

# Planetary Health Report Card (Medicine):

## University of Washington

# **UW** Medicine

## UW SCHOOL OF MEDICINE

2023-2024 Contributing Team:

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## **Summary of Findings**

Overall	
<u>Curriculum</u>	В
<ul> <li>The planetary health preclinical curriculum has made major improvements since the initiation of the report card with the help of the UW Planetary Health Workgroup and movement towards integrating planetary health as a curricular theme.</li> <li>Recommendations: Moving forward, the curriculum can further strengthen its integration of planetary health by emphasizing indigenous knowledge, reproductive health impacts, and the carbon footprint of the healthcare system as a whole, as well as providing emphasis on planetary health in the clinical curriculum.</li> </ul>	
Interdisciplinary Research	А-
<ul> <li>One of the medical school's strengths is the abundance of research opportunities related to climate health impacts. These are available through organizations such as the UW Center for Health and Environment and the Climate Impacts Group.</li> <li>Recommendations: The medical school should strengthen engagement with climate-related depand increase accessibility to climate-related research opportunities by providing a centralized w increasing access to research mentors in the field.</li> </ul>	ate change I Global partments ebsite and
Community Outreach and Advocacy	В
<ul> <li>The medical school partners with local community organizations such as Washington Physician Responsibility and makes environmental health education available to patients.</li> <li>Recommendations: Opportunities exist for the medical school to partner with the Office of Sust to promote community outreach and advocacy, as well as provide more regular communication about planetary health and sustainable healthcare.</li> </ul>	s for Social stainability to students
Support for Student-Led Initiatives	С
<ul> <li>With the Planetary Health Interest Group, there have been numerous opportunities for students to engage with planetary health both in-person and virtually. However, more structured, integrated, and financial support for student-led initiatives would increase engagement.</li> <li>Recommendations: The medical school should provide concrete financial and mentorship support for students to work on sustainability initiatives and quality improvement projects. These opportunities could be highlighted in the Triple I (Independent Investigate Inquiry) database for first-year students.</li> </ul>	
<u>Campus Sustainability</u>	В
<ul> <li>The University of Washington is mindful of utilizing sustainable building practices for new projretrofitting existing, older buildings is a challenge. The Office of Sustainability is integral to car does a fantastic job of promoting sustainable practices, whether through promoting community promoting recycling/composting.</li> <li>Recommendations: The institution should create more ambitious goals to achieve carbon neutr promote stricter standards regarding sustainability for supply procurement and campus events.</li> </ul>	ects, but npus and events or ality and

#### **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 minimises 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 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> <u>by 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**

Section Overview: 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 <u>medical school</u> offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?

- 3 Yes, the medical school has offered **more than one** elective whose primary focus is ESH/planetary health in the past year.
- 2 Yes, the medical school has offered **one** elective whose primary focus is ESH/planetary health in the past year.
- **1** 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.
- 0 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 University of Washington School of Medicine (UWSOM) has two non-clinical electives and one clinical elective which incorporates planetary health topics. The first non-clinical elective is "Core Topics in Global Health" which offers lectures on environmental health and its impact on maternal, adolescent, and child health such as in the transmission of infectious disease. The second non-clinical elective is "Tropical Medicine" which discusses the impact of climate change on vector-borne diseases and the epidemiological impact of warming temperatures. These two courses are available to first and second year students. The clinical elective "One Health" discusses the intricate links between the health of humans, animals, and the environment, and has the greatest planetary health focus. This course is designed for fourth year students.

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 <b>briefly</b> covered in the <b>core</b> curriculum.	
1	This topic was covered in <b>elective</b> coursework.	
0	This topic was <b>not</b> covered.	

Score explanation: The first year curriculum includes a dedicated lecture to exploring the relationship between climate change, heat extremes, and health. It is titled "Planetary Health Equity" and introduces this concept through the examples of extreme heats and flooding events and discusses the role the healthcare system plays in minimizing the harms of climate change-related events. This includes a break-out activity that focuses on health risks caused by extreme heat.

## **1.3.** Does your <u>medical school</u> curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?

- 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 first year lectures "Planetary Health Equity" and "Justice, Climate Change, and Infectious Disease," the effects of extreme weather events on both individual health and healthcare systems are briefly discussed, but are not explored in depth.

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

3	This topic was explored in depth by the core curriculum.
2	This topic was <b>briefly</b> covered in the <b>core</b> curriculum.
1	This topic was covered in <b>elective</b> coursework.
0	This topic was <b>not</b> covered.

Score explanation: The first year curriculum includes a lecture, "Justice, Climate Change, and Infectious Disease" that goes in-depth into how climate change is impacting global patterns of infectious diseases. This lecture also includes a break-out activity that explores how changing patterns of infectious disease might show up in clinical practice and what physicians might do to mitigate the effects of such changes.

## **1.5.** Does your <u>medical school</u> 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 <b>briefly</b> covered in the <b>core</b> curriculum.
1	This topic was covered in elective coursework.
0	This topic was <b>not</b> covered.

