

Planetary Health Report Card (Medicine):

University of Pittsburgh School of Medicine



2023-2024 Contributing Team:

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Summary of Findings

Overall	В
<u>Curriculum</u>	C -

- The University of Pittsburgh School of Medicine (UPSOM) includes a topic in climate change/climate action within the social medicine thread of the curriculum. A case on the cardiovascular effects of heat waves and the impact of climate change is included in the pre-clinical curriculum. Climate change topics are also included in an elective professional enrichment course.
- **Recommendations:** We recommend that relevant planetary health effects be addressed routinely throughout the pre-clinical education rather than only in stand-alone lectures or electives. The medical school should also provide medical students with patient education materials on climate change and the effects of the environment on their health to be able to initiate effective conversations with patients.

Interdisciplinary Research

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- The UPSOM is a member of the Global Consortium on Climate and Health Education and has many faculty members who have a primary or secondary research interest in planetary health.
- **Recommendations**: We recommend the medical school sponsors a planetary health conference or poster session & student research fellowship, require laboratories to participate in the Green Labs Program, and ensure that planetary health researchers can use Pitt resources to incorporate community member feedback.

Community Outreach and Advocacy

C +

- First year medical students begin their studies with a tour of historically excluded neighborhoods of Pittsburgh to hear from community advocates and visit community gardens.
- **Recommendations**: We recommend that the Office of Sustainability for the Health Sciences (OSHS) ensures continued engagement from medical students and faculty with local organizations including: Tree Pittsburgh, Environmental Health Project, Sustainable Pittsburgh, Women for a Healthy Environment, UrbanKind, and community gardens throughout the neighborhood.

Support for Student-Led Initiatives

A

- The UPSOM supports student groups dedicated to planetary health. Pitt Students for One Health receives funding from the Student Union to plan events and works closely with medical school faculty. Clinicians for Climate Action hosts a website that includes multiple research projects and potential mentors. The initiation of the student advisory board to the Deans of Sustainability has been an important achievement this year.
- **Recommendations**: We recommend that the new OSHS create a website or newsletter to advertise all the amazing events, research projects, and resources directly to students.

Campus Sustainability

B

- With the creation of OSHS, the medical school made exponential progress this year. There has been an
 improvement in the sustainability in medical school facilities as well with the opening of the West Wing
 which is pursuing LEED certification and utilization of onsite renewable electricity with the planned
 installation of solar panels.
- Recommendations: We recommend the continued development of programming and encourage utilization
 of the Pitt Green Host Program for lunch talks and events hosted at the medical school and participation of
 researchers in the Pitt Green Labs Program.

Statement of Purpose

Planetary health is human health.

The Planetary Health Alliance describes planetary health as "a solutions-oriented, transdisciplinary field and social movement focused on analyzing and addressing the impacts of human disruptions to Earth's natural systems on human health and all life on Earth." 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 Planetary Health Report Card that medical students internationally can use to grade and compare their home institutions on an annual basis. This medical-student-driven initiative aims to compare medical schools nationally and internationally on the basis of discrete metrics in five 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 5) medical school campus sustainability.

Definitions & Other Considerations

Definitions:

- Planetary Health: is described by the Planetary Health Alliance as "the health of human civilisation and the state of the natural systems on which it depends." For example, topics such as climate change, declining biodiversity, shortages of arable land and freshwater, and pollution would all fall under the realm of planetary health. Both planetary health and traditional 'environmental health' examine the relationship between human health and the external environment, including extreme temperatures, chemicals, vector-borne diseases, etc. Planetary health explicitly concerns itself with the potential health harms associated with human-caused perturbations of natural systems. Therefore, the human health focus of planetary health makes the field well-adapted for the context of medical school education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term "planetary health" to satisfy the metric.
- Sustainable Healthcare: As defined by the Academy of Royal Colleges, sustainable
 healthcare involves ensuring the ability to provide good quality care for future generations by
 balancing the economic, environmental, and social constraints and demands within health
 care settings. A sustainable healthcare system maintains population health, reduces disease
 burden and minimizes use of healthcare services.
- Education for Sustainable Healthcare (ESH): is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:
 - 1. Describe how the environment and human health interact at different levels.
 - 2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
 - 3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.
- Medical School vs. Institution: When "medical school" is specified in the report card, this only refers to curriculum and resources offered by the School of Medicine and does not include offerings from other parts of the university (e.g. undergraduate departments (USA), other related departments (e.g. Public Health, Population Health departments). In contrast, when "institution" is specified in the report card, we are referring to the university more

broadly. Any resource reasonably accessible by medical students, no matter where in the institution the resource comes from or if it is specifically targeted for medical students, can meet this metric.

- Environmental history (Metric #19 in Curriculum Section): This is a series of questions providers are taught to ask during medical encounters that elicits patients' exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and mold after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution.
- **Elective:** The word "elective" refers to an optional course or lecture series that a medical student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.
- **Clerkship:** This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations or placements.

Other considerations:

• If there are more than one "tracks" at your medical school with two different curricula (for example, Harvard Medical School has a Pathways and HST curriculum track), you can choose to fill out a report card for each track, or fill out just one report card and average the scores received by each track in cases where the scores are different (see the 2021 Harvard or Oxford report cards as examples).

Added to our resources in 2022, the Planetary Health Report Card <u>Literature Review</u> by <u>Metric</u> collates the evidence behind each of the metrics in the Planetary Health Report Card. It serves as a collection of references for further learning and a resource for those advocating for increased planetary health engagement at their institutions.

Planetary Health Curriculum

<u>Section Overview:</u> This section evaluates the integration of relevant planetary health topics into the medical school curriculum. Today's medical students will be on the frontlines of tackling the health effects of climate and other environmental changes. Therefore, it is critical that medical students are trained to understand the health effects of these changes, as well as planetary health issues and principles more broadly. Topics like the changing geography of vector-borne diseases, the health consequences of air pollution, environmental health inequities, and disaster response principles must be part of every medical school's core curriculum.

