
TRACEY J. WOODRUFF, PHD, MPH
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
CURRICULUM VITAE

Position: Professor, Department of Obstetrics, Gynecology & Reproductive Sciences
Director of the Program on Reproductive Health and the Environment
School of Medicine

Alison S. Carlson Endowed Professorship for the Program on Reproductive Health and the Environment

Address:



EDUCATION

1981 - 1985 University of California, Berkeley BS High Honors, Electrical Engineering and Computer Science

1989 - 1991 University of California, Berkeley MPH Environmental Health Science

1986 - 1991 Joint Program between University of California, Berkeley and San Francisco PhD Bioengineering

1991 - 1993 University of California, San Francisco Postdoc Pew Foundation Postdoctoral Fellow in Health Policy

PRINCIPAL POSITIONS HELD

2007 - present University of California, San Francisco. Alison S. Carlson Endowed Professorship for Program on Reproductive Health and the Environment, Department of Obstetrics, Gynecology, and Reproductive Sciences, School of Medicine and the Philip R Lee Institute for Health Policy Studies.

2007 – present Director, Program on Reproductive Health and the Environment.

1994 - 2007 U.S. Environmental Protection Agency. Senior Scientist National Center for Environmental Economics, Office of Policy.

HONORS AND AWARDS

1983 Tau Beta Pi, Engineering Honor Society

1983 Associated Western Universities Student Research Appointment

1983 Achievement Rewards for College Scientists Award

1984 Eta Kappa Nu (electrical engineering honor society)

1986 National Science Foundation Fellowship

1989 University of California, San Francisco Graduate Opportunity Fellowship

1990 University of California, San Francisco Chancellor's Fellowship

2022 Best Paper Award for Environmental Science from the journal Environmental Science & Technology

Honors and Awards from the U.S. Environmental Protection Agency (select awards)

1996 Office of Policy Tim Matzke award for outstanding analytical contributions

USEPA Medals awarded for meritorious service

1997 Bronze Medal in recognition of exceptional performance in preparing the "Review of National Ambient Air Quality Standards for Particulate Matter; Policy Assessment of Scientific and Technical Information" also known as the OAQPS staff paper

1998 Gold Medal for exceptional service for outstanding and successful and dedicated performance in completing revisions of the National Ambient Air Quality Standards, thereby contributing to major improvements in public health protections

2003 Bronze Medal for notable and outstanding research contributions to risk sciences at EPA

2004 Gold Medal for exceptional service for outstanding contribution to the development and publication of US EPA's America's Children and the Environment: Measures of Contaminants, Body Burdens, and Illnesses

2006 Silver medal for outstanding contribution to the development and publication of US EPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens.

Science and Technology Achievement Award, Awardees are chosen from EPA nominees by the Science Advisory Board and are for scientific publications of high scientific quality that provide an important contribution to the policy process

2008 Honorable Mention for the 2008 Scientific and Technological Achievement Award. Given for the publication of Estimating Risk from Ambient Concentrations of Acrolein across the United States.

2008 Level III Scientific and Technological Achievements Award. Given for the publication of Assessing Susceptibility from Early-Life Exposure to Carcinogens.

2011 Level III Winner of the Scientific and Technological Achievement Awards. Given for the publication of Evaluating Cumulative Organophosphorus Pesticide Body Burden of Children: A National case study.

Honors and Awards while at UCSF (last 5 years)

2019 Named the first Alison S. Carlson Endowed Professorship for the Program on Reproductive Health and the Environment

2021 Homer Calver Award, American Public Health Association (APHA)

2021 FIGO Recognition Award to Non-Obstetrician / Gynaecologists

2022 Award for Outstanding Research Mentorship UCSF, Department of Obstetrics, Gynecology, & Reproductive Sciences

PROFESSIONAL ACTIVITIES (last 5 years)

MEMBERSHIPS

1998 - present International Society for Environmental Epidemiology (ISEE)

2008 - present Society of Toxicology

2012 - present American Public Health Association

2015 - present Collegium Ramazzini (this is an elected society with limited membership)

2015 - present Project TENDR: Targeting Environmental Neuro-Development Risks -

2020 - present International Society of Exposure Science (ISES)

SERVICE TO PROFESSIONAL ORGANIZATIONS (last 5 years)

2018 – present International Society for Environmental Epidemiology: Member of the Organizing Committee for new North America Chapter of ISEE and Executive Committee Member (elected position)

2019 – present International Society for Environmental Epidemiology: North America Chapter Executive Committee Member (elected position)

- 2019 – 2021 International Federation of Gynecology and Obstetrics (FIGO): Committee for Reproductive and Developmental Environmental Health Member
- 2019 – present International Society of Exposure Science (ISES) 2020 Conference Committee and Plenary Speaker
Recruitment Task Force Member
- 2021 - 2021 International Society for Environmental Epidemiology (ISEE): Tony McMichael Award Subcommittee Member
- 2021- present Member of the National Academies of Sciences, Engineering, and Medicine’s Committee on *Variability and Relevance of Current Laboratory Mammalian Toxicity Tests and Expectations for New Approach Methods (NAMs) for use in Human Health Risk Assessment*
- 2022 – present Member of the National Academies of Sciences, Engineering, and Medicine’s Committee on *National Academies Board on Environmental Studies and Toxicology (BEST)*
- 2022 – present US Environmental Protection Agency, Board of Scientific Counselors (BOSC), Executive Committee
- 2022 - 2022 National Academies of Sciences, Engineering, and Medicine’s Reviewer “Children’s Environmental Health: Proceedings of a Workshop” for the Health and Medicine Division

SERVICE TO PROFESSIONAL PUBLICATIONS AND ORGANIZATIONS (Last 5 years)

2007 - 2020 Associate Editor and member of Advisory Board, Environmental Health Perspectives (Environmental Health Perspectives is one of the top journals in Environmental Health and Public Health Sciences)

2019 - 2019 Member of the Search Committee to help with the recruitment of the next Editor-in-Chief of Environmental Health Perspectives (Environmental Health Perspectives is one of the top journals in Environmental Health and Public Health Sciences)

2019-2019 Member of the Review Committee for selecting the next editor in chief for Environmental Health Perspectives. Environmental Health Perspectives is the leading journal in the field of environmental health. Responsibilities included providing advice to the Deputy Director of NIEHS (which is responsible for EHP) on all aspects of hiring, including identifying key qualities, recruitment, interviewing and selection and final recommendations of candidates.

INVITED PRESENTATIONS – INTERNATIONAL (Last 5 years)

2018 The University of Sydney, Sydney Policy Lab Project: "Improving methods to evaluate evidence in support of public health guidelines to protect Australians from environmental health hazards". Title: Empirically based methods
Plenary Speaker and Session Chair

2018 International Society of Exposure Science (ISES) and the International Society for Environmental Epidemiology (ISEE) Joint Annual Conference
Presenter

2018 IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Advisory Group to Recommend an Update to the Preamble Webinar
Invited Speaker

2019 Precision Medicine World Conference, Silicon Valley, CA. "Environment Matters: Big Data, Environmental Exposures & Health"
Invited Speaker

2019 International Federation of Fertility Societies (IFFS), Shanghai, China. "Epidemiology of Reproductive Outcomes"
Invited Speaker

2019 Unwrapped Conference (part of Plastic Exposed), Scotts Valley, CA. "Food Contact Materials, Prenatal Phthalate Exposure and Reproductive Health Effects."
Invited Speaker

2019 Gunma University Initiative for Advanced Research (GIAR) Int'l Exposome Symposium, Maebashi, Japan. "Leveraging Mass Spectrometry Data to Understand Maternal and Fetal Exposome in Pregnancy and Implications for Health."
Invited Speaker

- 2020 International Society of Environmental Epidemiology (ISEE), Symposium: From the University Door to the Congress Floor: How We Translate Science Into Policy. "Translating Scientific Findings on Environment and Health for Relevance to Decision Making." (web) Presenter
- 2020 International Society of Environmental Epidemiology (ISEE), Symposium: How GREAT is GRADE? Taking stock of GRADE for evidence review in environmental epidemiology" Risk of Bias Assessments in Evidence Review: Strengths and Limitations." (web) Presenter
- 2020 International Society of Exposure Science (ISES) Rethinking the evaluation of human exposure studies to improve public health policy decision making (web) Presenter
- 2020 International Society of Exposure Science (ISES) Innovative Approaches to Assessing Cumulative Environmental Exposures to Improve Health: From Science to Policy Part I/II (web) Presenter
- 2021 Conducting Evaluations of Evidence that are Transparent, Timely and Lead to Health-Protective Actions Workshop (web) Invite Speaker
- 2021 International Society for Environmental Epidemiology (ISEE) Conference Panel: "The critical role science-based, validated systematic review methods play to inform policy and decision-making to protect communities disproportionately impacted by harmful environmental exposures" (web) Panelist
- 2021 International Society for Environmental Epidemiology (ISEE) Conference Abstract no. 797 entitled: "Widespread Exposure to Emerging and Previously Unmeasured Chemicals in Commerce in Pregnant women Across the US" (web) Presenter
- 2021 International Society of Exposure Science (ISES) Assessing Cumulative Environmental Exposures to Improve Health and Justice: Engaging Multi-Sectors 5 Years After the Lautenberg Amendments (web) Presenter
- 2021 THE IMPERIAL COLLEGE NEONATAL UPDATE 2021: The science of newborn care (Web) Presenter
- 2022 International Society of Environmental Epidemiology(ISEE), "How to Conduct Systematic Reviews and Meta-Analyses to Improve Environmental Health Policy and Decision-Making" Presenter
- 2022 International Society of Environmental Epidemiology(ISEE), " The Devil they knew: chemical documents analysis of industry influence on PFAS Science" Presenter
- 2022 International Society of Environmental Epidemiology(ISEE), "Evaluating Chemical Hazard on a Global Scale" Presenter
- 2023 Nankai University, "Everywhere all at once, the chemical exposome and influences on health and health inequities" (web) Invited Speaker

