

Leadership in Research to Practice

In addition to his many duties as CEG Deputy Director and Director of the CEG Pilot Projects Program, **Jagjit Yadav, PhD**, has been leading a 2-year, nearly half-million dollar study, **Circulating cell-free antigens for monitoring of machining fluids**, [R21 OH011826](#), \$441,375 (NIOSH). Mycobacteria causal antigens prevalent in machining fluids have been associated with the development of hypersensitivity pneumonitis, also known as “machine operator’s lung,” among exposed individuals. In this 2-year study, Dr. Yadav and his team are working to identify the dominant cell-free mycobacterial antigens and their epitopes as immunoassay targets for routine and effective exposure monitoring. New knowledge gained by this research-to-practice study will inform intervention studies leading to a safer environment for machinists.



Coming Up | January & February 2022

[Andrea Baccarelli, MD, PhD](#), is the Leon Hess Professor & Chair of the Department of Environmental Health Sciences at Columbia University and Director of the NIH/NIEHS P30 [Center for Environmental Health in Northern Manhattan](#). Dr. Baccarelli will present via [webinar](#) at the DEPHS Wednesday Seminar on **January 12, 2022**. Dr. Baccarelli’s [Laboratory of Precision Environmental Health](#) focuses on



molecular mechanisms as pathways linking environmental exposures to human disease. Current efforts include the study of a range of mechanisms, including epigenomics, epitranscriptomics, extracellular vesicles and small non-coding RNAs, mitochondrial DNA, and the microbiome.



[Gail Prins, PhD](#), is the Michael Reese Endowed Professor in the Departments of Urology, Physiology and Biophysics, and Pathology at University of Illinois at Chicago and Director of the [Chicago Center for Health and Environment](#) (NIH/NIEHS P30). The CEG will host Dr. Prins in person on Wednesday **February 16**. Her current research includes study of PFAS, effects on progenitor cells and differentiated prostate as targets, and rewiring of the metabolome.

Recently Published

Xu Z, Niu L, Taylor JA. The ENmix DNA methylation analysis pipeline for Illumina BeadChip and comparisons with seven other preprocessing pipelines. *Clin Epigenetics*. 2021 Dec 9;13(1):216. [PMID: 34886879](#); [PMCID: PMC8662917](#). [Liang Niu, PhD](#) is a former CEG New Investigator Awardee (2018–2020).

Hartley K, MacDougall MC, Terrizzi B, Xu Y, Cecil KM, Chen A, Braun JM, Lanphear BP, Newman NC, Vuong AM, Sjödin A, Yoltan K. Gestational exposure to polybrominated diphenyl ethers and social skills and problem behaviors in adolescents: The HOME study. *Environ Int*. 2021 Dec 10;159:107036. [PMID: 34896668](#). More on the HOME study [here](#).

Matching Funds Available for Center Members & Awardees

Through its ITS Subsidy program, the Integrative Technologies Support Core offers **matching funds** for CEG members using the University Cores. To obtain a list of Cores and services, application instructions and the application form, visit the ITS Web page: <https://med.uc.edu/depart/eh/centers/ceg/its>.

Who can apply for an ITS Core subsidy? All CEG investigators and CEG Pilot award recipients.

What projects are supported? Research projects that involve the study of gene-environment interactions (GxE) or generate preliminary data for a future study of GxE interactions.

How much does the subsidy pay? Up to 50% of the service costs, capped at \$10K/application/year/PI).

How much does the investigator pay? The investigator pays for the remaining costs (from grants or other sources) not covered by the ITS Core subsidy.

Click [here](#) to learn more about services of the **Genomics and Epigenomics Sequencing Core** (GESC), managed by [Xiang Zhang, Ph.D.](#) Services may be requested via the GESC Web page at <https://med.uc.edu/depart/eh/cores/genomics/services-and-form> CEG investigators who use [GESC services](#) should self-identify as CEG members at line 21 of the form.