Curriculum: General

1.1. Did your medical school offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year? Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year. Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year. The medical school does not have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a lecture on planetary health. No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. Score explanation: The medical school offered an elective entitled "The Environmental Impact of

Score explanation: The medical school offered an elective entitled "The Environmental Impact of Healthcare: How to Heal the Planet and Ourselves" MS 1-2. This included topics such as healthcare sustainability, air pollution and inhaler use, the health benefits of trees, carbon footprinting of healthcare, sustainable foods, and exercise as a sustainable health promotion activity.

Curriculum: Health Effects of Climate Change

	1.2. Does your <u>medical school</u> curriculum address the relationship between extreme heat, health risks, and climate change?	
3	This topic was explored in depth by the core curriculum.	
2	This topic was briefly covered in the core curriculum.	
1	This topic was covered in elective coursework.	
0	This topic was not covered.	

Score explanation:

In a workshop within the population health course for MS2s, students went through a case of heat-related illness which emphasized risk factors within the patient's social history and environment. One of the objectives was: "Recognize the impact of global warming on vulnerable patient populations with cardiovascular disease and the role of social determinants of health in management of chronic disease".

As part of the cardiology block in the Three Rivers Curriculum for MS1s, students discussed a similar case, but focused on chronic heart failure, thus integrating the climate change conversation with our coursework. They not only discussed how social determinants of health intersect with the management of heart failure, but also how we can "counsel patients to protect them from forecasted heat waves."

An Emergency Medicine case discussion is provided in the Adult Inpatient Medicine Clerkship during the third year that details the diagnosis and medical management of hyperand hypothermia. It does not, however, explore the way in which these conditions will become more common with the changing climate or how well the healthcare system is equipped to handle large volumes of these cases on days of extreme temperature. In other words, the link between extreme temperatures and climate change is not discussed in this lecture.

${\bf 1.3.\ Does\ your\ \underline{medical\ school\ } curriculum\ address\ the\ impacts\ of\ extreme\ weather\ events\ on\ individual\ health\ and/or\ on\ health care\ systems?}$

- This topic was explored **in depth** by the **core** curriculum.
- 2 This topic was **briefly** covered in the **core** curriculum.
- 1 This topic was covered in **elective** coursework.
- 0 This topic was **not** covered.

Score explanation: The topic of natural disasters and extreme weather events was not covered as part of the core curriculum or elective coursework.

1.4. Does your <u>medical school</u> curriculum address the impact of climate change on the changing patterns of infectious diseases?

- This topic was explored **in depth** by the **core** curriculum.
- 2 This topic was **briefly** covered in the **core** curriculum.
- 1 This topic was covered in **elective** coursework.
- 0 This topic was **not** covered.

Score explanation: This topic was not covered as part of the core curriculum in any case-based learning sessions which focused on infectious disease or microbiology.

1.5. Does your $\underline{\text{medical school}}$ curriculum address the respiratory health effects of climate change and air pollution?

- 3 This topic was explored **in depth** by the **core** curriculum.
- 2 This topic was **briefly** covered in the **core** curriculum.
- 1 This topic was covered in **elective** coursework.

0 This topic was **not** covered.

Score explanation: The topic was covered briefly in the Body Fluid Homeostasis - Pulmonary course during the M2 year. In the lectures on COPD and lung cancer, risk factors mention environmental air pollution as a contributor of the development and exacerbation of asthma and lung cancer. "Weather changes" and air pollution are also listed as a common asthma trigger. The specific diseases caused by various chemicals and compounds, including asbestos and coal, are also explored in a lecture entitled "Restrictive Lung Diseases" under "Pneumoconioses".

1.6. Does your <u>medical school</u> curriculum address the cardiovascular health effects of climate change, including increased heat?

- 3 This topic was explored **in depth** by the **core** curriculum.
- 2 This topic was **briefly** covered in the **core** curriculum.
- 1 This topic was covered in **elective** coursework.
- 0 This topic was **not** covered.

Score explanation: This topic was covered in a workshop under the MS2 Population Health course, where students went through a case of heat-related illness which emphasized risk factors within the patient's social history and environment, with a reference to her neighborhood being classified as a "heat island". One of the objectives was: "Recognize the impact of global warming on vulnerable patient populations with cardiovascular disease and the role of social determinants of health in management of chronic disease."

As part of the cardiology block in the Three Rivers Curriculum for MS1s, students discussed a similar case, but focused on chronic heart failure. They not only discussed social determinants of health like the MS2s, but the workshop also had the objective of how to "counsel patients to protect them from forecasted heat waves."

1.7. Does your <u>medical school</u> curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?

- 3 This topic was explored **in depth** by the **core** curriculum.
- 2 This topic was **briefly** covered in the **core** curriculum.
- 1 This topic was covered in **elective** coursework.
- 0 This topic was **not** covered.

Score explanation: This topic is not covered in the core curriculum or in an elective.

1.8. Does your <u>medical school</u> curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?

3 This topic was explored **in depth** by the **core** curriculum.

This topic was briefly covered in the core curriculum.
This topic was covered in elective coursework.
This topic was not covered.

Score explanation: The elective MS3 course "Medical Nutrition" does not feature food security in the learning objectives, but it includes optional readings such as "Promoting Food Security for All Children" and a podcast called "Food Insecurity." The relationships between these factors were not addressed. The Environmental Impact of Healthcare: How to Heal the Planet and Ourselves" MS 1-2 elective course covers this topic.

1.9. Does your <u>medical school</u> curriculum address the outsized impact of climate change on marginalized populations such as those with low SES, women, communities of color, Indigenous communities, children, homeless populations, and older adults?

- This topic was explored **in depth** by the **core** curriculum.
- 2 This topic was **briefly** covered in the **core** curriculum.
- 1 This topic was covered in **elective** coursework.
- 0 This topic was **not** covered.

Score explanation: The Population Health (MS2 course) syllabus mentions that city policies on environmental hazards are often biased towards communities of color - "City sanitation department policies that concentrate trash transfer stations and other environmental hazards disproportionately in communities of color". In a workshop within this course, students went through a case of heat-related illness which emphasized risk factors within the patient's social history and environment. One of the objectives was: "Recognize the impact of global warming on vulnerable patient populations with cardiovascular disease and the role of social determinants of health in management of chronic disease". The MS1s reviewed a similar case on heat-related chronic heart failure during their cardiology block.