INVITED PRESENTATIONS - NATIONAL (Last 5 years)

- 2018 University of Southern California California Environmental Health Sciences Center NIEHS Seminar Series Invited Speaker
- 2018 Collaborative on Health and the Environment's EDC Strategies Group Science Briefs Webinar: Characterizing Multiple Chemical Exposures Among Pregnant Women Presenter
- 2018 The Forum Institute; Translational Medical Conference - Toxicity and Health Think Tank Forum (web) Invited Speaker
- 2018 Society of Toxicology FutureTox IV, Arlington, VA Invited Speaker
- 2018 Protect, CEHC Puerto Rico and Northeastern University. "Without Consent: Chemical Exposures and Our Health." (web) Invited Speaker
- 2019 CEHN Children's Environmental Health Network Education Series. "Protecting Children's Environmental Health: The Blueprint in Action." (web) Invited Speaker
- 2019 NIEHS Exposure Science and the Exposome Webinar Series. "Leveraging Mass Spectrometry Data to Understand Maternal and Fetal Exposome in Pregnancy and Implications for Health." (web) Invited Speaker
- 2019 National Academy of Science Evidence Integration Workshop, Washington D.C. Invited Panelist
- 2019 CA Department of Toxic Substances Control Environmental Chemistry Laboratory Seminar Series, Berkeley, CA. "Prenatal Chemical Exposures and Adverse Health Effects." (live and web) Invited Speaker

2019	Footprint Sustainability Summit, Scottsdale, Az. "Plastics and Your Health."	Invited Speaker
2020	National Academy of Sciences Environmental Neuroscience: Advancing the Understanding of How Chemical Exposures Impact Brain. "Exposure to Neurotoxic Chemicals & Neurodevelopmental Disease." (web)	Invited Speaker
2020	National Academy of Sciences Committee to Review EPA's Toxic Substances Control Act (TSCA) Systematic Review Guidance Document. "TSCA data evaluation process." (web)	Invited Speaker
2021	Secretary's Advisory Committee on Infant Mortality (SACIM) - "Environmental Contributions to Infant and Maternal Health" (web)	Invited Speaker
2021	National Resources Defense Council and Brunel University, "Conducting Evaluations of Evidence that are Transparent, Timely and Lead to Health-Protective Actions" (web)	Moderator, Speaker
2021	The University of Michigan -TSCA @5 Years: Opportunities to Act with Foresight, "Is the Toxic Substances Control Act (TSCA) Protecting Health and Promoting Environmental Justice? 5 Years After Lautenberg Amendments" (web)	Invited Panelist
2021	Northwestern University, Center for Reproductive Science, Career Catalyst Series, "A Career of Working at Science & Policy Intersection" (web)	Invited Speaker
2021	The University of Colorado, Scripps Fellowships in Environmental Journalism, "Getting into good trouble" (web)	Invited Speaker
2021	March of Dimes' Mom & Baby Action Network, "What does Environmental Health have to do with Equity in Maternal & Infant Health?" (web)	Invited Speaker
2021	American Diabetes Association's Scientific Sessions-81st Virtual Scientific Sessions, "PFAS—Metabolic Mechanisms as Endocrine Disruptors Influencing Maternal-Fetal Health" (web)	Invited Speaker
2021	Columbia Environmental Justice Boot Camp: Theory and Methods to Study Environmental Health Disparities, "Translating science into effective change to address environmental justice." (web)	Invited Speaker
2021	Columbia P30 Center for Environmental Health in Northern Manhattan (CEHNM), "Environmental Exposures and Health: Scientific Evidence & Policy Approaches" (web)	Invited Speaker
2021	ECHO Cohort Fall 2021, "Widespread Exposure to Emerging and Previously Unmeasured Chemicals in Commerce in Pregnant women Across the US " (web)	Invited Speaker
2021	AAMC Learn Serve Lead Annual Meeting, "Environmental Pollution Exposures and Contributing to Systemic Change for Addressing Health Inequities" (web)	Invited Speaker
2021	ECHO Program Stakeholder Briefing, "ECHO Advancing Solution Oriented Research to Prevent Harmful Chemical Exposures" (web)	Invited Speaker
2021	Reproductive Justice and Environmental Justice Convening, "Panel 2: Scientific Evidence What exists, where the gaps are, and why those gaps exist" (New Orleans, LA.)	Invited Panelist
2022	Wayne State, Center for Urban Responses to Environmental Stressors (CURES), Environmental Exposures and Health: Scientific Evidence & Policy Approaches (web)	Invited Speaker
2022	NIEHS Women's Environmental Impacts on Women's Health Disparities and Reproductive Health Workshop (web)	Panelist
2022	National Academies workshop Triangulation of Evidence in Environmental Epidemiology, "Lessons learned from over a decade of systematic review implementation to improve evidence integration" (web)	Invited Speaker
2022	NAS Children's Environmental Health: A Workshop on Future Priorities for Environmental Health Sciences, "Why addressing environmental threats to children's health still matters." (web)	Invited Speaker
2022	Columbia Environmental Justice Boot Camp: Theory and Methods to Study Environmental Health Disparities, "Translating science into effective change to address environmental justice." (web)	Invited Speaker

- 2022 NIEHS Workshop: Complex Exposures in Breast Cancer: Unraveling the Role of Environmental Mixtures, "Mixtures: they are everywhere." (web) Invited Speaker
- 2022 NIHES Mechanistic Toxicology Branch (MTB) DNTF, " Chemical and Social Environmental Influences on Prenatal and Child Health and Health Equity – Strategic Research to Address a Knotty Problem" Invited Speaker
- 2022 NASEM Sponsor Influences on the Quality and Independence of Health Research: A Workshop, Panel discussion "How to protect independent research" Panelist
- 2023 Collaborative on Health & the Environment (CHE) Environmental Justice and the Built Environment: Protecting Children and Families, "Chemical Exposures from the Built Environment – Developmental Risks& Environmental Justice" (web) Invited Speaker
- 2023 Telomere Research Network (TRN) Annual Meeting at NIEHS, " Everywhere all at once, exposome exposures and health effects: identifying exposure priorities to improve health and health equity." (web) Invited Speaker

INVITED PRESENTATIONS - REGIONAL AND OTHER INVITED PRESENTATIONS (Last 5 years)

- 2018 UCSF Maternal Fetal Medicine (MFM) Fellowship Didactics
- 2018 UCSF Center for Maternal-Fetal Precision Medicine Maternal-Fetal Immunology Symposium
- 2018 UC Hastings Challenging Environmental Orthodoxies
- 2019 UCSF Writing for Policymakers Panel
- 2019 UCSF Predoctoral Presentation
- 2019 CalEPA Office of Environmental Health Hazard Assessment (OEHHA) Read-Across Workshop
- 2019 UCSF & San Francisco State University (SFSU) In the Mix Team Science Event; "Environmental Pollution and Health Disparities– What We Know and What We Can Do"
- 2019 UC Berkeley - UCSF Bioengineering Graduate Program BioE Retreat
- 2019 University of Illinois at Urbana–Champaign Toxicology Program Keynote Speaker
- 2020 UCSF Mini Medical School for the general public, "Climate, Pollution, and Prenatal and Child Health" (web)
- 2021 UCSF Mini Medical School for the general public, "Environmental Threats to Reproductive Health and Human Fertility" (web)
- 2021 Collaborative on Health and the Environment, "Suspect Screening, Prioritization, and Confirmation of Environmental Chemicals in Maternal-Newborn Pairs from San Francisco" (web)
- 2021 UCSF EaRTH Environmental Scholars, "Principles of Community-Engaged Research and Environmental Justice." (web)
- 2021 UCSF School of Medicine Life Stages Course (web) Lecturer
- 2021 Cancer Control Program meeting, "Environmental Research and Translation for Health: the UCSF EaRTH Center" (web) Invited Speaker
- 2021 UCSF Center of Cellular Construction, "Environmental Chemicals and Developmental Effects and How Public Policy Determines our Exposures" (web) Invited Speaker
- 2022 UCSF EARTH Day, "Toxic Chemicals and Burning Planet" (web) Invited Speaker
- 2022 From Free Radicals to Key Characteristics Celebrating Research to Action - Past, Present, and Future, "Panel discussion on future applications of the KCs" Invited Panelist
- 2022 UCSF Memory and Aging Center Dementia Day, "Neurocognitive decline and the role of the social and chemical environment – opportunity for understanding and prevention" Invited Speaker
- 2022 UCSF Philip R. Lee Institute for Health Policy Studies Policy Skills Webinar, "Improving Your Policy Long Game." Invited Panelist

