Climate Change, Environmental Health, and Social Justice

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Background
A rapidly changing climate, losses of biodiversity, and unrelenting environmental degradation have brought our planet to a tipping point. Every person has been, and will continue to be, impacted by anthropogenic environmental insults. These impacts have disproportionately threatened the communities that are already experiencing social, health and environmental injustices that are shaped by inequitable and unjust social systems. The ranks of vulnerable people around the world (e.g. indigenous peoples, refugees, low-income and older individuals) are growing, which further accelerates the depletion of the resources available to them (e.g. fish, land, water). This, coupled with unsustainable corporate practices, over exploitation of resources by firms and governments, and rapid and unplanned urbanization has put entire ecosystems and communities at risk. In fact, many vulnerable communities are already feeling the brunt of an ailing planet. Food security in much of the developing world is threatened. Climate refugees (a term that did not exist 10 years ago) are crossing borders to find habitable land. New infectious diseases are emerging and existing diseases are spreading as the range of vectors (such as mosquitoes) expands. “Once in a lifetime” natural disasters are now happening every few years, if not more frequently. Urban populations are experiencing rapid decreases of clean water reservoirs, services and infrastructure that are not resilient to a changing climate. Each of the examples above lays bare the injustice and inequity that has been felt by the most vulnerable among us as a result of our collective onslaught on the environment. The challenge ahead is now undeniable; we must act decisively and act now.

It stands to reason, then, given the Brown School’s commitment to impact and equity, and its dedication "to investigate and inform how to equitably distribute resources to support health and well-being across every community" that Climate change, environmental health, and social justice should be identified as a priority for the foreseeable future.

The Brown School Experience
The Brown School has been addressing this issue; however, our efforts to date have been disconnected and inconsistent. In spite of a lack of funding and the absence of a concerted effort to pursue these topics as a school-wide priority, individual efforts of faculty, staff, and students interested in these themes have begun to bear fruit. A myriad of projects, grants, and collaborations demonstrates the potential for meaningful and sustainable actions to tackle the social, health and economic consequences of climate change and environmental degradation.

Early and recent activities
Several independent initiatives have been established within the Brown School focused on climate change, environmental health, and social justice. For example, through a series of projects and activities (e.g. dissertation funding, and others), the Buder Center has long been strongly committed to environmental and social justice and the Center for Social Development (CSD) has established “Environment and Social Development” as a new area of study at CSD. In 2010, as a result of previous strategic planning, the Brown School launched the Masters in Public Health Program, which includes “Environmental Health” as one of the core programmatic requirements. Over the past few years, the Brown School has hosted several conferences focused on climate change and social justice, including an international conference led by CSD and the International Center for Energy, Environment, and Sustainability (InCEES, formerly I-CARES) on climate change and social justice. The papers presented at this conference were compiled in a book published in 2019 titled “People and Climate Change: Vulnerability, Adaptation, and Social Justice.” In 2017, the Buder Center organized the “Indigenous Rights and Environmental Justice Symposium: From Standing Rock to St. Louis.” More recently, the Brown School became a member of the United Nations Sustainable Development Solutions Network to contribute in achieving the Sustainable Development Goals (SDGs) by 2030.

Climate change and environmental justice gained broad institutional support and recognition at Washington University through the creation of InCEES in 2007 and the Office of Sustainability in 2011. Both involve collaborations in research, teaching, and programs among faculty, staff, and students across the university and with external partners, both in St. Louis and in other regions. A subsequent InCEES initiative called “Topics of Conversation” led to development of the Washington University Climate Change Program. The program is comprised of four working groups, curriculum, research, operations and community outreach, of
which three Brown School public health faculty are members (Lora Iannotti, curriculum; Rodrigo Reis, research; Joe Steensma, operations). Additionally, Brown School Faculty (Steenmsa, Iannotti, Lesorogol) has been deeply involved with the Living Earth Collaborative, a consortium of scholars seeking understanding of biodiversity and human-ecosystems dynamics. The Office of Sustainability launched a University-wide Environmental Justice Initiative in 2017 to elevate research, teaching, practice, and student engagement in social justice and the environment. Brown School faculty and staff (Angela Hobson, Molly Tovar, and Lissa Johnson) have been integral members of the Initiative’s Steering Committee. Most recently, second year student Tamsen Reed initiated a call for a student group “Climate Change @ Brown” with an initial response of over 80 students.

