CORE UTILIZATION SUBSIDY PROGRAM

(formerly Research Voucher Program)

University of Louisville Center for Integrative Environmental Health Science (CIEHS)

Translational Research Support Core (TRSC)

READY TO GO CORE UTILIZATION SUBSIDY DUE DATE: January 3, 2024

Ready to go awards must be used prior to March 31, 2024

The **UofL Center for Integrative Environmental Health Science (CIEHS)** solicits applications to support clinical and translational environmental health science (EHS) research through the CIEHS P30 Environmental Health Sciences Core Center grant. Applications are encouraged which propose to utilize the clinical science, basic science, epidemiology and public health, or geospacial information science (GIS) services and resources offered by TRSC. For example, clinical resources include the Clinical Trials Unit (CTU) and Norton's Children's Research Institute as well as those needing IRB preparation assistance. It is expected that funding these EHS-centric studies will lead to Pilot Project Program or NIEHS grant submissions by the PI. For additional information regarding these resources, please contact Matt Cave (Navigator, Basic Science Resources), Jiapeng Huang (Navigator, Adult Clinical Science Resources), Jan Sullivan (Navigator, Pediatric Clinical Science Resources), Kira Taylor (epidemiology and public health), or Charlie Zhang (Navigator, GIS Resources) via the TRSC email service account (ihsfc@louisville.edu).

Likewise, projects that support the CIEHS's overall goal, propose to access other CIEHS Cores and/or Research Interest Groups (RIGs) and are consistent with the NIEHS translational research framework will be prioritized. The TRSC Core Utilization Subsidy Program (CUSP) encourages members of all traditionally underrepresented groups to apply and is open to all eligible UofL faculty regardless of race, color, national origin, sex, disability, or age. **The CUSP requires that the applicant utilize one or more of the CIEHS cores (CEC, TRSC, OEFC, BIFC). If biostatistics or bioinformatics are involved with the application, the CIEHS BIFC must be used. CIEHS members may be the principal investigator (PI) on only one active award from CIEHS during any given fiscal year.** Members who are PIs in a No Cost Extension (NCE) on a CIEHS award may submit a new CUSP application during the NCE.

Background: The goal of the CIEHS is to develop a framework to understand the complexities of and to integrate the interactions between environmental toxicants, lifestyle factors, structural determinants of health, life stage, genetics and gender and their roles in human health and disease. The CIEHS facilitates research and training focused on: **(1)** exposure to industrial chemicals present in the urban and rural Kentucky environments (metals, VOCs, POPs, etc.), **(2)** lifestyle factors (diet, alcohol, socioeconomic stressors, obesity, etc.), and the modifications to response by life stage, genetics and gender in development of chronic adult diseases. The CIEHS is organized into three multi-disciplinary research interest groups (Environmental Justice, Health Disparities and Climate Change & Health, Mechanistic and Translational Toxicology, and Precision Environmental Health and Exposome); a Translational Research Support Core (TRSC), a Community Engagement Core (CEC), and two facility cores (Biostatistics and Informatics Facility Core, "BIFC" and the Omics & Exposure Facility Core, "OEFC"). More information about the CIEHS may be found at https://louisville.edu/ciehs/. More information about NIEHS translational research framework may be found at https://www.niehs.nih.gov/research/programs/translational/framework-details/index.cfm.
TRSC Core Utilization Subsidy Applications will be accepted for this deadline. **Priority for the January 2024 deadline is being given to proposals focusing on the following areas: *A. Precision Environmental Health/Exposome, B. Mechanistic and Translational Toxicology or C. Environmental Justice, Health***

Disparities, and Climate Change & Health). ***Due to limited funding, the awards will be prioritized first to support target area funding.***

