



**Program on Reproductive  
Health and the Environment**  
Department of OB/GYN & RS  
Mailstop 0132  
550 16<sup>th</sup> Street, 7<sup>th</sup> Floor  
San Francisco, CA 94143  
prhe@obgyn.ucsf.edu

October 29, 2018

**Comments on EPA's Requests for Nominations: Experts to Consider for ad hoc Participation and Possible Membership on Toxic Substances Control Act (TSCA), Science Advisory Committee on Chemicals (SACC)**

Comments submitted via email to Todd Peterson, DFO, Office of Science Coordination and Policy

The following comments are being submitted by the University of California, San Francisco (UCSF) Program on Reproductive Health and the Environment (PRHE). We have no direct or indirect financial or fiduciary interest in the manufacture or sale of any chemical that would be the subject of the deliberations of this Committee.

In summary, our comments address the following main points:

- 1. Nominations of 13 individuals; and**
- 2. EPA should strive to eliminate or minimize financial conflicts of interest (COI- those with a financial interest or who profit from decisions) from selected committee members. In the event that financial COI exists, EPA should collect information from each and every SACC member in an effort for complete transparency regarding any financial COI that potentially bias members toward undervaluing the scientific information related to health effects of industrial chemicals. Any and all existing financial COI should be made explicit and transparent to the public.**

*Background*

We appreciate the opportunity to nominate qualified candidates to serve as ad hoc reviewers and potentially become members of the SACC, pursuant to section 2625(o) of the Frank R. Lautenberg Chemical Safety for the 21st Century Act. This panel will "provide independent advice and expert consultation, at the request of the Administrator, with respect to the scientific and technical aspects of issues relating to the implementation of this title" and will include "representatives of such science, government, labor, public health, public interest, animal protection, industry, and other groups as the Administrator determines to be advisable, including representatives that have specific scientific expertise in the relationship of chemical exposures to women, children, and other potentially exposed or susceptible subpopulations."

We encourage EPA to consider the following when considering nominations:

- **The role of reviewers and the SACC in supporting the mission of EPA in protecting human health and the environment.** As such, EPA has a professional and legal duty to select committee members who will provide credible and independent scientific analysis and advice free from conflicts of interest or a strong bias toward the perspective of regulated industries that may have a vested interest in minimizing EPA’s regulation of hazardous materials and products.
- **The need for transparent and effective disclosure policies that are strictly enforced.** These disclosure and conflict policies play an essential role in protecting EPA and committee work products and must be strictly enforced and routinely addressed to ensure the quality of SACC work products.
- **The need for representation from directly impacted, susceptible, vulnerable, and/or highly exposed populations.** We urge the Agency to not only seek representatives that have *specific scientific expertise* in the relationship of chemical exposures to women, children, and other potentially exposed or susceptible subpopulations, but to incorporate a broader and more inclusive definition to capture representation from individuals with diverse knowledge sources that represent unique perspectives to these critical issues. EPA has encouraged “citizen science” but then has then erected expertise barriers that essentially prevent those with expertise about impacted communities but perhaps without certain privileged credentials (i.e., holding a postgraduate degree) from taking part in critical discussions. There are many examples of successful implementation of such approaches, which have demonstrated that incorporating knowledge resources outside of traditional academics and science fields can greatly enrich the research and policy process.<sup>1</sup>

## Nominations

### 1. Nominations of 13 individuals to serve in an ad hoc role

We are pleased to nominate the following 13 candidates. We believe these individuals are extremely well-qualified and meet the criteria, with considerable experience and expertise that would contribute valuable service to EPA.

1. Dr. Tracey Woodruff
2. Dr. Veena Singla
3. Dr. Juleen Lam
4. Dr. Robert Harrison
5. Dr. Adam Finkel
6. Dr. Gina Solomon
7. Dr. Ami Zota
8. Dr. Maricel Maffini
9. Dr. Adrienne Hollis
10. Dr. Heather Patisaul
11. Dr. Weihsueh Chiu
12. Ms. Kristin Hill
13. Dr. Deborah Rice

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<sup>1</sup> Anderson, B.E., Naujokas, M.F. and Suk, W.A., 2015. Interweaving knowledge resources to address complex environmental health challenges. *Environmental health perspectives*, 123(11):1095-1099.

