Conference, Philadelphia, PA, 2004.

PROTOCOL REGISTRATIONS

Mitchell M, Cohen S, Movva N, Bylsma L, Hooda N. 2022. Systematic review of the potential association dietary eating patterns (specifically *including* whole dairy products) and anxiety in humans. PROSPERO 2022 CRD42022333785

Mitchell M, Cohen S, Suh M, Bylsma L, Movva N. 2022. Systematic review of the potential association between whole dairy products and their components on non-inflammatory immune outcomes in humans. PROSPERO 2022 CRD42022333780