

### Planetary Health Report Card (Medicine):

### University of Washington School of Medicine

### **UW** Medicine

### UW SCHOOL OF MEDICINE

#### 2022-2023 Contributing Team:

- Student names: Sumner Lawson, Ellen Guyer, Natalie Thiel, Kate LeBlanc, Nicola Gerbino, Shwetha Sanapoori, Brianna Cowin, Kate Tokareva, Claire Yang, Taylor Beach, Mikayla Engstrom, Lauren Taylor, Emma Reisman, Zoe Ferguson-Steele, Anders Ledell, Danielle Bohonos, Van Nguyen
- Faculty Mentor: Dr. Colette Kirchhoff
- Primary Contact: Kate Tokareva, katetaco@uw.edu

#### **Summary of Findings**

Overall	В-
Curriculum	C

- The planetary health preclinical curriculum has made some improvements over the past year, but there is still more work that needs to be done. A major milestone this past year was forming the Planetary Health Workgroup, which is actively revising the current curriculum.
- **Recommendations:** Moving forward, the curriculum should focus on emphasizing the respiratory, cardiovascular, and reproductive effects of climate change, including pollution, extreme heat, and industry-related toxins.

#### Interdisciplinary Research

A

- One of the medical school's strengths is the abundance of research opportunities related to climate change health impacts. These are available through the UW Center for Health and Global Environment and the Climate Impacts Group.
- **Recommendations**: The School of Medicine (SOM) should continue engaging with the various climate-related departments and make these experiences more easily accessible to medical students.

#### Community Outreach and Advocacy

**C**+

- The SOM partners with local community organizations such as Washington Physicians for Social Responsibility and makes environmental health education available to patients.
- **Recommendations**: Opportunities exist for the SOM to partner with the Office of Sustainability to promote community outreach and advocacy, as well as provide more regular communication to students about planetary health and sustainable healthcare.

#### **Support for Student-Led Initiatives**

 $\mathbf{C}$ 

- Over the past year, there have been numerous opportunities for students to get engaged with planetary health, from attending talks with local physicians to planting trees in the local community. However, more structured and integrated support for student-led initiatives could increase engagement.
- **Recommendations**: The SOM should provide concrete support for students to either spearhead or work with faculty on sustainability initiatives and quality improvement projects. These opportunities could be highlighted in the Triple I (Independent Investigate Inquiry) database for first-year students.

#### **Campus Sustainability**

В

- The University of Washington is mindful of utilizing sustainable building practices for new projects, but retrofitting existing, older buildings continues to be a challenge. The Office of Sustainability is integral to campus and does a fantastic job of promoting sustainable practices through community events and recycling/composting.
- **Recommendations**: The institution should create more ambitious goals to achieve carbon neutrality and promote stricter standards regarding sustainability for supply procurement and campus events.

#### **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 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.

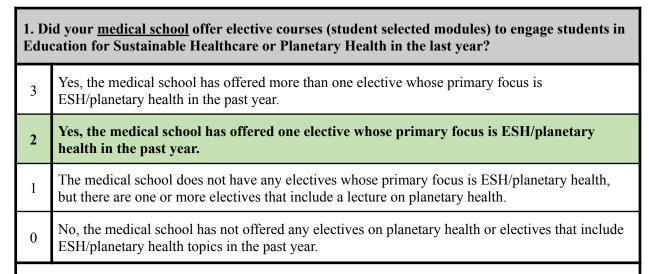
#### Other considerations:

• 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 last year, 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.

<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



Score explanation: The University of Washington School of Medicine (UWSOM) has two non-clinical electives and one clinical elective which have lectures on planetary health topics. The first is called "Core Topics in Global Health" and is available to first and second years as an elective. It offers lectures on environmental health and its impact on maternal, adolescent, and child health as well as transmission of infectious disease. The second elective offered to first and second years is called "Tropical Medicine." This course discusses the impact of climate change on vector-borne disease and the epidemiological impact of warming temperatures. The third clinical elective is offered to fourth years and is called "One Health." It discusses the intricate links between the health of humans, animals, and the environment, and has the greatest planetary health focus.

