

# Human Health Exposure Analysis Resource (HHEAR) Pilot and Feasibility Program Application

## **Applicant/Investigator Information:**

### **Principal Investigator:**

Name:

Institution:

Phone:

Email:

### **Co-Investigator 1:**

Name:

Institution:

Phone:

Email:

### **Co-Investigator 2:**

Name:

Institution:

Phone:

Email:

## **Investigator Eligibility:**

Are you eligible at your home institution to apply for an NIH grant as a principal investigator?

Yes       No

Do you have access to an ongoing or completed epidemiological or clinical study on human health which has been approved for human subjects research by an institutional review board (IRB)?

Yes       No

Do you want to add environmental exposure data to his/her research or needs more extensive analysis of exposures to support a scientific hypothesis related to human health outcomes?

Yes       No

Do you have access to existing human biological or environmental samples?

Yes       No

## **Agreement to HHEAR Policies:**

Do you agree to comply with the [HHEAR Publications Policy](#)?

Yes       No

**Parent Study Information:**

**Parent study project title:**

**Parent study cohort name and website link (if available):**

**Human subjects approval:** *Record the institution providing IRB approval and the IRB approval number for your original study.*

**Approving institution:**

**Approval number:**

**Parent study funding source(s), including grant number(s):**

**Parent study key publications:** *(limit to 3; provide as PMIDs)*

**Primary hypothesis of the parent study:**

**Health outcomes:** *Describe the specific health outcomes of the original study.*

**Environmental exposure measures:** *Describe environmental exposures assessments, if any, that have already been completed. This can include for example, previous analysis of biospecimens for chemical or stress biomarkers; metabolomics and/or gene expression profiles; collection of air, soil or water samples; and/or administration of questionnaires relating to stress, dietary or environmental exposures of interest.*

**Summary of main published findings for parent study:**

**Parent study design:**

## **Proposed HHEAR Pilot and Feasibility Project:**

**Project title:**

**Specific aims:**

**Abstract:** *Please provide a summary (hypotheses, study design, methods and statistical analysis) of your **proposed HHEAR project** in the context of the parent study. (150 word limit)*

**Significance:** Describe how the requested HHEAR analyses will provide data to support a future grant application and how this pilot project and the future grant will enhance the findings from your original study.

**Pilot study design:**

**Number of subjects proposed:**

**Number of biological samples to be analyzed:**

**Number of environmental samples to be analyzed:**

**NOTE:** Applicants are strongly encouraged to contact [HHEAR CC@westat.com](mailto:HHEAR_CC@westat.com) with questions regarding the scope of services, suitability of a proposal and/or costs of laboratory analyses.

## Human Health Exposure Analysis Resource (HHEAR) Pilot and Feasibility Program Application

**Proposed Pilot and Feasibility Project Biological Sample Characteristics and Analyses:** Complete Table 1 to provide information on characteristics of participants, the associated biological samples that will be provided, and the requested laboratory analyses. Complete a separate row for each unique combination of characteristics. **Scroll to the right to ensure you complete all columns.** Provide the biological sample information in as much detail as possible. For example, if you are providing serial serum and urine samples collected from men and women at Time 1 and Time 2, you would complete 8 rows of the Table. If you have a sample matrix that does not match a specified option, select "O-Other"

**Table 1: Proposed Project Biological Sample Characteristics and Requested Analyses**

Priority Order for Analyses	Laboratory Analyses (exposure measures)*  (select from drop down)	Participant Type  (select from drop down)	Age/Stage at Collection  (e.g., ages 0-2, first trimester)	Sample Matrix**  (select from drop down)	# Participants	# Samples per Participant	# Total Samples	Available Volume per Sample  (with units)	Collection Method  (e.g., morning void, fasting, passive drool)	Storage Temp  (with units)	# of Freeze-Thaws	Sample Collection Status  (All or Some)

**\*Key for column 2, Laboratory Analyses**

BFR – Brominated Flame Retardants	PAH – Polycyclic Aromatic Hydrocarbons	SMOKE – Tobacco Metabolites
DNA – DNA Adducts	PESTICIDES – Current Use	STRESS – Cortisol
DRUG – Pharmaceuticals and Other Drugs of Abuse	PESTICIDES – Legacy	TARGET – Other Targeted Analysis
NUTRIENTS	PFAS – Perfluoroalkyl and Polyfluoroalkyl Substances	TRACE ELEMENTS
OPE – Organophosphate Ester Flame Retardants & Plasticizers	PHENOLS	UNTARGETED
	PHTHALATES	VOC – Volatile Organic Compounds