- 2023 UCSF Global Health Sciences Masters "Noncommunicable Diseases (NCDs), the Environment and Health" . "Global Population Health: Why the Environment Matters" Lecturer
- 2023 UC Davis Frontiers in Physiology, "Making Your Science Impactful " Invited Speaker
- 2023 UCSF Fresno Resident Research Day, "Research Collaboration with UCFresno: Opportunity to address health equity and environmental impacts" Invited Speaker
- 2023 Stanford & UCSF PRC Lab Meeting, "Environmental Determinants of Preterm Birth and Health Inequities" Invited Speaker
- 2023 UCSF School of Medicine Life Stages IDS 122A, "Frontiers In Medicine: Impact of Environment on Reproductive Health" Invited Speaker
- 2023 EDC Strategies Group in partnership with CHE, "Chemicals and Pregnancy Complications: Findings from Nontargeted Analysis" (web) Invited Panelist

GOVERNMENT AND OTHER PROFESSIONAL SERVICE

- 2012 – 2023 California Science Advisory Board Developmental And Reproductive Toxicant (DARTIC) Identification Committee. Governor appointed Board of expert scientists to identify chemicals that are known to the State of California to cause reproductive toxicity.
- 2017 - 2017 NIH Study Section Infectious, Reproductive, Asthma and Pulmonary Conditions Study Section [IRAP] NIH review committee member
- 2017 - 2017 NIH Study Section Systemic Injury by Environmental Exposure [SIEE]
- 2018 - 2018 NIH/National Institute of Environmental Health Sciences, "Loan Repayment Review for 2018"
- 2018 - 2018 Health Effects Institute Draft Document 'Potential Health Effects from Unconventional Oil and Gas Development: A Systematic Review of the Epidemiology Literature'
- 2020 - 2020 United States-Israel: Bi-national Science Foundation Grant Proposal Reviewer
- 2020 - 2020 NIH/National Institute of Environmental Health Sciences K Award Reviewer
- 2020 - 2020 Robert Wood Johnson Interdisciplinary Research Leaders Program Reviewer
- 2020 - 2022 Executive Committee, NIH Environmental Influences on Child Health Outcomes (ECHO) Program, Elected member to represent cohorts on NIH ECHO consortium committee -ECHO is a 80+ child synthetic cohort representing over 50,000 children
- 2021 – 2023 California Air Resources Board (CARB) Expanded Health Advisory Group, Advisory group member
- 2021 - 2021 NIH/National Institute of Environmental Health Sciences, K99/R00, K01 and K23 Award Review Grant Reviewer
- 2023 - 2023 National Institute of Environmental Health Sciences (NIEHS), Bioinformatics Support for the NIEHS and National Toxicology Program (NTP) Grant Reviewer

UNIVERSITY AND PUBLIC SERVICE (last 5 years)

UC SYSTEM AND MULTI-CAMPUS SERVICE

- 2019 - 2022 UC Herbicide Task Force - Members responsible for providing review, guidance and recommendations on glyphosate-based herbicides and other pesticides, including long-term approaches to their use. Dr. Woodruff was appointed by the University of California Academic Senate. Member
- 2022 - present Science Advisor on microplastics and health, University of California California State Policy Evidence Consortium (CalSPEC). CalSPEC is a UC initiative administered through the UC Center Sacramento to

leverages the UC expertise in public service and research to support evidence-based policymaking at the state level.

UCSF CAMPUSWIDE

2018 - 2018 Center for Tobacco Control, Research and Education Mock Study Section for Postdoc Grant Writing Course Reviewer

2021 - 2021 14th Annual Health Disparities Research Symposium Abstract Reviewer

2022 - 2022 15th Annual Health Disparities Research Symposium Abstract Reviewer

SCHOOL OF MEDICINE

2018 – 2019 School of Medicine Strategic Plan Implementation Leader for the Community Action Group

DEPARTMENTAL SERVICE

2017 - 2019 Department Research Strategic Planning Taskforce Member

2017 - 2018 Interviewer for new chair of Department of Ob-Gyn and Reproductive Sciences

2018 - 2018 Search Committee for Associate Chair of Finance and Administration for Department of Ob-Gyn and Reproductive Sciences Member

2018 - 2019 Department Space Committee Member

2019 - present Research Strategy Committee Member

2020 - 2020 Interviewer for new head of the Center of Reproductive Sciences

SERVICE AT OTHER UNIVERSITIES

2019 - 2019 Review for internal grant for P30 center at the University of Southern California University of Southern California (USC)

2021 - 2022 Maternal and Infant Environmental Health Riskscape External Advisory Committee External Advisory Committee Reviewer Baylor University

2021 - present University of Southern California Environmental Health Sciences Center External Advisory Committee Reviewer University of Southern California (USC)

2023 - present California State University, East Bay NIEHS R15 External Advisory Committee California State University, East Bay (CSUEB)

COMMUNITY AND PUBLIC SERVICE

2018 - 2018 Piedmont High School Career Day - presentation to high school students about career in environmental health science Speaker

2018 - present Healthy Babies Bright Futures Advisory Board Advisory Board Member

2016 - present Science Action Network for Health and the Environment. We lead this network of 200+ scientists, clinicians and public health practitioners dedicated to preventing toxic chemical exposures, improve public health, and support environmental justice. We focus on engaging our participants in best practices for using science to engage in systematic changes to improve health and health equity.

2023 - present The Examination- nonprofit global health news organization Advisory Board Member

TEACHING AND MENTORING

TEACHING SUMMARY

I co-led the development of a new environmental health inquiry session part of the medical school bridges curriculum (2017).

MENTORING SUMMARY

I mentored over 50 trainees, physicians and academics at various points along their academic career, including undergraduate and graduate students and postdocs. My mentees have successful academic, government and nonprofit careers. I have served as primary mentor and secondary mentor of numerous training fellowships and have successfully mentored K99/R00 awardees. I have mentored several postdocs in first-time successful NIEHS K99 applications. I initiated a PRHE Postdoctoral Training Program to train and mentor PRHE postdocs in career and scientific development.

RESEARCH AND CREATIVE ACTIVITIES

RESEARCH AWARDS - CURRENT

1. National Institute of Environmental Health Sciences
UCSF Environmental Research and Translation for Health Center (EaRTH Center)
2. The JPB Foundation
Advancing Science-Based Decision Making About Toxic Chemicals: A Recipe for Building a Healthy Environment
3. National Institutes of Environmental Health Sciences
Discovery of novel environmental chemicals in a diverse population of maternal-infant pairs
4. NCI/NIEHS
DREAM: Discovering cancer Risks from Environmental contaminants And Maternal/child health
5. TIDES/Broad Reach Fund
Promote using science appropriate to protect public health, advance a new scientific agenda for chemical policy at USEPA through UCSF PRHE's Science Response Network and counter industry's influence on science and health.
6. National Institute of Health (NIH/NICHD)
UCSF Stanford Endometriosis Center for Discovery, Innovation, Training and Community Engagement Project 1
7. National Institute of Health (NIH/NICHD)
UCSF Stanford Endometriosis Center for Discovery, Innovation, Training and Community Engagement Project 2
8. EPA, subcontract to UCSF via Johns Hopkins University (PI Nachman)
INnovations to Generate Estimates of children's Soil/dust inTake (INGEST)
9. Passport Foundation
Promoting Evidence-Based Decision Making about Toxic Environmental Chemicals
10. USEPA/ICF
Cumulative Impacts EPA
11. CalEPA
Measuring chemicals from wristbands in a diverse pregnancy cohort
12. Office of Environmental Health Hazard Assessment
Leveraging in vitro and in silico approaches to identify human developmental and reproductive toxicants
13. Marisla Foundation Environmental

Reducing harmful chemical exposures to ensure healthier lives for all through advancing science, holding industry accountable and informing policy.