Score explanation: UWSOM's Respiration and Regulation block includes a session titled "Climate change and Lung Health." This session includes a pre-class reading on the cardiopulmonary health threats that climate change poses. The in-person portion of the session includes an hour-long case-based lecture on the projected rise in air pollution and how that will impact respiratory health including rises in asthma and seasonal allergies.

## **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: A lecture in the first-year core curriculum titled "Planetary Health Equity" includes a few slides on extreme heat and its potential impact on cardiovascular health. This lecture includes a breakout activity analyzing extreme heat – including who is most vulnerable and effective interventions.

## **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: A session titled "Justice, Climate Change, and Infectious Disease" is delivered to first year medical students during the infections and immunology block. This lecture briefly addresses the impact of climate change on mental health through the lens of eco-mindfulness, eco-anxiety, and the cultural significance of one's connection to their environment. There is no content on this included in the neuropsych block.

# 1.8. Joes your medical school 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. 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: At UWSOM the MS1's received a lecture titled "Justice, Climate Change, and Infectious Disease" that commented on the relationship between climate change and its effects on vector borne, food borne, and water borne diseases. Additionally, the MS3's had a week of lectures largely focused on planetary and environmental health. There was a lecture titled "Extreme Heat, Light and Noise Pollution as sleep disruptors" and "Wildfire and Urban Air Pollution and Extreme Heat". These lectures focused on specific ways the PNW was being affected by climate change and specific health outcomes we could predict based on that.

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?

- **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 lecture "Justice, Climate Change, and Infectious Disease" was delivered to the MSI class, which commented specifically on how racism and low socioeconomic status amplified the already harmful effects of climate change on health. Additionally, a "Case Based Planetary Health" lecture given to the MS3s touched on how structural racism put certain populations at increased risk for being negatively affected by climate change.

**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: Elective coursework is available that discusses the regional health impacts of climate change. One of these classes is "Introduction to Global Health: Disparities, Determinants, Policies, and Outcomes," whose course description describes inclusion of content around "the burden and distribution of disease and mortality" and "the determinants of global health disparities." Another class is "GH 501 Core Topics in Global Health where there are presenters discussing unequal health impacts of climate change. These classes may be taken as part of the Global Health Pathway, an elective pathway that combines classes of the students choosing with a scholarly project, clinical experience, and community engagement or they may be taken independently on top of required coursework.

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

1.11.	Does your	medical school	curriculum	address	the rep	roductive health	effects of
indu	stry-relate	d environmenta	l toxins (e.g.	air pollu	tion, p	esticides)?	

3	This topic was explored <b>in depth</b> by the <b>core</b> 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 is not covered in the core coursework block "Lifecycles" which covers the male and reproductive systems.

## **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: Parts of the UWSOM pre-clerkship curriculum made general note of environmental threats on health that could apply to major cities. For example, air pollution was listed as a risk factor for lung pathologies in the curriculum syllabi. Additionally, "climate change" was listed as a key part of zoonotic infections during the Infections & Immunity block. However, there is no standardized material that references threats to the university's surroundings specifically.

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
 Indigenous knowledge and value systems as essential components of planetary health
 This topic was not covered.

Score explanation: Indigenous knowledge and value systems are not explicitly covered in the core UWSOM curriculum. However, fourth-year students can opt to take "PEDS 609: Indian Healthcare Clerkship" and "PEDS 610: Traditional Indian Medicine" as part of elective clinical coursework to learn more about indigenous knowledge and planetary health.

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?

3	This topic was	explored in	depth by the	e core curriculum.
•	I mo copie mas	capioi cu in	acpen by en	core curriculully

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 UWSOM emphasizes the disproportionate impact of environmental toxins on historically marginalized populations through required courses, electives, and case-based learning. Mentions of such impacts have been both specific and broad throughout the curriculum (e.g. simply noting that "social factors" impact health without providing additional details). A lecture titled "Justice, Climate Change, and Infectious Disease" discusses climate change, justice, and environmental disparities. Additionally, the Cardiology, Pulmonary, and Renal block integrated discussions about SES and racial disparities related to lung disease, asthma, and lead poisoning throughout its content.

There are also several elective courses which discuss health disparities related to environmental health, including the "Environmental Health" elective offered at the Spokane site and Family Medicine electives, such as "FAMED 526 Community-Focused Urban Health: Determinants, Disparities, and Equity."

#### 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: The core curriculum for MS1 students of UWSOM covered the benefits of plant-based diet and mediterranean diets during the discussions of cardiovascular diseases, however it does not emphasize the environmental co-benefits. However, UWSOM provides elective coursework such as "Intro to Culinary Medicine" at the Bozeman Foundations Site and "Diet & Nutrition" in Idaho which touch on these topics.

#### 1.16. Does your medical school curriculum address the carbon footprint of healthcare systems?

#### 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.
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0 This topic was **not** covered.