The following resource was suggested for student review: "Racial and socioeconomic disparities in heat-related health effects and their mechanisms: a review"

1.10. Does your <u>medical school</u> curriculum address the unequal regional health impacts of climate change globally?

- 3 This topic was explored **in depth** by the **core** curriculum.
- 2 This topic was **briefly** covered in the **core** curriculum.
- 1 This topic was covered in **elective** coursework.
- 0 This topic was **not** covered.

Score explanation: This topic was covered in the elective professional enrichment course: Medicine and Climate Change (Spring 2023). One session reviews "the current state of climate change and the key global and local health impacts." This content was then repeated in a Flex week on Planetary Health in February 2024.

Curriculum: Environmental Health & the Effects of Anthropogenic Toxins on Human Health

1.11. Does your medical school curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)? 3 This topic was explored in depth by the core curriculum. 2 This topic was briefly covered in the core curriculum. 1 This topic was covered in elective coursework. O This topic was not covered.

Score explanation: The syllabus for the Reproductive course in the legacy curriculum briefly mentions that environmental exposures such as endocrine disruptors has been a reason for delayed puberty. It also states that congenital malformations can be caused by environmental teratogens. There is no information on the specifics of industry-related environmental toxins and their impact on reproductive health.

1.12. Does your <u>medical school</u> curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?

- 3 This topic was explored **in depth** by the **core** curriculum.
- 2 This topic was **briefly** covered in the **core** curriculum.
- 1 This topic was covered in **elective** coursework.
- 0 This topic was **not** covered.

Score explanation: The elective "Environmental Health" covered the topic of local factory waste and pollution. Specifically, one lecture covered a fire at the Clairton Coke Works factory that caused a spike in childhood ER visits and was a huge air pollution problem in the surrounding community. This topic was also covered in an optional lunch panel on careers in environmental health.

1.13. To what extent does your <u>medical school</u> emphasize the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?

- Indigenous knowledge and value systems are **integrated throughout** the medical school's planetary health education
- Indigenous knowledge and value systems as essential components of planetary health solutions are included **briefly** in the core curriculum.
- Indigenous knowledge and value systems as essential components of planetary health solutions are included in **elective** coursework.
- 0 This topic was **not** covered.

Score explanation: No mention of indigenous knowledge and value systems in association with climate or planetary health solutions was found in the core curriculum or elective coursework.

1.14. Does your <u>medical school</u> curriculum address the outsized impact of anthropogenic environmental toxins on marginalized populations such as those with low SES, women, communities of color, children, homeless populations, Indigenous populations, and older adults?

- This topic was explored **in depth** by the **core** curriculum.
- 2 This topic was **briefly** covered in the **core** curriculum.
- 1 This topic was covered in **elective** coursework.
- 0 This topic was **not** covered.

Score explanation: Population Health (MS2 course): Slides mention that residential racial segregation leads to "unhealthy physical exposures", which harm childhood and adult health. Slides mention that one effect of neoliberalism/capitalism is environmental pollution, due to industry deregulation. Slides show a map of areas with highest concentration of black carbon in air in Pittsburgh, as well as a map of Pittsburgh overlaid with area deprivation index scores (a metric linked to several healthcare outcomes, including higher rates of diabetes and cardiovascular disease, increased utilization of health services, and earlier death).

Curriculum: Sustainability

1.15. Does your <u>medical school</u> curriculum address the environmental and health co-benefits of a plant-based diet?

- 3 This topic was explored **in depth** by the **core** curriculum.
- 2 This topic was **briefly** covered in the **core** curriculum.
- 1 This topic was covered in **elective** coursework.
- 0 This topic was **not** covered.

Score explanation: This topic was covered during the Culinary Medicine Elective cooking classes at Phipps Teaching Kitchen offered to pre-clinical students. Students learned about the benefits of a plant-based diet to health and the environment and then made vegetarian and vegan dishes with the instruction of a professional chef. The Office of Sustainability also offered an elective cooking class covering these topics as well as their benefits to the planet with a professional chef.

1.16. Does your <u>medical school</u> curriculum address the carbon footprint of healthcare systems?

- This topic was explored **in depth** by the **core** curriculum
- 2 This topic was **briefly** covered in the **core** curriculum.
- 1 This topic was covered in **elective** coursework.
- 0 This topic was **not** covered.

Score explanation: The "Medicine and Climate Change" elective explores this in detail in the "The Carbon Footprint of Healthcare" lecture. This topic was addressed in an optional lunch time panel discussion on "Careers in Environmental Health".

1.17. Does your <u>medical school</u> curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum? (points for each)	
2	The health and environmental co-benefits of avoiding over-medicalisation, over-investigation and/or over-treatment
2	The environmental impact of pharmaceuticals and over-prescribing as a cause of climate health harm. Alternatively teaching on deprescribing where possible and its environmental and health co-benefits would fulfill this metric.
1	The health and environmental co-benefits of non-pharmaceutical management of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK.
1	Environmental impact of surgical healthcare on planetary health and the climate crisis, and how can it be mitigated.
1	The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anesthesia environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions
1	The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers.
1	Waste production within healthcare clinics and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting)
	 Score explanation: Built environment is covered in the surgery clerkship, but only in the context of patient background, not necessarily re: the impacts of surgical healthcare on the environment. Environmental impact of anesthesia is covered in the required text for the Anesthesia clerkship, but not elsewhere. Environmental impact of inhalers not covered.

Curriculum: Clinical Applications

1.18. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies to have conversations with patients about the health effects of climate change?	
2	Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum.
1	Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework.

No, there are **not** strategies introduced for having conversations with patients about climate change

Score explanation: This is not incorporated into any standardized patient simulation prior to starting clerkships.

1.19. In training for patient encounters, does your medical school's curriculum introduce strategies for taking an environmental history or exposure history? 2 Yes, the core curriculum includes strategies for taking an environmental history. 1 Only elective coursework includes strategies for taking an environmental history. 0 No, the curriculum does not include strategies for taking an environmental history.