Peer-reviewed publications (I have over 230 publications – this lists the last 5 years – for a complete list of published work in my bibliography: <https://www.ncbi.nlm.nih.gov/myncbi/167zghbwwq-5j/bibliography/public/>)

1. Vesterinen, HM, Morello-Frosch, R, Sen, S, Zeise, L, and Woodruff, TJ. Cumulative effects of prenatal-exposure to exogenous chemicals and psychosocial stress on fetal growth: systematic-review of the human and animal evidence. *PLoS*. 2017 July. PMID: 28700705. PMCID: PMC5507491
2. Lam J, Lanphear BP, Bellinger D, Axelrad DA, McPartland J, Sutton P, Davidson L, Daniels N, Sen S, Woodruff TJ. Developmental PBDE Exposure and IQ/ADHD in Childhood: A Systematic Review and Meta-analysis. *Environ Health Perspect*. 2017 August 03; 125(8):086001. DOI: 10.1289/EHP1632. PMID: 28799918. *I was PI of this project, and developed the initial idea.*
3. McGartland, A, Revesz, R, Axelrad, DA, Dockins, C, Sutton, P, and Woodruff, TJ. Estimating the health benefits of environmental regulations. *Science*. 2017 August. PMID: 28774918. DOI: 10.1126/science.aam.8204
4. Gerona, RR, Schwartz, JM, Pan, J, Friesen, MM, Lin, T, and Woodruff, TJ. Suspect screening of maternal serum to identify new environmental chemical biomonitoring targets using liquid chromatography-quadrupole time-of-flight mass spectrometry. *Journal of Exposure Science & Environmental Epidemiology*. 2017 October 11. PMID: 29019345
5. Zota AR, Mitro SD, Robinson JF, Hamilton EG, Park JS, Parry E, Zoeller RT, Woodruff TJ. Polybrominated diphenyl ethers (PBDEs) and hydroxylated PBDE metabolites (OH-PBDEs) in maternal and fetal tissues, and associations with fetal cytochrome P450 gene expression. *Environ Int*. 2018 Jan 06; 112:269-278. doi: 10.1016/j.envint.2017.12.030. PMID: 29316516. PMCID: PMC6561508
6. Varshavsky JR, Morello-Frosch R, Woodruff TJ, Zota AR. Dietary sources of cumulative phthalates exposure among the U.S. general population in NHANES 2005-2014. *Environ Int*. 2018 Jun;115:417-429. doi: 10.1016/j.envint.2018.02.029. Epub 2018 Mar 29. PubMed PMID: 29605141; PubMed Central
7. Koman PD, Hogan KA, Sampson N, Mandell R, Coombe CM, Tetteh MM, Hill-Ashford YR, Wilkins D, Zlatnik MG, Loch-Carus R, Schulz AJ, Woodruff TJ. Examining Joint Effects of Air Pollution Exposure and Social Determinants of Health in Defining "At-Risk" Populations Under the Clean Air Act: Susceptibility of Pregnant Women to Hypertensive Disorders of Pregnancy. *World Med Health Policy*. 2018 Mar; 10(1):7-54. PMID: 30197817.
8. Parry E, Zota AR, Park JS, Woodruff TJ. Polybrominated diphenyl ethers (PBDEs) and hydroxylated PBDE metabolites (OH-PBDEs): A six-year temporal trend in Northern California pregnant women. *Chemosphere*. 2018 Mar; 195:777-783. doi: 10.1016/j.chemosphere.2017.12.065. PMID: 29289024
9. Huang H, Wang A, Morello-Frosch R, Lam J, Sirota M, Padula A, Woodruff TJ. Cumulative Risk and Impact Modeling on Environmental Chemical and Social Stressors. *Curr Environ Health Rep*. 2018 Mar; 5(1):88-99. PMID: 29441463.
10. Vora B, Wang A, Kostli I, Huang H, Paranjpe I, Woodruff TJ, MacKenzie T, Sirota M. Meta-Analysis of Maternal and Fetal Transcriptomic Data Elucidates the Role of Adaptive and Innate Immunity in Preterm Birth. *Front Immunol*. 2018 May 9; 9:993. doi: 10.3389/fimmu.2018.00993. PMID: 29867970.
11. Wang A, Gerona RR, Schwartz JM, Lin T, Sirota M, Morello-Frosch R, Woodruff TJ. A Suspect Screening Method for Characterizing Multiple Chemical Exposures among a Demographically Diverse Population of Pregnant Women in San Francisco. *Environ Health Perspect*. 2018 July; 126(7):077009. PMID: 30044231
12. Huang H, Woodruff TJ, Baer RJ, Bangia K, August LM, Jelliffe-Palowski LL, Padula AM, Sirota M. Investigation of association between environmental and socioeconomic factors and preterm birth in California. *Environ Int*.

2018 Dec;121(Pt 2):1066-1078. doi: 10.1016/j.envint.2018.07.027. Epub 2018 Jul 31. PubMed PMID: 30075861; PubMed Central

13. Padula AM, Huang H, Baer RJ, August LM, Jankowska MM, Jellife-Pawlowski LL, Sirota M, [Woodruff TJ](#). Environmental pollution and social factors as contributors to preterm birth in Fresno County. *Environ Health*. 2018 Aug 29; 17(1):70. PMID: 30157858.
14. Power AM, Woodruff TJ, Conry JA, Giudice LC. Establishing the global working group on Reproductive and Developmental Environmental Health (RDEH): practicum of a global resource. *Glob Reprod Health*. 2018 Sep; 3(3). PMID: 31245658.
15. Power AM, [Woodruff TJ](#), Conry JA, Giudice LC. Establishing the global working group on Reproductive and Developmental Environmental Health (RDEH): practicum of a global resource. *IFFS Global Reproductive Health*. 2018 September; 3(3): e18. doi: 10.1097/GRH.000000000000018
16. Bero L, Chartres N, Diong J, Fabbri A, Ghersi D, Lam J, Lau A, McDonald S, Mintzes B, Sutton P, Turton JL, [Woodruff TJ](#). The risk of bias in observational studies of exposures (ROBINS-E) tool: concerns arising from application to observational studies of exposures. *Syst Rev*. 2018 Dec 21; 7(1):242. PMID: 30577874.
17. Varshavsky J, Smith A, Wang A, Hom E, Izano M, Huang H, Padula A, [Woodruff TJ](#). Heightened Susceptibility: A Review of How Pregnancy and Chemical Exposures Influence Maternal Health. *Reprod Toxicol*. 2019 May 02. PMID: 31055053
18. Koman PD, Singla V, Lam J, [Woodruff TJ](#). Population susceptibility: A vital consideration in chemical risk evaluation under the Lautenberg Toxic Substances Control Act. *PLoS Biol*. 2019 Aug; 17(8):e3000372. PMID: 31465433.
19. Zachek CM, Schwartz JM, Glasser M, DeMicco E, [Woodruff TJ](#). A screening questionnaire for occupational and hobby exposures during pregnancy. *Occup Med (Lond)*. 2019 Jun 27. PMID: 31247109
20. Singla VI, Sutton PM, [Woodruff TJ](#). The Environmental Protection Agency Toxic Substances Control Act Systematic Review Method May Curtail Science Used to Inform Policies, With Profound Implications for Public Health. *Am J Public Health*. 2019 Jul; 109(7):982-984. PMID: 31166745.
21. La Merrill MA, Vandenberg LN, Smith MT, Goodson W, Browne P, Patisaul HB, Guyton KZ, Kortenkamp A, Cogliano VJ, [Woodruff TJ](#), Rieswijk L, Sone H, Korach KS, Gore AC, Zeise L, Zoeller RT. Consensus on the key characteristics of endocrine-disrupting chemicals as a basis for hazard identification. *Nat Rev Endocrinol*. 2019 Nov 12. PMID: 31719706.
22. Pellizzari ED, [Woodruff TJ](#), Boyles RR, Kannan K, Beamer PI, Buckley JP, Wang A, Zhu Y, Bennett DH. Identifying and Prioritizing Chemicals with Uncertain Burden of Exposure: Opportunities for Biomonitoring and Health-Related Research. *Environ Health Perspect*. 2019 12; 127(12):126001. PMID: 31850800.
23. Pega F, Norris SL, Backes C, Bero LA, Descatha A, Gagliardi D, Godderis L, Loney T, Modenese A, Morgan RL, Pachito D, Paulo MBS, Scheepers PTJ, Schlünssen V, Sgargi D, Silbergeld EK, Sørensen K, Sutton P, Tenkate T, Torreão Corrêa da Silva D, Ujita Y, van Deventer E, [Woodruff TJ](#), Mandrioli D. RoB-SPEO: A tool for assessing risk of bias in studies estimating the prevalence of exposure to occupational risk factors from the WHO/ILO Joint Estimates of the Work-related Burden of Disease and Injury. *Environ Int*. 2019 Dec 18; 135:105039. PMID: 31864023
24. Pellizzari ED, [Woodruff TJ](#), Boyles RR, Kannan K, Beamer PI, Buckley JP, Wang A, Zhu Y, Bennett DH. Erratum: PMID: 32003588.
25. Izano MA, Cushing LJ, Lin J, Eick SM, Goin DE, Epel E, [Woodruff TJ](#), Morello-Frosch R. The association of maternal psychosocial stress with newborn telomere length. *PLoS One*. 2020; 15(12):e0242064. PMID: 33301453. PMCID: PMC7728273
26. Padula AM, Monk C, Brennan PA, Borders A, Barrett ES, McEvoy CT, Foss S, Desai P, Alshawabkeh A, Wurth R, Salafia C, Fichorova R, Varshavsky J, Kress A, [Woodruff TJ](#), Morello-Frosch R. A review of maternal prenatal exposures to environmental chemicals and psychosocial stressors-implications for research on perinatal outcomes in the ECHO program. *J Perinatol*. 2020 Jan; 40(1):10-24. PMID: 31616048.

