Planetary Health Report Card (Medicine) 2026:

Warren Alpert School of Medicine at Brown University

2025-2026 Contributing Team:

- Students: Nicolas Neumeister*, Alan Mach, Stephen Fox
- Faculty Mentors: Kyle Denison Martin, DO, MPH and Katherine Smith, PhD

*Primary Contact: nicolas_neumeister@brown.edu

Land Acknowledgement: Brown University is located in Providence, Rhode Island, on lands that are within the ancestral homelands of the Narragansett Indian Tribe. The Narragansett Indian Tribe, whose ancestors stewarded these lands with great care, continues as a sovereign nation today. We commit to working together to honor our past and build our future with truth.

Summary of Findings

Overall Grade	B

Curriculum	B-

- The medical school's curriculum has removed two of the lectures related to planetary health since the last report card. While themes of planetary health have been incorporated into other lectures, and exposure to planetary health remains a part of the curriculum, it has received less emphasis than in previous years. Nevertheless, the curriculum still emphasizes the importance of planetary health in small group discussions and continues to support the Planetary Health Scholarly Concentration to allow interested students to engage in longitudinal study throughout medical school.
- **Recommendations:** We recommend incorporating the themes of planetary health and climate change into small group discussions related to infectious disease and further integrating planetary health into case-based discussions in the Doctoring curriculum.

Interdisciplinary Research	A-

- In 2024, the Planetary Health Initiative (PHI) was launched in the Division of Biology and Medicine. The PHI expands planetary health curriculum efforts, community engagement, and connects all students with interdisciplinary research opportunities. The PHI held its inaugural Planetary Health Symposium on May 1st, 2025 at the medical school, featuring Dr. Sam Myers as the keynote speaker. Existing funding opportunities may support student projects in this area, but are not specific to planetary health. The medical school has several investigators with planetary health-related focuses, as well as a few lectures throughout the pre-clerkship curriculum discussing planetary health research.
- **Recommendations**: We recommend focusing further on integrating planetary health into the core curriculum, including the impact of hospital systems and environmental change on human health, which are not currently well-defined in existing materials.

Community Outreach and Advocacy	C+

- Educational materials are sparse and remain unadvertised unless driven by individual student initiative. The medical school does not yet have a substantial, institutional presence in the community as a center for planetary health or environmental stewardship.
- **Recommendations**: The medical school should seize the opportunity to become a *visible* leader in environmental health awareness. By leveraging its immediate proximity to the Providence River Pedestrian Bridge, the school could engage the community through public-facing informational campaigns, locally hosted health-and-climate workshops, or publicized partnerships with local environmental groups. This would be consistent with the adoption of student-advocated curricula, on a scale that affects the planet.
- **In short**: Centralize educational materials, relieve the reliance on individual student initiatives, and utilize the campus's high-visibility location to foster active, public-facing environmental advocacy.

Support for Student-Led Initiatives	A

- Support for student-led initiatives currently comes predominantly from the wider University rather than the medical school itself. Though this broader support has highlighted a present, growing demand among medical students, the medical school is missing the opportunity to sustain this momentum internally.
- **Recommendations**: We recommend the medical school cultivate a more robust, internal culture of sustainability by increasing direct support for student advocates. Specific interventions should include developing a centralized hub to connect students with faculty mentors, outlining clear pathways for environmentally sustainable quality improvement (QI) projects, and prioritizing research grants for planetary health initiatives.

- **In short**: Lower barriers and provide structured frameworks for student-led QI projects, allocate dedicated funding for these efforts, and better leverage the wider university's existing sustainability infrastructure.

Campus Sustainability	**B**

- The medical school recently cessated their composting at the medical school building, citing lack of return for the amount of time and money invested. This decreases the overall sustainability of the medical school campus. Budget constraints also forced Brown to halt their net-zero carbon emission goal, setting back the campus' progress towards a sustainable operation.
- Recommendations: Potential improvements include improving anatomy lab sustainability, establishing and implementing rigorous sustainability guidelines for events and procurement, finding alternative, more efficient methods to resume composting, and continuing to work towards full fossil fuel divestment.

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 analysing 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, urbanisation, 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 health professional 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 health professional training. It is imperative that we hold our institutions accountable for educating health professional 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 colour, 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 health professional schools, we have created a Planetary Health Report Card that students internationally can use to grade and compare their institutions on an annual basis. This student-driven initiative aims to compare health professional 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 centred on environmental health impacts 5) 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 health professional 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/Department vs. Institution:** When "Medical school" is specified in the report card, this only refers to curriculum and resources offered by the School/department 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 including all of its campuses. 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 (Curriculum Section):** This is a series of questions students 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 mould 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. Please be as specific as possible when providing evidence for this metric.

- **Elective:** The word "elective" refers to an optional course or lecture series that a 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.

- **Core Curriculum:** This refers to the taught material that is delivered to the entire cohort of students in one year.

- **Clerkship / Outreach:** 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, outreach or placements. This is a relatively short (approximately 4-8 weeks) period of study and patient-centred clinical experience that takes place as part of the undergraduate programme.

- **Clinical rotation:** This is a term used to refer to placements that students go on (e.g., ophthalmology, surgery, cardiology).

- **Physiotherapy vs Physical Therapy:** For the purposes of this report card these terms are considered interchangeable. However, physiotherapy will be used primarily.