Score explanation: The core curriculum at UWSOM incorporated a session titled "Climate Change and Health" in which one of the core objectives was to explain how health systems impact and are impacted by climate change. This incorporated information regarding the carbon footprint of health systems and highlighted ways physicians can incorporate discussion of these topics into their work.

1.17. prac	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 <b>pharmaceuticals</b> and over-prescribing as a cause of climate health harm. Alternatively teaching on <b>deprescribing</b> 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 <b>surgical</b> healthcare on planetary health and the climate crisis, and how can it be mitigated		
1	The impact of <b>anaesthetic</b> 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 <b>inhalers</b> on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers.		
1	<b>Waste production</b> within healthcare <b>clinics</b> and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting)		
	Score explanation: The UWSOM curriculum places emphasis on non-pharmaceutical management of conditions focussing on lifestyle recommendations for chronic conditions such as type 2 diabetes. Additionally, the UWSOM teaches about deprescribing pharmaceuticals where possible and avoiding over-medicalization in medical care, but only for the benefit of human health and exhausting resources. There is little discussion about reducing harm to the climate with these practices, especially surrounding the use of anaesthetic gases and inhalers. Points are awarded for the brief instances where the faculty mention the influence on environmental health, as well as the core curriculum session "Climate Change and Health" which covers how health systems impact climate change.		

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

Score explanation: The UWSOM curriculum includes a session titled "Climate Change and Health" in which one of the core objectives is to describe ways physicians can incorporate discussion of climate change into their work. Additionally, there are other opportunities throughout the curriculum via workshops that include environmental history-taking skills.

**1.19.** In training for patient encounters, does your <u>medical school's</u> 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: At UWSOM, students are trained in their first term of Foundations of Clinical Medicine about how to take a detailed history which includes asking about environmental exposures. Students are taught to include occupational history, and travel history which would include exposure to pesticides, asbestos, silicosis, lead, and other infectious causes. They also are instructed to expand on and ask about exposure to hazards that are driven by climate change, such as wildfire smoke, and air pollution. Additional topics covered are water quality, and housing conditions. Opportunities are given throughout the preclinical years to take environmental history with real patients. There are also reminders in the didactic coursework about the importance of environmental history since the physiologic effects of environmental exposure need to be considered when making a differential diagnosis.

#### Curriculum: Administrative Support for Planetary Health

<b>1.20.</b> Is your <u>medical school</u> currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?		
4	Yes, the medical school is currently in the process of making major improvements to ESH/planetary health education.	
2	Yes, the medical school is currently in the process of making <b>minor</b> improvements to ESH/planetary health education.	
0	No, there are <b>no</b> improvements to planetary health education in progress.	
Score explanation: UWSOM has a specific task-force, the Planetary Health Workgroup, which is a team of faculty and students dedicated towards incorporating planetary health into the core medical		

school curriculum. So far, a major milestone has been appointing a Planetary Health Lead within the curriculum.

## **1.21.** How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> 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: The current UWSOM core curriculum has aspects of planetary health that are incorporated longitudinally, but these topics need to be more integrated into the curriculum and discussed in further depth. Early on in the first-year curriculum, there is a lecture titled "Justice, Climate Change, and Infectious Disease" which introduces the topic of climate change and health and highlights its interdisciplinary aspects, touching on impacts on vector-borne disease spread, eco-anxiety, and the disproportionate effect on marginalized populations. Later on in the curriculum, the impacts of heat stress and respiratory illness are touched on in the Cardiovascular and Respiratory blocks, respectively. However, there are still gaps and opportunities that exist to further incorporate planetary health in the curriculum, such as in the Lifecycles block and Blood and Cancer block.

**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?

- 1 Yes, the medical school has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare
- 0 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: The UW School of Medicine has the Planetary Health Workgroup which consists of volunteer students and faculty. The workgroup is overseen by two dedicated faculty who are in charge of integrating planetary health into the curriculum. Furthermore, the SOM is in the process of hiring a dedicated faculty member who will be in charge of overseeing curricular integration of planetary health into the curriculum.

#### Section Total (47 out of 72)

65.28%

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**

<u>Section Overview:</u> 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 <u>medical school</u>?

- **3** Yes, there are faculty members at the medical school who have a primary research focus in planetary health or healthcare sustainability.
- <sup>2</sup> 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.
- 1 There are planetary health and/or healthcare sustainability researchers at the **institution**, but none associated with the medical school.
- 0 No, there are **no** planetary health and/or healthcare sustainability researchers at the **institution** or **medical school** at this time.

