
Planetary Health Report Card: *George Washington University School of Medicine*

2019-2020 Contributing Team:

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Statement of Purpose

Planetary health is human health.

The Planetary Health Alliance defines planetary health as “a field focused on characterizing the human health impacts of human-caused disruptions of Earth's natural systems.” This definition is intentionally broad, intended to encompass the multitude of ways that the environment can affect health, including water scarcity, changing food systems, urbanization, biodiversity shifts, natural disasters, climate change, changing land use and land cover, global pollution, and changing biogeochemical flows. The health of humanity is dependent on our environment and our environment is changing rapidly and in disastrous ways. Although the World Health Organization has called climate change “the greatest threat to global health in the 21st century,” many medical school’s institutional priorities do not reflect the urgency of this danger to human health.

As future health professionals, we must be prepared to address the impacts of human-caused environmental changes on our patients’ health. This preparation is in the hands of the institutions providing our medical training. It is imperative that we hold our institutions accountable for educating medical students about the health impacts of climate change and other anthropogenic environmental changes, generating research to better understand health impacts and solutions, supporting related student initiatives, embracing sustainable practices as much as possible, and engaging with surrounding communities that are most affected by environmental threats. Because climate change and environmental threats disproportionately affect vulnerable populations (for example, communities of color, older adults sensitive to health threats, and individuals in low-resource settings), these issues are inherently ones of equity and justice.

With the purpose of increasing planetary health awareness and accountability among medical schools, we have created a standardized and reproducible Planetary Health Justice Report Card that medical students nationally can use to grade and compare their home institutions. This medical-student-driven initiative aims to compare medical schools on the basis of discrete metrics in four main category areas: 1) planetary health curriculum, 2) interdisciplinary research in health and environment, 3) university support for student planetary health initiatives, and 4) community outreach centered on environmental health impacts. This project is inspired by the [Racial Justice Report Card](#), an initiative from White Coats 4 Black Lives that has led to substantial impactful change at medical schools around the country.

Planetary Health Curriculum

Section Overview: This section evaluates the integration of relevant planetary health topics into the medical school curriculum.

Metric	Points	Descriptor
1.1 Did your medical school offer elective courses to engage students in planetary health in the last year?	1	Yes, the medical school has offered such elective courses in the last year.
	0	No, the medical school has not offered such elective courses in the last year.
1.2 Does your medical school curriculum address the impact of climate change on the changing patterns of infectious diseases?	2	The metric is met by the core curriculum.
	1	The metric is met by elective coursework.
	0	The metric is not met.
1.3 Does your medical school curriculum address the environmental co-benefits of a plant-based diet in its nutrition lectures?	2	The metric is met by the core curriculum.
	1	The metric is met by elective coursework.
	0	The metric is not met.
1.4 Does your medical school curriculum address the potential mental health effects of environmental degradation and climate change?	2	The metric is met by the core curriculum.
	1	The metric is met by elective coursework.
	0	The metric is not met.
1.5 Does your medical school curriculum address the effects of industry-related environmental exposures (e.g. air pollution, pesticides) on pregnancy?	2	The metric is met by the core curriculum.
	1	The metric is met by elective coursework.
	0	The metric is not met.

1.6 Does your medical school curriculum address endocrine disrupting chemicals and their effects?	2	The metric is met by the core curriculum.
	1	The metric is met by elective coursework.
	0	The metric is not met.
1.7 Does your medical school curriculum address the relationships between individual patient food security, ecosystem health, and climate change?	2	The metric is met by the core curriculum.
	1	The metric is met by elective coursework.
	0	The metric is not met.
1.8 Does your medical school curriculum address the effect of air pollution on respiratory and cardiovascular health?	2	The metric is met by the core curriculum.
	1	The metric is met by elective coursework.
	0	The metric is not met.
1.9 Does your medical school curriculum address the relationship between heat-related illnesses and climate change?	2	The metric is met by the core curriculum.
	1	The metric is met by elective coursework.
	0	The metric is not met.
1.10 Does your medical school curriculum address the outsized impact of anthropogenic environmental toxins and climate change on vulnerable populations such as those with low SES, women, minorities, indigenous communities, children, and the elderly?	2	The metric is met by the core curriculum.
	1	The metric is met by elective coursework.
	0	The metric is not met.
1.11 Does your medical school curriculum identify ways to advocate for and implement sustainable best practices	2	The metric is met by the core curriculum
	1	The metric is met by elective coursework.