**Faculty Engagement**

At the faculty level, several placed-based initiatives related to the super topic of “Climate Change, Environmental Health and Social Justice” have been implemented in the course of the last 15 years, including land use, rights of indigenous peoples in Kenya (Carolyn Lesorogol), rights of Indigenous people in the US (Molly Tovar), food and livestock development in Haiti, Ecuador and Eats Africa (Lora Iannotti), sustainable farming, fishing and energy practices in Costa Rica (Joe Steensma). In addition, several faculty members have been engaged in research projects that align with this topic, including climate change and obesity (Ross Hammond), livable cities (Rodrigo Reis), the United Nation’s Sustainable Development goals and their links to health (Deborah Salvo), improving fisheries in Nigeria (Steenmsa), environmental pollution and health (Christine Ekenga). However, these initiatives tend to occur without connection or cohesiveness, which has not optimized resource utilization and overall scientific and community impact.

**Curriculum Opportunities and Requirements**

In 2016, the Master of Social Work curriculum added “environmental justice” to its classroom and fieldwork competencies per a change in accreditation requirements in 2015 to address environmental justice. Environmental justice concepts are introduced and discussed in the required course, Social, Economic, and Political Environments. While the case studies vary across sections of the course, students analyze critical issues that impact under-represented populations in regard to food insecurity/food deserts, childhood lead exposure, or other environmental issues. In a review of the self-study submitted for re-accreditation, the term shows up in the name of the required EPAS competency and designated as “emphasized” or “reinforced” in existing courses and concentrations. However, none of the concentration descriptions explicitly apply the topic nor are there any courses specific to the subject. There is one mention of a 2016 field instructor appreciation day focused on the environmental justice competency.

The Brown School’s public health program requires all MPH students to take an introductory course in environmental health (Foundations of Public Health: Environmental Health). This course introduces the pathways through which individuals and communities are exposed to chemical, physical, and biological contaminants and prepares students to understand and propose solutions to environmental health risks at a local to global level. Climate change and environmental justice are two important components of this course. Three more advanced elective courses related to climate change are offered through the public health program to all Brown School students – Transdisciplinary Problem Solving (TPS): Climate Change and Health, TPS: From the Inside Out - Public Health and the Built Environment, and TPS: Global Hunger and Under nutrition. TPS: Climate Change focuses on environmental and public health challenges and opportunities posed by a changing climate. Students are prepared to understand the root causes and inputs into these major environmental issues, develop an understanding of the necessary adaptations to avoid public health crises related to climate change, and consider what can be done to moderate the impact of a changing climate on human health. TPS: Public Health and the Built Environment focuses on the human-made features of our communities, which includes land use, community design, and transportation systems that directly and indirectly impact health outcomes. Students learn to analyze the connections between the built environment and various health outcomes, explore the policy and decision-making processes that facilitate built environment changes, and examine the co-benefits of built environments that prioritize health. TPS: Global Hunger and Under nutrition focuses on solutions to reducing global nutrition disparities and prepares students to understand environmental factors, including climate change and sustainable agricultural practices, that influence nutrition.
While the Master’s in Social Policy does not currently offer any explicit courses targeting climate change and environmental health, social policy coursework at the Brown School trains students in valuable skills to impact policies that can advance environmental health and social justice. Courses in areas such as Impact Assessment, Benefit Cost Analysis, policy implementation, and advocacy foster theoretical and practical knowledge that prepares students to make a difference in their careers around the pressing issues of our time. Additionally, students have access to course and field education opportunities to work with government locally, regionally, and nationally to gain valuable exposure to law and policymaking processes. As climate change and environmental health touch on many different social policy areas (economic security, health policy, housing policy, immigration, etc.), there is an opportunity to develop partnerships with organizations working in climate change and environmental health fields to create a pipeline of practicum students interested in these topics.

