

# Project Information ?

5P30ES020957-06

DESCRIPTION DETAILS RESULTS HISTORY SUBPROJECTS

**Project Number:** 5P30ES020957-06 **Contact PI / Project Leader:** [RUNGE-MORRIS, MELISSA A](#)  
**Title:** CENTER FOR URBAN RESPONSES TO ENVIRONMENTAL STRESSORS (CURES) **Awardee Organization:** WAYNE STATE UNIVERSITY

### Abstract Text:

Situated in the heart of Detroit, the environmental health sciences "identity" of the Center for Urban Responses to Environmental Stressors (CURES) is to understand the health impacts of environmental exposures to complex chemical and non-chemical contaminants in Detroit's urban landscape. Our strategic vision is to provide leadership to identify, evaluate, and mitigate environmental health concerns in close collaboration with the community and environmental policy makers. CURES has assembled a unique interdisciplinary team of established and new environmental health scientists and community partners to address major environmental health challenges facing Detroit's racially and ethnically diverse population. We hypothesize that "modern-era" diseases (e.g., cardiovascular disease, cancer, diabetes) that compromise the quality of life of residents living in an industrialized urban environment, such as Detroit, occur as a consequence of dynamic interactions among an individual's genetic and epigenetic make-up, nutritional status, and environmental stressors, which re-program key cellular networks to favor pathogenesis. CURES advances the NIEHS 2012-2017 Strategic Plan by nurturing strong bonds with Detroit's urban community, applying translational and interdisciplinary team-research approaches to solve complex environmental health problems, and by seeking the sources of environmental health disparities. CURES is making an impact in our region. Our researchers and community partners responded rapidly and coordinately to a serious emerging health crisis in our immediate vicinity; the 2015-2016 lead watershed contamination disaster in Flint, Michigan. To create a gateway to a healthy Detroit, CURES' short-term goals are to: 1) strengthen existing partnerships and continue to develop new ones between CURES and the Detroit community; 2) in collaboration with them, identify the chief environmental health threats to Detroit's vulnerable populations; 3) conduct highly integrated mechanistic, epidemiological, and community-engaged research that addresses the impact of urban environmental exposures on human health; 4) build the capacity of CURES to accomplish its research goals by providing facility cores that are optimized to meet the needs of its members and seed funds to support pilot projects to explore the feasibility of new areas of study; and 5) enhance the impact of CURES on the field of environmental health science by providing mentoring to new and established investigators that supports their professional goals and prepares them for leadership roles in environmental health research. Our long-term goals are to 1) enhance our community partners' efforts to increase community awareness and facilitate programs for a healthier community and 2) develop appropriate strategies, based on CURES research, to inform policy so as to mitigate the risks associated with urban environmental exposures. We believe that CURES is optimally positioned on "the ground floor" of innovative team science opportunities that have the greatest promise to realize the early detection, prevention, and eventual eradication of urban environmental disease in our lifetime.

### Public Health Relevance Statement:

The Wayne State University "Center for Urban Responses to Environmental Stressors" (CURES) is focused on establishing a cleaner and healthier living and working environment in the City of Detroit and its regional neighbors. The CURES Center applies an integrated, community-engaged team approach to understand how exposure to urban environmental chemical and non-chemical stressors affects human health.

### Project Terms:

Abate; Address; Adult; Adverse effects; Affect; Age; Age Distribution; Air Pollution; Area; Asthma; Awareness; base; Cardiovascular Diseases; career; Characteristics; Chemical Exposure; Chemicals; Child; Cities; Coke; Collaborations; Communities; Complex; consumer product; Core Facility; cost; design; Development; Diabetes Mellitus; diet and exercise; Disasters; Disease; Early Diagnosis; Elderly; empowered; Environment; environmental chemical; Environmental Exposure; Environmental Health; Environmental Impact; Environmental Policy; environmental stressor; Epidemiology; Epigenetic Process; ethnic diversity; ethnic minority population; Ethnic Origin; experience; Exposure to; Floor; Funding; gene environment interaction; Generations; Genetic; Geography; Goals; health disparity; Heart; Heart Diseases; Heavy Metals; Housing; Human; Immigrant; Immune System Diseases; Individual; Industrialization; innovation; land use; Lead; lead exposure; Lead Poisoning; Leadership; Light; Link; Liver diseases; Locales; low socioeconomic status; Malignant Neoplasms; member; Mentors; Metabolic Diseases; Michigan; Microbiology; Mission; Modernization; National Institute of Environmental Health Sciences; Neighborhoods; Nutritional status; Obesity; Particulate; Pathogenesis; Personal Behavior; Personal Satisfaction; Petroleum; Pilot Projects; Policies; Policy Maker; pollutant; Pollution; Population Heterogeneity; Positioning Attribute; Prevention; programs; psychosocial; Quality of life; Race; racial diversity; Refugees; Renaissance; Research; Research Personnel; Research Training; resilience; Respiration Disorders; response; Risk; Role; Science; Scientist; Secure; Seeds; Silicon Dioxide; Social Interaction; socioeconomics; Source; Strategic Planning; stressor; Tars; Universities; Vision; Vulnerable Populations; wasting; Water; Work

