Exponent®
Engineering & Scientific Consulting

Janine Cubello, Ph.D.

Scientist | Chemical Regulation and Food Safety
Washington DC
+1-202-772-4965 | jcubello@exponent.com

Professional Profile

Dr. Janine Cubello is a human health toxicologist with expertise in neurotoxicity, food safety, metals toxicology, and inhalation toxicology. At Exponent, she works as a regulatory toxicologist providing support in the preparation of regulatory dossiers for chemicals, medical devices, veterinary medicines, consumer products, and food ingredients for submission to regulatory agencies including the U.S. Environmental Protection Agency (EPA) and Food and Drug Administration (FDA). She has working experience conducting literature reviews and preparing data evaluation reports, OECD study summaries, and weight-of-evidence evaluations to support regulatory testing requirements.

Dr. Cubello has considerable research experience evaluating the critical windows of exposure and neurotoxicity associated with ingested and inhaled metals, as well as physiological contexts that alter them. Her research background in co-exposure and mixture models of metals (e.g. iron, copper, lead) has given her a comprehensive knowledge for ascertaining the extent by which metal contaminants and their biological effects contribute to whole exposure toxicity and behavioral outcomes. Additionally, she has experience building scientific confidence within in vitro models for their ability to recapitulate in vivo neurological responses to metal exposures.

Prior to joining Exponent, Dr. Cubello completed her postdoctoral training at University of Rochester, where she led in vivo research projects investigating the neurochemical and behavioral toxicities linked to inhalation of ultrafine air particulate matter and its metal constituents in mice. She earned her Ph.D. in Toxicology from University of Rochester in 2022 where she studied the independent and combinatorial neurodevelopmental effects of gestational iron deficiency and exposure to lead in drinking water. During her graduate career, she developed translationally relevant in vitro and in vivo mouse models in parallel with multiple standard operating procedures to evaluate molecular and elemental perturbations observed under these contexts within specific regions and cells of the early postnatal, adolescent, and adult brain. Dr. Cubello has received recognition for her scientific contributions made to the field of neurotoxicology research and communicated through peer-reviewed publications and conference presentations. Additionally, she is an active member of the Society of Toxicology and an active peer reviewer for the journal Neurotoxicology.

Academic Credentials & Professional Honors

Ph.D., Toxicology, University of Rochester, 2022

M.S., Toxicology, University of Rochester, 2020

B.S., Biochemistry, Niagara University, 2017

SOT Toshio Narahashi Neurotoxicology Specialty Section Postdoctoral Fellow/Associate Poster Award,

2024

Robert N. Infurna Award, 2024

Weiss Toxicology Scholar Award, 2021

University of Rochester Graduate Student Society Poster Travel Award, 2019

Professional Affiliations

Society of Toxicology (SOT) – Sustainable Chemicals through Contemporary Toxicology Specialty Section Postdoctoral Representative (2024-2025)

Society of Toxicology (SOT) – Postdoctoral Member (2023-Present)

Society of Toxicology (SOT) – Graduate Student Member (2020-2023)

American Society for Neurochemistry – Graduate Student Member (2020-2023)

Publications

Cubello J, Marvin E, Conrad K, Merrill AK, George JV, Welle K, Jackson BP, Chalupa D, Oberdörster G, Sobolewski M, & Cory-Slechta DA. The contributions of neonatal inhalation of copper to air pollution-induced neurodevelopmental outcomes in mice. Neurotoxicology. 2024;100:55-71.

Cubello J, Peterson DR, Wang L, Mayer-Proschel M. Maternal Iron Deficiency and Environmental Lead (Pb) Exposure Alter the Predictive Value of Blood Pb Levels on Brain Pb Burden in the Offspring in a Dietary Mouse Model: An Important Consideration for Cumulative Risk in Development. Nutrients. 2023;15(19):4101.

Rudy MJ, Salois G, Cubello J, Newell R, Mayer-Proschel M. Gestational iron deficiency affects the ratio between interneuron subtypes in the postnatal cerebral cortex in mice. Development. 2023;150(20):dev201068.

Presentations

Cubello J, Masten MC, Marvin E, Welle K, Chalupa D, Oberdörster G, Sobolewski M, Cory-Slechta DA. Neurochemical and Behavioral Toxicity of Ultrafine Air Particulate Matter During Gestation. Poster presentation, Society of Toxicology 64th Annual Meeting and ToxExpo, Orlando, FL, 2025.

Cubello J, Conrad K, Merrill AK, George JV, Marvin E, Sobolewski M, Cory-Slechta DA. Identification of Critical Windows of Exposure for Inhalation of Copper Oxide Nanoparticle-Induced Neurotoxicity. Poster presentation, Society of Toxicology 63rd Annual Meeting and ToxExpo, Salt Lake City, UT, 2024.

Cubello J, Conrad K, Merrill AK, George JV, Marvin E, Sobolewski M, Cory-Slechta DA. The Contributions of Neonatal Inhalation of Copper to Air Pollution-Induced Neurodevelopmental Outcomes in Mice. Oral presentation (invited), University of Rochester Toxicology Training Program Annual Retreat, 2023.

Cubello J, Conrad K, Merrill A, George JV, Marvin E, Sobolewski M, Cory-Slechta DA. Developmental Cu Inhalation: A Risk Modifier for Schizophrenia. Poster presentation, Society of Toxicology 62nd Annual Meeting and ToxExpo, Nashville, TN, 2023.

Cubello J, Wang L, Peterson D, Mayer-Pröschel M. Gestational Iron Deficiency Modulates Offspring Pb Burden in a Tissue-Specific Manner. Poster presentation, Society of Toxicology 61st Annual Meeting and

ToxExpo, San Diego, CA, 2022.

Cubello J and Mayer-Pröschel M. Brain Metal Dyshomeostasis Attributed to Gestational Iron Deficiency and Lead (Pb) Exposure is Refractory to Iron Supplementation. Poster presentation, 52nd Annual American Society for Neurochemistry Meeting, Roanoke, VA, 2022.

Cubello J and Mayer-Pröschel M. Vulnerabilities of the Iron Deficient Brain to Environmental Toxicants. Poster presentation, 51st Annual American Society for Neurochemistry Meeting (Virtual Event), 2021.

Cubello J and Mayer-Pröschel M. Early-life Iron Deficiency as a Prodrome for Later-Onset Neurological Pathologies. Poster presentation, Society of Toxicology 60th Annual Meeting (Virtual Event), 2021.

Peer Reviews

Neurotoxicology

Biological Trace Element Research