**External Environment**

The last five years have been the hottest in the modern record and global carbon dioxide emissions began rising again in 2017 after three years of leveling off. The consequences today include record temperatures, rapidly melting icecaps, unprecedented wildfires, rapid and large-scale flooding, as well as devastating, more frequent hurricanes. Rapidly changing ecosystems have already resulted in dramatic changes disease vector populations (mosquitos and ticks, for example), while decimating populations of beneficial insects, such as bees and other important pollinators. Ecosystems, and the food systems to which they are inextricably linked, are at a tipping point. In the coming decades, millions will face malnutrition due to devastating drought and floods, and many more will have to migrate seeking food and water sources.

**Climate Change will increase social, health and economic inequalities**

The effects of climate change will be even more dramatic for vulnerable populations, particularly those living in poverty. The 2019 United Nations Human Rights Council Report on Climate Change and Poverty states that climate change is the major threat to human existence, and will dramatically reverse the social, economic and quality of life achievements from the last two centuries. Furthermore, the report predicts that climate change will: a) exacerbate existing poverty and inequality; b) have the most severe impact in poor countries and regions, and the places poor people live and work; c) worsen global inequality.

Because most people living in poverty tend to live in areas that are more susceptible to climate change, where housing infrastructure is less climate-resistant, and where social and health services are less frequent, they are more likely to experience lasting negative impacts, including social safety and financial stability. The livelihoods and assets of people living in poverty will be more affected, as well as their exposure to disease, food insecurity, and consequently increased morbidity and mortality. According to the Lancet Countdown on Health and Climate Change (2018), “the impacts of climate change are disproportionately affecting the health of vulnerable populations and people in low-income and middle-income countries. By undermining the social and environmental determinants that underpin good health, climate change exacerbates social, economic, and demographic inequalities, with the impacts eventually felt by all populations.”

**Climate Change, Social Work, Public Health and Social Policy Practice**

The consequences of climate change to our communities have been a growing concern for Social Work and Public Health research and practice.

In 2015, the accreditation body of social work education (Council on Social Work Education, CSWE) launched the Committee on Environmental Justice, which is jointly sponsored by CSWE’s Commission for Diversity and Social and Economic Justice, and Commission on Global Social Work Education. In the same year, the CSWE also revised its educational policies to include environmental justice (“Advance human rights and social, economic, and environmental justice”) ([https://www.cswe.org/Centers-Initiatives/Centers/International-KAKI/News/NEW!-Committee-on-Environmental-Justice-(1)](https://www.cswe.org/Centers-Initiatives/Centers/International-KAKI/News/NEW!-Committee-on-Environmental-Justice-(1))).

In 2016, the accrediting body for public health education (Council for Education in Public Health, CEPH) revised required educational competencies for schools and programs in public health. The following competencies are directly or indirectly related to the environment, climate change, and social justice:
• Explain effects of environmental factors on population health
• Explain the social, political, economic determinants of health and how they contribute to population health and health inequities
• Explain how globalization affects global burdens of disease
• Explain an ecological perspective on the connections among human health, animal health, and ecosystem health
• Discuss the means by which structural bias, social inequities, and racism undermine health and create challenges to achieving health equity at organizational, community, and societal levels
• Assess population needs, assets, and capacities that affect communities’ health
• Advocate for political, social, or economic policies or programs that improve the health in diverse populations.