Score explanation: In 2015, the Center for Health and the Global Environment (CHanGE) was founded, which is a research organization designed to "collaboratively develop and promote innovative approaches to understanding and managing the risks of global environmental change." Dr. Ebi conducts research specifically on the health risks of global change. The current director of CHanGE, Dr. Jeremy Hess, is an emergency medicine physician affiliated with the UWSOM. He has contributed extensively to institutional, national, and international efforts to understand and adapt to the effects of climate change. He has held leading roles in producing the IPCC's Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation, and the Sixth Assessment Report. He is also an author on the annual Lancet Countdown on Health and Climate Change. Furthermore, he serves as a consultant for the Climate and Health Program at the U.S. Center for Disease Control and Prevention. Lastly, Dr. Peter Rabinowitz is a family medicine physician and Director of the UW Center for One Health Research, which is an organization focused on performing research on the interaction between humans, animals, and the environment. This Center also houses Dr. Noelle Benzekri and Dr. Alice Tin, physicians who hold faculty appointments with the UW School of Medicine.

<b>2.2.</b> 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 <b>not currently</b> a department or institute for interdisciplinary planetary health research, but there are <b>plans</b> 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: The UW Center for One Health Research and the Center for Health and the Global Environment have active researchers from several disciplines, including medicine, veterinary medicine, architecture, and public health. They also have members from organizations outside UW, including universities across the country. CHanGE invites anyone to join, whether they be staff, students, faculty, or community members. In addition, the Climate Impacts Group (CIG) at UW is specifically operated to investigate the effects of climate change and to identify areas that necessitate further research in this field. Part of their purpose is to aid in enabling local and regional communities to navigate current and future effects of climate change. The CIG partners with organizations such as the Washington Department of Fish and Wildlife, the Pacific Climate Impacts Consortium, The Nature Conservancy, and several Indigenous tribes.

## **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 <u>medical school</u>?

3	Yes, there is a process in which community members impacted by climate and environmental injustice have <b>decision-making power</b> in the climate + environmental research agenda.
2	Yes, there is a process in which community members impacted by climate and environmental injustice advise the climate + environmental research agenda.
1	No, but there are <b>current efforts</b> to establish a process for community members to advise or make decisions on the research agenda.
0	There is <b>no</b> process, and <b>no</b> efforts to create such a process.
Score resol asses Ecolo repor and a respo adap clima actio into t allow speci initia cente	e explanation: The University of Washington Climate Impacts Group (UW CIG) has specific urces for Indigenous communities to provide input and access resources to perform climate syments for their own lands and peoples. For example, the Quileute Tribe completed a Traditional ogical Knowledge report to inform the Tribe's Climate Plan. According to their website, "the rt identifies and synthesizes cultural use and cultural context of traditional resources and habitats, adaptations to climate and other environmental changes." The CIG has a Tribal Support Desk "to ond to as-needed tribal queries regarding the climate change vulnerability assessment and tation process." The Yakima Nation were able to fund a project that aimed to "better understand atte change impacts on the meadows of their Reservation that they manage and focus restoration ns where they will contribute most to maintaining the ecological and cultural values of meadows the future." Additionally, CHanGE welcomes community stakeholders as collaborative members, wing another avenue for communication. There is no formal methodology at the UWSOM ifically for disproportionately impacted groups to dictate the path forward for research and policy trives, but they can provide input to help guide their relevance through these other closely related pers of research.

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

3	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.
2	There is a website that <b>attempts to centralize</b> various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive.
1	The <b>institution</b> has an <b>Office of Sustainability website</b> that includes <b>some</b> resources related to health and the environment.
0	There is <b>no</b> website.

Score explanation: The University of Washington has a website for their <u>Center for Health and the</u> <u>Global Environment</u>. This website centralizes information about courses, research, events and news related to the intersection of health, the environment and climate change. Additionally, there is a <u>UW</u> <u>Sustainability</u> website that catalogues student groups focused on sustainability and gives information about reducing emissions and waste on campus. There is also a <u>Program on Climate Change</u> website where information about climate change focused courses and research can be found.

## **2.5.** Has your <u>institution</u> recently hosted a conference or symposium on topics related to planetary health?

4	Yes, the <b>medical school</b> has hosted at least one conference or symposium on topics related to planetary health in the past year.
3	Yes, the <b>institution</b> has hosted at least one conference or symposium on topics related to planetary health in the past year.
2	Yes, the institution has hosted a conference on topics related to planetary health in the past three years.
1	The <b>institution</b> has not hosted any conferences directly, but they have provided financial support for a local planetary health event.
0	No, the <b>institution</b> has not hosted a conference on topics related to planetary health in the past three years.
Score explanation: EarthLab, UW Sustainability, and the Center for Health and the Global Environment are hosting its inaugural <u>Symposium on Climate Change and Clinical Practice</u> on March 28, 2024 in partnership with UW Medicine. Outside of this, EarthLab has hosted various conferences throughout the past 3 years related to climate and health.	

## **2.6.** Is your <u>medical school</u> a member of a national or international planetary health or ESH organization?

1 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 Washington School of Medicine is a member of the Global Consortium on Climate and Health Education as of 2022.

#### Section Total (14 out of 17)

82.35%

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 <u>medical school</u> partner with community organizations to promote planetary and environmental health?