Score explanation: Extensive practice and focus is placed on obtaining a social history in the Medical Interviewing courses. However, the importance of these elements in the context of climate change is not emphasized. For example, it is encouraged to discuss access to food, but evaluating the importance of this information in the context of environmental health is not emphasized. Environmental pollution is not introduced as an important component of social history-taking.

Curriculum: Administrative Support for Planetary Health

1.20. Is your medical school currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education? Yes, the medical school is currently in the process of making major improvements to ESH/planetary health education. Yes, the medical school is currently in the process of making minor improvements to ESH/planetary health education. No, there are no improvements to planetary health education in progress.

Score explanation: Planetary health topics were included in the social medicine thread in the complete curriculum redesign in Fall of 2023 and working to incorporate these into cases throughout the preclinical years. The Office of Sustainability in the Health Sciences is working to incorporate a session on sustainable waste management during the pre-clerkship week.

1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the core curriculum? 6 Planetary health/ESH topics are well integrated into the core medical school curriculum. 4 Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum. 2 Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s).

0 There is **minimal/no** education for sustainable healthcare.

Score explanation: ESH at Pitt Med is currently covered in standalone lectures (e.g. environmental exposures) or very tangentially as part of SDoH curriculum. There are two elective courses that cover ESH.

1.22. Does your <u>medical school</u> employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?

- Yes, the medical school has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare
- No, the **medical school** does **not** have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare.

Score explanation: There are content leads for the Social Medicine threads in the Three Rivers Curriculum who oversee the integration of ESH concepts in the curriculum. This is advised by the Deans of Sustainability.

Section Total (29 out of 72)	С-
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Back to Summary Page here

Are there additional curriculum resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Interdisciplinary Research

Section Overview: This section evaluates the quality and quantity of interdisciplinary planetary health research at the medical school and broader institution. Interactions between health and the environment are complex and multifactorial. While climate change has been extensively studied from an environmental science perspective, planetary health is an emerging field. As leading health institutions with talented researchers and research resources, medical schools should fund research studying the health effects of climate change and anthropogenic environmental toxins. This obligation is particularly strong because the public and policymakers are more attentive to climate change when its implications for human health are emphasized.

2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your medical school? Yes, there are faculty members at the medical school who have a primary research focus in planetary health or healthcare sustainability. Yes, there are individual faculty members at the medical school who are conducting research related to planetary health or healthcare sustainability, but it is not their primary research focus. There are planetary health and/or healthcare sustainability researchers at the institution, but none associated with the medical school. No, there are no planetary health and/or healthcare sustainability researchers at the institution or medical school at this time.

Score explanation: There are faculty members at the medical school conducting research in environmental health, specifically in the Pulmonary Medicine and Obstetrics and Gynecology departments. A few faculty have a primary research focus on planetary health. Dr. Woods researches the environmental impact of surgery. Dr. Maximous researches the effect of climate change and the environment on pulmonary health. These faculty additionally mentor fellows and medical students with primary research interests in environmental health. There are additional faculty conducting environmental science research outside of the medical school. Some references from faculty related to Pulmonary and Environmental health are:

https://pubmed.ncbi.nlm.nih.gov/36251286/ https://pubmed.ncbi.nlm.nih.gov/35612914/

https://pubmed.ncbi.nlm.nih.gov/34818133/

2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your <u>institution</u> ?	
3	There is at least one dedicated department or institute for interdisciplinary planetary health research.
2	There is not currently a department or institute for interdisciplinary planetary health research, but there are plans to open one in the next 3 years.
1	There is an Occupational and Environmental Health department , but no interdisciplinary department or institute for planetary health research.
0	There is no dedicated department or institute.

Score explanation: There is a Center for Healthy Environments and Communities at the School of Public Health. There is also a Center for Climate and Global Change which is a multidisciplinary center for researchers which is based in the School of Arts & Sciences. Finally there is the Mascaro Center for Sustainable Innovation which provides interdisciplinary research, education and engagement opportunities.

2.3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your $\underline{\text{medical}}$ school?

- Yes, there is a process in which community members impacted by climate and environmental injustice have **decision-making power** in the climate + environmental research agenda.
- Yes, there is a process in which community members impacted by climate and environmental injustice **advise** the climate + environmental research agenda.
- No, but there are **current efforts** to establish a process for community members to advise or make decisions on the research agenda.
- There is **no** process, and **no** efforts to create such a process.

Score explanation: The Clinical and Translational Science Institute has the Community PARTners core service which offers Community Engagement Studios to researchers. They organize an advisory board of community members impacted or with lived experience surrounding this research to provide feedback on the development and implementation of research projects at the School of Medicine directly to the principal investigator. The Office of Sustainability in medicine also partners with the Community Vitality Collective to gain feedback.

2.4. Does your <u>institution</u> have a planetary health website that centralizes ongoing and past research related to health and the environment?

- There is an **easy-to-use**, **adequately comprehensive** website that **centralizes** various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities.
- There is a website that **attempts to centralize** various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive.
- The **institution** has an **Office of Sustainability website** that includes **some** resources related to health and the environment.
- O There is **no** website.

Score explanation: Pitt Sustainability is a web page that compiles funding opportunities, upcoming events, leaders in planetary health, and other resources. The research section includes an interdisciplinary annual report of sustainability research. The website is well updated and has current events for the coming year. This web page is the official online hub for the Pitt Sustainability office.

2.5. Has your institution recently hosted a conference or symposium on topics related to

Planetary health? Yes, the medical school has hosted at least one conference or symposium on topics related to planetary health in the past year. Yes, the institution has hosted at least one conference or symposium on topics related to planetary health in the past year. Yes, the institution has hosted a conference on topics related to planetary health in the past three years. The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event. No, the institution has not hosted a conference on topics related to planetary health in the past three years.

Score explanation: The University of Pittsburgh Office of Sustainability hosted a <u>Student Sustainability Symposium</u> on 21 April 2023. UPMC hosted <u>CleanMed</u> 2023, a conference for leaders in healthcare sustainability, from 23 May to 25 May 2023. In addition, Pitt was a virtual host for the <u>Global</u> Conference on <u>Sustainability</u> in <u>Higher Education</u> from 12 October to 14 October 2021.