According to the Association of Schools and Programs in Public Health (ASPPH), approximately 60 (or 32%) of the schools and programs that are CEPH accredited offer an MPH degree in an environmental health concentration. Fifteen of the top 20 US News and World Report ranked schools and programs have an environmental health program. Many have a specific, organized climate change focus on research, education, and practice. However, in recent years, only 6% of all public health graduate degrees conferred nationally are to students who have a concentration or specialization in environmental sciences/health. (I think we can make the argument that given the major global impacts due to environmental change, we need to be training more students specifically in environmental science and climate change whether through a specific specialization or tied to coursework in other specializations such as mental health.

An initial review of the top 10 schools of social work in the U.S. revealed a relative lack of explicit coursework around topics relating to climate change. Similarly, none of the examined schools featured a concentration related to climate change and environment health, and there were no research centers explicitly focused on the subject. As such, there may be an opportunity to be a leader in developing curriculum opportunities and institutions dedicated to the study of climate change and environmental health from a social work perspective.

In 2016, the American Academy of Social Work and Social Welfare launched a 10-year initiative identifying 12 grand challenges for social work, of which one is “Create social responses to a changing environment,” stimulating further research on the topic. In late 2017, the American Public Health Association (APHA) called the public health community to integrate climate change as a health issue, and launched a series of initiatives to engage its members, funders and stakeholders to make meaningful actions to advance the contribution of public practice on the health impacts of climate change. These calls for action have resulted in ongoing efforts to understand the skills needed for the next generation of Social Work and Public Health practitioners to help our communities, develop new curricula and courses, and modify social welfare and health care systems and policies to adapt and to mitigate the consequences of climate change.

Researchers and educators in other disciplines, however, are increasingly active in identifying concerns and potential solutions of environmental changes. In a 2019 summer research conference led by the Earth Institute at Columbia University, both social work and public health professionals were noticeably absent from participation, according to a Brown School student who attended. In her conference notes, she articulates key roles for our professions to contribute in building community engagement, decision-making, and policy development, as well as research on social innovations that contribute to successful adaptation.

Translating Evidence to Action

Over the last few years there has been an increase in public awareness about the consequences of climate change (e.g. heat waves) to human physical and mental health, as well as a growing recognition that human activity is a greater contributor to these many environmental and climate changes. While U.S. policy reform has lagged, the farm bill was recently reauthorized which supports agricultural conservation, disease prevention, and ensures food security for low-income families. However, this has not yet resulted in meaningful policy and behavior changes to improve communities’ resiliency and emergency preparedness. In
addition, voluntary buyout program policies have been criticized for the inherent inequities and cultural negligence to displaced families and particularly indigenous communities. In addition, to date there has not yet been a wide recognition of the intersection between climate change, environmental health and social justice.

**Strategic Themes**

**Climate Change is a health and social justice issue**
Climate Change will disproportionally affect vulnerable populations, impacting their living conditions and physical and mental health. These impacts will require systems and policies to be adapted to help mitigating the negatives consequences threatening human existence and prosperity.

**Climate change impacts our world, nation and region**
Local action is also needed to tackle the local impacts of climate change social, health and economic equality, access to health and social services. There have been sparse and weak actions to raise public awareness on the ongoing consequences of climate change in the region (e.g. flooding, heat waves), and on how this threatening economic security, and quality of life of urban, suburban and rural communities in the region.

**Brown School efforts need to be optimized and coordinated**
Disparate elements in the Brown School are addressing the topic. To be efficient and cost-effective, we should leverage and build on existing efforts, both within the Brown School and across the university. This could also include importance of partnerships in refining and articulating about this work at the Brown School to implement new curriculum opportunities (e.g. classes and concentration programs), within and across existent programs offered The Brown School and by Washington University at large. Likewise, there is an excellent opportunity to leverage our School’s is global leadership in dissemination and implementation (D&I) research by focusing some of the D&I work on the topic of climate change and environmental and social justice. In addition, the expertise and interest of the many research centers and isolated researchers at the Brown School could also benefit from coordinated and explicit efforts to strength the research portfolio on the intersection of climate change, environmental health, and social justice.