Contact PI Information:	Program Official Information:	Other PI Information:
<b>Name:</b> RUNGE-MORRIS, MELISSA A <b>Email:</b> <a href="#">Click to view contact PI email address</a> <b>Title:</b> PROFESSOR	<b>Name:</b> THOMPSON, CLAUDIA L <b>Email:</b> <a href="#">Click to view PO email address</a>	Not Applicable

Organization:	Department / Educational Institution Type:	Congressional District:
<b>Name:</b> WAYNE STATE UNIVERSITY <b>City:</b> DETROIT <b>Country:</b> UNITED STATES (US)	RADIATION-DIAGNOSTIC/ONCOLOGY SCHOOLS OF MEDICINE	State Code: MI District: 13

### Other Information:

<b>FOA:</b> <a href="#">RFA-ES-16-001</a>	<b>DUNS Number:</b> 001962224	<b>CFDA Code:</b> 113
<b>Study Section:</b> Environmental Health Sciences Review Committee (EHS)	<b>Project Start Date:</b> 5-JUN-2014	<b>Project End Date:</b> 31-MAR-2022
<b>Fiscal Year:</b> 2019 <b>Award Notice Date:</b> 1-APR-2019	<b>Budget Start Date:</b> 1-APR-2019	<b>Budget End Date:</b> 31-MAR-2020

### Administering Institutes or Centers:

NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES

### Project Funding Information for 2019:

<b>Total Funding:</b> \$1,507,524	<b>Direct Costs:</b> \$992,342	<b>Indirect Costs:</b> \$515,182
Year	Funding IC	FY Total Cost by IC
2019	NATIONAL INSTITUTE OF ENVIRONMENTAL HEALTH SCIENCES	\$1,507,524

**History:**Total project funding amount for 7 projects is **\$7,106,346\***

\* Only NIH, CDC, and FDA funding data.

Project Number	Sub #	Project Title	Contact Principal Investigator	Organization	FY	Admin IC	Funding IC	FY Total Cost by IC
5P30ES020957-06		CENTER FOR URBAN RESPONSES TO ENVIRONMENTAL STRESSORS (CURES)	RUNGE-MORRIS, MELISSA A	WAYNE STATE UNIVERSITY	2019	NIEHS	NIEHS	\$1,507,524
5P30ES020957-05		CENTER FOR URBAN RESPONSES TO ENVIRONMENTAL STRESSORS (CURES)	RUNGE-MORRIS, MELISSA A	WAYNE STATE UNIVERSITY	2018	NIEHS	NIEHS	\$1,522,770
2P30ES020957-04		CENTER FOR URBAN RESPONSES TO ENVIRONMENTAL STRESSORS (CURES)	RUNGE-MORRIS, MELISSA A	WAYNE STATE UNIVERSITY	2017	NIEHS	NIEHS	\$1,550,094
3P30ES020957-04S1		CENTER FOR URBAN RESPONSES TO ENVIRONMENTAL STRESSORS (CURES)	RUNGE-MORRIS, MELISSA A	WAYNE STATE UNIVERSITY	2017	NIEHS	NIEHS	\$71,722
5P30ES020957-03		CENTER FOR URBAN RESPONSES TO ENVIRONMENTAL STRESSORS (CURES)	RUNGE-MORRIS, MELISSA A	WAYNE STATE UNIVERSITY	2016	NIEHS	NIEHS	\$924,750
5P30ES020957-02		CENTER FOR URBAN RESPONSES TO ENVIRONMENTAL STRESSORS (CURES)	RUNGE-MORRIS, MELISSA A	WAYNE STATE UNIVERSITY	2015	NIEHS	NIEHS	\$817,488
1P30ES020957-01A1		CENTER FOR URBAN RESPONSES TO ENVIRONMENTAL STRESSORS (CURES)	RUNGE-MORRIS, MELISSA A	WAYNE STATE UNIVERSITY	2014	NIEHS	NIEHS	\$711,998

**Subprojects:**

Project Number	Sub #	Project Title	Contact Principal Investigator	Organization	FY	Admin IC	Funding IC	FY Total Cost by IC
5P30ES020957-06	6989	PILOT PROJECT PROGRAM	KOCAREK, THOMAS A	WAYNE STATE UNIVERSITY	2019	NIEHS	NIEHS	\$408,085
5P30ES020957-06	6987	COMMUNITY OUTREACH AND ENGAGEMENT CORE (COEC)	LICHTENBERG, PETER A.	WAYNE STATE UNIVERSITY	2019	NIEHS	NIEHS	\$284,809
5P30ES020957-06	6986	INTEGRATIVE HEALTH SCIENCES FACILITY CORE	PARKER, GRAHAM C	WAYNE STATE UNIVERSITY	2019	NIEHS	NIEHS	\$205,739
5P30ES020957-06	6988	EXPOSURE SIGNATURES FACILITY CORE (ESFC)	RUDEN, DOUGLAS M	WAYNE STATE UNIVERSITY	2019	NIEHS	NIEHS	\$238,768
5P30ES020957-06	6985	ADMINISTRATIVE CORE	RUNGE-MORRIS, MELISSA A	WAYNE STATE UNIVERSITY	2019	NIEHS	NIEHS	\$370,123

NIH...Turning Discovery Into Health®