Anti-Racism Faculty Hiring Initiative Cluster for Addressing Environmental Racism and Promoting Health Equity

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Rationale

It is not an accident that some communities in the U.S. and globally experience greater harmful burdens on their health than others. They are often communities who face racial discrimination compounded by discrimination based on gender, income, culture, and ability. Health burdens include high levels of risk from and exposure to lead poisoning, asthma, certain cancers, viral and bacterial infections, and lack of access to nutritious diets, among numerous conditions. At one level, environmental factors influence health burdens. The aforementioned risks and exposures are related to wide ranging environmental factors, including infrastructure (e.g., adequate water sanitation), environmental quality (e.g., air pollution levels), and climate and ecological changes (e.g., risks of severe drought and extreme weather). In the U.S., racism has been a major factor in denying Black, Brown, and Indigenous communities access to adequate infrastructure and to clean, safe, healthy, and ecologically and climate resilient environments.

Racism, considered in this way, can be called environmental racism, and it is often carried out through public policies at the federal, state, or local level that have either explicit racist intent or disproportionate harm to Black, Brown, Indigenous, and low-income communities. Comparatively higher health burdens - or health inequities - experienced by some communities are related to racism.

A critical avenue of anti-racist research is to identify the relationships between health inequities

and environmental racism and the development of solutions, most often implemented through public policies, that end health inequities through ending environmental racism. This proposal focuses on an area of research that seeks to understand the relationships connecting environmental racism, health inequity, environmental factors, and public policies. The goal is better knowledge of what relationships exacerbate or ameliorate unequal burdens of harm.

The University of Michigan (UM) has long stood out nationally and internationally in terms of research and education in this area. Research at UM has established the understanding that diverse dimensions of environmental racism are critically important to identifying and ending racialized health inequities. This proposal seeks to connect existing and new faculty who focus on environmental racism, health equity, and public policies that are integral with a special emphasis on research that examines *synergistically* the connections among racism and racial violence, environmental injustice, and racialized health disparities. New knowledge about the connections between environmental factors and health promises provocative solutions—which by necessity will most often take the form of new public policies at multiple levels—for ending environmental racism and promoting health equity. The work described in this proposal will propel UM to be at the center of some of the major policy and funding trends in government and philanthropy, as discussed in more detail in Appendix 1 at the end of the proposal text.

The lead faculty on this proposal have multiple established relationships with one another that have advanced new knowledge about the connections between environmental racism and health inequity. Instead of understanding environmental racism and health as having linear causality, faculty at the UM show in their research that these relationships are often synergistic and compounding. Historic and current racism, often embedded in public and private institutions, operates as a pernicious factor that - all at once-affects physical health outcomes, cultural and social well-being, mental health, access to care and services, and opportunities within education, science, political decision-making, and policy processes.

The education and training of UM students should deliver strong interdisciplinary skill sets that are calibrated to emerging anti-racist best practices, equipping them for leadership through careers in health and environmental fields. These trends are creating energy for research universities to develop interdisciplinary approaches that cross diverse vectors of scientific and policy analysis. This proposal seeks to meet this challenge. The lead and engaged faculty on this proposal represent major networks of strength at Michigan in research, teaching, and service advancing health equity and environmental justice. Appendix 2 lists centers, programs, and initiatives that are partners on this proposal, having offered their strong endorsement to partner on the proposed work. The partners have affirmed the hiring in this proposal will add value to their missions and projects, supporting their further growth in the area of environmental racism and health. In turn, the partners' wide-ranging educational and research work fosters an unparalleled academic context and diversity of options for the new faculty hires to collaborate with existing faculty.

The schools leading this proposal will contribute to the community-based, policy-relevant, and interdisciplinary work on which this proposal will further build at UM. It cannot be emphasized enough how the faculty leading this proposal have formed a scholarly ecosystem of mutual collaboration at the nexus of health equity and environmental racism, regularly collaborating on numerous small and large activities that are too numerous to document here. Many projects of different sizes connect the lead collaborators on this proposal and their extended networks at UM. One project is supported by the National Institute on Minority Health and Health Disparities, with co-PIs from SPH, ISR and SEAS. The project focuses on neighborhood segregation in racial health inequalities throughout adulthood. Ford's newly launched interdisciplinary Center for Racial Justice seeks to explore, analyze, and understand how public policies have undermined or advanced the goal of racial equity, including policies related to environmental racism and health. SEAS' new Tishman Center for Social Justice and the Environment is at the early stages of further crystallizing the connections across campus in the key area of this proposal. ISR serves as a major part of the connective tissue of the three schools. ISR is partnering with the three schools on this proposal given its long history of research related to health disparities, environmental influences on health, and racial inequality. Appendix 3 describes the history of this proposal and how it has been developed over time.