### **Nomination #1: Dr. Tracey Woodruff**

Professor, University of California San Francisco Program on Reproductive Health and the Environment  
550 16<sup>th</sup> Street  
San Francisco, CA 94158  
415-476-3198  
Tracey.woodruff@ucsf.edu

Dr. Woodruff, Ph.D., M.P.H., currently serves as a Professor in the Department of Obstetrics, Gynecology, and Reproductive Sciences and Philip R Lee Institute for Health Policy Studies at the University of California, San Francisco and the Director of the Program on Reproductive Health and the Environment. She has done extensive research and policy development on environmental health issues, with a particular emphasis on early-life development. Her research includes evaluating prenatal exposures to environmental chemicals and related adverse pregnancy outcomes, and characterizing developmental risks. She has authored numerous scientific publications and book chapters, and has been quoted widely in the press, including USA Today, the San Francisco Chronicle, and WebMD. She was previously at the US EPA, where she was a senior scientist and policy advisor in the Office of Policy, and author of numerous government documents. She is an Associate Editor of Environmental Health Perspectives. She was appointed by the governor of California in 2012 to the Science Advisory Board of the Developmental and Reproductive Toxicant (DART) Identification Committee.

### **Nomination #2: Dr. Veena Singla**

Associate Director, Science and Policy, University of California San Francisco Program on Reproductive Health and the Environment  
550 16<sup>th</sup> Street  
San Francisco, CA 94158  
415-476-3203  
Veena.singla@ucsf.edu

Dr. Singla, Ph.D., is the Associate Director of Science & Policy at the Program on Reproductive Health and the Environment at University of California, San Francisco. Her work focuses on informing policies with the most current scientific principles and data to reduce and prevent harmful environmental exposures. Her research focuses on indoor environmental quality and how exposure to multiple chemicals affects health outcomes, especially for vulnerable populations such as workers, pregnant women and young children. She specializes in the communication of complex scientific information at the intersection of research and policy, and has led work on groundbreaking policies which attempt to establish frameworks for safer chemical evaluation and substitution. She worked as a postdoctoral teaching fellow at Stanford University and as an adjunct faculty member at the University of San Francisco. She holds a bachelor's degree from the University of California, Berkeley, and a PhD in cell biology from the University of California, San Francisco.

### **Nomination #3: Dr. Juleen Lam**

Assistant Professor, Department of Health Sciences, Cal State East Bay  
25800 Carlos Bee Blvd  
SF 533  
Hayward, CA 94542  
510-885-2195

Juleen.lam@csueastbay.edu

Dr. Lam, Ph.D., M.H., M.H.S, is currently an Assistant Professor at Cal State East Bay in the Department of Health Sciences. Previously, she was an Associate Research Scientist at the Program on Reproductive Health and the Environment. She has been involved with the Navigation Guide and systematic review methodology since 2011, and has been an author on four completed case studies applying the Navigation Guide methodology to answering environmental health policy-relevant questions. She is currently leading the sixth case study to address the association between formaldehyde exposure and asthma health outcomes. Prior to her position at UCSF, she completed two postdocs at the US Environmental Protection Agency and the Johns Hopkins University.

**Nomination #4: Dr. Robert Harrison**

Senior Physician Diplomate, University of California San Francisco  
2330 Post Street  
San Francisco, CA 94115  
415-885-7580  
Robert.Harrison@ucsf.edu

Dr. Harrison is a clinical professor of Medicine at University of California, San Francisco. He founded and has directed UCSF Occupational Health Services for more than 15 years, and now is a senior attending physician. He has diagnosed and treated over 10,000 patients with work- and environmental-induced diseases and injuries. He also directs the worker tracking investigation program for the California Department of Public Health. Dr. Harrison received his B.A. from the University of Rochester and his M.D. from the Albert Einstein College of Medicine. He is board certified in both internal medicine and occupational medicine. He has served on the California Occupational Safety and Health Administration (Cal/OSHA) Standards Board, and authored numerous publications in the area of occupational medicine.