**The Brown School is ideally positioned to become a leader in this field**
To date, particular groups and individuals at the Brown School have put forward important efforts to address climate change, environmental health, and social justice. In setting priorities for the next decade, the Brown School has an opportunity to assert strong leadership in research, education, policy, and practice on this critical global issue. This issue aligns well with Washington University’s overall priorities and offers multiple opportunities for transdisciplinary collaboration on campus; we have in place international, national, and local expertise to conduct research and teach; and we have three established disciplines under the one school concept that uniquely positions the school to comprehensively address the intersection of climate change, environmental health, and social justice.

**Options**
The Brown School should develop a unified, cohesive, and comprehensive approach across its degreed programs to address the priority of climate change, environmental health, and social justice. The options below are thus a holistic set of recommendations in each designated area rather than individual suggestions. We recognize that implementation may require short- and long-term strategies, which are discussed in the next section.
Frame Brown School’s Approach: Solving Potential Environmental Hazards and Climate Change Effects

Climate change and environmental issues are very broad and related subject areas which have been highly politicized, and addressed in various ways across the campus as well as across universities. To that end, it is important that the Brown School be thoughtful and strategic in its focus. Key elements to emphasize are:

- Brown School is committed to proactive social action that focuses on both prevention and response to climate change and other environmental safety hazards.
- “Where you live matters” (Robert Wood Johnson framing) which recognizes that all are impacted by environmental changes (not just one group’s problem).
- Brown School works in the community, with the community to promote sustainable living.
- The fundamental focus of our work does not change; but reflects current and future societal environmental conditions challenging long-standing social and health issues.
- Living in healthy and sustainable physical and social environments is a priority value at the Brown School.
- Brown School contributes expertise and a comprehensive approach encompassing the disciplines of social work, public health, and social policy to mitigating social and health hazards, resulting from climate change and other environmental issues; and adapting social and health services to optimally promoting well-being and health in communities affected by climate change and other environmental issues.
- Brown School should serve as a model of sustainability through daily practices at work in the building and outside (e.g. Consider rooftop urban garden).
- Washington University is committed and well-equipped with expertise across multiple disciplines, and approaches solutions through transdisciplinary partnerships and action with the community to solve social and health problems that may arise from climate change and other environmental safety hazards.

Faculty development
- The faculty highlighted the need for training on how to integrate the subject matter across Brown School’s programs and particularly integration in course material, research, and field education.
- An important mid-term action is recruiting a senior faculty with expertise to lead development of this body of work, and with established research projects and external relationships with the related scientific and funding communities.
- In the short-term, the assignment of one or more faculty to lead development of this body of work will speed its development.

Curriculum: Assessment, integration, and development
- Review and catalog existing courses across the degreed programs, both to identify those that give focus to environmental issues and climate change, and those that do not currently cover the subject but could be infused with content or related examples. For example, a high percentage of students at the Brown School focus on mental health so it will be important to articulate how environmental hazards impact mental health.
- The existing courses assessment will provide opportunity to identify gaps and develop new courses.
- In accordance with Brown’s values (e.g. living in a safe and healthy environment), the topic should be infused in all foundation-level courses. This will require training to help the faculty learning on ways to infuse in existing courses, such as using case examples and examples for research projects.
- Implementing new concentrations in the topic area should be considered a priority if the Brown School is aiming to achieve a preeminent role in the fields of social work, public health and social
policy. Currently in discussion is a public health concentration on “planetary health.” This proposal is an opportunity to establish a joint concentration, which can leverage resources to serve all three-degree programs (social work, public health, social policy).

**Field education**
- As part of curriculum assessment, assess the extent to which environmental-related practica are available, utilized and needed.
- Provide training to field education supervisors on the intersection of climate change, health, and social justice, and how the fieldwork will meet accreditation standards.
- Expand opportunities for students to be placed in agencies focused on climate change and other environmental-related concerns. Give priority to local focus in order to facilitate the university’s emphasis on community action. For example, leverage university networks to further develop opportunities for placement, both on and off campus, with WU departments and local agencies that are focused on climate change.