Appendix 4, referenced again later in the proposal, describes ISR's important contributions to the focus area of this proposal.

Discussion of sustainability and impact:

One of the key areas of sustainability and impact is on existing curricula and cross-campus

teaching collaborations. For example, Ford's STPP program trains students university-wide on the politics and policymaking of technology, energy, and sustainability, with electives housed as SEAS, SPH and EHS, among other units. More broadly, students frequently enroll in classes or dual-degree programs across SEAS, SPP, and SPH, and are engaged in research mentorship through ISR. Interconnected courses from these hires will help recruit students, boost cross-campus enrollments, build more robust dual-degree programs, and promote interdisciplinarity. In terms of research, ISR is a critical and predominant partner for faculty and researchers in the three other units. ISR is an important glue in the nexus of SEAS, SPP, and SPH in the topic area of this proposal. Having ISR in this role strengthens the sustainability and impact as ISR adds value, serves as a respected intermediary organization, and brings scientific capital, resources, and networks. Appendix 4 documents ISR's important research and connections to the collaboration among the three schools.

School for Environment and Sustainability (SEAS)

SEAS is widely credited with creating the field of environmental justice (EJ) through its faculty's studies on racism and the distribution of environmental health burdens. SEAS' 1990 "Michigan Conference on Race and the Incidence of Environmental Hazards" was a landmark event that sparked Executive Order 12898 on EJ. Many SEAS faculty, students, and alumni are influential in national affairs related to racism and health equity, including interventions in the Flint Water Crisis and the creation of the recent Environmental Justice Mapping and Data Collection Act. SEAS faculty regularly give congressional testimony and have served on the White House Environmental Justice Advisory Council and the National Environmental Justice Advisory Council. SEAS faculty on the Michigan Environmental Justice Work Group advanced 33 recommendations eventually adopted by Governor Whitmer, leading to the state's first Office of the Environmental Justice Public Advocate and Environmental Justice Advisory Council. The council includes two SEAS faculty and two SEAS alumni.

Many current faculty investigate environmental racism and health; however, SEAS students have identified the intersection of health and environment as a priority for greater focus. The SEAS M.S. in EJ receives applications from far more qualified candidates than it can admit due to curricular capacities, and other SEAS specializations would like greater inclusion of EJ and health equity content, especially course offerings. SEAS M.S. capstone projects offer engaged client-based, practical experience in the field, and

110 have been connected to equity, anti-discrimination, and justice. Kyle Whyte is currently the specialization coordinator for environmental justice at SEAS and is responsible for the launching of the new Tishman Center for Social Justice and the Environment.

School of Public Health (SPH)

The Michigan Center on Lifestage Environmental Exposures and Disease (M-LEEaD) is a National Institute of Environmental Health Sciences (NIEHS) Core Center supporting research, training, and community engagement to advance understanding of environmental exposure impacts during vulnerable stages of the lifespan to inform medical and public health interventions. Recently several faculty have been active in discussions and training to amplify the role of anti-racist approaches by NIEHS and its Centers. The SPH's M-LEEaD Center's Stakeholder Advocacy Board includes environmental justice advocates, government officials and health service organizations that can inform the work of scholars with community and policy perspectives related to health and environmental justice. Community based participatory research (CBPR) approaches are encouraged and supported by the Center, and several faculty in the school are active in environmental health research using CBPR approaches. In addition, the Detroit URC, a partnership between researchers at the SPH and other UM units with multiple Detroit -based partners, has been working to promote CBPR to address health equity, with a strong focus on environmental justice, for over 25 years. The Detroit URC works closely with Poverty Solutions and the M-LEEaD Center to provide training for community organizations regarding their rights in research and for emerging new partnerships between community and academic researchers. The CBPR Partnership Academy, which is run by faculty and community affiliates of the Detroit URC, offers year-long training and support for new community-academic research partnerships, a critical resource for faculty recruited through this mechanism. The Environmental Health Sciences (EHS) Department's world-class research faculty transcends disciplines ranging from industrial hygiene, environmental quality, toxicology, environmental epidemiology, genetics and epigenetics. The Department offers both professional (MPH) and academic (MS and PhD) degrees, and operates an Accelerated Masters Degree (AMD) in EHS in collaboration with four Chinese universities. The AMD program was recently approved for a partnership with Spelman College. Two EHS training grants support doctoral and master-level students, including many representing health disparity populations and/or who

are engaged in research on environmental justice and anti-racism.