in health care? (for example, avoiding unnecessary OR waste)	0	The metric is not met.
1.12 Does your medical school curriculum address important environmental threats that are relevant to the university's surrounding community? (for example, fires in California)	2	The metric is met by the core curriculum.
	1	The metric is met by elective coursework.
	0	The metric is not met.
1.13 Does your institution have graduate or non-medical undergraduate level courses on planetary health open to medical student enrollment free of charge?	2	There are graduate or undergraduate level courses open to free medical student enrollment.
	1	There are graduate or undergraduate level courses but they are not open to free medical student enrollment.
	0	There are no graduate level courses related to planetary health
1.14 In training for patient encounters, does your medical school's curriculum introduce strategies to have conversations with patients about the health effects of climate change?	1	Yes, there are strategies introduced for having conversations with patients about climate change.
	0	No, there are no strategies introduced for having conversations with patients about climate change.
1.15 In training for patient encounters, does your institution's curriculum introduce strategies for taking an environmental history or exposure history?	1	Yes, the curriculum includes strategies for taking an environmental history.
	0	No, the curriculum does not include strategies for taking an environmental history.
1.16 Does your medical school have an ongoing program that offers incentives for	1	Yes, the medical school has an incentive program.

faculty/departments to develop new planetary health courses and/or incorporate planetary health into existing courses?	0	No, the medical school does not have an incentive program.
Section Total (out of 28)	15	

Score explanations:

1.1 Elective Courses

There are no elective courses in the pre-clinical years at GW outside of scholarly concentrations. Clinical elective courses that involve topics in planetary health include:

EMED 516 Wilderness Medicine

IDIS 365 Environmental Health Elective

IDIS 361 Disaster Medicine

Dr. Akselrod is currently working towards creating an additional “Climate Change and Health” elective. There also used to be an Environmental Health Scholarly Concentration Track, but was discontinued due to diminished student interest.

The Environmental Health Elective course is a special study of the student’s choosing with Dr. Paulson as a faculty mentor.

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1.2 Infectious Disease

The PPS3 lecture “Climate Change” by Dr. Akselrod mentions climate change’s impact on the worsening spread of vector borne, water borne, zoonotic, and person-to-person diseases. There are several slides on each topic, which make clear the connection between worsening natural disasters and the spread of water borne infections, warming climate and vector-borne disease, disruption of wildlife habitat and spreading of zoonotic and emerging diseases.

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1.3 Diet and Sustainability

Searches for keywords “climate, climate change, environment, environmental, sustainable, sustainability” in the transcriptions of diet and nutrition lectures from the GI-Liver block including “Diet and Nutrition Counseling and Introduction to Culinary Medicine” from 2020 and “Diet and Nutrition Counseling” and “Intro to Culinary Medicine” from 2019 do not make any mention of environmental co-benefits of plant based diets.

Dr. Akselrod’s PPS3 lecture “Climate Change” does, however, highlight the role of plant-based foods and

fuels in the fight against climate change.

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1.4 Mental Health

The PPS3 lecture “Climate Change” by Dr. Akselrod highlights mental health effects of climate change including eco-anxiety/grief, individual and community-level trauma, adverse childhood experiences, and increased risk of adverse mental effects due to natural disasters.

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1.5 Environmental Exposures in Pregnancy

Dr. O’Brien’s Toxicology lecture in the “Foundations” block covers the basics of toxicology and some common environmental toxins such as mercury, lead, organophosphates, and cyanide, but does not make clear their connections to harmful effects during pregnancy.

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1.6 Endocrine Disrupting Chemicals

Endocrine disrupting chemicals and their effects are not covered in the curriculum.

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1.7 Food Security

The PPS3 lecture “Climate Change” by Dr. Akselrod highlights a UN report warning of increasing risk of food insecurity because of climate change as well as the role of desertification in exacerbating food insecurity for 500 million people living in areas experiencing desertification.

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1.8 Air Pollution

Dr. Akselrod’s PPS3 lecture “Climate Change” has a slide about exacerbation of respiratory disease that includes information about health co-benefits of reducing fossil fuel use, attributable deaths due to air pollution, and contribution of wildfires to air pollution.

There is mention of the contribution of pollutants to development of COPD in a “Pathology of COPD” session by Dr. Shwartz in the ‘Respiratory’ organ block, but no mention of the systemic contributions from the burning of fossil fuels.