$2.6. \ Is \ your \ \underline{medical \ school} \ a \ member \ of \ a \ national \ or \ international \ planetary \ health \ or \ ESH \ organization?$

- Yes, the medical school is a member of a national or international planetary health **or** ESH organization
- 0 No, the medical school is **not** a member of such an organization

Score explanation: The University of Pittsburgh School of Medicine is a member of the <u>Global</u> <u>Consortium on Climate and Health Education</u>. The affiliated hospital system, UPMC, is a member of Practice Greenhealth.

Section Total (15 out of 17) A

Back to Summary Page here

Are there additional research resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Community Outreach and Advocacy

<u>Section Overview:</u> This section evaluates medical school engagement in community outreach and advocacy efforts associated with planetary health. Researching and teaching planetary health is necessary but not sufficient. It is critical that institutions also directly engage with communities most affected by environmental health harms. Although climate change is a problem largely created by those with power and resources, its impacts fall disproportionately on under-resourced populations and communities of color. Institutions should partner with local communities affected by climate change and pollution to share information about environmental health threats, advocate together for change, and provide opportunities for students to be a part of this work.

3.1. Does your medical school partner with community organizations to promote planetary and environmental health? Yes, the medical school meaningfully partners with multiple community organizations to promote planetary and environmental health. Yes, the medical school meaningfully partners with one community organization to promote planetary and environmental health. The institution partners with community organizations, but the medical school is not part of that partnership. No, there is no such meaningful community partnership.

Score explanation: During orientation, MS1 students attend required neighborhood tours in underserved areas experiencing climate injustice and meet community leaders of local nonprofits. Nonprofits visited include community gardens, and volunteer opportunities were discussed. In addition, Pitt Students for One Health is a student organization that focuses on improving health by acknowledging the complex intersection between people, animals, plants, and their shared environments. It partners with community organizations such as Tree Pittsburgh, Repair the World Pittsburgh, City of Pittsburgh Volunteer Clean Up, and the Pittsburgh East End Cooperative Garden. In addition, Pitt Med partners with community organizations through the Community Alliance Program, including the Environmental Charter School.

3.2. Does your <u>medical school</u> offer community-facing courses or events regarding planetary health?	
3	The medical school offers community-facing courses or events at least once every year.
2	The medical school offers courses or events open to the community at least once per year, but they are not primarily created for a community audience.
1	The institution has offered community-facing courses or events, but the medical school was not involved in planning those courses or events.
0	The institution/medical school have not offered such community-facing courses or events.

Score explanation: The University of Pittsburgh hosts online and in-person public lectures on climate change and environmental health. Some are organized in collaboration with the Center for Sustainable Business. The Climate and Global Change Center has organized events and outreach activities like K-12 mobile science labs, and Pitt Sustainability has organized events such as K-12 reading groups. However, the University of Pittsburgh School of Medicine does not regularly offer community-facing events on this topic.

3.3. Does your medical school have regular coverage of issues related to planetary health and/o	or
sustainable healthcare in university update communications?	

- Yes, all students **regularly** receive communication updates dedicated to planetary health and/or sustainable healthcare.
- Yes, planetary health and/or sustainable healthcare topics are sometimes included in communication updates.
- O Students **do not** receive communications about planetary health or sustainable healthcare.

Score explanation: The regular newsletter from the Social Medicine Fellows Program (SMFP) sometimes includes communications on planetary health and sustainability. The March 2023 newsletter discussed food insecurity in relation to climate change and methane buildup. Events such as Garden Basics through Grow Pittsburgh were mentioned, and organizations such as Phipps Homegrown Edible Garden Program were discussed. In March 2023, a new Office for Sustainability in Medicine was announced and has been communicating updates and events. Additionally the Office of Medical Education occasionally sends out sustainability updates.

3.4. Does the <u>institution</u> or <u>main affiliated hospital trust</u> engage in professional education activities targeting individuals post graduation with the aim of ensuring their knowledge and skills in planetary health and sustainable healthcare remain up to date during their professional career?

- Yes, the **institution** or **main affiliated hospital trust** offers multiple in-person or online courses relating to planetary health and/or sustainable healthcare for post-graduate providers, including at least one with a primary focus of planetary health.
- Yes, the **institution** or **main affiliated hospital trust** offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers
- There are **no** such accessible courses for post-graduate providers

Score explanation: Magee-Womens hosts an annual Environmental Health Literacy Symposium for health care providers. The purpose of the symposium is to educate health care providers around current research in the field of environmental health and to supply tools to assist them in counseling patients. The UPMC CME catalog does not contain any course offerings on planetary health.

3.5. Does your <u>medical school</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about environmental health exposures?

Yes, the **medical school** or <u>all</u> **affiliated hospitals** have accessible educational materials for patients.

Some affiliated hospitals have accessible educational materials for patients.

No affiliated medical centres have accessible educational materials for patients.

Score explanation: Magee Women's Hospital includes environmental education in its programming for new parents. The free environmental health classes for child-bearing families includes education about environmental hazard reduction. This information is also included in their prenatal/postnatal online newsletter. However, not all hospitals have accessible patient education materials. The medical school does not have any accessible patient education materials on environmental health exposures. Additionally UPMC as a whole offers a Health Library which includes an article on <a href="Environmental Environmental En

3.6. Does your medical school or its affiliated teaching hospitals have accessible educational materials for patients about the health impacts of climate change? Yes, the medical school or all affiliated hospitals have accessible educational materials for patients. Some affiliated hospitals have accessible educational materials for patients. No affiliated hospitals have accessible educational materials for patients.

Score explanation: While UPMC offers education materials on Environmental health. They do not specifically address the health impacts of climate change.

Section Total (8 out of 14)	C+
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Back to Summary Page here

Are there additional community engagement and advocacy resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Support for Student-Led Planetary Health Initiatives

<u>Section Overview:</u> This section evaluates institutional support for student-led planetary health initiatives, such as funding, fellowships, programming, and student groups. Planetary health is a young field and, as young people facing a future deeply shaped by climate change, students are often some of the first at an institution to engage with it. Institutions should provide support for students to engage in sustainability quality improvement (QI) initiatives, discover mentors in their area of interest, and receive funding for planetary health projects.