27. Abduweli Uyghurturk D, Goin DE, Martinez-Mier EA, [Woodruff TJ](#), DenBesten PK. Maternal and fetal exposures to fluoride during mid-gestation among pregnant women in northern California. *Environ Health*. 2020 Apr 06; 19(1):38. PMID: 32248806.
28. Buckley JP, Barrett ES, Beamer PI, Bennett DH, Bloom MS, Fennell TR, Fry RC, Funk WE, Hamra GB, Hecht SS, Kannan K, Iyer R, Karagas MR, Lyall K, Parsons PJ, Pellizzari ED, Signes-Pastor AJ, Starling AP, Wang A, Watkins DJ, Zhang M, [Woodruff TJ](#). Opportunities for evaluating chemical exposures and child health in the United States: the Environmental influences on Child Health Outcomes (ECHO) Program. *J Expo Sci Environ Epidemiol*. 2020 May; 30(3):397-419. PMID: 32066883.
29. Panagopoulos Abrahamsson D, Park JS, Singh R, Sirota M, [Woodruff TJ](#). Applications of Machine Learning to in silico Quantification of Chemicals without Analytical Standards. *J Chem Inf Model*. 2020 May 07. PMID: 32379974
30. Varshavsky JR, Robinson JF, Zhou Y, Puckett KA, Kwan E, Buarjung S, Aburajab R, Gaw SL, Sen S, Smith SC, Frankenfield J, Park JS, Fisher SJ, [Woodruff TJ](#). Association of polybrominated diphenyl ether (PBDE) levels with biomarkers of placental development and disease during mid-gestation. *Environ Health*. 2020 Jun 03; 19(1):61. PMID: 32493340.
31. Li J, Pega F, Ujita Y, Brisson C, Clays E, Descatha A, Ferrario MM, Godderis L, Iavicoli S, Landsbergis PA, Metzendorf MI, Morgan RL, Pachito DV, Pikhart H, Richter B, Roncaioli M, Rugulies R, Schnall PL, Sembajwe G, Trudel X, Tsutsumi A, [Woodruff TJ](#), Siegrist J. The effect of exposure to long working hours on ischaemic heart disease: A systematic review and meta-analysis from the WHO/ILO Joint Estimates of the Work-related Burden of Disease and Injury. *Environ Int*. 2020 Jun 03; 142:105739. PMID: 32505014
32. Varshavsky JR, Sen S, Robinson JF, Smith SC, Frankenfield J, Wang Y, Yeh G, Park JS, Fisher SJ, Woodruff TJ. Racial/ethnic and geographic differences in polybrominated diphenyl ether (PBDE) levels across maternal, placental, and fetal tissues during mid-gestation. *Sci Rep*. 2020 Jul 22; 10(1):12247. PMID: 32699379.
33. Robinson JF, Hamilton EG, Lam J, Chen H, [Woodruff TJ](#). Differences in cytochrome p450 enzyme expression and activity in fetal and adult tissues. *Placenta*. 2020 Aug 06; 100:35-44. PMID: 32818874
34. Eick SM, Goin DE, Chartres N, Lam J, [Woodruff TJ](#). Assessing risk of bias in human environmental epidemiology studies using three tools: different conclusions from different tools. *Syst Rev*. 2020 10 29; 9(1):249. PMID: 33121530. PMCID: PMC7596989
35. Eick SM, Goin DE, Izano MA, Cushing L, DeMicco E, Padula AM, [Woodruff TJ](#), Morello-Frosch R. Relationships between psychosocial stressors among pregnant women in San Francisco: A path analysis. *PLoS One*. 2020; 15(6):e0234579. PMID: 32530956.
36. Eick SM, Hom Thepaksorn EK, Izano MA, Cushing LJ, Wang Y, Smith SC, Gao S, Park JS, Padula AM, DeMicco E, Valeri L, [Woodruff TJ](#), Morello-Frosch R. Associations between prenatal maternal exposure to per- and polyfluoroalkyl substances (PFAS) and polybrominated diphenyl ethers (PBDEs) and birth outcomes among pregnant women in San Francisco. *Environ Health*. 2020 09 16; 19(1):100. PMID: 32938446. PMCID: PMC7495899
37. Goin DE, Izano MA, Eick SM, Padula AM, DeMicco E, [Woodruff TJ](#), Morello-Frosch R. Maternal experience of multiple hardships and fetal growth: Extending environmental mixtures methodology to social exposures. *Epidemiology*. 2020 Oct 05. PMID: 33031217
38. Li J, Rugulies R, Morgan RL, [Woodruff TJ](#), Siegrist J. Systematic review and meta-analysis on exposure to long working hours and risk of ischaemic heart disease - Conclusions are supported by the evidence. *Environ Int*. 2020 Nov; 144:106118. PMID: 33051043
39. Eick SM, Enright EA, Geiger SD, Dzwilewski KLC, DeMicco E, Smith S, Park JS, Aguiar A, [Woodruff TJ](#), Morello-Frosch R, Schantz SL. Associations of Maternal Stress, Prenatal Exposure to Per- and Polyfluoroalkyl Substances (PFAS), and Demographic Risk Factors with Birth Outcomes and Offspring Neurodevelopment: An Overview of the ECHO.CA.IL Prospective Birth Cohorts. *Int J Environ Res Public Health*. 2021 Jan 16; 18(2). PMID: 33467168. PMCID: PMC7830765

40. Zhang P, Carlsten C, Chaleckis R, Hanhineva K, Huang M, Isobe T, Koistinen VM, Meister I, Papazian S, Sdougkou K, Xie H, Martin JW, Rappaport SM, Tsugawa H, Walker DI, Woodruff TJ, Wright RO, Wheelock CE. Defining the Scope of Exposome Studies and Research Needs from a Multidisciplinary Perspective. *Environ Sci Technol Lett.* 2021 Oct 12; 8(10):839-852. PMID: 34660833. PMCID: PMC8515788
41. Norris SL, Aung MT, Chartres N, Woodruff TJ. Evidence-to-decision frameworks: a review and analysis to inform decision-making for environmental health interventions. *Environ Health.* 2021 Dec 08; 20(1):124. PMID: 34876125. PMCID: PMC8653547
42. Giudice LC, Llamas-Clark EF, DeNicola N, Pandipati S, Zlatnik MG, Decena DCD, Woodruff TJ, Conry JA, FIGO Committee on Climate Change and Toxic Environmental Exposures. Climate change, women's health, and the role of obstetricians and gynecologists in leadership. *Int J Gynaecol Obstet.* 2021 Dec; 155(3):345-356. PMID: 34694628
43. Nambiema A, Sembajwe G, Lam J, Woodruff T, Mandrioli D, Chartres N, Fadel M, Le Guillou A, Valter R, Deguigne M, Legeay M, Bruneau C, Le Roux G, Descatha A. A Protocol for the Use of Case Reports/Studies and Case Series in Systematic Reviews for Clinical Toxicology. *Front Med (Lausanne).* 2021; 8:708380. PMID: 34552944. PMCID: PMC8450367
44. Eick SM, Goin DE, Trowbridge J, Cushing L, Smith SC, Park JS, DeMicco E, Padula AM, Woodruff TJ, Morello-Frosch R. Dietary predictors of prenatal per- and poly-fluoroalkyl substances exposure. *J Expo Sci Environ Epidemiol.* 2021 Oct 06. PMID: 34615969
45. Whaley P, Blaauboer BJ, Brozek J, Cohen Hubal EA, Hair K, Kacew S, Knudsen TB, Kwiatkowski CF, Mellor DT, Olshan AF, Page MJ, Rooney AA, Radke EG, Shamseer L, Tsaioun K, Tugwell P, Wikoff D, Woodruff TJ. Improving the quality of toxicology and environmental health systematic reviews: What journal editors can do. *ALTEX.* 2021; 38(3):513-522. PMID: 34164697
46. Varshavsky JR, Robinson JF, Zhou Y, Puckett KA, Kwan E, Buarpong S, Aburajab R, Gaw SL, Sen S, Gao S, Smith SC, Park JS, Zakharevich I, Gerona RR, Fisher SJ, Woodruff TJ. Organophosphate Flame Retardants, Highly Fluorinated Chemicals, and Biomarkers of Placental Development and Disease during Mid-Gestation. *Toxicol Sci.* 2021 Mar 02. PMID: 33677611
47. Wang A, Abrahamsson DP, Jiang T, Wang M, Morello-Frosch R, Park JS, Sirota M, Woodruff TJ. Suspect Screening, Prioritization, and Confirmation of Environmental Chemicals in Maternal-Newborn Pairs from San Francisco. *Environ Sci Technol.* 2021 Mar 16. PMID: 33726493
Top 5% of all research outputs scored by Altmetric (accessed 2022.Jan)
48. Lam J, Koustas E, Sutton P, Padula AM, Cabana MD, Vesterinen H, Griffiths C, Dickie M, Daniels N, Whitaker E, Woodruff TJ. Exposure to formaldehyde and asthma outcomes: A systematic review, meta-analysis, and economic assessment. *PLoS One.* 2021 Mar 31;16(3):e0248258. doi: 10.1371/journal.pone.0248258. PMID: 33788856; PMCID: PMC8011796
49. Sutton P, Chartres N, Rayasam SDG, Daniels N, Lam J, Maghrbi E, Woodruff TJ. Reviews in environmental health: How systematic are they? *Environ Int.* 2021 Jul;152:106473. doi: 10.1016/j.envint.2021.106473. Epub 2021 Mar 30. PMID: 33798823.
50. Pellizzari ED, Woodruff TJ, Boyles RR, Kannan K, Beamer PI, Buckley JP, Wang A, Zhu Y, Bennett DH. Erratum: Identifying and Prioritizing Chemicals with Uncertain Burden of Exposure: Opportunities for Biomonitoring and Health-Related Research. *Environ Health Perspect.* 2021 Apr; 129(4):49001. PMID: 33825551. PMCID: PMC8041265
51. Eick SM, Goin DE, Cushing L, DeMicco E, Smith S, Park JS, Padula AM, Woodruff TJ, Morello-Frosch R. Joint effects of prenatal exposure to per- and poly-fluoroalkyl substances and psychosocial stressors on corticotropin-releasing hormone during pregnancy. *J Expo Sci Environ Epidemiol.* 2021 Apr 6. doi: 10.1038/s41370-021-00322-8. Epub ahead of print. PMID: 33824413.
52. Pellizzari E, Woodruff TJ. Response to "Comment on 'Identifying and Prioritizing Chemicals with Uncertain Burden of Exposure: Opportunities for Biomonitoring and Health-Related Research' and 'Beyond the Light