- **3** Yes, the medical school meaningfully partners with multiple community organizations to promote planetary and environmental health.
- 2 Yes, the **medical school** meaningfully partners with **one** community organization to promote planetary and environmental health.
- 1 The **institution** partners with community organizations, but the medical school is not part of that partnership.
- 0 No, there is **no** such meaningful community partnership.

Score explanation: The UWSOM partners with multiple community organizations that promote planetary and environmental health. UW Medicine joined the Washington Health Care Climate Alliance in 2019 with the goals of addressing the health impacts of climate change and promoting sustainability. An article on the goals of this collaboration can be found <u>here</u>. Additionally, students have the opportunity to volunteer with the Washington Physicians for Social Responsibility (WPSR) to promote action against climate change and engage in health advocacy via climate issue-specific task forces, advocacy action teams, and individual or group projects. More information on this group's work can be found <u>here</u>.

<b>3.2. Does your <u>medical school</u> offer community-facing courses or events regarding planetary health?</b>	
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 <b>institution</b> 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 UW Department of Family Medicine hosted an annual lecture/event titled <u>"Planetary Health: We Are All in this Together."</u> The UW Department of Global Health recently hosted	

a panel discussion on <u>climate change and mental health</u>. Additionally, the University of Washington's Office of Sustainability offers several events, workshops, and webinars that are open to the community throughout the year. The "Climate Dialogue series" is a monthly lecture series that covers varying topics within planetary health, such as sustainable agriculture and food systems. Some examples of webinars offered include a discussion called "Climate Change: A Public Health Perspective", which centers around the effects of climate change from a human health lens, as well as "Environmental Justice and Climate Justice: The Role of Social Movements in Policy Creation", that focuses on climate policy and the intersection with social justice.

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

- 2 Yes, all students **regularly** receive communication updates dedicated to planetary health and/or sustainable healthcare.
- 1 Yes, planetary health and/or sustainable healthcare topics are **sometimes** included in communication updates.

0 Students do not receive communications about planetary health or sustainable healthcare.

Score explanation: Required UWSOM communications for the 2023 year were reviewed and none contained updates on planetary health or sustainable healthcare. However, students can opt into planetary health communications from the <u>Occupational and Environmental Medicine Department</u> and <u>UW Center for Health and the Global Environment (CHanGE)</u>.

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.

1 Yes, the institution or main affiliated hospital trust offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers.

0 There are **no** such accessible courses for post-graduate providers.

Score explanation: At the University of Washington, there was a webinar hosted by the International Association of Medical Science Educators. On the UWSOM continuing medication education website, there was a 1 hour live web series titled "One World, One Health Tackling the Global Health Crisis" discussing climate change impacts human health and marginalised populations.

<u>CLIME: IAMSE 2024 Winter Web Series - University of Washington School of Medicine - Continuing</u> <u>Education (CE) - 8935-8687 - CLIME: IAMSE 2024 Winter Web Series (cloud-cme.com)</u>

3.5. Does your medical school or its affiliated teaching hospitals have accessible educational

materials for patients about environmental health exposures?

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

1 **Some** affiliated hospitals have accessible educational materials for patients.

0 **No** affiliated medical centres have accessible educational materials for patients.

Score explanation: The UW Medicine Library provides information about different <u>environmental</u> <u>health exposures</u> for adults including: molds, air pollution, carbon monoxide, lead, radon, and a variety of occupational lung diseases. There is also information for <u>pediatric</u> environmental health exposures and triggers for asthma and allergies. The library has a <u>checklist</u> for keeping the home environment safe which goes over basic safety measures to reduce exposures to mold and reduce structural hazards. There is also information about <u>heat related illness</u> (with a heat stroke <u>quiz</u>) and <u>occupational lung diseases</u>.

**3.6.** Does your <u>medical school</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about the health impacts of climate change?

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

1 **Some** affiliated hospitals have accessible educational materials for patients.

0 No affiliated hospitals have accessible educational materials for patients.

Score explanation: There are articles in the UW health library about health and the environment. They have articles such as "<u>Climate Change Making 218 Infectious Diseases Even Worse</u>" and "<u>Climate Change is the World's Most Pressing Health Problem: WHO</u>". These articles provide patients with information about the negative impacts of climate change on our health. The library also provides resources on the ozone's effect on <u>asthma</u>. University of Washington is part of the Washington Healthcare Climate Alliance which partnered with <u>Health Care without Harm</u> to "bring health care's expertise, experience, and trusted voice to the legislative and regulatory process for climate-smart policies related to energy, transportation, food, waste, infrastructure, and community resilience".

#### Section Total (10 out of 14)

71.43%

#### 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

Section Overview: 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?

- 2 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.
- 0 No, neither the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects.

Score explanation: The UWSOM does not offer specific opportunities or support for sustainability initiatives or projects, although students may pursue these efforts on their own time. This is unchanged from last year.