During a Lung Cancer session during the Respiratory section of the CPR block by Dr. Baram there is a slide highlighting the role of air pollution and particularly fossil fuel combustion products as contributing to the development of lung cancer.

In the Foundations block during a biochemistry session on DNA Replication, Damage, and Repair by Dr. Elliott, he mentions benzopyrene’s role as a liver carcinogen and byproduct of fossil fuel combustion.

However, there is no mention during the Cardiac section of CPR of the effects of air pollution on cardiovascular health. For this reason we have scored this section as a 1.

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1.9 Heat-Related Illnesses

The PPS3 lecture “Climate Change” by Dr. Akselrod there mentions climate change’s impact on heat

exposure as well as the pathophysiology of heat-related illnesses, heat-related emergencies, heat-wave mortality, heat and warming climate effects on CKD and respiratory disease exacerbation. The CPR Asthma Summit Housing Panel session also mentions extreme heat or cold as exacerbating asthma.

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1.10 Environmental Determinants of Health

PPS-1 #3 “Foundations of Clinical Public Health” mentions environmental determinants of health including access to green space, lead or other toxin exposures, physical environment, built environment, socio-economic environment, and information environment, but there is no mention of climate change. Dr. Akselrod’s PPS3 lecture “Climate Change” makes explicit mention of geriatric and agricultural worker vulnerability to heat-related illness, as well as vulnerable populations (children, elderly, chronically ill, socially and economically marginalized) affected disproportionately by food insecurity and malnutrition. The Asthma Summit in the CPR pulmonary block emphasizes the disproportionate effect of respiratory irritants to people of limited resources in D.C., especially children.

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1.11 How to Advocate for Sustainable Practices

Dr. Akselrod’s PPS3 lecture “Climate Change” demonstrates examples of physician-led climate action and advocacy for both mitigation and adaptation. Topics include the medical ethics of action (or inaction) on climate change, the AMA resolution H-135.938: Global Climate Change and Human Health, and encouraging involvement with medical professional societies to amplify your impact.

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1.12 Area-Specific Environmental Threats

Dr. Akselrod’s PPS3 lecture “Climate Change” has a slide highlighting D.C. area relevant environmental threats like heat exposure and flooding.

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1.13 Graduate-Level Planetary Health Courses

The Milken School of Public Health has many course offerings relating to planetary health that students may enroll in as part of combined degree programs, but not as part of the MD program alone. There are Scholarly Concentration seminar series that medical students may participate in that may touch upon topics relating to planetary health, like natural disaster response, in the Disaster Medicine concentration, or the UN Sustainable Development Goals in the Global Health Concentration. However, since there are very sparse explicit mentions of planetary health topics in their program objectives we have elected not to include these course offerings as qualifying for graduate-level education free for medical student enrollment.

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1.14 Patient Encounters

The “Practice of Medicine” course, which is the portion of the GW curriculum that covers training for patient encounters, does not include specific training for having conversations with patients about the health effects of climate change.

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1.15 Environmental History

The “Practice of Medicine” course, which is the portion of the GW curriculum that covers training for patient encounters, does not include specific training for taking a full environmental exposure history.

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1.16 Faculty Incentives

There are currently no faculty incentives to include topics in planetary health in existing courses or to create new courses.

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Interdisciplinary Research in Health and Environment

Section Overview: This section evaluates the quality and quantity of interdisciplinary research in health and environment at the medical school.

Metric	Points	Description
2.1 Does your institution have a planetary health website, or a website centralizing various campus resources related to health and the environment?	1	There is a website that centralizes various campus resources related to health and the environment.
	0	There is no website.
2.2 Has your institution hosted a conference on planetary health in the past 3 years?	1	Yes, the institution has hosted a conference on planetary health in the past three years.
	0	No, the institution has not hosted an interdisciplinary health conference in the past three years.
2.3 Are there researchers engaged in planetary health research at your institution?	3	Yes, there is a department, institute, or center devoted to planetary health.
	2	Yes, there are individual faculty members who are doing research on topics immersed in planetary health.
	1	Yes, there are individual faculty members who are doing research that is related to planetary health.
	0	No, there is no research on planetary health at this time.
2.4 Is there a dedicated department or institute for multidisciplinary environmental and planetary health research?	1	There is a dedicated department or institute.
	0	There is no dedicated department or institute.
2.5 Is there active recruitment of researchers who focus on planetary health issues?	1	There is active recruitment.
	0	No recruitment efforts are made.