- under the Lamppost: New Chemical Candidates for Biomonitoring in Young Children". Environ Health Perspect. 2021 Apr;129(4):48002. doi: 10.1289/EHP9192. Epub 2021 Apr 7. PMID: 33825550; PMCID: PMC8041267
53. Padula AM, Ma C, Huang H, Morello-Frosch R, Woodruff TJ, Carmichael SL. Drinking water contaminants in California and hypertensive disorders in pregnancy. Environ Epidemiol. 2021 Apr 2;5(2):e149. doi: 10.1097/EE9.000000000000149. PMID: 33870020; PMCID: PMC8043732
 54. Pega F, Náfrádi B, Momen NC, Ujita Y, Streicher KN, Prüss-Üstün AM, Technical Advisory Group, Descatha A, Driscoll T, Fischer FM, Godderis L, Kiiver HM, Li J, Magnusson Hanson LL, Rugulies R, Sørensen K, Woodruff TJ. Global, regional, and national burdens of ischemic heart disease and stroke attributable to exposure to long working hours for 194 countries, 2000-2016: A systematic analysis from the WHO/ILO Joint Estimates of the Work-related Burden of Disease and Injury. Environment International. 2021 May;106595. DOI: 10.1016/j.envint.2021.106595. PMID: 34011457
In top 5% of all research outputs scored by Altmetric and scoring #5 of 4,107 from this source (accessed 2022.01)
 55. Eick SM, Goin DE, Cushing L, DeMicco E, Park JS, Wang Y, Smith S, Padula AM, Woodruff TJ, Morello-Frosch R. Mixture effects of prenatal exposure to per- and polyfluoroalkyl substances and polybrominated diphenyl ethers on maternal and newborn telomere length. Environ Health. 2021 06 30; 20(1):76. PMID: 34193151. PMCID: PMC8247076
 56. Panagopoulos Abrahamsson D, Wang A, Jiang T, Wang M, Siddharth A, Morello-Frosch R, Park JS, Sirota M, Woodruff TJ. A Comprehensive Non-targeted Analysis Study of the Prenatal Exposome. Environ Sci Technol. 2021 Jul 14. PMID: 34260856. PMCID: PMC8338910
 57. Jiang T, Wang M, Wang A, Abrahamsson D, Kuang W, Morello-Frosch R, Park JS, Woodruff TJ. Large-Scale Implementation and Flaw Investigation of Human Serum Suspect Screening Analysis for Industrial Chemicals. J Am Soc Mass Spectrom. 2021 Sep 01; 32(9):2425-2435. DOI: 10.1021/jasms.1c00135. PMID: 34409840
 58. Corbett GA, Lee S, Woodruff TJ, Hanson M, Hod M, Charlesworth AM, Giudice L, Conry J, McAuliffe FM, International Federation of Gynecology, Obstetrics (FIGO) Committee on Impact of Pregnancy on Long-t. Nutritional interventions to ameliorate the effect of endocrine disruptors on human reproductive health: A semi-structured review from FIGO. Int J Gynaecol Obstet. 2022 Feb 04. PMID: 35122246
 59. Eick SM, Cushing L, Goin DE, Padula AM, Andrade A, DeMicco E, Woodruff TJ, Morello-Frosch R. Neighborhood conditions and birth outcomes: Understanding the role of perceived and extrinsic measures of neighborhood quality. Environ Epidemiol. 2022 Oct; 6(5):e224. PMID: 36249266. PMCID: PMC9555921
 60. Eick SM, Goin DE, Lam J, Woodruff TJ, Chartres N. Correction: Authors' rebuttal to Integrated Risk Information System (IRIS) response to PMID: 35513846. PMCID: PMC9074178
 61. Rayasam SDG, Koman PD, Axelrad DA, Woodruff TJ, Chartres N. Toxic Substances Control Act (TSCA) Implementation: How the Amended Law Has Failed to Protect Vulnerable Populations from Toxic Chemicals in the United States. Environ Sci Technol. 2022 09 06; 56(17):11969-11982. PMID: 35980084. PMCID: PMC9454241
 62. Eick SM, Geiger SD, Alshawabkeh A, Aung M, Barrett E, Bush NR, Cordero JF, Ferguson KK, Meeker JD, Milne GL, Nguyen RHN, Padula AM, Sathyanarayana S, Welch BM, Schantz SL, Woodruff TJ, Morello-Frosch R, Environmental influences on Child Health Outcomes. Associations between social, biologic, and behavioral factors and biomarkers of oxidative stress during pregnancy: Findings from four ECHO cohorts. Sci Total Environ. 2022 Aug 20; 835:155596. PMID: 35490822. PMCID: PMC9177811
 63. Goin DE, Abrahamsson D, Wang M, Jiang T, Park JS, Sirota M, Morello-Frosch R, DeMicco E, Zlatnik MG, Woodruff TJ. Disparities in chemical exposures among pregnant women and neonates by socioeconomic and demographic characteristics: A nontargeted approach. Environ Res. 2022 Dec; 215(Pt 1):114158. PMID: 36049512