# 4.2. Does your institution offer opportunities for medical students to do research related to planetary health and/or sustainable healthcare? 2 The institution has a specific research program or fellowship for students interested in doing planetary health/sustainable healthcare research. 1 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.

0 There are **no opportunities** for students to engage in planetary health/sustainable healthcare research.

Score explanation: Students can independently explore planetary health and sustainability research, and in some cases this may fulfill requirements for the Independent Investigative Inquiry (III) program. This past year, the Planetary Health Interest Group organized a list of faculty contact information with planetary-health related projects for students to utilize if they were interested. Additionally, there are multiple sustainability research programs through the University of Washington schools of Pharmacy, Nursing, and Public Health, some of which are listed <u>here</u>. Project information is limited and decentralised, making it difficult to know whether projects may be open to medical student participation.

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.
- 0 There is no medical-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.

Score explanation: There is no UWSOM web page dedicated to planetary health or sustainable healthcare. The University of Washington as a whole has a sustainability page, which includes a sustainability and medicine <u>subsection</u>, but this site is not affiliated with the medical school. Information about sustainability programs available to UW medical students and research related to planetary health conducted by UWSOM faculty must be accessed externally through decentralised, program specific websites, which can make the information more difficult to find.

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?

- 2 Yes, there is a 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.**
- 0 No, there is **not** a student organization at my institution dedicated to planetary health or sustainability in healthcare.

Score explanation: The Planetary Health Interest Group was formed this year with dedicated faculty support. Examples of projects include facilitating a lecture-series on planetary-health related topics and connecting interested students with faculty conducting research on climate change and health.

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?

- 1 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: There are several roles for students to serve on various institutional committees, but no position exists to advocate for sustainability practices. A list of medical student committee positions can be found <u>here</u>. There is a University of Washington Environmental Stewardship <u>committee</u> that serves the whole institution. Medical students are eligible to serve on this committee, but as of now, Jan. 2023, there are none.

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. The Montana foundations site hosts annual "Culinary Medicine" dinners with their mentor groups which provide students with experience with gardens, specifically a "farm-to-table" approach to food.

- 2. The UW Planetary Health Interest Group hosted a lecture on climate communication.
- 3. The <u>UW Sustainability Events Calendar</u> highlights past and future events relating to sustainability, which is frequently updated.
- 4. The Spokane foundations site had several volunteer opportunities through the Health Equity Circle organization to plant trees in neighborhoods with low tree canopy coverage.
- 5. The Seattle foundations site has an interest group called "Pacific Northwest Wilderness Medicine" that hosted a wilderness survival course and encouraged registration to the multi-day 5th Northwest Wilderness Medicine Conference that took place at Mt. Hood Kiwanis camp.

Section Total (8 out of 15)

53.33%

Back to Summary Page here

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?	
3	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.
2	There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but <b>no specific staff member</b> in charge of medical school and/or hospital sustainability.
1	There are <b>no salaried sustainability staff</b> , but there is a sustainability task force or committee
0	There are <b>no</b> staff members <b>or</b> task force responsible for overseeing campus sustainability
Score explanation: The University of Washington's Office of Sustainability serves the UW Health Sciences programs through the UW Environmental Stewardship Committee subcommittee on Greening Health Sciences, Sustainability and Medicine ( <u>SAM</u> ), and Multidisciplinary Efforts for Sustainability in Health Care ( <u>MESH</u> ). However, the Office of Sustainability does not have a specific employee or liaison for the School of Medicine.	

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 <b>written and approved plan</b> to achieve carbon neutrality by <b>2030</b>
3	The institution/medical school has a <b>written and approved plan</b> to achieve carbon neutrality by <b>2040</b>
1	The institution/medical school has a stated goal of carbon neutrality by <b>2040</b> but has <b>not created a plan</b> to reach that goal or the <b>plan is inadequate</b>
0	The institution/medical school does not meet any of the requirements listed above
Score explanation: While the University of Washington does have a plan to reduce carbon emissions 45% by 2030 and 95% by 2050, this timeline does not meet the rapid assimilation of carbon neutrality necessary to combat climate change. See page 25 of the Fiscal Year 2024 Sustainability Action Plan for	

more information.

5.3. Do buildings/infrastructure used by the <u>medical school</u> 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.
0	Medical school buildings source <b>&lt;20%</b> of energy needs from off-site and/or on-site renewable energy.

Score explanation: The University of Washington sources its energy from Seattle City Light (SCL). In 2021, SCL compiled more than 80% of its energy from renewable sources, the majority hydroelectric. This reviewer considers hydroelectric power as renewable energy. However, it is important to recognize the debate over whether hydroelectric power classifies as a source of renewable energy. Additionally, UW solar is drafting a Solar Energy Plan for the next thirty years for the Seattle campus to bring more solar capacity to the institution. However, the medical school does not yet have solar panel arrays on its buildings.

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?

- <sup>3</sup> 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.
- 2 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.
- 0 Sustainability is **not considered** in the construction of new buildings.