1. **Precision Environmental Health/Exposome:**
    - Addresses the individual variability associated with responses to environmental exposures
    - Goal is to understand individual risk to prevent disease
    - Integrates Genetics, Epigenetics and Omics Data
    - Exposomics: measurements of multiple exposures and/or the health effects of multiple exposures
2. **Mechanistic and Translational Toxicology:**
    - Molecular mechanisms that underlie agent toxicity: how is gene expression impacted by exposures
    - Data generation can be translated to human biology
    - Utilizes innovative new approaches to study environmental exposures
3. **Environmental Justice and Health Disparities and Climate Change & Health:**
    - Environmental factors such as air and water quality are fundamental determinants of our health and well-being. Environmental factors can lead to disease and health disparities when the places where people live, work, learn, and play are burdened by social inequities.
    - Climate Change Direct Effects: heat-related illness; respiratory disease; heart disease; food- water-and vector-borne diseases; injury; premature death, mental health impacts, poor maternal and birth outcomes
    - Climate Change Indirect Effects: chemical releases into environment, changes in air, water, food quality and quantity; population displacement; interruptions to health care; Infrastructure and supply chain disruption; economic impacts – more people living in poverty.

General Information and Types of Awards:

(1) **Response to Reviewers** (**small) awards** for up to $1,500 to cover the costs associated with research needed to finish out a project or address questions arising in manuscript revisions or grant resubmissions.

(2a) **New Hypothesis Expansion/Direction (medium) awards** for up to $5,000 to cover costs associated with critical exploratory research and proof-of-concept studies needed for hypothesis generation and grant (re-) submission.

(2b) **IRB Preparation Assistance (medium) awards** for up to $5,000 to cover costs associated with assistance in IRB preparation.

(3) **Supporting the Base (large) awards** (up to 25% total costs capped at a $10,000 maximum) will be provided to subsidize already funded EHS research (for example NIEHS).

Review Process: Applications are submitted through the Onbase platform and then reviewed by the CUSP Review Panel (Drs. Merchant, Leblanc, and Cave) which makes funding recommendations to the CIEHS IAC. Note: Awards for human studies or animal studies will not be approved if IRB or IACUC protocols are pending.

An individual may be the PI on only one CUSP award from CIEHS in any fiscal year. Members who are PIs in a No Cost Extension (NCE) on a CIEHS award may submit a new CUSP application during the NCE. **Awardees** will be required to sign an award notice committing to the terms of the award, including required post-award reporting, citation of the grant (P30ES030283) in any publications, and **participation in a CIEHS session at the subsequent annual Research!Louisville event**.

Post-Award Administration of Core Utilization Subsidy Awards

Reporting: Ascertaining the impact of TRSC Core Utilization Subsidy awards on UofL EHS research is vital for gauging the success of the program. To gather necessary information needed to measure success all awardees (PIs) will be contacted 12-, 24- and 36-months post award. The goal will be to determine if and how the TRSC funds led to support and stimulation of EHS research by CIEHS members. We will be looking to gather information that includes but is not limited to: **(a)** listing of poster and oral presentations, **(b)** grant applications which included subsidized research results, **(c)** trainees that were directly involved with the research, **(d)** copies of the manuscripts (resubmitted/in-press/published), **(e)** grant applications (submitted/funded/renewed), **(f)** data sharing to the EHS research community and lastly a cover page addressing how the expended funds addressed the gap in the research.

To apply for a Core Utilization Subsidy**, please click on the link below:**

https://louisville.edu/ciehs/ciehs-research-vouchers/ciehs-research-voucher-application

Program Contacts

For general information about the CIEHS TRSC Subsidy Award Program and the application process, contact:
Matt Cave, MD, Director, TRSC, ihsfc@louisville.edu

For information related to other CIEHS Cores and RIGs, contact the individual directors:

Omics and Exposure Facility Core (OEFC)
Michael Merchant, PhD
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Community Engagement Core (CEC)
Luz Huntington-Moskos, PhD, RN, CPN
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Biostatistics and Informatics Facility Core (BIFC)

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Mechanistic and Translational Toxicology RIG
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Precision Environmental Health and Exposome RIG
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Environmental Justice, Health Disparities and Climate Change & Health RIG
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