News at a Glance

Oct | Nov 2020

CEG members may be eligible for matching funds for use of Core services, including Bioinformatics Core services, through our Integrative Technologies Services (ITS) Subsidies program. Core subsidies are cost share, but the investigator portion can come from any source: grant funds, RIA funds, or startup up funds, etc. In keeping with the CEG mission to conduct and support innovative, multi-disciplinary research on gene-environment interactions (GxE), there must be an environmental exposure in the project or parent project. ITS Subsidy application forms and instructions are available online at https://med.uc.edu/depart/eh/centers/ceg/its

The National Institute of Environmental Health Sciences provides on its website a list of chemicals or factors that it recognizes as environmental agents that may pose adverse health effects to exposed individuals and populations. Listed and described at https://www.niehs.nih.gov/health/topics/agents/index.cfm are the following:

Acrylamide Air Pollution Algal Blooms Allergens & Irritants Aloe Vera Arsenic Bisphenol A (BPA) Cell Phone Radio Frequency Radiation Climate Change Cosmetics Dioxins **Dust Mites and Cockroaches**

Electric & Magnetic Fields Endocrine Disruptors Essential Oils Flame Retardants Formaldehyde Ginkgo

Hair Dye

Hazardous Material/Waste **Hexavalent Chromium** Hydraulic Fracturing & Health

Lead Mercury Mold

Nanomaterials

Ozone

Perfluoroalkyl & Polyfluoroalkyl

Substances (PFAS)

Pesticides

Pet Allergens

Pollen Radon

Safe Water and Health **Smoking and Vaping**

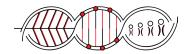
Soy Infant Formula

Styrene

Weather Extremes

Representatives of the Center for Closing the Health Gap, the Mill Creek Alliance, We Engage 4 Health, EPA, and the City of Cincinnati Childhood Lead Poisoning Prevention Program, et al., met virtually on Nov 13 with the CEG Community **Engagement Core.** These community partners shared valuable insights on citizens' environmental concerns and ideas for stakeholder-driven science. Follow the collaborative research and translation activities of the CEC here and on social media CEG

Center for Environmental Genetics



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http://med.uc.edu/eh/centers/ceg

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Attention CEG Year 28 Pilot awardees and Core leaders: Progress Reports are due **December 21**. Please be timely, as this deadline is necessary to prepare the best possible and most comprehensive centerwide Annual Report to NIEHS.

Prior CEG sub-awardees are encouraged to send us updates on related publications and other achievements you would like to ensure are included.

Recent Publications

Yadav E, Yadav N, Hus A, Yadav JS. Aquaporins in lung health and disease: Emerging roles, regulation, and clinical implications. Respir Med. 2020 Oct 17;174:106193. doi:10.1016/j. rmed.2020.106193.Onlineaheadofprint.Print2020Nov1.174;106193.PMID:33096317

Lee JE, Cho SG, Ko SG, Ahrmad SA, Puga A, Kim K. Regulation of a long noncoding RNA MALAT1 by aryl hydrocarbon receptor in pancreatic cancer cells and tissues. Biochem Biophys Res Commun. 2020 Sep 5:S0006-291X(20)31637-5. doi: 10.1016/j.bbrc.2020.08.053. Epub ahead of print. PMID: 32900487.

Reigle J, Secic D, Biesiada J, Wetzel C, Shamsaei B, Chu J, Zang Y, Zhang X, Talbot NJ, Bischoff ME, Zhang Y, Thakar CV, Gaitonde K, Sidana A, Bui H, Cunningham JT, Zhang Q, Schmidt LS, Linehan WM, Medvedovic M, Plas DR, Landero Figueroa JA, Meller J, Czyzyk-Krzeska MF. Tobacco smoking induces metabolic reprogramming of renal cell carcinoma. J Clin Invest. 2020 Sep 24:140522. PMID: 32970633.

de Gannes M, Ko Cl, Zhang X, Biesiada J, Niu L, Koch SE, Medvedovic M, Rubinstein J, Puga A. Dioxin disrupts dynamic DNA methylation patterns in genes that govern cardiomyocyte maturation. Toxicol Sci. 2020 Oct 5:kfaa153. PMID: 33017471. Matthew DeGannes, Ph.D. '20 is a mentee of CEG members Alvaro Puga, Ph.D., et al.

Pecquet AM, Maier A, **Kasper S**, Sumanas S, **Yadav J.** Exposure to per-fluorooctanoic acid (PFOA) decreases neutrophil migration response to injury in zebrafish embryos. BMC Res Notes. 2020 Aug 31;13(1):408. PMID: 32867820. PMCID: PMC7460781. Dr. Alison Pecquet is a mentee of CEG members Susan Kasper, PhD and Jagjit Yadav, PhD.

Martin KV, Edmondson D, Cecil KM, Bezi C, Vance ML, McBride D, Haynes EN. Manganese exposure and neurologic outcomes in adult populations. Neurol Clin. 2020 Nov;38(4):913-936. PMID: 33040869. Danielle McBride, Ph.D.c is a mentee of former CEG member Erin Haynes, Dr.Ph.