64. Rayasam SDG, Aung MT, Cooper C, Kwiatkowski C, Germolec DR, Rooney AA, Walker VR, Forte C, Woodruff TJ, Chartres N. Identifying environmental factors that influence immune response to SARS-CoV-2: Systematic evidence map protocol. *Environ Int.* 2022 Apr 08; 164:107230. PMID: 35447423. PMCID: PMC8989740
65. Choi G, Kuiper JR, Bennett DH, Barrett ES, Bastain TM, Breton CV, Chinthakindi S, Dunlop AL, Farzan SF, Herbstman JB, Karagas MR, Marsit CJ, Meeker JD, Morello-Frosch R, O'Connor TG, Pellizzari ED, Romano ME, Sathyanarayana S, Schantz S, Schmidt RJ, Watkins DJ, Zhu H, Kannan K, Buckley JP, Woodruff TJ, program collaborators for Environmental influences on Child Health Outcomes. Exposure to melamine and its derivatives and aromatic amines among pregnant women in the United States: The ECHO Program. *Chemosphere.* 2022 Nov; 307(Pt 2):135599. PMID: 36055588. PMCID: PMC9748524
66. Buckley JP, Kuiper JR, Bennett DH, Barrett ES, Bastain T, Breton CV, Chinthakindi S, Dunlop AL, Farzan SF, Herbstman JB, Karagas MR, Marsit CJ, Meeker JD, Morello-Frosch R, O'Connor TG, Romano ME, Schantz S, Schmidt RJ, Watkins DJ, Zhu H, Pellizzari ED, Kannan K, Woodruff TJ. Exposure to Contemporary and Emerging Chemicals in Commerce among Pregnant Women in the United States: The Environmental influences on Child Health Outcome (ECHO) Program. *Environ Sci Technol.* 2022 05 17; 56(10):6560-6573. PMID: 35536918. PMCID: PMC9118548
67. Koman PD, Gilden R, Chartres N, Woodruff TJ. Toxic Substances Control Act (TSCA) Implementation: New Ways to Promote Occupational Justice and Prevent Worker Exposures From Hazardous Chemicals. *Workplace Health Saf.* 2022 Mar 23; 21650799221078553. PMID: 35321606
68. Abrahamsson D, Siddharth A, Young TM, Sirota M, Park JS, Martin JW, Woodruff TJ. In Silico Structure Predictions for Non-targeted Analysis: From Physicochemical Properties to Molecular Structures. *J Am Soc Mass Spectrom.* 2022 Jul 06; 33(7):1134-1147. PMID: 35649165. PMCID: PMC9365522
69. Eick SM, Enright EA, Padula AM, Aung M, Geiger SD, Cushing L, Trowbridge J, Keil AP, Gee Baek H, Smith S, Park JS, DeMicco E, Schantz SL, Woodruff TJ, Morello-Frosch R. Prenatal PFAS and psychosocial stress exposures in relation to fetal growth in two pregnancy cohorts: Applying environmental mixture methods to chemical and non-chemical stressors. *Environ Int.* 2022 May; 163:107238. PMID: 35436721
70. Martenies SE, Zhang M, Corrigan AE, Kvit A, Shields T, Wheaton W, Bastain TM, Breton CV, Dabelea D, Habre R, Magzamen S, Padula AM, Him DA, Camargo CA, Cowell W, Croen LA, Deoni S, Everson TM, Hartert TV, Hipwell AE, McEvoy CT, Morello-Frosch R, O'Connor TG, Petriello M, Sathyanarayana S, Stanford JB, Woodruff TJ, Wright RJ, Kress AM, program collaborators for Environmental influences on Child Health Outcomes. Associations between combined exposure to environmental hazards and social stressors at the neighborhood level and individual perinatal outcomes in the ECHO-wide cohort. *Health Place.* 2022 Jul 21; 76:102858. PMID: 35872389
71. Pega F, Momen NC, Gagliardi D, Bero LA, Boccuni F, Chartres N, Descatha A, Dzhambov AM, Godderis L, Loney T, Mandrioli D, Modenese A, van der Molen HF, Morgan RL, Neupane S, Pachito D, Paulo MS, Prakash KC, Scheepers PTJ, Teixeira L, Tenkate T, Woodruff TJ, Norris SL. Assessing the quality of evidence in studies estimating prevalence of exposure to occupational risk factors: The QoE-SPEO approach applied in the systematic reviews from the WHO/ILO Joint Estimates of the Work-related burden of disease and Injury. *Environ Int.* 2022 Mar; 161:107136. PMID: 35182944. PMCID: PMC8885428
72. Goin DE, Abrahamsson D, Wang M, Park JS, Sirota M, Morello-Frosch R, DeMicco E, Trowbridge J, August L, O'Connell S, Ladella S, Zlatnik MG, Woodruff TJ. Investigating geographic differences in environmental chemical exposures in maternal and cord sera using non-targeted screening and silicone wristbands in California. *J Expo Sci Environ Epidemiol.* 2022 Apr 21. PMID: 35449448
73. Eick SM, Goin DE, Lam J, Woodruff TJ, Chartres N. Authors' rebuttal to Integrated Risk Information System (IRIS) response to PMID: 35321722. PMCID: PMC8944042
74. Oksas C, Brody JG, Brown P, Boronow KE, DeMicco E, Charlesworth A, Juarez M, Geiger S, Schantz SL, Woodruff TJ, Morello-Frosch R, Padula AM, program collaborators for Environmental influences on Child Health Outcomes. Perspectives of peripartum people on opportunities for personal and collective action to

- reduce exposure to everyday chemicals: Focus groups to inform exposure report-back. *Environ Res.* 2022 Mar 26; 212(Pt A):113173. PMID: 35351450
75. Trowbridge J, Goin DE, Abrahamsson D, Sklar R, Woodruff TJ. Fossil fuel is the common denominator between climate change and petrochemical exposures, and effects on women and children's health. *Int J Gynaecol Obstet.* 2023 Feb; 160(2):368-371. PMID: 36069123. PMCID: PMC9851939
76. Cathey AL, Nguyen VK, Colacino JA, Woodruff TJ, Reynolds P, Aung MT. Exploratory profiles of phenols, parabens, and per- and poly-fluoroalkyl substances among NHANES study participants in association with previous cancer diagnoses. *J Expo Sci Environ Epidemiol.* 2023 Sep 18. PMID: 37718377. PMCID: PMC10541322
77. Enright EA, Eick SM, Morello-Frosch R, Aguiar A, Woodbury ML, Sprowles JLN, Geiger SD, Trowbridge J, Andrade A, Smith S, Park JS, DeMicco E, Padula AM, Woodruff TJ, Schantz SL. Associations of prenatal exposure to per- and polyfluoroalkyl substances (PFAS) with measures of cognition in 7.5-month-old infants: An exploratory study. *Neurotoxicol Teratol.* 2023 Jul-Aug; 98:107182. PMID: 37172619
78. Chen H, Kapidzic M, Gantar D, Aksel S, Levan J, Abrahamsson DP, Jigmeddagva U, Basrai S, San A, Gaw SL, Woodruff TJ, Fisher SJ, Robinson JF. Perfluorooctanoic Acid Induces Transcriptomic Alterations in 2nd Trimester Human Cytotrophoblasts. *Toxicol Sci.* 2023 Sep 20. PMID: 37738295
79. Padula AM, Ning X, Bakre S, Barrett ES, Bastain T, Bennett DH, Bloom MS, Breton CV, Dunlop AL, Eick SM, Ferrara A, Fleisch A, Geiger S, Goin DE, Kannan K, Karagas MR, Korrick S, Meeker JD, Morello-Frosch R, O'Connor TG, Oken E, Robinson M, Romano ME, Schantz SL, Schmidt RJ, Starling AP, Zhu Y, Hamra GB, Woodruff TJ, program collaborators for Environmental influences on Child Health Outcomes. Birth Outcomes in Relation to Prenatal Exposure to Per- and Polyfluoroalkyl Substances and Stress in the Environmental Influences on Child Health Outcomes (ECHO) Program. *Environ Health Perspect.* 2023 03; 131(3):37006. PMID: 36920051. PMCID: PMC10015888
80. Abrahamsson D, Brueck CL, Prasse C, Lambropoulou DA, Koronaiou LA, Wang M, Park JS, Woodruff TJ. Extracting Structural Information from Physicochemical Property Measurements Using Machine Learning—A New Approach for Structure Elucidation in Non-targeted Analysis. *Environ Sci Technol.* 2023 Sep 25. PMID: 37746919. PMCID: PMC10569036
81. Gaber N, Bero L, Woodruff TJ. The Devil they Knew: Chemical Documents Analysis of Industry Influence on PFAS Science. *Ann Glob Health.* 2023; 89(1):37. PMID: 37273487. PMCID: PMC10237242
82. Taibl KR, Schantz S, Aung MT, Padula A, Geiger S, Smith S, Park JS, Milne GL, Robinson JF, Woodruff TJ, Morello-Frosch R, Eick SM. Associations of per- and polyfluoroalkyl substances (PFAS) and their mixture with oxidative stress biomarkers during pregnancy. *Environ Int.* 2022 11; 169:107541. PMID: 36191484. PMCID: PMC9846434
83. Abrahamsson D, Siddharth A, Robinson JF, Soshilov A, Elmore S, Cogliano V, Ng C, Khan E, Ashton R, Chiu WA, Fung J, Zeise L, Woodruff TJ. Modeling the transplacental transfer of small molecules using machine learning: a case study on per- and polyfluorinated substances (PFAS). *J Expo Sci Environ Epidemiol.* 2022 11; 32(6):808-819. PMID: 36207486. PMCID: PMC9742309
84. Rayasam SDG, Koman PD, Axelrad DA, Woodruff TJ, Chartres N. Rebuttal to Correspondence: PMID: 36322049
85. Eick SM, Geiger SD, Alshawabkeh A, Aung M, Barrett ES, Bush N, Carroll KN, Cordero JF, Goin DE, Ferguson KK, Kahn LG, Liang D, Meeker JD, Milne GL, Nguyen RHN, Padula AM, Sathyanarayana S, Taibl KR, Schantz SL, Woodruff TJ, Morello-Frosch R, of program collaborators for Environmental Influences on Child Health Outcomes. Urinary oxidative stress biomarkers are associated with preterm birth: an Environmental Influences on Child Health Outcomes program study. *Am J Obstet Gynecol.* 2022 Nov 15. PMID: 36400174
86. Ames JL, Burjak M, Avalos LA, Braun JM, Bulka CM, Croen LA, Dunlop AL, Ferrara A, Fry RC, Hedderson MM, Karagas MR, Liang D, Lin PD, Lyall K, Moore B, Morello-Frosch R, O'Connor TG, Oh J, Padula AM, Woodruff TJ,