Score explanation: The University of Washington Health Sciences Education Building has LEED Gold standards but has yet to receive LEED Gold certification. The university's green building standards stipulate that new buildings at minimum must have LEED Gold specifications, energy efficiency 15% above city code, and a 50% reduction in potable water use compared to city code. The Magnuson Health Sciences Center houses much of the medical school. It is decades old and has not undergone significant retrofitting to improve sustainability. However, there is a request for state funding to update and centralise the cooling system in several wings of the building. This renovation would reduce the building's energy consumption.

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.

0 The medical school or institution has **not** implemented strategies to encourage and provide environmentally-friendly transportation options.

Score explanation: The University of Washington offers a variety of environmentally-friendly transportation options for students and employees.

2

- U-Pass students are provided a subsidised U-Pass that gives them access to Seattle area public transportation including King County and regional bus systems, Sounder Train, Light Rail, water taxis, streetcar and monorail systems. In addition, students are provided full fare coverage for regional paratransit services as well as vanpool, UW Shuttles, and Emergency Ride Home services. Students pay a required quarterly U-Pass fee and as of July 1, 2022 all UWMC students and employees will receive a fully subsidised public transit pass.
  - The UW offers multiple **shuttles**, for example the Health Services Shuttle, that are available for students and staff to shuttle between UWMC, Harborview and other associated health services locations in Seattle.
- *Carpooling and Vanpooling* available for students and employees for an annual or quarterly fee.
- **Biking** the UW Seattle Campus is located on the Burke Gilman Trail and is surrounded by an extensive system of bike lanes that provide students a safe route to bike to campus. There are 7,800 bike rack spots, bike lockers, and bike rooms across campus that are available for students to lock up their bikes.
- Walking the UW Seattle Campus is located on the Burke Gilman Trail and has a network of walking paths on campus; in addition, the school offers resources like maps and walking guides to support folks in finding the right route to, from and while on campus. Two Light Rail Stations and buses from around the region service the campus and provide a route for off-campus students to walk to campus. According to the UW 28% of people walk to campus everyday.

Finally, the UW Sustainability Action Plan aims to reduce single-occupancy transportation to the UW by 6% by 2028. The plan includes encouraging sustainable transportation options, improving active transportation infrastructure and access, as well as promoting U-CAR and UW Shuttle service for mid-day travel.

5.6. Does your <u>medical school</u> have an organics recycling program (compost) and a conventional recycling program (aluminum/paper/plastic/glass)?	
2	Yes, the medical school has both compost and recycling programs accessible to students and faculty.
1	The medical school has <b>either</b> recycling <b>or</b> compost programs accessible to students and faculty, but not both.
0	There is <b>no</b> compost or recycling program at the medical school.

*UW Facilities has conventional recycling and organic recycling throughout campus. They offer a disposal guide on their website to help people identify what waste products should go in which sort of container (website). UW Facilities manages the Magnuson Health Sciences Center; however, they note on their website that recycling for some School of Medicine and UW Medical Center locations is managed separately through UWMC Environmental Services. There are multiple waste bins located around campus for trash, recycling, and composting which is accessed by both students and faculty. UW Recycling plans to expand the number of compost bins in 15 buildings on the Seattle campus in 2024.* 

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 adequate sustainability requirements for food and beverages, including meat-free days or no red-meat, and is engaged in efforts to increase food and beverage sustainability.

- 2 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.
- 1 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 University of Washington Housing & Food Services (HFS) uses a value-based approach when making decisions regarding dining and food procurement. UW HFS believes in sourcing as much as they can from local vendors, i.e. vendors within 250 miles from the Seattle campus. In addition, they value prioritising procurement from women-owned and BIPOC-owned businesses. Per the 2024 UW Sustainability Action Plan (SAP), the UW Housing and Food Services sustainability goal is to achieve 35% of food procured from local sources by 2025 (website).

*UW HFS strives to advance sustainable dining and food procurement while balancing the logistics of providing food for a large campus. They use the US Foods bi-annual report to help continuously evaluate the proportion of campus food coming from sustainable sources and those that share the UW HFS sustainability values. One of UW HFS's highest sustainability efforts is the UW Farm - a 2 acre organic farm on campus that provides produce sold in campus grocery stores and in dining halls.* 

There is an emphasis on increasing plant-based items as HFS has made an intentional shift in purchasing a reduced percentage of animal-based meat. The 2024 UW SAP reports that more than 38% of menu items are plant-based.

The UW SAP has a target goal to reduce single-use disposable items and has partnered with UW HFS to promote the OZZI program, which offers reusable takeout containers. The OZZI program is primarily aimed toward residence halls at this time with plans to expand in the future. Additionally, UW Recycling, Sustainability, HFS and Procurement Services are planning to create a Zero-Waste Task Force for the university, although this has not yet been implemented.

