## News at a Glance

## May \ June 2020

The CEG welcomes three **New Investigator Awardees (NIAs)**, each of whom will receive partial junior faculty salary support through the Administrative Core: They are Drs. Angelico Mendy, Jun Wang, and Patrick Ray.





Angelico Mendy, MD, MPH, PhD, is an Assistant Professor in the UC Department of Environmental and Public Health Sciences. Dr. Mendy joined UC after completing an Intramural Research Training Award in the Environmental Cardiopulmonary Disease Group at NIEHS. His research while at NIEHS explored the effects of endocrine disrupting chemicals on respiratory health and examined whether these effects might be mediated by epigenetic changes. Dr. Mendy has recently published work on the association of bisphenols F and S used as bisphenol A (BPA) substitutes with asthma and allergic outcomes. Other research interests include the identification of phenotypes of complex diseases, and the effect modification by serum levels of antioxidant vitamins (A, C, and E) on the relationship of ambient air pollutants and asthma outcomes.



Jun Wang, PhD, PE, CIH, CSP (center photo) is an Assistant Professor in the Division of Environmental and Industrial Hygiene. Dr. Wang oversees the Workplace Aerosol and Gaseous Lab (WANG Lab) in the Center for Health-Related Aerosol Studies (CHRAS). His research interests include measuring emission of airborne toxins from notable environmental sources; developing methodologies to quantify cytotoxicity, oxidative potential, and respiratory deposition of ultrafine aerosols and nanoparticles;

and designing next-generation sensory detection and engineering controls to reduce inhalation exposure to airborne toxins. Dr. Wang has proposed a multifaceted study aiming to understand (1) how metal exposures (manganese, lead, mercury, etc.) introduce neuroinflammation through magnolia activation and cytokines overproduction, and (2) how learning, memory, and other developmental markers in youth are affected by environmental exposure to metals.

## **Recent Publications**

Braun JM, Buckley JP, **Cecil KM, Chen A**, Kalkwarf HJ, Lanphear BP, Xu Y, Woeste A, **Yolton K.** Adolescent follow-up in the Health Outcomes and Measures of the Environment (HOME) Study: cohort profile. <u>BMJ Open</u>. 2020 May 7;10(5):e034838. <u>PMID: 32385062</u>

Percy Z, Vuong AM, Ospina M, Calafat AM, La Guardia MJ, Xu Y, Hale RC, **Dietrich KN, Xie C,** Lanphear BP, Braun JM, **Cecil KM, Yolton K, Chen A.** Organophosphate esters in a cohort of pregnant women: Variability and predictors of exposure. Environ Res. 2020 May;184:109255. PubMed <u>PMID: 32087441</u>; PubMed Central <u>PMCID: PMC7103481</u>.

Langevin SM, Kuhnell D, Biesiada J, Zhang X, Medvedovic M, Talaska GG, Burns KA, Kasper S. Comparability of the small RNA secretome across human biofluids concomitantly collected from healthy adults. PLoS One. 2020 Apr 10;15(4):e0229976. doi: 10.1371/journal.pone.0229976. eCollection 2020. PMID: 32275679; PMCID 7147728

Merianos AL, Jandarov RA, Mahabee-Gittens EM. Tobacco smoke exposure, respiratory health, and health care utilization among US adolescents. Chest. 2020 Apr 7. pii: S0012-3692(20)30570-5. doi: 10.1016/j.chest.2020.03.038. [Epub ahead of print] PMID: 32272115.



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Dr. Patrick Ray, PhD (bottom photo at left) is an Assistant Professor of Chemical and Environmental Engineering in the UC College of Engineering and Applied Science. Dr. Ray completed his undergraduate and graduate studies in Massachusetts: B.Sc., University of Massachusetts Amherst 2001; M.Sc., Tufts University, 2006; Ph.D., Tufts 2010 (Water resources engineering); Postdoc, UMass-Amherst, 2014 (Water systems modeling under nncertainty). He has served as Principal Investigator on awards from the National Oceanic and Atmospheric Administration (NOAA), the Ohio Water Development Authority (Multidimensional risk assessment on riverine contamination: Case study of Cincinnati) and World Bank (Group Climate Change Risk Assessment of Expanded Upper Arun Hydropower Facility, Nepal). In 2015 Dr. Ray received the World Bank Knowbel Prize Team Award, and in 2011 he was named Professor of the Year, UC Faculty of Engineering.

The Integrative Technologies Support Core (ITS), led by Ying Xia, Ph.D., offers CEG members free access to shared equipment and subsidies for use of core services. Applications must include a written cost quote from the core manager (see and follow Flow Chart). Application form here.