News at a Glance

September 15, 2017



Aimin Chen, MD, PhD, a co-leader of the CEG Integrative Health Sciences Facility Core and Pilot Projects Program, has received a 5-year R01 award from the National Institute of Environmental Health Sciences for his study of the developmental neurotoxicity of organophosphate and novel bromated flame retardants in children (NIEHS R01 ES028277, 09/30/17 – 06/30/22). Dr. Chen and colleagues have pioneered efforts



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to identify potential adverse effects of flame retardants, particularly polybrominated diphenyl ethers (PBDEs), on child neurodevelopment and reproductive health outcomes. PBDEs are hormonally active as estrogens, anti-estrogens, anti-androgens depending on congeners, and also act as thyroid hormone disrupting chemicals. Dr. Chen et al. have found prenatal exposure to PBDEs to be associated with reduced cognitive function and increased externalizing problems such as aggression and hyperactivity at school age.

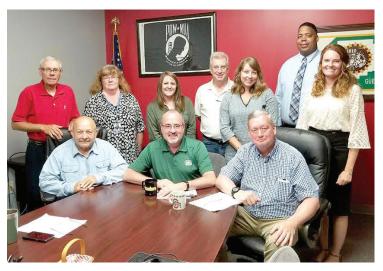
Nationally respected for his research on environmental exposures and human development, Dr. Chen joined this May in briefing U.S. Congressional members and staff regarding another major concern: lead (Pb) toxicity. Dr. Chen serves as a member of the <u>Project TENDR</u> alliance, which is calling for improved primary prevention of harmful environmental exposures.



2nd row, right: Aimin Chen poses with fellow members of Project TENDR (full image and video documentary <u>here</u>)

New & Noteworthy

- Ma J, Hong K, Wang HS. Progesterone protects against BPA-induced arrhythmias in female rat cardiac myocytes via rapid signaling. Endocrinology. 2017 Apr 1;158(4):778-790. PMID: 28324061; PMCID: PMC5460806
- Khanal T, Choi K, Leung YK, Wang J, Kim D, Janakiram V, Cho SG, Ho SM, Kim H. Loss of NR2E3 represses AHR by LSD1 reprogramming, is associated with poor prognosis in liver cancer. Sci Rep. 2017 Sep 6 [ePub ahead of print]. PMID: 28878246



COEC Director Erin Haynes, MS, DrPH (far right) poses with colleagues Jen Veevers, PhD (3rd from left) and Rachael Shepler (3rd from right) following a meeting with Guernsey County Commissioners, Byesville Mayor Jay Jackson (2nd from right), and Guernsey County Emergency Management Director Gerry Beckner, et al. Photo Credit: The Daily Jeffersonian

CEG COEC Director Erin N. Haynes, MS, DrPH; COEC Program Coordinator Rachael Shepler; and team member | scientific writer Jen Veevers, PhD recently traveled to Cambridge, Ohio, to share with Guernsey County Commissioners and other civic leaders results from a collaborative study involving hundreds of regional students and their teachers.

As reported in <u>The Daily Jeffersonian</u> on August 23, 2017, these "citizen scientists" joined in collecting air quality samples that were subsequently analyzed for more than 60 volatile organic compounds (VOCs) and formaldehyde. Air quality in the county is of concern to local commissioners in light of natural gas extraction activity in Guernsey, Noble and Belmont Counties. The joint study involving UC and local partners showed that the highest concentrations of VOCs were detected near a highway and truck stop fueling station. Levels did not, however, exceed EPA levels unacceptable for human health. In addition to print media coverage, <u>regional radio</u> also covered this successful community engagement project.



Save the Date: Friday October 27. CEG Pilot Research Symposium. Keynote speaker: Ghurjit Khurana-Hershey, MD, PhD; Director, Division of Asthma Research, Cincinnati Children's Hospital Medical Center, and Director, Medical Scientist Training Program, UC College of Medicine. 121 Kettering Research Complex, 8:45 AM - 3:30 PM.