**\*\*Key for column 5, Sample Matrix**

B – Whole Blood	CSF – Cerebrospinal Fluid	O – Other	S – Serum
BLF – Bronchial Lavage Fluid	CT – Cord Tissue	OT – Other Tissue	SL – Saliva
BR – Breast Milk	D – DNA	PC – Plasma Citrate	ST – Stool
BT – Biopsied Tissue	DBS – Dried Blood Spots	PE – Plasma EDTA	T – Teeth
BU – Buccal Cell	EBC – Exhaled breath condensate	PH – Plasma Heparin	U – Urine
CB – Cord Blood	H – Hair	PL – Placenta	WBC – White Blood Cells
CP – Cord Plasma	ME – Meconium	R – RNA	
CS – Cord Serum	N – Nails	RBC – Red blood cells	

## Human Health Exposure Analysis Resource (HHEAR) Pilot and Feasibility Program Application

Provide information on the biospecimens to be analyzed for your proposed project. Describe the type of specimen collected, the collection method you employed, and any processing that was done to the specimen. Also describe the storage containers, storage temperature, and length of time in storage. *(100 word limit)*

## Human Health Exposure Analysis Resource (HHEAR) Pilot and Feasibility Program Application

**Environmental Samples and Analyses:** Complete Table 2 to provide information on the environmental samples that will be provided to HHEAR and requested lab analyses. Complete a separate row for each unique combination of characteristics. Provide the environmental sample information in as much detail as possible. If you have a sample matrix that does not match a specified option, select “O-Other” and specify the matrix in the Other Comments section.

**Table 2: Proposed Project Environmental Sample Characteristics and Requested Analyses**

Priority Order for Analyses	Laboratory Analyses <i>(select from drop down)</i>	Sample Matrix <i>(select from drop down)</i>	# Samples	Available Total Volume/ Quantity <i>(with units)</i>	Storage Temp <i>(with units)</i>	# of Freeze-Thaws
	SELECT ONE:	SELECT ONE				

**Key for Column 2, Laboratory Analyses**

BFR – Brominated Flame Retardants	Pesticides – Legacy	TARGET – Other Targeted Analyses
OPE – Organophosphate Esther Flame Retardants & Plasticizers	PFAS – Perfluoroalkyl and Polyfluoroalkyl substance	TRACE ELEMENTS
PAH – Polycyclic Aromatic Hydrocarbons	PHENOLS	UNTARGETED
Pesticides – Current Use	PHTHALATES	

**Key for Column 3, Sample Matrix**

AG – Air Sample Glass Fiber Filter	DWF – Drinking Water Filtered	SW – Silicone Wristbands
AP – Air Sample Polyurethane Media	DWU – Drinking Water Unfiltered	SED – Sediment
AS – Air Samplers (other media, need specific info)	GWF – Ground Water Filtered	SOI – Soil
AT – Air Sample Teflon Filter	GWU – Ground Water Unfiltered	WP – Surface Wipe
AX – Air Sample XAD Resin	HD – House Dust	SWF – Surface Water Fresh Water Filtered
CD – Car Dust	HW – Hand Wipes	SWU – Surface Water Fresh Water Unfiltered



## Human Health Exposure Analysis Resource (HHEAR) Pilot and Feasibility Program Application

Provide information on the collection method employed, including the tools and materials used to collect the environmental sample, and any sample processing that was conducted (e.g., sieving) and the containers used to store the samples. Please also include the location where the samples were collected (e.g., if dust, where in the house was the dust collected?). *(100 word limit)*

**Anticipated timeline for Pilot and Feasibility project:**

**Anticipated source of funding for future project:**

**Anticipated timeline for future project:**

**Please complete this application and submit it, along with biosketches for the Principal Investigator and all Co-Investigators, to [HHEAR\\_CC@westat.com](mailto:HHEAR_CC@westat.com).**