



1966–2024: A Long Legacy of Achievement

As we mark the end of the CEG’s 2018–2023 cycle, we recall key milestones in the history of the CEG and its contributions to the study of gene-environment (GxE) interactions:

1966: Dr. Edward Radford, who was named 2nd director of the UC Department of Environmental Health, is awarded a \$6.5 million Center grant from the U.S. Public Health Service to establish the UC **Center for Study of the Human Environment**. Radford was known for his research on cigarettes in the 1960s, finding that radioactive polonium 210 was present in tobacco, made its way into the lungs of smokers, and could be a contributing factor in lung cancer.

1966: Paul Kotin, MD, is chosen as director of the newly established Division of Environmental Health Sciences (DEHS) within the National Institutes of Health, later to become NIEHS. DEHS leases space in Research Triangle Park, North Carolina, the home of NIEHS today,

1969: Dr. Raymond Suskind is named 3rd director of the UC Department of Environmental Health and serves through 1985. Suskind serves as PI of the Center grant until Dr. Roy Albert becomes chair in 1986.

1992: Daniel W. Nebert, MD wins NIEHS environmental health sciences center award P30 ES006096 and names the Center for Environmental Genetics (CEG). Under Nebert, investigators from additional university departments are incorporated into the grant, and Center pilot funding contributes substantially to capacity-building for environmental health science research at UC and Cincinnati Childrens Hospital Medical Center.

1996: Dr. Marshall Anderson becomes the 5th director of the Department (1996–2003). A new Center for Genome Information is established.

2001: Molecular Epidemiology in Children’s Environmental Health (MECEH) T32 training program established

2005: Shuk-Mei Ho, PhD, becomes the 6th Department chair and renews & directs the CEG P30 award, 2005–2018.

2013: CEG NIEHS award renewed for \$8.7 million.

2018: CEG NIEHS award renewed, \$8 million, 2018–2023 (YRS 26–30). Dr. Susan Pinney is named CEG Director, having ultimate oversight of four Center cores and the CEG Pilot Projects Program, as well as **12 CEG cohorts**, each used to test multiple research questions. All of these cohorts, listed at right, bank biospecimens and have data- and biospecimen-sharing policies.

2023: Dr. Alex Lentsch is named Chair of the Department of Environmental and Public Health Sciences. The CEG celebrates 5 decades of GxE interactions research.



Carol Rice, PhD receives Selikoff Award

CEG Emerita [Dr. Carol Rice](#) received the **Irving J. Selikoff Award** for contributions to the protection of worker’s health and the environment at the International Conference on the Environment, Work and Health in the 21st Century, held in Bologna, Italy, late last year. Read more [here](#).

Top 10 Poster @ ToxExpo 2024

[John Reichard, PhD](#), a CEG member, presented a Top 10 poster abstract on a framework approach for evaluation of potential degradation of active pharmaceutical ingredients for long-duration spaceflight. Read more [here](#).

CEG Cohorts	
Cohort / PI / Collaborators / N / Inclusion	Exposures / Tools / Experience
CA cohort Yolton, Cecil, Ryan, Brunst 23% Black, 3% Hispanic	Air pollution
CAAPS cohort Ryan, Cecil, Yolton, Brunst 21% Black, 2.3% Hispanic	Land use regression model for elemental carbon from traffic; Metals; Hair\serum cotinine. Home assessment for exposures
Cincinnati Lead Study (CLS) Cecil, Wright (MSSM), Bhattacharya 80% Black	Whole blood Pb, Pb in deciduous teeth, Bone Pb by K-XRF.
Croatian Cohort Deka	PFAS
Fernald Community Cohort (FCC) Pinney, Xie, Petrick (MSSM), Chen (UPenn)	Metals (especially uranium), radon, PFAS. Exposure algorithm for U and metric calculation. Cistern use patterns
Pediatric Clinic Repository (GCPCR) Hershey 39% Black, 4% Hispanic	Pets, Environmental Tobacco Smoke Mold, Allergens Traffic Pollution, Diesel Exhaust
HOME study cohort Yolton, Cecil 29% Black	Q items on exposure; Drinking water Environmental sampling for metals, PBDE, PFAS, PCB, OPEs, phthalates, phenols, pesticides, tobacco
BCERP Puberty cohort Cincinnati: Biro, Pinney, Xie, Brunst 33% Black, 4% Hispanic	Phthalates, phenols, PFCs, PBDEs, PCBs, metals; tracking drinking water source; sunscreen recognition tool
Samoa GWAS Cohort Deka	Dietary exposures
Pediatric Respiratory & Enteric Virus Acquisition & Immunogenesis Longitudinal (PREVAIL) Cohort Morrow, 45% Black, 2.4% Hispanic	PFAS and, metals Luminex pathogen panel
Global Exploration of Human Milk Morrow, 33.3% Hispanic	PFAS and metals
Influenza IMPRINT Birth Cohort Morrow, 24% Black, 4% Hispanic	PFAS and metals