4.1. Does your <u>medical school</u> or your <u>institution</u> offer support for medical students interested in enacting a sustainability initiative/QI project?

- Yes, the **medical school** or **institution** *either* offers grants for students to enact sustainability initiatives/QI projects *or* sustainability QI projects are part of the core curriculum.
- The **medical school** or **institution** encourages sustainability QI projects (to fulfill clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, **but** there is no student funding available and there is no requirement to participate.
- No, **neither** the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects.

Score explanation: The institution (University of Pittsburgh) offers numerous grants and awards for students interested in pursuing sustainability projects. These grants are available for individual students (Pitt Green Fund), student groups (MCSI Student Group Sustainability Grants), building innovations (Sustainability Student Prototyping Grants), and events (Global Studies Center Student Center Student Organization Event Funding). This website highlights existing projects and details about how sustainable practices have been achieved across campus.

4.2. Does your <u>institution</u> offer opportunities for medical students to do research related to planetary health and/or sustainable healthcare?

- The **institution** has a **specific** research program or fellowship for students interested in doing planetary health/sustainable healthcare research.
- There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these **require student initiative** to seek these out and carry them out in their spare time.
- There are **no opportunities** for students to engage in planetary health/sustainable healthcare research.

Score explanation: There are opportunities for students to get involved with research in planetary health and sustainable healthcare sponsored by the medical school's Office of Sustainability. There are a few funded research programs through Pitt Sustainability but they are only for undergraduate students and not available for medical students. Many of the opportunities medical students may have to do research have the potential to be funded by the medical school's nonspecific research grants (Dean's summer research program, Social Medicine Fellows, PhD program, etc.).

- 4.3. Does the <u>medical school</u> have a webpage where medical students can find specific information related to planetary health and/or sustainable healthcare activities and mentors within the medical school? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.
- The **medical school** has a webpage with specific information related to planetary health or sustainable healthcare that includes up-to-date information on relevant initiatives and contact information of potential mentors.
- There is a **medical school** webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information.
- There is **no medical-school** specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.

Score explanation: There is a School of Medicine website for the <u>Clinicians for Climate Action</u> group. This website includes faculty mentors, their contact information and specific advocacy and research interests. There is up to date information about ongoing projects, events, conferences, and achievements. There is no direct posting of available research opportunities on this webpage.

- 4.4. Does your <u>medical school</u> have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?
- Yes, there is a student organization **with faculty support** at my medical school dedicated to planetary health or sustainability in healthcare.
- Yes, there is a student organization at my medical school dedicated to planetary health or sustainability in healthcare but it **lacks faculty support.**
- No, there is **not** a student organization at my institution dedicated to planetary health or sustainability in healthcare.

Score explanation: There are multiple student organizations within the medical school that cover the topics of planetary health engagement, scholarship, and advocacy. All of these groups have a dedicated faculty advisor that is supportive in their endeavors as well as funding available for events and conference attendance. These groups include Pitt Students for One Health, the Global Health and Underserved Populations Group, and the Social Medicine Fellows.

- 4.5. Is there a student liaison representing sustainability interests who serves on a <u>medical school</u> or <u>institutional</u> decision-making council to advocate for curriculum reform and/or sustainability best practices?
- Yes, there is a student representative that serves on a medical school or institutional decision-making council/committee.
- 0 No, there is no such student representative.

Score explanation: The Deans of Sustainability in the Health Sciences has instituted a student advisory committee for the medical school office of sustainability including representation from every class.

There will also be three medical students who are elected to the Student Executive Council of the medical school to represent planetary health in the school and curriculum.

4.6. In the past year, has the <u>institution</u> 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	Panels, speaker series, or similar events related to planetary health that have students as an intended audience.
1	Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.
1	Cultural arts events, installations or performances related to planetary health that have students as an intended audience.
1	Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.
1	Wilderness or outdoors programs (e.g., that organize hiking, backpacking, kayaking, or other outings for students)

Score explanation:

- 1. UPSOM Culinary Medicine Interest Group held an herb growing workshop in February 2023. First year medical students also visit community gardens during their Neighborhood Walks sponsored by the Social Medicine Fellows.
- 2. In February 2024, UPSOM's Pitt Students for One Health hosted a lunch talk for medical students on Careers in Environmental Health and invited physicians to share their story on how they have incorporated healthcare sustainability into their career. Also in February 2024, a new Planetary Health Journal Club was started to engage medical and graduate students in the schools of Health Sciences in discussions about the latest research on topics of environmental health and healthcare sustainability.
- 3. In spring of 2023 Clinicians for Climate Action sponsored a Frackland tour and invited students to visit fracking sites and hear from community activists on how they can advocate for patients who suffer from the health consequences of living in proximity to fracking sites.
- 4. Pitt Sustainability regularly hosts tree planting volunteering events.
- 5. UPSOM's Wilderness Medicine interest group organizes outdoor trips where medical students participate in simulations of medical scenarios that can occur outdoors as well as hiking trips. The University of Pittsburgh Campus Recreation also organizes outdoor and adventure pursuits trips. Campus Rec also hosts regular events through their Natural Connections series including yoga, planting, nature walks, climbing.

Section Total (14 out of 15)	A

Back to Summary Page <u>here</u>

Are there additional student-led initiative resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

Campus Sustainability

Section Overview: This section evaluates the support and engagement in sustainability initiatives by the medical school and/or institution. The healthcare industry is a major contributor to greenhouse gas emissions as well as pollution that harms local, regional, and global ecosystems. While healthcare is, by nature, a resource-intensive endeavor, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinizing every aspect of how our systems operate, from where we source our energy, to how we build our infrastructure, to what companies we invest in. Our medical schools, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimizing environmental impact.

5.1. Does your medical school and/or institution have an Office of Sustainability? Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is at least one designated staff member for sustainability at the hospital and/or medical school. There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but no specific staff member in charge of medical school and/or hospital sustainability. There are no salaried sustainability staff, but there is a sustainability task force or committee There are no staff members or task force responsible for overseeing campus sustainability

Score explanation: The Medical School opened a new Office of Sustainability in the Health Sciences this fall including an associate, assistant dean and program manager to work alongside the The University of Pittsburgh Office of Sustainability is directed by Dr. Aurora Sharrard. The University office of Sustainability employs 19 other staff members in addition to interns, campus leaders, green ambassadors, and affiliated faculty dedicated to university wide, strategies, policies, collaborations and partnerships to advance the Pitt Sustainability Plan.

