



Weathering the storms in 2020 and beyond



It's a brave new world! Globalization, which has already brought about serious reductions in biodiversity and contributed to climate change, now hits humanity with the nCOVID-19, a novel coronavirus to which virtually no human being has previous immunity. Major pandemics were predicted in 1994 by Laurie Garrett in [*The Coming Plague: A World Out of Balance*](#), but subsequent threats till now — SARS, MERS and Ebola — were contained relatively quickly. At this moment, serious and bold public health policies are starting to be implemented and may yet prevail against the deniers in high places around the globe, and more importantly, against the virus. In the best of all possible worlds, this could set a precedent for elevating scientists and public health professionals as truth-tellers whose messages promote the well-being of all people.

From the global to the local, here at UC Davis, we are soon to receive the

Environmental Health Sciences Center (EHSC) renewal award for the next five years. Programmatically, we plan to expand our work on air pollution toxicology and epidemiology, particularly in relation to wildfire smoke; broaden wildfire research in areas of mental and behavioral health; deepen collaborations on environmental contributions to cancer; continue molecular and mechanistic investigations of varied exposures; initiate studies of interventions; strengthen community ties and engage on issues linking social and environmental justice; tackle the cumulative impacts from complex mixtures of exposures; and reach out to local, regional and state decision-makers with lessons and policy implications from our science. This will also be a time to consolidate the many new members who recently joined EHSC, and develop the careers and leadership potential of young and mid-career environmental health scientists.

Irva Hertz-Picciotto

Director, UC Davis Environmental Health Sciences Center

Welcome Natalie Nardone!



After months of searching for a candidate to fill EHSC's program manager position, we finally found a perfect match! [Natalie Nardone, PhD](#) comes to us via UCSF's Department of Cardiology where she worked as program manager for nicotine, tobacco and cannabis research. She's also a published researcher who has [co-authored dozens of studies](#) on topics ranging from user experience and nicotine exposure in JUUL products to secondhand tobacco smoke biomarkers in teenagers.

"I am delighted to join the UC Davis Environmental Health Sciences Center," Nardone says. "I hope to help all of the programs run smoothly and support the continuation of this vital work!"

Report back: Partnerships for Environmental Public Health (PEPH) Annual Meeting

More than 200 attendees from across the US – including EHSC Science Writer Jennifer Biddle and Community Engagement Core



(CEC) Program Manager Aubrey Thompson – participated in the [2020 PEPH Annual Meeting](#) February 12-13 in Durham, North Carolina. The event attracted EHS center staff, researchers, representatives from community groups and NGOs, doctors and others who came together to discuss community-engaged research. Ten workshops over the 2-day event covered a range of topics including community-based air monitoring, outreach via social media, information gaps in vaping materials, interactive mapping, youth involvement in citizen science, translation of data into action and disasters as environmental justice opportunities.

“The main theme running through each workshop and plenary session was how best to leverage the work we’ve done to strengthen our networks and policies in the future,” says Biddle.

Report back: Community Stakeholder Advisory Committee (CSTAC) Meeting

On February 25, EHSC’s Community Engagement Core (CEC) hosted its semi-annual meeting with its [Community Stakeholder Advisory Committee \(CSTAC\)](#). Some 23 people – scientists, government officials and NGO representatives – attended the teleconference held jointly in Davis and Merced.

The CEC wanted to hear directly from CSTAC members to suss out how EHSC could better translate science into policy. At the meeting, scientists Kathryn Conlon, Rebecca Schmidt, Savannah Mack and Crystal Rogers presented their current research projects, answered questions and discussed possible collaborations.

While EHSC’s first five years laid the foundation for community-engaged research, the CSTAC was loud and clear: Much more can be done to build capacity to bring meaningful change to communities. Below are a few project ideas that surfaced during the meeting to help achieve that goal.

- **White paper on chlorpyrifos alternatives:** As the State of California releases its list of chlorpyrifos alternatives, creating a white paper on known health impacts and existing research on alternative pesticides would be useful for advocacy organizations.
- **Right-to-know confirmation for researchers:** Testimony or

written information on the need for notification of pesticide application, for the purpose of scientific research.