#### Curriculum: Health Effects of Climate Change

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: The UWSOM recently made changes in its core curriculum to address the impact of climate change on health. First year students now attend a lecture called "Justice, Climate Change and

Infectious Disease," and complete associated readings and case studies. Amongst other climate change topics, the impact of extreme temperatures on mental health is discussed. In addition, there is a lecture for first year students in the Medical Science and Research block that covers extreme temperatures and the occurrence of heat stroke. However, the curriculum lacks extensive coverage of the extreme heat impacts on cardiovascular health in the current Cardiovascular block.

3. Does your medical school curriculum address the impacts of extreme weather events of	n
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: The UWSOM recently added a lecture titled "Social Determinants of Health, Healthcare Equity and Covid-19," which briefly covers the inequitable impact of extreme weather on vulnerable and marginalized populations.

#### 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: The UWSOM curriculum for first-years includes a lecture called "Justice, Climate Change and Infectious Disease." The lecture discusses the changing patterns of infectious diseases due to climate change, including changes in vector ecology and impacts to water quality. The lecture is accompanied by case-based discussions and a 24 minute pre-recorded video titled, "Introduction to Climate Change and Infectious Disease."

#### 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 briefly covered in the core curriculum.
- 1 This topic was covered in elective coursework.
- 0 This topic was not covered.

Score explanation: At the time of completion of this report card, the UWSOM has not yet included the respiratory health effects of climate change and air pollution in the curriculum. However, there is an upcoming planned lecture for first-year medical students in the respiratory block titled "Climate Change and Lung Health" as part of the revised preclinical curriculum. The lecture discusses the respiratory health effects of climate change, specifically relating to wildfires and urban air pollution.

6. Does your medical sch	<u>ool</u> curriculum	address the	cardiovascular	health	effects o	f climate
change, including increa	sed 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: The UWSOM recently added a lecture for first year students in the Medical Science and Research block that discusses extreme temperatures and heat-related illnesses. The impact of extreme heat and air pollution on cardiovascular disease is also very briefly touched on in the lecture, "Justice, Climate Change and Infectious Disease," but is not currently included in the cardiovascular block.

#### 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: The UWSOM first-year curriculum includes a lecture titled "Justice, Climate Change, and Infectious Disease" that discusses ecoanxiety and hopelessness in response to climate change. The revised second-year curriculum for the upcoming year will include a small group discussion in the psychiatry block that includes environmental factors in mental illness related to climate change.

#### 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.
- 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 first-year core curriculum includes a lecture titled "Justice, Climate Change, and Infectious Disease" that briefly mentions hunger and malnutrition, contaminated food, and contaminated water as health consequences of climate change. Resources associated with the session also include the threat of climate change to traditional indigenous food sources.

- 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 UWSOM first-year core curriculum includes a lecture titled "Justice, Climate Change, and Infectious Disease" that explains the concept of environmental inequality and includes several slides on the interaction between social determinants of health and climate change. The lecture is accompanied by a required case-based discussion section that focuses on the disproportionate impact of climate change on the health of indigenous communities. Resources associated with the class session include articles and videos on indigenous communities' experiences with and responses to climate change and environmental inequality.

- 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." There are two more specific classes titled "Understanding and Managing the Health Risks of Climate Change" and "Global Environmental Change and Public Health." 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.

## 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: There is no mention of the impact of environmental toxins on reproduction in the UWSOM required coursework block "Lifecycles," which covers the reproductive systems. This has not changed since last year, but there is currently a Planetary Health Workgroup at the UWSOM dedicated to inserting content around planetary health.

#### 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: Various 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 zoonoses during the infectious disease block. However, there is no standardized material that references threats to the university's surroundings specifically. While air pollution in urban areas may apply to Seattle as a major city, it does not apply to other regional campuses included in WWAMI, which are often in more rural areas.