**Nomination #5: Dr. Adam Finkel**

Senior Fellow, Wharton Risk Management & Decision Processes Center, University of Pennsylvania  
Clinical Professor of Environmental Health Sciences, University of Michigan School of Public Health  
1 Pennington-Lawrenceville Road  
Pennington, NJ 08534  
afinkel@wharton.upenn.edu  
202-406-0042

Dr. Finkel, Sc.D., M.P.P., CIH, is a Senior Fellow at the Wharton Risk Management and Decision Processes Center, and also a Clinical Professor of Environmental Health Sciences at the University of Michigan School of Public Health. From 2008 to 2017, he was Executive Director of the Penn Program on Regulation, where he was also a Senior Fellow at the Penn Law School. From 2004 to 2008, he was a Visiting Professor of Public and International Affairs at the Woodrow Wilson School at Princeton University, and Professor of Environmental and Occupational Health at the UMDNJ School of Public Health. From 2000 to 2003, Dr. Finkel was Regional Administrator for the U.S. Occupational Safety and Health Administration (OSHA) in Denver, Colorado, responsible for OSHA's regulatory enforcement, compliance assistance, and outreach activities in the six-state Rocky Mountain region (Region VIII). Prior to that (1995-2000), he was Director of

Health Standards Programs at OSHA headquarters, and was responsible for promulgating and evaluating risk-based regulations to protect the nation's workers from chemical, radiological, and biological hazards.

**Nomination #6: Dr. Gina Solomon**

Clinical Professor, University of California San Francisco  
Principal Investigator, Public Health Institute  
555 12<sup>th</sup> Street, 10<sup>th</sup> Floor  
Oakland, CA 94607  
415-747-7628  
Gina.solomon@ucsf.edu

Gina Solomon, M.D., M.P.H. is a Clinical Professor of Medicine in the Division of Occupational and Environmental Medicine at UCSF. She is also a Principal Investigator at the Public Health Institute. From 2012-2017 she was appointed by Governor Brown as the Deputy Secretary for Science and Health at the California Environmental Protection Agency. Dr. Solomon served as the director of the occupational and environmental medicine residency program at UCSF from 2008-2012, the associate director of the UCSF Pediatric Environmental Health Specialty Unit from 2003-2009, and as a Senior Scientist at the Natural Resources Defense Council (NRDC) from 1996-2012. She serves on the U.S. Environmental Protection Agency's Board of Scientific Counselors and on the National Academy of Science (NAS) Board on Environmental Studies and Toxicology and the NAS Committee on Emerging Science for Environmental Health Decisions. Dr. Solomon's work has encompassed cumulative impacts and environmental justice, new tools in toxicology, the health effects of diesel exhaust, endocrine disrupting chemicals, pesticides, environmental contaminants in New Orleans after Hurricane Katrina, the health implications of the 2010 Gulf oil spill, refinery safety, and the health effects of climate change. Dr. Solomon received her bachelor's degree from Brown University, a doctorate of medicine from the Yale University School of Medicine, and a master's degree in public health from the Harvard School of Public Health.

**Nomination #7: Dr. Ami Zota**

Assistant Professor, Environmental and Occupational Health, George Washington University Milken School of Public Health  
950 New Hampshire Ave NW 414  
Washington, DC 20052  
202-994-9289  
azota@gwu.edu

Dr. Zota, Sc.D., M.S., is an Assistant Professor in the Department of Environmental & Occupational Health at the George Washington University Milken School of Public Health. Dr. Zota's work seeks to secure environmental justice and improve health equity through advancements in science, policy, and clinical practice. Her research identifies novel pathways linking social disparities, environmental exposures, and reproductive and children's health. She received a career development award from the National Institutes of Health for her research on environmental health disparities and was recently recognized as a Pioneer Under 40 in Environmental Public Health by the Collaborative on Health and the Environment. She is currently an Associate Editor of Journal of Exposure Science and Environmental Epidemiology and on the Editorial Boards of Environmental Health Perspectives and Environmental Epigenetics.

**Nomination #8: Dr. Maricel Maffini**

Independent Consultant  
240-252-5589  
[drmvma@gmail.com](mailto:drmvma@gmail.com)

Dr. Maffini, Ph.D., is an independent consultant with expertise in environmental health, chemical safety, and science policy. Prior to consulting, she was a senior scientist at Natural Resources Defense Council and senior officer at The Pew Charitable Trusts focusing her work on food chemical regulatory policies, food additive regulation, and FDA chemical safety assessment modernization. Dr. Maffini was also a Research Assistant Professor at Tufts University School of Medicine investigating the development of breast cancer, tumor formation and proliferation, and bisphenol-A effects on breast cancer development.