Environmental health sciences remain essential to public health and environmental justice. A 2018 Lancet Commission noted, "*Pollution is the largest environmental cause of disease and premature death*" and the WHO declared, "*Air pollution has a devastating impact on children's health*," with disproportionate effects on people of color and lower socioeconomic status. EHS is increasingly focused on *integrated approaches* to intervening at the human-environment interface including fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income in the development and implementation of environmental laws, regulations, and policies.

Ford School of Public Policy (SPP)

Ford is a leading school of public policy nationally, with nationally-recognized expertise in social policy, health policy, and environment and energy policy. Many of the mechanisms—driven by structural racism and other factors--through which exposure to differential environments yields racial disparities flow through public policy, and addressing them will require policy change. The proposed cluster would bring Ford more deeply into partnership with SEAS, SPH, and all units involved, with a direct focus on addressing structural racism. Ford's contributions would complement other units by connecting their work to proactive and reactive policy levers necessary for structural change. Ford's research centers would be a particular benefit to this cluster proposal. Ford's newly launched, interdisciplinary Center for Racial Justice seeks to understand how public policies have undermined or advanced the goal of racial equity, including policies related to environmental racism, with a focus on bringing changemakers (thought leaders, artists and advocates) working on these issues to campus. Research at the Center for Local, State, and Urban Policy has long had an emphasis on environmental and energy policy. Poverty Solutions, a university-wide initiative housed at the Ford School, has supported work across UM on confronting structural racism, housing instability, environmental justice, and health policy. This cluster directly complements Ford's priorities to bring an anti-racism focus more deeply into the school's scholarship and teaching. The School seeks to address how structural racism drives policy decisions and outcomes more fully across courses and research across the curriculum, while adding a new curricular offering on the history of how public policy has both exacerbated and addressed structural racism across domains.

Evidence of support for the work of new hires:

The lead Deans have affirmed that each unit has a strong support environment for new faculty, including formal mentoring committees. They use best practices that use individual and group mentoring opportunities, create for a for early-career and mid-career scholars to have meaningful inputs on unit policy, and provide opportunities for seeding and growing research. The Deans have affirmed that they have allocated resources to support full-time faculty positions with excellent start-up packages for pretenure and tenured faculty. There will also be support for connecting new faculty to communities. For example, the MLEEaD Center organizes regular seminars including 'Residents and Researchers' where community members/researchers come together to consider environmental health issues of mutual concern. The Environmental Justice specialization (SEAS) and Tishman Center for Social Justice and the Environment will host research convenings in health equity and environmental racism. Poverty Solutions holds regular series of events and opportunities for convening researchers and building capacity.

It is important to state that the new hires will be entering a highly engaging scientific community that has long been at the forefront of research and education on environmental racism, health equity, and anti-racism research. They will have access to the funder relationships already in place with current faculty and researchers, and be able to further build upon those relationships.

They will have access to structured mentorship that will directly empower and expand their research and educational strength.

An interdisciplinary committee (including the Lead Faculty and a subset of the Engaged Faculty who crafted this proposal) will be established to coordinate search activities, provide oversight, and coordinate and stimulate activities in environmental justice, anti-racist practice, and health equity across the campus. This group will consist of at least one senior faculty from each participating unit. The following are the activities that we envision this group undertaking to promote career development for new hires. These activities would be coordinated by the current UM faculty and researchers using our current resources, and would provide access to our scholarly ecosystem to the new hires. The new hires would not have to take on any of the organizing work as the activities are meant to uplift the research questions and approaches of the new hires, and generate the more specified relationships needed to launch and sustain the expanded research, external funding, and educational relationships.