#### 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: Indigenous knowledge and value systems as they relate to medicine and health outcomes are included throughout the curriculum at UWSOM; however, there is no discussion about

Indigenous knowledge and value systems related to planetary health solutions specifically. Indigenous knowledge and value system are discussed in the Themes of Medicine talk "Decolonizing Medicine" and through electives, such as Indian Health Issues: Past, Present, and Future (UCONJ 530), and the Indian Health Pathway, which provides students an opportunity to learn didactically as well as through clinical experience. For example, the objectives from the "Decolonizing Medicine" talk in Themes of Medicine Spring 2022 included: explaining "the impact of colonization on traditional Indigenous medicine" and comparing "modern medicine and traditional Indigenous medicine address stress/inflammation." These objectives provided a required space for students to learn about Indigenous values, but did not specifically include knowledge about planetary health solutions.

14. Does your medical school 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: UWSOM integrates 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 factor" impact health without providing addition details). For example, unequal impacts of climate change was listed as a contributing factor to perinatal mental health during the Mind, Brain, and Behavior block. The Cardiology, Pulmonary, and Renal block also 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

## 15. Does your medical school 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 first-year students at UWSOM covered the benefits of plant-based diet and Mediterranean diets during the discussions of cardiovascular diseases. While no specific lecture was allocated to this topic, the benefits of plant-based diets were discussed throughout the cardiovascular syllabus and emphasized during case-based discussions. Additionally, UWSOM

provided the following elective coursework in "Intro to Culinary Medicine in Bozeman, MT" and "Diet & Nutrition in Idaho" in Autumn 2022. As part of the culinary medicine elective course offered at the Bozeman foundations site, students learn about healthy diet choices for the prevention and treatment of disease. The Mediterranean diet is a key focus of this course, the foundation of which is plant-based foods such as fresh vegetables, whole grains, legumes, nuts, and seeds.

16. I	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.		
0	This topic was not covered.		
Score explanation: This topic is not formally covered at any point in the curriculum.			

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: The UWSOM 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-medicalisation in medical care, but only for the benefit of human health. Emphasis on the impact on environmental health is placed on the faculty rather than the curriculum. Points	

are awared for the brief instances where the faculty mention its influence on environmental health.

#### Curriculum: Clinical Applications

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 conversations about climate change throughout the curriculum such as workshops that include environmental history-taking skills, but there are no sessions about how to talk to patients about the health effects of climate change.

#### 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.
- Only elective coursework includes strategies for taking an environmental history.
- No, the curriculum does not include strategies for taking an environmental history.

Score explanation: At the 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 which would include exposure to pesticides, asbestos, and lead. 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

20. Is your <u>medical school</u> 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.
- 0 No, there are no improvements to planetary health education in progress.

Score explanation: This past year, the UWSOM created the Planetary Health Workgroup, which is a team of faculty and students dedicated towards incorporating planetary health into the core medical school curriculum.

#### 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.
- 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).
- 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 there is still a lot of work that needs to be done. 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. However, there are still gaps and opportunities that exist to further integrate planetary health in the curriculum, such as in the Cardiovascular Respiratory, Renal, and Lifecycles blocks.

### 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: Over the past year, the UWSOM formed 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.

~ .•		<i>-</i>		
Section	Lotal	(37)	out of 72)	)

51.39%

#### **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.

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.	
2	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: The University of Washington (UW) is home to the Center for Health and the Global Environment (CHanGE) whose mission is to "collaboratively develop and promote innovative approaches to understanding and managing the risks of global environmental change." The director of CHanGE is Jeremy J. Hess, MD, MPH, who is an emergency medicine physician affiliated with the University of Washington School of Medicine. Dr. Hess has a history of active involvement in climate change research. He is lead author on several national and international climate assessments, including 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. The founding director, Dr. Kristie Ebi, conducts research specifically on the health risks of global change and founded CHanGE in 2015. In addition, there are several other UW School of Medicine-affiliated physicians conducting active research within topics of climate change and the effects on human health. This is current for 2022-23 and has not changed since 2020.

## 2. Is there a dedicated department or institute for interdisciplinary planetary health research at your institution? There is at least one dedicated department or institute for interdisciplinary planetary health research. 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.

- There is an Occupational and Environmental Health department, but no interdisciplinary department or institute for planetary health research.
- There is no dedicated department or institute.