2.6 Is there quantitatively and qualitatively meaningful research that has been authored or co-authored by researchers from your institution on planetary health issues?	2	Yes, researchers from my institution have produced a substantial body of impactful research related to planetary health.
	1	There has been some research related to planetary health generated by researchers from my institution, but it is lacking in quantity and/or quality.
	0	There are no studies authored or co-authored by university researchers on these issues.
2.7 Has your institution joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education?	1	Yes, the institution has joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education.
	0	No, the institution has not joined the Planetary Health Alliance or the Global Consortium on Climate and Health Education.
Section Total (out of 10)	9	

Score Explanations

2.1 Planetary Health Website

There is a [web page](#) that contains GW wide environmental initiatives, opportunities for student involvement, environmental actions the university has taken, academic resources, and environmental research directories.

The department of Environmental and Occupational Health website has links to MPH and doctoral programs, research, internship opportunities, career and alumni network resources, and a departmental news section highlighting climate, environmental, and occupational health stories coming out of the institute.

The School of Medicine and Health Sciences does not explicitly have a website consolidating campus resources dedicated to environmental health, but the newly formed Climate and Health Research Network (CHRN) has an explicit goal of creating a “Climate and Health at GW” webpage to enhance visibility of research on this topic.

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2.2 Planetary Health Conference

The annual conference of the International Society for Environmental Epidemiology (ISEE) will be held at GW and hosted by the Milken Institute SPH in August 2020 (COVID pending).

On May 9, 2019 the Milken Institute hosted a Climate Thematic Working Group Retreat / Science to Action Roundtable on “How a Changing Environment Impacts Population Health,” which was a NSF-Funded Workshop on Climate Litigation. It was a meeting of researchers and other stakeholders to discuss issues of air quality and climate change in cities worldwide.

Every year GW hosts Planet Forward, a project of the Center for Innovative Media at the George Washington University School of Media and Public Affairs, teaches, celebrates, and rewards environmental storytelling by college students. The 2019 event hosted students from 40+ schools and representatives from 100+ organizations. Although the event touches on a large range of topics relating to environmental studies, health related topics have also been included.

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2.3 Planetary Health Individual Researchers

A directory of individual researchers affiliated with GW engaged in sustainability or planetary health research can be found [here](#), but does not currently include research topics or link to researcher bios. There are many researchers affiliated with the School of Medicine specifically and a greater number affiliated with the GW Milken Institute of Public Health.

A list of researchers by college, department, and research topic pertaining to sustainability or planetary health was compiled for the [AASHE STARS](#) program, but has not yet been made publicly available.

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2.4 Institute for Multidisciplinary Research on Health and the Environment

The GW School of Medicine and Health Sciences and the Milken Institute of Public Health (MISPH) have a department of [Environmental and Occupational Health](#) with departmental research focusing on interdisciplinary topics including: Environmental Sustainability, Occupational Health, Risk Science and Policy, Infectious Diseases, and Social and Community Dimensions of Environmental Health. The Milken Institute also has special “Organized Research Units (ORU),” although there is not explicitly an ORU for environmental or climate health, which could be a potential area of growth.

In early 2020 a Cross-Disciplinary Research Fund (CDRF) called the Climate and Health Research Network (CHRN) was approved. It consists of a core group of faculty members led by Susan Anenberg, of the MISPH, who are actively pursuing transdisciplinary research collaborations at GW, and a larger group of other members of the GW community who engage with the topic in various ways.

The CHRN has an explicit goal of forming a Climate and Health Center at GW to further advance their aims in research, education, and science-policy translation.

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2.5 Recruitment of Planetary Health Researchers

There is active recruitment within The Department of Environmental and Occupational Health of the George Washington University Milken Institute School of Public Health for environmental health researchers. (Assessed via query at <https://www.gwu.jobs/> for ‘environmental health’).

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2.6 Meaningful research

Under the “Environmental Sustainability” section of the departmental research page of the Environmental and Occupational Health website there is a link to download a list of publications, projects, and accomplishments related to climate change that have been produced by faculty at the department. The document lists 16 academic publications, mostly in environmental health or public health related journals, between 2011 and 2016. However, the document is dated and does not include anything beyond 2016.