- Mentoring of new faculty hired under this initiative, regardless of career stage, with intentional mentoring activities at the individual and group levels.
- Organizing regular joint symposia across the schools; ISR has expressed interest in serving as one convener of the joint symposia.
- Offering or facilitating a variety of research seminars to stimulate new interdisciplinary scholarship and action to address environmental racism and achieve environmental health equity.
- Proposing and helping to organize a "Michigan Meeting" to bring together renowned national and international scholars and activists engaged in antiracism theory and practice, and their applications for addressing environmental racism and promoting environmental health equity.
- Proposing and coordinating an "Environmental Racism, Anti-Racism and Health Equity" theme semester. The theme semester will engage scholars and activists involved with addressing environmental racism, anti racist research, pedagogy and practice, and promoting environmental health equity as presenters.
- Organizing an interdisciplinary speaker series focus on Environmental Racism and Anti-Racist Scholarship and Action.
- In collaboration with the new hires and other faculty members, developing proposals for graduate funding in anti-racist research and practice to address environmental racism and promote environmental health equity (e.g., NIH Graduate Training grant, K-12 STEM/STEAM programs).
- In coordination with the M-LEEaD Center (SPH), Tishman Center (SEAS) and Poverty Solutions (FORD), establishing bidirectional, explicitly equitable, research and action opportunities that actively pursue priorities identified by communities confronting environmental racism and associated health inequities
- Establish a learning program that links students with local, regional and international organizations and/or schools working on anti-racist practice to disrupt environmental racism and promote environmental health equity.
- In collaboration with the new hires and other faculty members, develop proposals to fund postdoctoral fellows who will work closely with faculty members on innovative research and action to address environmental racism and promote environmental health equity.

This series of activities along with the new research programs and courses taught by the new and current faculty will create an intellectually stimulating environment that will provide multiple opportunities for professional development for those newly hired under this initiative, as well as next generation of scholars and organizers representing communities experiencing environmental racism and prepared to engage in anti-racist research and practice toward promoting health equity.

Appendix 1: Policy and Funding

Trends in policy, research, and philanthropy signify that a window is opening for institutions like UM to make major contributions to solving health inequities that are driven by environmental racism. In the U.S., executive and legislative actions at the federal level are focusing on addressing health inequities caused by environmental racism, including in relation to climate change, infrastructure, and occupational safety, among other areas. The Biden administration has created a White House Environmental Justice Interagency Council and a White House Environmental Justice Advisory Council. These efforts aim to address historical and current injustices using an interdisciplinary approach across the whole government. Biden's Justice40 Initiative from Executive Order 14008 calls for 40% of the benefits of infrastructure investments in climate resilient, energy, water, and other infrastructure to benefit underserved and disadvantaged communities. A major dimension of Justice40 is addressing health equity issues in communities that endure environmental racism, whether in terms of remediating ongoing and legacy sources of pollution or in terms of ensuring that new infrastructure improves problems at the intersection of health equity and environmental racism.

Leadership at both the National Science Foundation and the National Institutes of Health are currently committed to better integration of "basic" and "applied" research frameworks and practices, as well as to "convergence" of programs centering on inclusivity and equity in scientific training and work with specific and increasingly interdisciplinary research fields. Globally, United Nations (UN) programs and international organizations are seeking improved models for linking human rights abuses to health, including the impacts of racism on health. One prominent example is the joint-action collaboration between the UN Environment and the World Health Organization focused on mitigating environmental factors affecting health risks. UN Environment gave its 2020 lifetime achievement award to Robert Bullard for his work on environmental racism and health. In philanthropy, large and small funders are recognizing the limitations of health solutions that fail to address social determinants and environmental factors. For example, the Kresge Foundation's recent \$30 million commitment to grantmaking in racial justice has as one of its emphases the nexus of health and the environment. The Bezos Earthfund has already granted \$500 million to advance environmental and climate justice, including for work that advances solutions (e.g. Justice40) and data science for understanding racism, health, and the environment. Importantly, SEAS recently received a 11 million dollar donation from the NorthLight Foundation and Tishman family to establish the Tishman Center for Social Justice and the Environment, a major component of which will be focused on environmental racism and health equity.

Appendix 2: Partners

- SEAS Environmental Justice Specialization (SEAS)
- Program in the Environment (SEAS; university-wide)
- The Sustainable Food Systems Initiative (LSA/SEAS/Taubman/SPH)
- Poverty Solutions (Presidential initiative)
- Center for Racial Justice (Ford)
- Center for Local, State, and Urban Policy, CLOSUP (Ford)
- Science, Technology, and Public Policy (STPP) Program (Ford)
- The Social Environment and Health Program (ISR)
- Population Studies Center (ISR)
- Program for Research on Black Americans (ISR)
- Life Course Development (LCD) Program (ISR)
- RacismLab (Rackham Interdisciplinary Workgroup)
- The Detroit Community-Academic Urban Research Center (SPH)
- The Center for Research on Ethnicity, Culture, and Health (SPH)
- Community Action to Promote Healthy Environments (SPH)
- M-LEEaD: Michigan Center on Lifestage Environmental Exposures and Disease (SPH)
- Residential College (LSA)
- The Edward Ginsberg Center for Community Engagement (university-wide)