Score explanation: The University of Washington is home to the Climate Impacts Group (CIG), an organization which aims to identify areas in need of further climate change research, advance scientific understanding of climate change impacts through organizing and conducting dedicated scientific research, and utilizing the findings of climate change research to inform policy decisions and empower local and regional communities to respond and adapt to the effects of climate change. In conducting its work, the UW CIG partners with entities such as the Washington Department of Fish and Wildlife, the Pacific Climate Impacts Consortium, The Nature Conservancy, and several First Nation tribes. This is current for 2022 and has not changed since 2020.

- 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>?
- 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: Community stakeholders who are disproportionately impacted by the effects of climate change have been able to help steer the direction of research projects conducted through the University of Washington Climate Impacts Group (UW CIG). For example, the Yakama Nation were able to fund a project that aimed to "better understand climate change impacts on the meadows of their Reservation that they manage, and focus restoration actions where they will contribute most to maintaining the ecological and cultural values of meadows into the future." While there is no formal process for community stakeholders to exert top level decision-making influence on the research agenda for the UW CIG, organized community stakeholders have previously been able to provide input on the direction of several climate change research projects. This is current for 2022 and has not changed since 2020.

- 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.
- 0 There is no website.

Score explanation: The University of Washington has a robust <u>sustainability website</u>. This includes ways that they are trying to cut down their climate impact, student groups doing sustainability work on campus, and relevant funding opportunities. The University of Washington also has a <u>Program on Climate Change website</u>. This website includes more event opportunities, information specific to courses on climate and health research and people involved. This is current for 2022 and has not changed since 2020.

#### 5. Has your <u>institution</u> 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 4 planetary health in the past year. Yes, the institution has hosted at least one conference or symposium on topics related to 3 planetary health in the past year. Yes, the institution has hosted a conference on topics related to planetary health in the past three 2 years. The institution has not hosted any conferences directly, but they have provided financial support 1 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 Washington hosted the following climate conferences and symposiums:

- The <u>16th Annual Graduate Climate Conference</u> on October 28-30, 2022. Graduate students from hundreds of academic institutions share ideas on climate and climate change in an array of disciplines.
- The 5th Annual Program on Climate Change Symposium on May 19, 2022. Over forty students and faculty attended the symposium showcasing topics of climate-related research and outreach activities done by graduate students in the Program on Climate Change.
- The <u>National Climate Assessment: Northwest Chapter Engagement Workshop</u> on February 1, 2022. The National Climate Assessment is a Congressionally mandated quadrennial report led by the U.S. Global Change Research Program (USGCRP). The report evaluates how climate change affects people and places in the United States. The Northwest Chapter Engagement Workshop was one in a series of workshops that solicited feedback based on a range of topics and geographic regions.

The University of Washington Botanic Gardens hosted the following conference and symposium:

• The <u>2022 Urban Forest Symposium</u> on October 6, 2022, aimed to bridge the gap between tribal practices and local government, fostering the kinds of partnerships that can interweave community, access, ancestral stewardship, and current management practices that all work towards collaborative stewardship of our urban forests.

• The <u>2023 Washington Botanical Symposium</u> will be held on March 8, 2023. The symposium includes an extensive network of professional, academic, and amateur botanists who are actively engaged in the conservation, management, and study of Washington's diverse flora

#### 6. Is your <u>medical school</u> 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 Washington School of Medicine is now a member of the Global Consortium on Climate and Health Education, new for 2022-23. As of January 2023, UWSOM has not joined the Planetary Health Alliance.

Section Total (15 out of 17) 88.24%

Back to summary page here

#### **Community Outreach and Advocacy**

Section Overview: 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.

# 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: The University of Washington partners with many 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 here. 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 here.

# 2. Does your medical school 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. O The institution/medical school have not offered such community-facing courses or events.

Score explanation: The University of Washington's Office of Sustainability offers several events, workshops, and webinars that are open to the community throughout the year. Many of these events

have been offered virtually over the last year, which has allowed for increased access by community members. 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. The UW School of Medicine was not directly affiliated or involved in planning these events, but rather the University of Washington institution as a whole offered these community-facing lectures.

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.	

