UW EDGE Center

Interdisciplinary Center for Exposures, Diseases, Genomics and Environment



Pilot Projects, Year 27 (2022-23)

Metagenomic Approach to Decipher Mechanisms of Cadmium Neurotoxicity, Dr. Julia Cui, Pl, DEOHS, School of Public Health

Single-Cell Characterization of the Testes-Immune Axis for Improved Hazard Assessment of Chemical Mixtures, Dr. Elaine Faustman, Pl, DEOHS, School of Public Health individual variability in inflammatory gene expression response to wildfire exposures using a self-administered blood sampling device, Dr. Ashleigh Theberge, Pl, DEOHS, Department of Chemistry

Elucidate the effects of increased usage of quaternary ammonium compound disinfectants on human microbiome during COVID-19, Dr. Libin Xu, PI, DEOHS, Department of Medical Chemistry

Pilot Projects, Year 26 (2021-22)

Community Engagement to Identify Priorities, Policies, and Scenarios for Modeling the Health Benefits of a Just Transition, Dr. Jeremy Hess, PI, DEOHS, School of Public Health

Unraveling Gut Microbiome-Mediated Alterations in Human CYP3A4 Expression and Activity, Dr. Qingcheng Mao, Pl, Department of Pharmaceutics Spatiotemporal Refinement for Environmental Circadian Misalignment, Dr. Trang VoPham, Pl, Department of Epidemiology, School of Public Health

Pilot Projects, Year 25 (2020-21)

Characterization of Urban Nano-Particles, Dr. Elena Austin, PI, DEOHS, School of Public Health

Airway Morphology as an Effect Modifier of Diesel Exhaust Inhalation in a Murine Model, Dr. Robb Glenny, Pl, Pathology, Pl, Division of Pulmonary, Critical Care and Sleep Medicine Characterizing perinatal neurotoxicant exposures in a dense urban informal settlement in Nairobi: A community-engaged approach to foster new Maternal Child Environmental Health research and interventions in Kenya, Dr. Catherine Karr, Pl, DEOHS, School of Public Health

Pilot Projects, Year 24 (2019-20)

Development of a 3D microphysiological model of ochratoxin A-induced nephropathy, Dr. Ed Kelly, Pl, Pharmacy

Assessing the effects of common environmental toxicants on monoallelic gene expression in Caenorhadbits elegans, Dr. Alexander Mendenhall, PI, Pathology Partnership to characterize PM2.5 in 5 population centers on the Yakama Nation Reservation and Evaluation of Indoor Air Cleaners, Dr. Edmund Seto, PI, DEOHS

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Pilot Projects, Year 23 (2018-19)

Assessing Molecular Responses Associated with Clinical Symptoms from Low-Level Domoic Acid Exposure in Nonhuman Primates, Dr. Tom Burbacher, PI, DEOHS, UW School of Public Health

A high throughput pre-RNA sequencing pipeline to decipher the microbiome-toxicant relationship, Dr.Julia Cui, PI, DEOHS, UW School of Public Health

Using a novel 3d intestinal tissue culture s ystem to understandi mpacts ofc admiumm odulation of host glutathione response on enteric viral infection, Dr.Scott Meschke, PI, DEOHS, UW School of Public Health

Pilot Projects, Year 22 (2017-18)

Pilot studies of the effects of dietary factors on the colon epigenome using human "miniguts" Dr. William Grady & Chris Kemp, Pl, Fred Hutchinson Cancer Research Center Conserved SUMOylation pathways in heavy metal exposure, Dr. Dana Miller, Pl, Dept. of Biochemistry

High-throughput organotypic brain slice platform for evaluation of quantum dots toxicity and cellular localization, Dr. Elizabeth Nance, PI, UW School of Chemical Engineering Multi-method characterization of exposure to α-dicarbonyls and markers of acute response" Dr. Mike Yost, PI, DEOHS, UW School of Public Health