**Nomination #9: Dr. Adrienne Hollis**

Director of Federal Policy, WE ACT for Environmental Justice  
50 F Street, NW, 8th Floor  
Washington, DC 20001  
202-495-3036  
adrienne@weact.org

Dr. Hollis, Ph.D., Esq., holds both a doctorate degree in biomedical sciences and a law degree focused in environmental law. Dr. Hollis received her doctorate from Meharry Medical College and her law degree from Rutgers School of Law. She has extensive experience in the environmental arena, having worked on numerous environmental issues, beginning with her postdoctoral studies at the Harvard School of Public Health in Boston, Massachusetts. From Boston, Dr. Hollis was employed as a Supervisory Environmental Health Scientist and Toxicologist (Section Chief) at the Agency for Toxic Substances and Disease Registry in Atlanta, Georgia, where she and her section addressed health concerns at sites around the country that were listed on EPA's National Priorities List. Next, Dr. Hollis developed the Environmental and Occupational Health track for Florida A & M University's Institute of Public Health, located in its School of Pharmacy and Pharmaceutical Sciences. Dr. Hollis, a tenured associate professor in the Institute, chose to pursue her interest in environmental law, and moved to New Jersey to attend law school. Most recently, Dr. Hollis worked as a Project Attorney at Earthjustice, a premier non-profit law firm, in its Tallahassee, Florida office. Currently, Dr. Hollis is the Director of Federal Policy at WE ACT for Environmental Justice.

**Nomination #10: Dr. Heather Patisaul**

Professor, Department of Biological Sciences  
North Carolina State University  
127 David Clark Labs Raleigh, NC 27695  
919-513-7567  
hbpatisa@ncsu.edu

Dr. Patisaul, Ph.D., explores the mechanisms by which endocrine disrupting compounds (EDCs) alter neuroendocrine pathways in the brain related to sex specific physiology and behavior. She is specifically interested in how estrogenic compounds, including phytoestrogens, impact the neural pathways which coordinate the physical and behavioral changes that occur during the pubertal transition. The lab uses a variety of traditional and transgenic rodent models (rats, mice and voles) and employs a suite of neuroanatomical, neurobehavioral, and molecular testing strategies such as RNAseq, qPCR, in situ

hybridization, autoradiography and immunohistochemistry. Dr. Patisaul is a NIEHS ONES Award recipient and has participated on several national and international expert panels and workshops related to health effects associated with soy and other endocrine disruptors including the 2010 World Health Organization Expert Panel on the health risks of Bisphenol A, and the 2012 Workshop on Low Dose Effects of Endocrine Active Chemicals co-organized by the US National Institute for Environmental Health Sciences/NIH and the Joint Research Center's Institute for Health and Consumer Protection. She is also a member of the National Research Counsel Committee on Incorporating 21st Century Science Into Risk-Based Evaluations the chair of the 2016 Gordon Conference on Environmental Endocrine Disruptors.

**Nomination #11: Dr. Weihsueh Chiu**

Professor, Veterinary Medicine and Biomedical Sciences, Texas A&M University  
Veterinary Integrative Biosciences, College of Veterinary Medicine and Biomedical Sciences  
Texas A&M University VMA Building, Rm. 107  
4458 TAMU College Station, TX 77843-4458,  
979-845-4106  
wchiu@cvm.tamu.edu

Dr. Chiu, Ph.D., focuses on the development of quantitative, data-driven approaches for understanding and predicting the human health effects of environmental chemicals. Specifically, his research applies computational and statistical methods to transform data into knowledge used to protect public health. Until joining Texas A&M in January 2015, Chiu was an environmental health scientist in the U.S. Environmental Protection Agency (EPA) Office of Research and Development, National Center for Environmental Assessment. Chiu earned his Ph.D. in Physics from Princeton University and then worked at the U.S. Governmental Accountability Office (GAO), where he conducted investigations for Congress on various risk assessment-related topics, prior to joining the EPA. His research specialties include quantitative health risk assessment, dose-response assessment, statistical modeling of environmental and biological systems, and pharmacokinetics. He is particularly interested in integrating data across multiple disciplines to provide quantitative estimates of risk and/or benefit.

