Kathleen Chen, M.P.H.

SENIOR SCIENTIST I

CONTACT INFORMATION

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PROFESSIONAL PROFILE

Ms. Chen is a health scientist with several years of experience in epidemiological and toxicological human health risk assessment, as well as skill in performing literature reviews and weight-of-evidence analyses. She has evaluated the impacts of health effects related to a variety of exposures, including asbestos, heavy metals, per- and polyfluoroalkyl substances (PFAS), and fragrance ingredients. Ms. Chen also has experience in performing exposure data modeling, and she has analyzed and integrated epidemiological data from large public data sets such as Surveillance, Epidemiology and End Results (SEER) and the National Health and Nutrition Examination Survey (NHANES) in the human health risk assessment process. Additionally, she has assisted in characterizing health effects associated with nicotine replacement therapies based on published literature.

Ms. Chen is proficient in project management and generating client deliverables. She has experience in litigation matters.

EDUCATION AND DEGREES EARNED

2021 Master of Public Health, Molecular Epidemiology and Environmental Health Sciences
Columbia University, Mailman School of Public Health

2018 Bachelor of Science, Biomolecular Science; minor in Entrepreneurship
University of Michigan, Ann Arbor

HONORS/AWARDS

2021	Joseph H. Graziano Award for Academic Excellence in Environmental Health Sciences
2021	Delta Omega Public Health Honor Society Inductee

SELECTED EXPERIENCE

Risk Assessment

Executed 50+ human health risk assessments to identify modes of action and possible associations between exposure to various environmental contaminants and resultant health effects in children and adults, including carcinogenic, neurodevelopmental, and metabolic effects.

Assisted in the development of manufacturing guidelines for various pharmaceutical ingredients.

Literature Review

As lead epidemiologist, reviewed over 300 papers to identify associations between perinatal and postnatal exposure to polychlorinated biphenyls and the resultant effects on neurodevelopment in both children and adults.

Performed a review of literature cited in the Scientific Report of the 2020 U.S. Department of Agriculture (USDA) Dietary Guidelines and subsequent weight-of-evidence and bias analyses to assess the validity of support for new acceptable levels of alcohol consumption dictated by the USDA and U.S. Department of Health and Human Services (HHS) and generating guidance for affected clients.

Graduate/Undergraduate Research Experience

Conducted epigenetic research on the effects of exposure to $PM_{2.5}$ and NO_2 during different points in pregnancy on neurodevelopment and BDNF expression in the child, using a distributed lag model to identify primary time windows of susceptibility.

Aided in research on the effects of maternal exposure to endocrine disrupting chemicals, specifically phthalates, on epigenetic alterations in target genes, fetal development, and metabolic homeostasis.

Analyzed the role of the MLL1/KMT2A protein in the innate immune system's response to sepsis and examined the effectiveness of three inhibitory drugs in recreating a MLL1/KMT2A knockout environment to build on preliminary results. Analyzed the use of these drugs as pharmaceutical agents for treatment.

PUBLICATIONS

Lynch HN, Lauer DJ, Leleck OM, Freid RD, Collins J, **Chen K**, et al. 2023. Systematic review of the association between talc and female reproductive tract cancers. Front Toxicol 5:1157761; doi: 10.3389/ftox.2023.1157761.

Lynch HN, Lauer DJ, Thompson WJ, Leleck O, Freid RD, Collins J, **Chen K**, et al. 2022. Systematic review of the scientific evidence of the pulmonary carcinogenicity of talc. Front Public Health 10:989111; doi: 10.3389/fpubh.2022.989111.

Neier K, Montrose L, **Chen K**, Malloy M, Jones T, Svoboda L, et al. 2020. Short- and long-term effects of perinatal phthalate exposures on metabolic pathways in the mouse liver. Environ Epigenet 6(1):dvaa017; doi: 10.1093/eep/dvaa017.

Jansen EC, Peterson KE, Lumeng JC, Kaciroti N, LeBourgeois MK, **Chen K**, Miller AL. 2019. Associations between sleep and dietary patterns among low-income preschoolers. Journal Acad Nutr Diet 119(7):1176–1187; doi: 10.1016/j.jand.2019.01.008.

PRESENTATIONS

Chen K, Price S, Finley B. An evaluation of the biokinetics of bone lead levels in children following tap water exposure using the All Ages Lead Model (AALM). Abstract 4079, Society of Toxicology 64th Annual Meeting, Orlando, FL, March 2025.

Price S, **Chen K**, Finley B. Estimating infant blood levels from baby food consumption: A biokinetic model analysis. Abstract 4080, Society of Toxicology 64th Annual Meeting, Orlando, FL, March 2025.

Chen K, Fung E, Parker J, Moore S, Schulte A, Steimel K, Stewart C. Evaluating the potential for dermal sensitization following exposures to butylphenyl methylpropional in rinse-off and leave-in haircare products. Abstract 4481, Society of Toxicology 62nd Annual Meeting, Nashville, TN, 2023.

Chen K, Steiger B, Hoffman C, Kimball S. Environmental, health, and economic benefits of urban greening and cool roofs in India. Presented at the 17th International Conference on Urban Health, Virtual, 2021.