5.2. How ambitious is your <u>institution/medical school</u> plan to reduce its own carbon footprint?	
5	The institution/medical school has a written and approved plan to achieve carbon neutrality by 2030
3	The institution/medical school has a written and approved plan to achieve carbon neutrality by 2040
1	The institution/medical school has a stated goal of carbon neutrality by 2040 but has not created a plan to reach that goal or the plan is inadequate
0	The institution/medical school does not meet any of the requirements listed above
	Score explanation: In February 2020, The University of Pittsburgh's Board of Trustees, committed to carbon neutrality by 2037 and this encompasses the medical school. It has a

clear climate action plan updated yearly that outlines the work needed to meet this goal and the progress so far. More information on the Climate Action Plan can be found here. Pitt is also actively tracking their progress through the sustainability dashboard.

5.3. Do buildings/infrastructure used by the medical school for teaching (not including the hospital) utilize renewable energy? 3 Yes medical school buildings are 100% powered by renewable energy 2 Medical school buildings source >80% of energy needs from off-site and/or on-site renewable energy. 1 Medical school buildings source >20% of energy needs from off-site and/or on-site renewable energy. O Medical school buildings source <20% of energy needs from off-site and/or on-site renewable energy.

Score explanation: Currently, it is estimated that less than 20% of the medical school building electricity comes from renewable sources. Scaife Hall has one of the <u>highest energy use intensities</u> on Pitt's campus. The new West Wing addition of Scaife Hall is awaiting LEED silver certification and plans to utilize 100% renewable electrical sources over the next 10 years at least. Solar panels are expected to be installed in 2024 to produce renewable electricity onsite.

5.4. Are sustainable building practices utilized for new and old buildings on the <u>medical school</u> campus, with design and construction of new buildings and remodeling of old buildings conforming to a published sustainability rating system or building code/guideline?

- Yes, sustainable building practices are utilized for new buildings on the medical school campus and the **majority** of old buildings **have been retrofitted** to be more sustainable.
- Sustainable building practices are utilized for new buildings on the medical school campus, but most old buildings have **not been retrofitted.**
- 1 Sustainable building practices are **inadequately or incompletely** implemented for new buildings.
- O Sustainability is **not considered** in the construction of new buildings.

Score explanation: The 2009 renovations of Allen Magee Scaife Hall were designated LEED BD-C status for components related to water use reduction, use of low-emission regional materials, and heat island preventative roofing. Energy usage was reduced through changes such as switching escalators to staircases. The West Wing addition opened in the Fall of 2023 and is pursuing LEED certification. The project has made use of salvaged materials, reduced the need for electricity consumption with a glass facade to allow natural light, reduced air leakage rate, incorporated high-efficiency HVAC, plumbing, and electricity upgrades, and has a cascading stormwater management system with native plants. They also plan to install solar panels in 2024. The old wing of the Allen Magee Scaife Hall is now undergoing a full renovation that is expected to incorporate the same sustainability features as the new addition.

5.5. Has the <u>medical school</u> or <u>institution</u> implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?

- Yes, the medical school or institution has implemented strategies to encourage and provide **environmentally-friendly transportation options** such as safe active transport, public transport, or carpooling and these options are well-utilized by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default.
- The medical school or institution has implemented **some** strategies to provide environmentally-friendly transportation options, but the options are **unsatisfactorily** accessible or advertised.
- The medical school or institution has **not** implemented strategies to encourage and provide environmentally-friendly transportation options.

Score explanation: The University of Pittsburgh allows students, faculty and staff to avoid car commuting by offering fare-free service on all forms of Pittsburgh Regional Transit (PRT) throughout Allegheny County. Additionally, students and staff can utilize POGOH bike share network through unlimited free 30-minute rides. Additionally, Pitt holds a Silver Bicycle Friendly Designation from the League of American Bicyclists and has recently renovated Bigelow Boulevard on campus to be a complete street with separated bike lanes. This information was sent to all students in an email and mentioned at new student orientation, and on the schools website. The fare-free service on PRT is highly utilized by students as parking on campus is expensive and limited.

5.6. Does your <u>medical school</u> have an organics recycling program (compost) and a conventional recycling program (aluminum/paper/plastic/glass)?

- Yes, the medical school has **both** compost **and** recycling programs accessible to students and faculty.
- The medical school has **either** recycling **or** compost programs accessible to students and faculty, but not both.
- There is **no** compost or recycling program at the medical school.

Score explanation: The University of Pittsburgh has ensured that recycling containers are available throughout campus buildings. Scaife Hall has single-stream recycling bins including toner, ink, textile and battery recycling. While the University has multiple compost drop-off locations, the medical school does not have compost bins. This reflects the lack of compost programs within the hospital, which manages the medical school building.

5.7. Does the <u>medical school</u> apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?

- Yes, the medical school has a**dequate s**ustainability requirements for food and beverages, including meat-free days or no red-meat, and **is engaged** in efforts to increase food and beverage sustainability.
- There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The medical school **is engaged** in efforts to increase food and beverage sustainability.

- There are sustainability guidelines for food and beverages, but they are **insufficient or optional.**The medical school is **not** engaged in efforts to increase food and beverage sustainability.
- 0 There are **no** sustainability guidelines for food and beverages.

Score explanation: The medical school offered its first food option in the West Wing Renovation which opened this year. They have contracted with Panera Bread to offer food to the school. There is no information about whether the contract includes any sustainability guidelines. Students are allowed to purchase catering from any restaurant of their choosing for reimbursement by the Student Executive Council for interest group meetings and events. There are no sustainability guidelines for use of this funding. Sometimes event catering is through meal tickets to the affiliated hospital cafeteria. The UPMC Presbyteria cafeteria partners with the Greater Pittsburgh Community Food Bank's Chef's Table program to donate leftover food to community organizations. The hospital no longer appears to offer a weekly farmers market from Freedom Farms. Additionally the cafeteria achieved a LEED-Gold designation, an improvement from last year where they earned silver designation, from the Sustainable Pittsburgh Restaurant Association based on 149 actions across 6 categories of sustainability standards: waste reduction, water conservation, energy efficiency, people, responsible sourcing, and nutrition.

