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Engineering & Scientific Consulting

Andrea Tineo, M.P.H.

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Professional Profile

Ms. Tineo is an environmental health scientist who specializes in industrial hygiene, environmental exposure assessment, and health risk assessment. Her master's thesis focused on evaluating the use of wearable technology to mitigate occupational heat stress through continuous personal and physiological monitoring.

Ms. Tineo's experience includes conducting chemical and physical exposure assessments (e.g., benzene, toluene, hydrogen sulfide, heat, and noise) qualitative and quantitative data analysis, literature reviews, developing injury and illness prevention programs, and data visualization utilizing ArcGIS. Prior to her industrial hygiene work, Ms. Tineo conducted environmental monitoring including stormwater and greenhouse gas sampling to support river and meadow restoration projects.

Ms. Tineo received her M.P.H. in Environmental Health Sciences with a concentration in Industrial Hygiene from UC Berkeley School of Public Health. She brings a strong background of biological and environmental sciences. She received her B.S. in Biology and B.A. in Anthropology from St. Mary's College of Maryland.

Academic Credentials & Professional Honors

M.P.H., Public Health, University of California, Berkeley, 2023

B.S., Biology and Anthropology, St. Mary's College of Maryland, 2018

Dr. Charles H. Powell Award, American Industrial Hygiene Association – Northern California Section (2022)

NIOSH Industrial Hygiene Traineeship (2021-2023)

Kaiser Permanente Scholar, University of California, Berkeley (2021-2023)

Prior Experience

Research Analyst, Heat Strain Monitoring, Airswift Contractor, 2022-2023

Occupational Hygiene Intern, Chevron, 2022

Education Program Coordinator, Ecology Center, 2019-2021

Professional Affiliations

American Industrial Hygiene Association (member), Stewardship and Sustainability Subcommittee

American Industrial Hygiene Association, Northern California Section (member)

Publications

Stewart, M., Tineo, A., Woodrow, B., Wasik, M., Chan, S. (2023). Continuous personal monitoring and personalized hydration recommendations with wearable sweat sensors to prevent occupational heat stress. In: Waldemar Karwowski and Tareq Ahram (eds) Artificial Intelligence, Social Computing and Wearable Technologies. AHFE (2023) International Conference. AHFE Open Access, vol 113. AHFE International, USA. http://doi.org/10.54941/ahfe1004205

Project Experience

Industrial Hygiene and Occupational Health:

Collected residential volatile organic compound measurements utilizing traditional industrial hygiene methods

Summarized and described field-based heat strain wearable trial data and provided study recommendations for future trials

Delivered training and education to participants of field-based heat strain wearable trial

Monitored oil refinery workers for benzene, toluene, ethylene, xylene, and noise in accordance with company annual monitoring plan

Reviewed and summarized literature related to the public health impacts of hydraulic fracturing and oil and gas extraction

Developed report providing recommendations for heat exposure best practices and influence of climate change on working conditions in Cambodia's textiles, garment, leather, and footwear industry

Conducted a job analysis and developed a report providing recommendations to reduce musculoskeletal risks for chocolatiers engaging in lift, upper extremity, and manual material handling tasks

Conducted a literature review on the adverse health outcomes and toxicity associated with exposure to heavy metals in informal e-waste sector

Consumer Products:

Evaluated and examined products for BPA under Proposition 65

Litigation Support:

Reviewed discovery documentation and summarized exposure history in support of expert report of indoor environmental quality issues including water intrustion, mold, asbestos, and PFAS. Described the frequency and duration of exposure and relevant risk factors.