Score explanation: UWSOM communications for the 2022 year were reviewed and none contained updates on planetary health or sustainable healthcare. Future UWSOM communications could include updates from the Occupational and Environmental Medicine Department. The UW Office of Sustainability also has a newsletter that students can opt-into if they are interested.

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

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

Score explanation: There are no former or upcoming <u>CME courses</u> (online or in person) relating to planetary health and sustainable healthcare.

- 5. Does your <u>medical school</u> or its primary <u>affiliated hospital</u> have accessible educational materials for patients about environmental health exposures?
- 2 Yes, all affiliated hospitals have accessible educational materials for patients.

- Some affiliated hospitals have accessible educational materials for patients.
- 0 No affiliated medical centers have accessible educational materials for patients.

Score explanation: The University of Washington has information available on their website about different environmental health exposures including: molds, air pollution, carbon monoxide, lead, radon, and a variety of occupational lung diseases. Further information can be found <a href="here">here</a> and <a href="here">here</a>.

- 6. Does your <u>medical school</u> or its <u>primary affiliated hospital</u> have accessible educational materials for patients about climate change and health impacts?
  - 2 Yes, all 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: University of Washington is part of the Washington Healthcare Climate Alliance which partnered with Health Care without Harm 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." All affiliated hospitals are part of this initiative and share Health Care without Harm's brochures, which can be viewed <a href="here">here</a>. Additionally, they have some resources regarding the ozone's effect on asthma which can be found <a href="here">here</a>.

Section Total (8 out of 14) 57.14%

Back to summary page here

<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.

## 1. Does your medical school or your institution 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 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.

#### ${\bf 2.\ Does\ your\ \underline{institution}\ offer\ opportunities\ for\ medical\ students\ to\ do\ research\ related\ to\ planetary\ health\ and/or\ sustainable\ health care?}$

- 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: Students can independently explore sustainability research, and in some cases this may fulfil requirements for the Independent Investigative Inquiry (III) program. There are no sustainability related projects listed under the III directory for 2023, but students are able to identify research projects outside of this list. There are multiple sustainability research programs through the University of Washington schools of Pharmacy, Nursing, and Public Health, some of which are listed here. Project information is limited and decentralised, making it difficult to know whether projects may be open to medical student participation.

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 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. 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: The Montana Foundations site of UWSOM had an active Planetary Health Interest Group for the 2022-23 academic year with faculty support that was open to medical students at that site. They held several events, including a "Climate Change and Health" talk with local physicians, tea talks with students about eco-anxiety, and spearheading a composting service.

- 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: 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 here. There is a University of Washington Environmental Stewardship committee that

serves the whole institution. Medical students are eligible to serve on this committee, but as of now, *Jan. 2023*, there are none.

#### 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) Projects where students are able to gain experience in organic agriculture and sustainable 1 food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects. Panels, speaker series, or similar events related to planetary health that have students as an 1 intended audience. Events in which students learn directly from members of a local environmental justice 1 community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts. Cultural arts events, installations or performances related to planetary health that have students as 1 an intended audience. Local volunteer opportunities related to building community resilience to anthropogenic 1 environmental impacts.

Score explanation: Over the past year, UWSOM has hosted or encouraged participation in numerous events related to planetary health. These include:

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.

Wilderness or outdoors programs (e.g., that organize hiking, backpacking, kayaking, or

- 2. The Montana foundations site Planetary Health Interest Group hosted a talk with local physicians titled "Climate Change and Health," as well as several informal coffee-talks with interested students around eco-anxiety. The Wyoming foundations site Lifestyle Medicine Interest Group also hosted a talk on evidence-based lifestyle interventions, that included an emphasis on plant-based nutrition.
- 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%
-----------------------------	--------

1

other outings for students)

#### **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.

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 no specific staff member in charge of medical school and/or hospital sustainability.		
1	There are no salaried sustainability staff, but there is a sustainability task force or committee		
0	There are no staff members or task force responsible for overseeing campus sustainability		

Score explanation: The University of Washington's Office of Sustainability (website found <u>HERE</u>) serves the University of Washington campuses. While no person is directly assigned to the School of Medicine, the UW Environmental Stewardship Committee subcommittee on Greening Health Sciences works closely with Sustainability and Medicine (Information on SAM can be found <u>HERE</u>), a facility by facility initiative working to embrace sustainable practices within our organisation's medical institutions.