**Nomination #12: Ms. Kristin Hill**

Evaluation and Program Development Services Consultant  
232 N. Stevens Street  
Rhineland, WI 54501  
715-367-0771  
khill4004@gmail.com

Ms. Kristin Hill, MSHSA, is an administrator, consultant, educator, facilitator and evaluation practitioner with over 40 years of progressively responsible national and international experience in professional nursing practice, public health, education, facilitation, mediation, program management, evaluation and consultation in a wide variety of settings such as health care, university and local school district education, environmental agencies, local government and community development. Recognized for the ability to incorporate cultural understanding and a global perspective in systems analysis, organizational development and human relations. Best known for use of participatory approaches in planning, problem solving and decision making. Served on numerous local, state and national committees and advisory boards. Along with international experience in Poland, Russia, Nicaragua and Haiti, Kristin has immersed into the public health issues impacting American Indian/Alaska Native citizens. This includes directing one of the nation's twelve

Tribal Epidemiology Centers, serving as faculty for the Mountain Plains Health Consortium and independent consulting with plains and Midwest Tribes. Participates as a site surveyor for the Council on Education in Public health, accrediting schools and programs of public health.

**Nomination #13: Dr. Deborah Rice**

Toxicologist, Retired  
207-734-0904  
ricekrwc@midcoast.com

**2. EPA should strive to eliminate or minimize financial conflicts of interest (COI- those with a financial interest or who profit from decisions) from selected committee members. In the event that financial COI exists, EPA should collect information from each and every SACC member in an effort for complete transparency regarding any financial COI that potentially bias members toward undervaluing the scientific information related to health effects of industrial chemicals. Any and all existing financial COI should be made explicit and transparent to the public.**

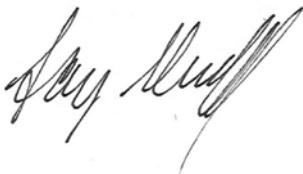
We strongly recommend that EPA select reviewers who represent support for the protection of human health and the environment, consistent with the mission of the Agency. As such, each selected committee member must be transparently vetted for any financial conflicts of interest that bias them in undervaluing the scientific evidence on health effects from exposure to hazardous chemicals, such as those working for or financially supported by industry.

In other public health regulatory situations, it is customary to set a health benchmark or risk assessment based only on health and scientific considerations and then to consider costs, lead time or market considerations in the risk management or implementation phase. This risk management phase would be an appropriate avenue for industry consultation and advisement to the Administrator. In this manner, industry members are given the opportunity to directly provide advice on considerations that impact their operations, but this structure would keep these economic considerations separate from the scientific risk assessment process.

In summary, we encourage EPA to ensure reviewers cover a wide breath of knowledge and experience from various relevant sectors who do not have a financial COI or whose financial COI is transparently and explicitly stated up-front. Our nominations include scientists, researchers, and health professionals from academia, government, and nonprofit organizations.

Thank you for the opportunity to provide comments and nominations. Please let us know if we can provide any additional information or be of further help.

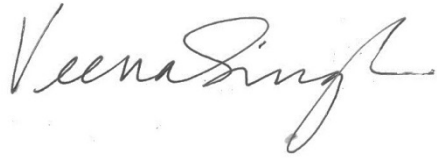
Respectfully,



Tracey Woodruff, PhD, MPH  
Professor and Director



Program on Reproductive Health and the Environment  
Department of Obstetrics, Gynecology and Reproductive Sciences  
University of California, San Francisco

A handwritten signature in black ink that reads "Veena Singla". The signature is fluid and cursive, with the first name "Veena" written in a larger, more prominent script than the last name "Singla".

Veena Singla, PhD  
Associate Director of Science and Policy  
Program on Reproductive Health and the Environment  
Department of Obstetrics, Gynecology and Reproductive Sciences  
University of California, San Francisco

A handwritten signature in black ink that reads "Danielle Fries". The signature is cursive and somewhat stylized, with the first name "Danielle" being the most legible part, followed by "Fries".

Danielle Fries, MPH  
Science Associate, Science and Policy  
Program on Reproductive Health and the Environment  
Department of Obstetrics, Gynecology and Reproductive Sciences  
University of California, San Francisco