- **Revisit CalEnviroScreen:** How can we add more information to the existing platform (e.g. socioeconomic status) or better use [CalEnviroScreen](#) as a resource not a litmus test?
- **More health risk assessments:** The key question the public has around many environmental pollutants is, “Should I be concerned about this?”
- **True cost accounting:** The CSTAC emphasized the importance of incorporating health economics and cost of environmental pollution into research. Specifically, the CSTAC asked the CEC to facilitate relationships with more UC Davis health economists.
- **Be a regulatory watchdog:** Once environmental regulations are implemented, community-based organizations say there’s a need to know whether they’re followed, enforced and having an impact on environmental quality and human health.

If you have expertise in or want to explore these topics with a community-based organization or state agency, contact CEC Co-directors Tanya Khemet-Taiwo (tmkhemet@ucdavis.edu) and Jonathan London (jklondon@ucdavis.edu).

Stay tuned for more from the CEC about CSTAC policy priorities!

Announcements

- Due to COVID-19, EHSC is postponing its Annual Retreat to Monday, October 12. The postponed event will still include [Tyrone Hayes](#) as the keynote speaker and lightening talks, poster presentations and discussions with community partners. We'll keep you updated in future newsletters. Contact event co-chairs Janine LaSalle (jmlasalle@ucdavis.edu) or Laura Van Winkle (lsvanwinkle@ucdavis.edu) for more information.
- The [International Association of Wildland Fire 3rd Annual Smoke Symposium](#) will take place remotely April 20-24. EHSC members [Katie Conlon](#) and [Anthony Wexler](#) are helping to organize the conference, and [Angela Haczku](#) is moderating the UC Davis Wildfire & Smoke Health Summit at the Symposium on April 22. Get the [list of pre-conference workshops here](#) and [FAQs for attendees and conference speakers here](#).



Happy Birthday to Finn! He just turned 1 on February 26 and appears to be helping mom and CEC Program Manager Aubrey Thompson build their new home and Sacramento's first straw bale house.

Recently published

- Klocke, Carolyn; Lein, Pamela J. Evidence Implicating Non-Dioxin-Like Congeners as the Key Mediators of Polychlorinated Biphenyl (PCB) Developmental Neurotoxicity. [International Journal of Molecular Sciences](#). 2020 Feb 04; 21 (3).
- Matelski, Lauren; Morgan, Rhianna K; Grodzki, Ana Cristina; Van de Water, Judy; Lein, Pamela J. Effects of cytokines on nuclear factor-kappa B, cell viability, and synaptic connectivity in a human neuronal cell line. [Molecular Psychiatry](#). 2020 Jan 21.
- Hennebelle, Marie; Morgan, Rhianna K; Sethi, Sunjay; Zhang, Zhichao; Chen, Hao; Grodzki, Ana Cristina; Lein, Pamela J; Taha, Ameer Y. Linoleic acid-derived metabolites constitute the majority of oxylipins in the rat pup brain and stimulate axonal growth in primary rat cortical neuron-glia co-cultures in a sex-dependent manner. [Journal of Neurochemistry](#). 2020 Jan; 152 (2) :195-207.
- Flayer, Cameron H; Larson, Erik D; Joseph, Anjali; Kao, Sean; Qu, Wenxiu; Van Haren, Austin; Royer, Christopher M; Miller, Lisa A; Capitanio, John P; Sielecki, Thais; Christofidou-Solomidou, Melpo; Haczku, Angela. Ozone-induced enhancement of airway hyperreactivity in rhesus macaques: Effects of antioxidant treatment. [The Journal of Allergy and Clinical Immunology](#). 2020 Jan; 145 (1) :312-323.
- London, Jonathan K; Haapanen, Krista A; Backus, Ann; Mack, Savannah M; Lindsey, Marti; Andrade, Karen. Aligning Community-Engaged Research to Context. [International Journal of Environmental Research and Public Health](#). 2020 02 13; 17 (4)

In the news

- The Los Angeles Times interviewed [EHSC's Kent Pinkerton](#) about his work studying sex differences in lung health and why males may be more susceptible to COVID-19. [Read why the coronavirus is so much more deadly for men than women.](#)

If you have any announcements, new research, press coverage or anything else you'd like to share with your EHSC colleagues in this newsletter, please contact Jennifer Biddle (jsbiddle@ucdavis.edu).



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