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: The University of Washington has a published goal to reduce fossil fuel production by 45% by 2030. While there is a goal to achieve carbon neutrality by 2050, there is	

not a published plan in place to meet this goal. See section 10 of their 2022 fiscal year sustainability action plan <u>HERE</u> for more information about the current plan.

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 <20% of energy needs from off-site and/or on-site renewable energy.	

Score explanation: The Office of Sustainability at the University of Washington has an ongoing plan to implement solar at its campuses to account for 5% of its total electricity needs. The remainder of the needs of the institution come from Seattle City Light, 80% of which comes from hydroelectric. While categorically debated whether or not hydroelectric is renewable given that it impacts fisheries and water flow, this reviewer believes that if wind can be considered renewable given its impact on birds, so too can hydroelectric dams.

- 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.
- 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.
- O Sustainability is not considered in the construction of new buildings.

Score explanation: The University of Washington recently finished construction and opened the new Health Sciences Education Building (HESB) in September 2022. The HSEB project met UW's baseline sustainability requirements and worked directly with the UW Campus Sustainability Fund to incorporate an electrochromic glazing system, which minimizes energy use, and a large, off-site water filtration system that meets the new building's needs and that of an additional 17 acres of future development. The rooftop of the building has connections for future solar power, and the building team worked closely with UW Solar, an interdisciplinary campus organization that is developing a campus-wide plan to maximize areas of solar gain. Attention was also paid to local materials and biophilia, with the use of cross-laminated timber as part of the structural system, further reducing the carbon footprint of the project. However, the current Health Sciences Building that houses most of the medical school building is old, complex, and energy inefficient. Although it has not been retrofitted, it has a Resource Conservation Program that frequently implements small projects to improve the efficiency of the building.

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

Yes, the medical school 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 has implemented some strategies to provide environmentally-friendly transportation options, but the options are unsatisfactorily accessible or advertised.

The medical school 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.

- 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, improve active transportation infrastructure and access, as well as promoting U-CAR and UW Shuttle service for mid-day travel.

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.

1

- 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: 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.

- 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.
- 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 UW 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 2023 UW Sustainability Action Plan, 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.

UW HFS has sustainability language in vendor contracts. When developing a vendor contract, the UW will share their sustainability values and ask a few questions aimed at understanding the company's approach to sustainability. These questions roughly include,

- What are your organisation's values around sustainability initiatives?
- What sustainability initiatives are you currently practising?
- What are your plans moving into the future to continue with sustainability initiatives in the future?

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 Washington has laid out its <u>stated goals</u> for the institution and there are guides for purchasing certain items like recycled paper, but there is not a comprehensive guideline for all purchasing decisions such as electronics, chemicals etc. However, it is highly encouraged across campus to shop wisely for supplies. 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.

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

- 2 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 University of Washington is making an effort to use recyclable and compostable containers, cutlery and straws for events. Additionally, they are eliminating single use condiment packets and will be using large pumps instead. 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.

#### 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.
- 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: 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).

# 11. Does your institution's endowment portfolio investments include fossil-fuel companies? 4 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. 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 not divested from fossil-fuel companies, but faculty and/or students are conducting organized advocacy for divestment. O Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that.

Score explanation: The University of Washington Board of Regents recently approved a resolution to begin exiting all direct investments in fossil-fuel companies 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

#### **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 Washington School of Medicine

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(37/72) \times 100 = 51.4\%$	С
Interdisciplinary Research (17.5%)	$(15/17) \times 100 = 88.2\%$	A
Community Outreach and Advocacy (17.5%)	(8/14) x 100 = 57.1%	C+
Support for Student-led Planetary Health Initiatives (17.5%)	(8/15) x 100= 53.3%	С
Campus Sustainability (17.5%)	(21/32) x 100 = 65.6%	В
Institutional Grade	(Ax0.3 + Bx0.175 + Cx0.175 + Dx0.175 + Ex0.175) = 61.6%	В-

#### **Report Card Trends**

#### **Section Overview**

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