- Zhu Y, Hamra GB, program collaborators for Environmental influences on Child Health Outcomes. Prenatal exposure to per- and polyfluoroalkyl substances and childhood autism-related outcomes. *Epidemiology*. 2023 Jan 12. PMID: 36630444
87. Liu Y, Wosu AC, Fleisch AF, Dunlop AL, Starling AP, Ferrara A, Dabelea D, Oken E, Buckley JP, Chatzi L, Karagas MR, Romano ME, Schantz S, O'Connor TG, Woodruff TJ, Zhu Y, Hamra GB, Braun JM, the program collaborators for Environmental influences on Child Health Outcomes. Associations of Gestational Perfluoroalkyl Substances Exposure with Early Childhood BMI z-Scores and Risk of Overweight/Obesity: Results from the ECHO Cohorts. *Environ Health Perspect*. 2023 06; 131(6):67001. PMID: 37283528. PMCID: PMC10246497
88. Knapp EA, Kress AM, Parker CB, Page GP, McArthur K, Gachigi KK, Alshwabkeh AN, Aschner JL, Bastain TM, Breton CV, Bendixsen CG, Brennan PA, Bush NR, Buss C, Camargo CA, Catellier D, Cordero JF, Croen L, Dabelea D, Deoni S, D'Sa V, Duarte CS, Dunlop AL, Elliott AJ, Farzan SF, Ferrara A, Ganiban JM, Gern JE, Giardino AP, Towe-Goodman NR, Gold DR, Habre R, Hamra GB, Hartert T, Herbstman JB, Hertz-Picciotto I, Hipwell AE, Karagas MR, Karr CJ, Keenan K, Kerver JM, Koinis-Mitchell D, Lau B, Lester BM, Leve LD, Leventhal B, LeWinn KZ, Lewis J, Litonjua AA, Lyall K, Madan JC, McEvoy CT, McGrath M, Meeker JD, Miller RL, Morello-Frosch R, Neiderhiser JM, O'Connor TG, Oken E, O'Shea M, Paneth N, Porucznik CA, Sathyanarayana S, Schantz SL, Spindel ER, Stanford JB, Stroustrup A, Teitelbaum SL, Trasande L, Volk H, Wadhwa PD, Weiss ST, Woodruff TJ, Wright RJ, Zhao Q, Jacobson LP, Environmental Influences On Child Health Outcomes OBOPCF. The Environmental influences on Child Health Outcomes (ECHO)-wide Cohort. *Am J Epidemiol*. 2023 Mar 24. PMID: 36963379
89. Martenies SE, Zhang M, Corrigan AE, Kvit A, Shields T, Wheaton W, Around Him D, Aschner J, Talavera-Barber MM, Barrett ES, Bastain TM, Bendixsen C, Breton CV, Bush NR, Cacho F, Camargo CA, Carroll KN, Carter BS, Cassidy-Bushrow AE, Cowell W, Croen LA, Dabelea D, Duarte CS, Dunlop AL, Everson TM, Habre R, Hartert TV, Helderman JB, Hipwell AE, Karagas MR, Lester BM, LeWinn KZ, Magzamen S, Morello-Frosch R, O'Connor TG, Padula AM, Petriello M, Sathyanarayana S, Stanford JB, Woodruff TJ, Wright RJ, Kress AM, Program Collaborators for Environmental Influences on Child Health Outcomes. Developing a National-Scale Exposure Index for Combined Environmental Hazards and Social Stressors and Applications to the Environmental Influences on Child Health Outcomes (ECHO) Cohort. *Int J Environ Res Public Health*. 2023 07 10; 20(14). PMID: 37510572. PMCID: PMC10379099
90. Varshavsky JR, Rayasam SDG, Sass JB, Axelrad DA, Cranor CF, Hattis D, Hauser R, Koman PD, Marquez EC, Morello-Frosch R, Oksas C, Patton S, Robinson JF, Sathyanarayana S, Shepard PM, Woodruff TJ. Current practice and recommendations for advancing how human variability and susceptibility are considered in chemical risk assessment. *Environ Health*. 2023 Jan 12; 21(Suppl 1):133. PMID: 36635753. PMCID: PMC9835253
91. Trowbridge J, Abrahamsson D, Bland GD, Jiang T, Wang M, Park JS, Morello-Frosch R, Sirota M, Lee H, Goin DE, Zlatnik MG, Woodruff TJ. Extending Nontargeted Discovery of Environmental Chemical Exposures during Pregnancy and Their Association with Pregnancy Complications-A Cross-Sectional Study. *Environ Health Perspect*. 2023 07; 131(7):77003. PMID: 37466315. PMCID: PMC10355149
92. Nielsen GH, Heiger-Bernays WJ, Levy JI, White RF, Axelrad DA, Lam J, Chartres N, Abrahamsson DP, Rayasam SDG, Shaffer RM, Zeise L, Woodruff TJ, Ginsberg GL. Application of probabilistic methods to address variability and uncertainty in estimating risks for non-cancer health effects. *Environ Health*. 2023 Jan 12; 21(Suppl 1):129. PMID: 36635712. PMCID: PMC9835218
93. Maffini MV, Rayasam SDG, Axelrad DA, Birnbaum LS, Cooper C, Franjevic S, MacRoy PM, Nachman KE, Patisaul HB, Rodgers KM, Rossi MS, Schettler T, Solomon GM, Woodruff TJ. Advancing the science on chemical classes. *Environ Health*. 2023 Jan 12; 21(Suppl 1):120. PMID: 36635752. PMCID: PMC9835214
94. Vandenberg LN, Rayasam SDG, Axelrad DA, Bennett DH, Brown P, Carignan CC, Chartres N, Diamond ML, Joglekar R, Shamasunder B, Shrader-Frechette K, Subra WA, Zarker K, Woodruff TJ. Addressing systemic

- problems with exposure assessments to protect the public's health. *Environ Health*. 2023 Jan 12; 21(Suppl 1):121. PMID: 36635700. PMCID: PMC9835264
95. Woodruff TJ, Rayasam SDG, Axelrad DA, Koman PD, Chartres N, Bennett DH, Birnbaum LS, Brown P, Carignan CC, Cooper C, Cranor CF, Diamond ML, Franjevic S, Gartner EC, Hattis D, Hauser R, Heiger-Bernays W, Joglekar R, Lam J, Levy JI, MacRoy PM, Maffini MV, Marquez EC, Morello-Frosch R, Nachman KE, Nielsen GH, Oksas C, Abrahamsson DP, Patisaul HB, Patton S, Robinson JF, Rodgers KM, Rossi MS, Rudel RA, Sass JB, Sathyanarayana S, Schettler T, Shaffer RM, Shamasunder B, Shepard PM, Shrader-Frechette K, Solomon GM, Subra WA, Vandenberg LN, Varshavsky JR, White RF, Zarker K, Zeise L. A science-based agenda for health-protective chemical assessments and decisions: overview and consensus statement. *Environ Health*. 2023 Jan 12; 21(Suppl 1):132. PMID: 36635734. PMCID: PMC9835243
96. Herbstman JB, Romano ME, Li X, Jacobson LP, Margolis AE, Hamra GB, Bennett DH, Braun JM, Buckley JP, Colburn T, Deoni S, Hoepner LA, Morello-Frosch R, Riley KW, Sathyanarayana S, Schantz SL, Trasande L, Woodruff TJ, Perera FP, Karagas MR, program collaborators for Environmental influences on Child Health Outcomes. Characterizing changes in behaviors associated with chemical exposures during the COVID-19 pandemic. *PLoS One*. 2023; 18(1):e0277679. PMID: 36638141. PMCID: PMC9838870
97. Aung MT, Eick SM, Padula AM, Smith S, Park JS, DeMicco E, Woodruff TJ, Morello-Frosch R. Maternal per- and poly-fluoroalkyl substances exposures associated with higher depressive symptom scores among immigrant women in the Chemicals in Our Bodies cohort in San Francisco. *Environ Int*. 2023 Jan 16; 172:107758. PMID: 36682206
98. Woodruff TJ, Charlesworth A, Zlatnik MG, Pandipati S, DeNicola N, Latif I. Code OB: We need urgent action on climate change and toxic chemicals. *Int J Gynaecol Obstet*. 2023 Feb; 160(2):363-365. PMID: 36649076