This [webpage](#) links to the directory of faculty involved in sustainability research at GW.

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2.7 Planetary Health Alliance

No GW associated institute has joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education.

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Community Outreach and Advocacy in Environment and Health

Section Overview: This section evaluates the quality of medical school engagement in community programming and outreach and advocacy efforts associated with the environment and health.

Metric	Points	Description
3.1 How often does your institution offer community-facing courses or events regarding planetary health and the environment?	2	The institution offers such community-facing courses or events at least once every year.
	1	The institution offers such community-facing courses or events less than once per year.
	0	The institution does not offer such community-facing courses.
3.2 Does your institution interface with community organizations to promote planetary and environmental health?	1	Yes, the institution formally interfaces with one or more community organizations to promote planetary and environmental health.
	0	No, there is no such community partnership.
3.3 Does your institution have regular coverage of issues related to planetary health in its primary campus magazine?	2	Yes, there is an article related to planetary health in the majority of issues.
	1	In the past year, there has been at least one article related to planetary health.
	0	There has been no mention of planetary health in the last year in the campus magazine
3.4 Does the institution offer continuing medical education courses that address planetary health?	2	Yes, one or more in-person CME courses are offered.
	1	Yes, one or more online CME courses are offered.
	0	There are no courses.
3.5 Does your institution provide opportunities for medical student engagement in developing community resilience to anthropogenic environmental impacts?	1	Yes, the institution has provided opportunities.
	0	No, the institution has not provided opportunities.

3.6 Does institutional marketing (posters, billboards, etc) address climate change or the relationship between health and the environment?	1	Yes, institutional marketing addresses the intersections between climate and health.
	0	No, institutional marketing does not address these intersections.
3.7 Does your medical center have accessible educational materials for patients about environmental health exposures?	1	Yes, the medical center has accessible educational materials.
	0	No, the medical center does not have accessible educational materials.
3.8 Does your institution's endowment portfolio investments include fossil-fuel companies?	3	No, the institution is entirely divested from fossil fuels.
	2	The institution has partially divested from fossil-fuel companies.
	1	The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organized advocacy for divestment.
	0	Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that.
Section Total (out of 13)	8	

Score Explanations

3.1 Community-facing courses

George Washington University sponsored the Group on Earth Observations' annual meeting in 2013. The meeting provides a forum for the earth-observing public health, medical, and other interested communities to exchange information and plan for future collaborations.

GW's Milken Institute SPH hosted a 2015 town hall meeting on climate change and public health featuring authors of the USGCRP draft report, "Impacts of Climate Change on Human Health in the United States: A Scientific Assessment."

The Environmental and Occupational Health Consortium of DC-area Universities that was created by Deans Goldman and Perry held a meeting on the threats climate change poses to Washington, DC in 2016.

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3.2 Community organizations

[Our Partners](#) contains a list of external stakeholders involved in GW related sustainability efforts.

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3.3 Coverage in campus magazine

There is regular coverage in the GW campus publication the ‘GW Hatchet’ on issues of environmental health and climate change. Searches for key terms like ‘environmental, environmental health, climate, climate change, climate health, sustainability’ each yield between 930 and 2000+ results the GW Hatchet’s search function [here](#).

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3.4 Continuing education courses

Dr. Akselrod’s gave a Grand Rounds lecture on climate change and human health to the internal medicine faculty as recently as November 7th, 2019 in a program found [here](#).

Dr. Neelu Tummala is coordinating GW sponsored CME 4 credit course with the Medical Society Consortium on Climate and Health in July, 2020 about how climate change affects health.

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3.5 Community outreach

GW SMHS offers scattered educational opportunities on this subject, such as recent webinars titled “Building Healthier Communities Through Policy, Systems and Environmental (PSE) Change,” or “Community Health Training Institute - Moving from Programs to Policy, Systems and Environmental Change,” but there is no centralized resource for medical students interested in doing this work in the community. Individual students have taken steps toward action on their own, but without GW SMHS support specifically organized around this subject. The GW sustainability website offers opportunities for student engagement, but there is no medical student or medical school specific community outreach organizing related to environmental resilience. The scholarly concentration in Community/Urban Health includes community outreach opportunities as part of its curriculum though which students may elect to work on related topics, however.

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3.6 Marketing

The GW SMHS does not have marketing materials specifically tailored to addressing the intersection between human health and climate change.