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

3	Yes, the medical school has <b>adequate</b> sustainability requirements for supply procurement <b>and</b> is <b>engaged</b> in efforts to increase sustainability of procurement.
2	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.
1	There are sustainability guidelines for supply procurement, but they are <b>insufficient or optional</b> . The medical school is <b>not engaged</b> in efforts to increase sustainability of procurement.
0	There are <b>no</b> sustainability guidelines for supply procurement.
Score explanation: The University of Washington Procurement Services has sustainability requirements	

that are required in all university-wide contract solicitations and include criteria based on the specific commodity. Examples include packing material reduction, energy efficiency, supplier take-back/trade-in, and responsible delivery and transportation (website). However, there are no requirements for the amount or type of sustainable products that must be purchased. Rather, UW Procurement Services encourages departments to consider purchasing used items from UW Surplus or recycled or environmentally preferable products (EPP) when quality and performance are comparable to alternatives. An example of the encouragement and recognition of good practices is the UW Green Office Program. In addition, UW has made an active effort to include a student presence in the UW Procurement Services office with three intern, liaison, or coordinator positions. This is unchanged from last year.

5.9. Are there sustainability requirements or guidelines for events hosted at the <u>medical school</u> ?	
2	Every event hosted at the medical school <b>must</b> abide by sustainability criteria.
1	The medical school strongly recommends or incentivizes sustainability measures, but they are not required.
0	There are <b>no</b> sustainability guidelines for medical school events.
Score explanation: UW Medicine budgetary guidelines prohibit the purchase of plastic silverware, cups, plates, etc. Although efforts are being made, there are not established requirements and guidelines for events hosted at the medical school. This is unchanged from last year.	

# 5.10. Does your <u>medical school</u> 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.

1	There are <b>guidelines</b> on how to make lab spaces more environmentally sustainable, but not programs or initiatives.
0	There are <b>no</b> efforts at the medical school to make lab spaces more sustainable.

Score explanation: While not specific to the medical school, the UW Green Laboratory Certification program offers labs the opportunity to gauge their sustainability practices, receive training, and be awarded with recognition based on meeting sustainability standards.

From their website: "Members of any UW lab from any department can certify their lab. Labs may belong to UW Seattle, UW Tacoma, or UW Bothell, or be an off-campus UW lab. To apply for certification, lab members simply fill out the <u>online application</u> (this typically takes 20-25 mins). This short initial questionnaire allows them to see what steps they are already taking to operate sustainably and where they can improve. It addresses workplace practices in action areas such as energy use, chemical use, work-related travel, and more."

In addition, the Green Laboratory Certification program also supports UW's Climate Action Plan (Strategy 2.3.1) and for the availability of general guidelines for UW faculty, staff, and students (Strategy 7.4.2).

5.11. Does your <u>institution's</u> endowment portfolio investments include fossil-fuel companies?			
4	The institution is <b>entirely divested</b> from fossil fuels <b>and</b> has made a <b>commitment to reinvest divested funds</b> into renewable energy companies or renewable energy campus initiatives.		
3	The institution is <b>entirely divested</b> from fossil fuels.		
2	The institution has partially divested from fossil fuel companies or has made a commitment to fully divest, but currently still has fossil fuel investments.		
1	The institution has <b>not divested</b> from fossil-fuel companies, but faculty and/or students are <b>conducting organized advocacy</b> for divestment.		
0	Yes, the institution has investments with fossil-fuel companies and there have been <b>no efforts</b> to change that.		
Score explanation: The University of Washington Board of Regents recently approved a <u>resolution to</u> <u>begin exiting all direct investments in fossil-fuel companies</u> with the goal of complete divestiture by Fiscal Year 2027. The resolution includes a commitment not to renew indirect investments in funds primarily focusing on fossil-fuel extraction or reserves. Both commitments include allowances for firms contributing to the transition to sustainable energy.			
The Advisory Committee on Socially Responsible Investing (ASCRI) met from September 2021 to April			

2022, and their recommendation to the UW Board of Regents was presented to the University of Washington Investment Management Company (UWINCO). While the institution has officially made the commitment to fully divest, there is still investment in fossil fuels.

Section Total (21 out of 32)

65.63%

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	
А	80% - 100%	
В	60% - 79%	
С	40% - 59%	
D	20% - 39%	
F	0% - 19%	

#### Planetary Health Grades for the University of Washington School of Medicine

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(47/72) \ge 100 = 67\%$	В
Interdisciplinary Research (17.5%)	(14/17) x 100 = 82%	A-
Community Outreach and Advocacy (17.5%)	(10/14) x 100 = 71%	В
Support for Student-led Planetary Health Initiatives (17.5%)	(8/15) x 100= 53%	С
Campus Sustainability (17.5%)	$(21/32) \ge 100 = 66\%$	В
Institutional Grade	(Ax0.3 + Bx0.175 + Cx0.175 + Dx0.175 + Ex0.175) = 68%	В

#### **Report Card Trends**

#### **Section Overview**

This graph demonstrates trends in overall and section grades for the years in which UWSOM has participated in the Planetary Health Report Card initiative.