**Research**
- Develop interdisciplinary proposals with other departments on campus to fund research that connects climate change, environmental health, and social justice. Meet with departments, such as engineering, Tyson research center, office of sustainability, institute for public health, the medical campus, and the business school to identify shared interests. Give attention to local and regional environmental issues.
- Establish Washington University seed research funding.
- Assign class research projects.
- Partner with one or more centers/departments to fund student research.
- Build a new “one school vision” center or expand an existing transdisciplinary center to house Climate Change, Environmental Health, and Social Justice. (For example, expanding Center for Social Development’s “Environment and Social Development” body of work with increased faculty leadership. Building on an existing structure leverages existing administrative resources and thus a cost-effective way to build both research content and visibility).
- Establish a university-wide action-oriented solutions-focused center or institute, “Environmental Action and Solutions Center”. This program would function as the rapid response and dissemination arm of the University’s various environmental research initiatives. The center would partner with industry, policy-makers, researchers, and practitioners from various disciplines to rapidly prototype and deploy solutions to environmental challenges. The center would be unique in that it would (1) have faculty from all schools housed within its four walls (2) be outside of a typical ‘academic’ environment (such as Cortex) and operate like an “environmental Skunkworks” (ala Lockheed in WWII) (3) focus on rapid translation of research into action and hyper-focused on finding solutions to problems as opposed to defining and refining research questions (4) have social innovation, technology development and deployment, and environmental justice as its core mission objectives (5) offer unique curricula that would allow students from many disciplines to obtain graduate degrees in their chosen fields through accelerated coursework, but be dedicated to a transdisciplinary problem-solving team that will have a much greater probability of having quick and lasting impact than traditional graduate education (6) leverage the unique strengths of the Brown School (Social Systems Design Lab, E3 Nutrition Lab, CSD, and others) to ensure that all solutions will address the challenges in an equitable manner, (7) and most radically, we will unapologetically consult with (and learn from) all entities (corporations, civil society organizations, researchers, policy makers, social entrepreneurs, etc.) that are willing to help the center and the Brown School advance their missions.
Career services
• Leverage university networks to further develop job opportunities both on and off campus, with WU departments and local agencies that are focused on climate change.
• Develop job prospects by cultivating partnerships at local, regional, national, and international levels with public and private sector entities that are working on climate change issues. Educate these entities on the value of having social work and public health workers as part of the solution.

Partnerships
• Identify key institutions (local, national and international) that are working on the intersection of climate change, environmental health and social justice issues. Establish partnerships with private and public sector entities to develop a pipeline of opportunities for proposing and conducting research, educating and working with policymakers, hosting practicum students, and developing education exchanges and visiting professorships.
• Establish long-term partnerships between Brown School and other schools. This strategy will help Brown School optimize resources to address important curriculum, research and policy gaps.

Communications
• Strengthen the university message that this is a priority area for education, research, and community participation.
• Design explicit messaging to raise awareness about the important roles of our respective professional fields (social work, public health, social policy) in addressing climate change and other environmental hazards.
• Make human and technological resources immediately available to effectively communicate the Brown School’s multiple and cohesive activities on climate change and environmental health and justice.

Student Support
• Provide financial and faculty support for the new student group “Climate Change @ Brown”
• Offer research fellowships to master’s- and doctoral-level students.

Short- and Long-term Plans

Short-term plans
Faculty and staff development
• In the short-term, the assignment of one or more faculty to lead development of this body of work will speed its development.
• An important mid-term action is recruiting a senior faculty with expertise to lead development of this body of work, and with established research projects and external relationships with the related scientific and funding communities.
• Hire more faculty and staff with expertise in the intersection of climate change, environmental health and social justice.
• Assign existent faculty and staff to help speed the body of work in the intersection of climate change, environmental health and social justice.
• Create an associate dean position to lead this area of work.
• Host educational seminars for faculty and staff to build awareness of the issue and ways to integrate into their daily lives.
• Conduct training for faculty on how to integrate climate change, environmental health and social justice into existing curriculum
Student support
- Provide financial and faculty support for the new student group “Climate Change @ Brown.”
- Offer research fellowships to master’s- and doctoral-level students.