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3.7 Patient educational materials

GW does not provide patient education materials specifically about environmental health exposures.

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3.8 Investments

The GW Hatchet [reported](#) on statements made by President LeBlanc (Feb. 2, 2020), “He revealed that about 3 percent of the University’s investments are connected to fossil fuel companies through funds GW invests in.”

On April 23, 2020 the GW Hatchet [reported](#), “[The Board of Trustees Chair Grace] Speights said officials have not made any private investments in at least five years that focus on the extraction of fossil fuels – including all forms of coal, oil and natural gas – and have reduced existing fossil fuel investments by 89 percent.”

On May 26, 2020 the GW Hatchet [reported](#), “The Board of Trustees’ Task Force on Environmental, Social and Governance Responsibility released recommendations that encourage trustees to fully divest GW’s endowment from the fossil fuel industry by 2025.”

On June 29, 2020 the GW Hatchet [reported](#) that the GW's Board of Trustees' pledged to eliminate all fossil fuel investments from its endowment and to achieve carbon neutrality by 2030, with the additional goal to reverse all of its greenhouse gas emissions since its founding in 1821.

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University Support for Student-Led Planetary Health Initiatives

Section Overview: This section evaluates the extent and quality of institutional support for student-led planetary health initiatives, such as funding, programming, etc.

Metric	Points	Description
4.1 Does your medical school offer a year-long fellowship for medical students to enact an initiative related to planetary health?	1	The medical school offers an explicit year-long fellowship for medical students to enact an initiative related to planetary health.
	0	There is no explicit practicum or year-long planetary health fellowship open to medical students.
4.2 Does your medical school have a website where medical students can learn about applying for funding for planetary health initiatives?	1	Yes, there is a website where medical students can learn about applying for funding for initiatives related to planetary health.
	0	No, there is no such website.
4.3 Does your institution have a website where medical students can find the contact information of mentors for planetary health initiatives?	2	The institution has a webpage that lists faculty involved in planetary health.
	1	The institution has a general website or directory that lists faculty and staff members' research and/or academic interests, but is not planetary health specific.
	0	There is no simple means of locating potential mentors for planetary health initiatives.
4.4 Does your medical school have funded, registered student groups dedicated towards fostering a culture of planetary health engagement and scholarship on campus, supported by faculty advisors?	2	Yes, there is a funded student organization with faculty support at my medical school dedicated to planetary health or sustainability in healthcare.
	1	Yes, there is a student organization at my medical school dedicated to planetary health or sustainability in healthcare but it lacks faculty support and/or funding.
	0	No, there is not a funded student organization at my institution dedicated to planetary health or sustainability in healthcare.

4.5 In the past year, has the institution had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	1	Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.
	1	Conferences, speaker series, symposia or similar events related to planetary health that have students as the intended audience.
	1	Cultural arts events, installations or performances related to planetary health that have students as the intended audience.
	1	Wilderness or outdoors programs (e.g., that organize hiking, backpacking, kayaking, or other outings for students) that follow Leave No Trace principles.
Section Total (out of 10)	8	

Score Explanations

4.1 Fellowship opportunity

GW SMHS does not have year-long fellowship opportunities relating specifically to planetary health, but GW offers several dual MD/MPH and MD/Certificate in Public Health programs, which include “[Environmental Health Science and Policy MPH](#)” and “[Global Environmental Health MPH](#).” These programs require a capstone project which would allow the student to enact a planetary health initiative.

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4.2 Funding application website

While there is no specific website that offers *multiple* funding opportunities for GW students to pursue projects in planetary health, there is a website dedicated to the “[Eco-Equity Challenge](#)” where undergraduate or graduate students can apply to receive “funds, training, and mentoring from Sustainability and the Nashman Center to implement their projects” pertaining to environmental or climate justice. However, there is not explicit targeting of medical students for planetary health funding or a webpage from the School of Medicine on the topic.

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4.3 Mentor contact information

List of professors and their specialties, as well as a [media-relations website](#) showcasing professors with specific interest in climate change and climate health can be found on GW websites.

A list of medical student mentors involved in clinical public health can be found [here](#), some of whom are involved in planetary health initiatives. However, there is not a specific page organized by the SMHS that promotes mentors by their involvement in planetary health initiatives. This would be a good goal for the creation of web resources by the newly formed Climate and Health Research Network (CHRN).

