

**Kelsi Perttula, PhD**  
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## Education

<b>UC Berkeley; School of Public Health</b> Ph.D., Environmental Health Sciences	<b>Berkeley, CA</b> December 2017
<b>San Jose State University</b> M.S., Chemistry	<b>San Jose, CA</b> May 2011
<b>UC Berkeley; College of Chemistry</b> B.S., Chemistry	<b>Berkeley, CA</b> May 2003

## Research & Laboratory Experience

<b>Assistant Professor</b> Department of Public Health	<b>California State University East Bay</b> August 2022 - Present
<ul style="list-style-type: none"><li>- Establishment of an independent research program</li><li>- Research projects underway include review of epidemiological relationships between modifiable exposures and Parkinson's Disease.</li><li>- Continued collaboration with UC Berkeley exposure lab for air pollution research projects and Mt. Sinai faculty on exposomics projects.</li><li>- Incorporate CSUEB undergraduate students into research projects.</li></ul>	
<b>Visiting Scholar</b> Department of Environmental Health Sciences	<b>UC Berkeley</b> July 2019 - July 2021
<ul style="list-style-type: none"><li>- Analyzed indoor/outdoor particulate matter and carbon-related air quality data.</li><li>- Measured the distribution of respirable particles within elevators and calculated concentration decay equations and constants.</li><li>- Mentor and collaborate with graduate students.</li><li>- Affiliate status presently retained</li></ul>	
<b>Graduate Student Researcher</b> Department of Environmental Health Sciences	<b>UC Berkeley</b> 2012 - 2017
<ul style="list-style-type: none"><li>- Executed targeted &amp; untargeted LC-MS metabolomic studies of xenobiotic and endogenous exposures in the Rappaport Lab.</li><li>- Extracted biological matrices for different classes of molecules based on goal analysis.</li><li>- Analyzed high-dimensional LCMS data with data-adaptive variable selection methods.</li><li>- Evaluated potential biomarkers for chemical identity and predictive value.</li><li>- BSL 2 Laboratory Safety Officer.</li></ul>	

**Forensic Scientist**

SMCSO Forensic Laboratory

**San Mateo County Sheriff's Office**

2005 - 2012

- Examined and analyzed biological, fiber, blood toxicology, and trace evidence. Relevant instrumentation: capillary electrophoresis, polarized light microscopy, FTIR, GCMS. Examined crime scenes. BSL 2 Laboratory Safety Officer. Qualified expert witness in San Mateo, Solano, and Alameda county courts.

**Teaching Experience****Assistant Professor**

Department of Public Health

**California State University East Bay**

August 2022 - Present

- First Year Seminar (PH 100), Environmental Health (PH 300)
- Epidemiology (PH 330), Public Health (315)

**Lecturer**

Departments of Chemistry and Health Sc/Public Health

**California State University East Bay**

2018 - 2022

- Chemistry and Society (Chem 106), General Chemistry (Chem 1103), General Chemistry Laboratory (Chem 112), Bioanalytical and Forensic Instrumentation, Laboratory and Lecture (Chem 320).
- Investigating Disease Outbreaks & Epidemics (HSC 270), Environmental Health (HSC 300), Environmental Health Policy (HSC 362), Epidemiology Lecture (HSC 330)

**Graduate Student Instructor**

School of Public Health

**UC Berkeley**

January 2017 - July 2017

- Advised undergraduate honor students with their theses. Co-taught Introduction to Environmental Health Sciences.

**Lecturer**

Department of Life Sciences

**Notre Dame de Namur University**

2010 - 2012

- Taught organic and general chemistry labs. Developed and taught environmental toxicology. Mentored and advised undergraduates.

**Publications**

- § Kado, M; **Perttula, K**; Noth, EM; Moore, D, Nguyen, P; Perrino, C; Nicas, M; Hammond, SK; "Elevator Ventilation and SARS-CoV-2-Relevant Particulate Matter Removal in Three Older California Elevators", Indoor Air, vol. 2023, Article ID 7664472, 10 pages, 2023.
- § Petrick, L; Imani, P; **Perttula, K**; Yano, Y; Whitehead, T; Metayer, C; Rappaport, S. Untargeted metabolomics of newborn dried blood spots reveals sex-specific associations with pediatric acute myeloid leukemia. Leukemia Research, 106585, 2021.
- § Schiffman, C; Petrick, L; **Perttula, K**; Yano, Y; Carlsson, H; Whitehead, T; Metayer, C; Hayes, J; Edmands, WMB; Rappaport, S; Dudoit, S; Filtering procedures for untargeted LC-MS metabolomics data, BMC Bioinformatics, 20 (1), 2019.
- § Petrick, L; Schiffman, C; Edmands, WMB; Yano, Y; **Perttula, K**; Whitehead, T; Metayer, C; Wheelock, CE; Arora, M; Grigoryan, H; Carlsson, H; Dudoit, S; Rappaport, SM, Metabolomics of neonatal blood spots reveal distinct phenotypes of pediatric acute lymphoblastic leukemia and potential effects of early-life nutrition, Cancer Letters, 452, 2019.

- § **Perttula, K**; Schiffman, C; Edmands, WMB; Petrick, L; Grigoryan, H; Cai, X; Gunter, MJ; Naccarati, A; Polidoro, S; Dudoit, S; Rappaport, S; Untargeted lipidomic features associated with colorectal cancer in a prospective cohort, *BMC cancer*, 18 (1), 2018.
- § Petrick, L; Edmands, WMB; Schiffman, C; Grigoryan, H; **Perttula, K**; Yano, Y; Dudoit, S; Whitehead, T; Metayer, C; Rappaport, S; An untargeted metabolomics method for archived newborn dried blood spots in epidemiologic studies, *Metabolomics*, 13 (3), 27, 2017.
- § **Perttula, K**; Edmands, WMB; Grigoryan, H; Cai, X; Iavarone, AT; Gunter, MJ; Naccarati, A; Polidoro, S; Hubbard, A; Vineis, P; Evaluating ultra-long-chain fatty acids as biomarkers of colorectal Cancer risk, *Cancer Epidemiology and Prevention Biomarkers*, 25 (8) 2016.
- § Cai, X; **Perttula, K**; Pajouh, SK; Hubbard, A; Nomura, DK; Rappaport, SM; Untargeted lipidomic profiling of human plasma reveals differences due to race, gender and smoking status, *Metabolomics*, 4 (1), 2014.

## Volunteer Experience

### **CALICO Center**

San Leandro, California

- Member of the Board of Directors
- Treasurer - September 2023 - Present
- Support and advise as a board member for CALICO, the Child Abuse Listening, Interviewing and Coordination Center, a Child Advocacy Center of California (CACCC).
- Assist in the interpretation and implementation of local, state, and federal health guidelines, to support staff, children, and clients during the COVID-19 pandemic.

### **Child Advocacy Center**

January 2021 - Present

### **Gan Avraham Preschool**

Oakland, California

- Volunteer for annual auction fundraiser (2019).
- Organize, advertise and coordinate biannual blood drives with the Red Cross.
- Volunteer at large for the community (2020 - Present).

### **Temple Beth Abraham**

Fall 2018 - May 2023

## Awards

UC Berkeley School of Public Health Alumni Scholarship; 2013.

Online Course Quality Transformation Grant; Quality Matters Certification; CSUEB, 2019.

## Professional Organizations

Member, American Public Health Association

Member, International Society for Environmental Epidemiology