Curriculum development
- Review existing courses across the degreed programs and identify ways to intentionally and systematically integrate the intersection of climate change, environmental health, and social justice into relevant courses and course descriptions.
- Develop a concentration in the MPH program in Planetary Health
- Work with School of Engineering on dual degree or other programs that might synergize well
- Consider novel approaches to education. For example, a “SkunkWorks Model” whereby the first year of the program is accelerated and intense academically, and the second year is a “Project Based Learning” (e.g. environment housed at CORTEX and the academic cohort works to solve a consequential environmental challenge under faculty supervision).

Field education
- Expand opportunities for students to be placed in agencies focused on climate change and other environmental-related concerns. Give priority to local focus in order to facilitate the university’s emphasis on community action. For example, leverage university networks to further develop opportunities for placement, both on and off campus, with WU departments and local agencies that are focused on climate change.
- Track participation of students in types of placements.

Research
- Explore opportunities for interdisciplinary proposal opportunities with other departments on campus to fund research that connects climate change, environmental health, and social justice. Meet with departments, such as engineering, Tyson research center, office of sustainability, institute for public health, and the business school to identify shared interests. Give attention to local and regional environmental issues.
- Explore opportunity for Washington University seed research funding.
- Assign class research projects and encourage individual research projects focused on the intersection of environment and wellbeing
- Partner with one or more centers/departments to fund student research.
- Expand an existing transdisciplinary center such as Center for Social Development’s “Environment and Social Development” body of work with increased faculty leadership.

Career services
- Leverage university networks to further develop job opportunities both on and off campus, with WU departments and local agencies that are focused on climate change.

Partnerships
- Establish local partnerships with private and public sector entities to develop opportunities for regional research, expanded number of practicum sites, and public awareness education.
- Establishing long-term partnerships with the Sam Fox School and the School of Engineering to offer dual-appointments, joint classes, and other activities to optimize and improve curriculum and research activities on climate change.

Communications
- Design explicit messaging to raise awareness about the important roles of our respective professional fields (social work, public health, social policy) in addressing climate change.
- Articulate Brown School’s unique contribution to the effort, e.g. unified approach across degreed programs.
Long-term plans

Student support
• Provide ongoing financial and faculty support for the new student group “Climate Change @ Brown.”
• Offer research fellowships to master’s- and doctoral-level students.

Curriculum development
• Establish a joint concentration in Climate Change, Environmental Health, and Social Justice, which can leverage resources to serve all three-degree programs (social work, public health, social policy).
• Hire faculty with expertise in the intersection of climate change, environmental health and social justice.

Field education
• Expand opportunities for students to be placed in agencies focused on climate change and other environmental-related concerns. Give priority to local focus in order to facilitate the university’s emphasis on community action. For example, leverage university networks to further develop opportunities for placement, both on and off campus, with WU departments and local agencies that are focused on climate change.
• Track participation of students in types of placements.

Research
• Establish a Brown School center to house Climate Change, Environmental Health, and Social Justice.
• Establish a University-wide Environmental Action and Solution Center (see description above).

Career services
• Develop job prospects by cultivating partnerships at local, regional, national, and international levels with public and private sector entities that are working on climate change issues. Educate these entities on the value of having social work and public health workers as part of the solution.

Partnerships
• Establish ongoing partnerships with private and public sector entities to develop a pipeline of opportunities for proposing and conducting research, working with policymakers, hosting practicum students, and developing education exchanges and visiting professorships.

Communications
• Articulate Brown School’s unique contribution to addressing Climate Change, Environmental Health, and Social Justice, e.g. unified approach across degreed programs. Post in admissions materials, on website, article for magazine, public affairs materials.