A directory of individual researchers affiliated with GW engaged in sustainability or planetary health research can be found [here](#), but does not currently include research topics or link to researcher bios.

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4.4 Registered student group

As of 2019 there is a registered, university-approved, and funded student group of medical students and physician assistant students, the Climate Health Interest Group.

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4.5 Miscellaneous programs and initiatives

- **Garden:**

[GroW Garden](#) is a cooperative urban garden that is managed by undergraduate students and maintained by volunteers, including medical students.

- **Conferences, speaker series, symposia, or similar events:**

- [Planet Forward Summit](#) April 2-3
- [Planet Forward “salons”](#) for community debate

- **Cultural arts events, installations, or performances:**

<https://sustainability.gwu.edu/planet-forward> - environmental storytelling platform many classes and events with renowned chef José Andrés on the intersection between food and sustainability

- **Wilderness or outdoor programs:**

2 week 4th year “wilderness medicine” program for 15 students:

<https://www.gwumc.edu/smhs/mdcatalog/searchdetails.cfm?occourseid=21&cfid=yes>

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Grading

Section Overview

This section focuses on the grading of the report card. The institution received a grade for each of the individual sections as well as an overall institutional grade. Section point totals were tallied, divided by the total points available for the section, and converted to a percentage. The overall institutional grade is an average of the section grades. Letter grades for each section and the institution overall were then assigned according to the table below.

Letter Grade	Percentage
A	80% - 100%
B	60% - 79%
C	40% - 59%
D	20% - 39%
F	0% - 19%

Planetary Health Grades for the George Washington University School of Medicine and Health Sciences

The following table presents the individual section grades and overall institutional grade for the GW SMHS on this medical-school-specific planetary health report card.

Section	Raw Score	Grade
Planetary Health Curriculum	15 / 28 = 53%	C
Interdisciplinary Research in Health and Environment	9 / 10 = 90%	A
Community Outreach and Advocacy in Environment and Health	8 / 13 = 62%	B-
University Support for Student-led Planetary Health Initiatives	8 / 10 = 80%	A-
Institutional Grade	Average of four scores above= 71%	B

Section	
<p>Planetary Health Curriculum</p> <ul style="list-style-type: none"> • Most planetary health topics are covered in a session explicitly dedicated to Climate Change and Health in the PPS3 course. We suggest identifying relevant points in the organ block curricula where these topics can be weaved in to existing didactic materials. • GW SMHS holds special “summits” as part of the core curriculum dedicated to in-depth problem solving for selected topics in public health, some of which are selected for further consideration by public health officials or advance in entrepreneurship competitions. A Climate Health Summit could provide a rich educational experience in illustrating the connections between the environment and human health while using student-led innovations to make progress towards improving planetary health. 	C
<p>Interdisciplinary Research in Health and Environment</p> <ul style="list-style-type: none"> • GW SMHS could promote the activities of the Climate and Health Research Network (CHRN) to medical students, and support its efforts to foster increased cross-institutional collaboration in planetary health research. • The GW Sustainability office could promote researchers involved in planetary health research by updating its publicly available database of sustainability researchers to include their research topics and/or links to their personal faculty webpages. 	A
<p>Community Outreach and Advocacy in Environment and Health</p> <ul style="list-style-type: none"> • The Climate Health Interest Group at GW SMHS should consider organizing community and advocacy events relating to planetary health. • Patient education materials specific to environmental exposures should be available in all GW medical facilities in order to promote patient awareness and safety. 	C+
<p>University Support for Student-led Planetary Health Initiatives</p> <ul style="list-style-type: none"> • Opportunities for student-led research in planetary health could be further supported by the university by offering scholarships dedicated to advancing research in fields relating to planetary health. • The GW SMHS could also consider reintroducing the Environmental Health scholarly concentration as a way of supporting student interest and initiatives relating to planetary health. 	A-
<p>Overall</p> <ul style="list-style-type: none"> • The George Washington University has made considerable efforts to improve its 	

sustainability footprint in recent years, especially as the (largely undergraduate) student led movement for divestment has gained traction among university officials.

- Cross-institute research in planetary health is receiving increased support with the newly formed Climate and Health Research Network, which should help surpass administrative barriers to multidisciplinary research within the university.
- The GW SMHS already has a strong focus on clinical public health, so we believe further integration of planetary health into the medical curriculum will be supported.