5.8. Does the <u>medical school</u> or <u>institution</u> apply sustainability criteria when making decisions about supply procurement?

- Yes, the medical school has **adequate** sustainability requirements for supply procurement **and** is **engaged** in efforts to increase sustainability of procurement.
- There are sustainability guidelines for supply procurement, but they are **insufficient or optional.**The medical school is **engaged** in efforts to increase sustainability of procurement.
- There are sustainability guidelines for supply procurement, but they are **insufficient or optional.**The medical school is **not engaged** in efforts to increase sustainability of procurement.
- There are **no** sustainability guidelines for supply procurement.

Score explanation: The University of Pittsburgh has optional guidelines for sustainable supply procurement. The Pitt Surplus program facilitates material reuse by coordinating pickup/dropoffs of gently used supplies/furniture to exchange between departments, offices, and individuals for repurposing. The University Stores and online purchasing tool provide designations for "sustainable picks' and "green program" endorsements. These criteria include local sourcing, use of sustainable materials, and climate neutral certifications. The medical school's recent construction and supply procurement has had a focus on sustainable sourcing in accordance with these recommendations.

Materials & Waste Progress, 2018-22 - Pitt Sustainability

LEED certification or better on all new construction and major renovations plans <u>Buildings - Pitt Sustainability</u>

UPMC purchasing with the goal of sustainability: <u>Sustainable Operations, UPMC Environmental</u> Initiatives

West wing: <u>Allen Magee Scaife Hall Addition & Renovation (Pursuing LEED Certification) - Pitt Sustainability</u>

5.9. Are there sustainability requirements or guidelines for events hosted at the medical school?

Every event hosted at the medical school must abide by sustainability criteria.
 The medical school strongly recommends or incentivizes sustainability measures, but they are not required.
 There are no sustainability guidelines for medical school events.

Score explanation: The "Pitt Green Host" program on the main campus provides a certification program for event hosts. The certification program includes online modules and a quiz for certification. The online modules cover topics like food waste composting, zero waste, multiple attendance modalities, food for all dietary needs, and supply procurement. The training can be found here. This allows hosts to access a Microsoft Teams site to request green resources for their event and gain support. Medical school events would be eligible for this certification however the medical school does not require that hosts participate in this program. The medical school is not required to abide by these criteria.

$5.10.\ Does\ your\ \underline{medical\ school}\ have\ programs\ and\ initiatives\ to\ assist\ with\ making\ lab\ spaces$ more environmentally sustainable?}

- Yes, the medical school has **programs** and **initiatives** to assist with making lab spaces more environmentally sustainable.
- There are **guidelines** on how to make lab spaces more environmentally sustainable, but not programs or initiatives.
- There are **no** efforts at the medical school to make lab spaces more sustainable.

Score explanation: The University of Pittsburgh Office of Sustainability has a Pitt Green Labs designation. The criteria for this designation can be found <u>here</u> and are based on Chemicals & Safety, Culture of Sustainability, Energy Consumption & Maintenance, Innovation Actions, Lab Recycling, Purchasing, and Water Conservation. There is a program where labs can fill out a self-assessment to receive points for a laboratory designation. The Medical School has three laboratories, 2 have received the saplings award (25-49% of possible points) and 1 has received the seed award (1-24% of possible points).

5.11. Does your <u>institution's</u> endowment portfolio investments include fossil-fuel companies?

- The institution is **entirely divested** from fossil fuels **and** has made a **commitment to reinvest divested funds** into renewable energy companies or renewable energy campus initiatives.
- 3 The institution is **entirely divested** from fossil fuels.
- The institution has **partially divested** from fossil fuel companies **or** has made a **commitment to fully divest**, but **currently** still has fossil fuel investments.
- The institution has **not divested** from fossil-fuel companies, but faculty and/or students are **conducting organized advocacy** for divestment.
- Yes, the institution has investments with fossil-fuel companies and there have been **no efforts** to change that.

Score explanation: According to the April 2023 Consolidated Endowment Fund Environmental, Social, and Governance Report 2020-21 As of 2022, the Universities endowment fund has 8.1% exposure to fossil fuel holdings. This is an increase from 5.9% in 2021. In the February 2021 report from the Board of Trustees Ad Hoc Committee on Fossil Fuels, will divest from fossil fuels by 2035. Despite this fluctuation, the University currently is on track to meet this commitment.

Section Total (21 out of 32)	В

Back to Summary Page here

Are there additional sustainability resources offered at your medical school or institution not yet asked about that you would like to describe? If so, please do so below.

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 a weighted average of the section grades, with curriculum receiving a higher weight owing to its larger number of metrics. Letter grades for each section and the institution overall were then assigned according to the table below.

Letter Grade*	Percentage	
A	80% - 100%	
В	60% - 79%	
С	40% - 59%	
D	20% - 39%	
F	0% - 19%	

Planetary Health Grades for the University of Pittsburgh School of Medicine

The following table presents the individual section grades and overall institutional grade for the University of Pittsburgh School of Medicine on this medical-school-specific Planetary Health Report Card.

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(29/72) \times 100 = 40\%$	C-
Interdisciplinary Research (17.5%)	$(15/17) \times 100 = 88\%$	A
Community Outreach and Advocacy (17.5%)	(8/14) x 100 = 57%	C+
Support for Student-led Planetary Health Initiatives (17.5%)	(14/15) x 100= 93%	A
Campus Sustainability (17.5%)	(21/32) x 100 = 65%	В
Institutional Grade	$ \begin{array}{l} (0.40 \times 0.3 + 0.88 \times 0.175 + 0.57 \times 0.175 \\ + 0.93 \times 0.175 + 0.65 \times 0.175) = 65\% \end{array} $	В

Report Card Trends

Section Overview

This graph demonstrates trends in overall and section grades for the years in which The University of Pittsburgh School of Medicine has participated in the Planetary Health Report Card initiative.

Planetary Health Report Card Trends for the University of Pittsburgh School of Medicine