- **Community organisations:** For most institutions, there are existing groups that are not directly affiliated with the university and exist as a product of what the community the institution exists in cares about or needs. These specific community organisations relevant to this report include those that are focused around some aspect of climate and health preservation. These community organisations can include but are not limited to local mutual aid initiatives, underserved-resource distribution groups, clean-up and nature conservation groups, community gardeners, and other environmental-related organisations. If your institution does not have access to local volunteerships with community groups, please report any community organisations your institution or school has collaborated with.

- **Climate justice:** The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.

- **Extractivism:** The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to the

historic seizing of natural resources, a practice which has developed business models tied to ecological degradation and loss of biodiversity.

- **Global South:** Nations that often have less economic and industrial development and are typically in the southern hemisphere. These nations have been found to be disproportionately impacted by the climate crisis.

- **Low socioeconomic status (SES):** An individual or geographical area that across a variety of socioeconomic factors (e.g., income, education, race/ethnicity) is considered vulnerable. This vulnerability has been correlated to more adverse health outcomes often as a consequence of encountering more barriers in accessing and receiving healthcare.

- **Low and Middle-Income Countries (LMIC):** Countries that have lower degrees of economic affluence.

- **Anthropogenic:** Created through human activity

- **Marginalized communities:** Groups excluded from mainstream economic, educational, social, and/or cultural experiences due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status (Sevelius et al., 2020).

Scoring Matrix

- Elective coursework (1 point): This score applies to material that is actively selected by the students such as a module choice, or additional lecture series. By implication, only a given proportion of the cohort will receive this taught material.
- Brief coverage in the core curriculum (2 points): This score applies where a topic is covered only briefly in a core curriculum session. This implies that the entire cohort receives the same material. At minimum brief inclusion would qualify as inclusion in a single lecture slide in a single year.
- In depth coverage in the core curriculum (3 points): This score applies where a topic is taught in significant detail or where a topic is repeatedly brought up in different years. This might look like several dedicated lecture slides, or inclusion of the same topic in different lectures and teaching formats.

Other considerations:

- If there are more than one “tracks” at your institution 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). Where possible please indicate the proportion of students that are on each track.

Updated in 2025, a complete literature review by metric is available for the 2024/25 Medicine Report Card Template. This largely translates across disciplines although we are hoping to expand this process across all of our covered disciplines. A link to the 2025 literature review by metric is available here.

Planetary Health Curriculum

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

Curriculum: General

1.1. Did your medical school offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?	
Yes, the medical school has offered **more than one** elective whose primary focus is ESH/planetary health in the past year. (3 points)	
Yes, the medical school has offered **one** elective whose primary focus is ESH/planetary health in the past year. (2 points)	
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. (1 point)	
No, the medical school has **not** offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. (0 points)	
Score Assigned:	2
Score explanation: The medical school offered a semester-long preclinical elective titled Planetary Health for the fifth year in a row. This was led by Brown faculty members, Dean Katherine Smith and Dr. Kyle Martin, in collaboration with medical students. This elective focused on how environmental health and population level health intersect. Lectures and visiting speakers covered topics such as warming temperatures and their effect on infectious disease prevalence, the need for sustainable practices in operating rooms, and heat-related illness in emergency medicine. The elective also required 4 hours of community-based service activity relevant to planetary health with students completing activities such as harvesting produce for a local food pantry or planting trees in the city of Providence.	

1.2. Does your medical school curriculum address the relationship between extreme heat, health risks, and climate change?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score explanation: This topic was briefly covered in the core curriculum during the metabolism unit in lectures titled “Introduction to Nutrition Science” and “Energy Balance.” These lectures specifically explored the relationship between climate change and food availability as well as the effect that different diets have on planetary health. Additionally, in the required first year Doctoring curriculum, there was a 3 hour didactic day that covered how environmental and occupational exposures can affect an individual’s health and how to take an exposure history, including exposure to extreme heat.	

1.3. Does your medical school curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score explanation: This topic was formerly covered as part of the M1 core curriculum at Brown in the course Health Systems Science which included a lecture titled "Occupational Health and Climate Change" that briefly covered the topic of extreme weather and individual health, however this lecture was not included this year. This topic was, however, covered in the elective course Planetary Health which discussed how flooding, hurricanes, droughts and forest fires can affect population level health, health systems, and individual health. Additionally, it was covered in a required lecture titled “Indigenous and Territorial Health” which discussed the impact of events such as hurricanes on healthcare among indigenous communities.	

1.4. Does your medical school curriculum address the impact of climate change on the changing patterns of infectious diseases?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score explanation: As part of the first-year curriculum at Brown, topics related to climate change and infectious disease transmission are still mentioned within the Microbiology/Infectious Disease block. These sessions briefly address how climate change may expand the geographic range and seasonal duration of vector-borne diseases such as West Nile virus, Lyme disease, and malaria, and how flooding and drought can influence waterborne disease risk. However, the previously dedicated lectures “Occupational Health and Climate Change” and “Planetary Health” are no longer included, and the material is now covered more briefly and with less depth. As a result, students receive a brief mention of changing vector migration patterns rather than an in depth discussion of how this can affect human health and emerging disease.	

1.5. Does your medical school curriculum address the respiratory health effects of climate change and air pollution?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: During the M1 core curriculum, the Health Systems Science course dedicated 2 small group discussion sessions to the impact of air pollution and mold exposure on the development of pediatric respiratory illnesses such as asthma. In addition to these small group sessions, there was a required assignment which involved drafting a mock testimony to support the passage of a bill protecting Rhode Island’s pediatric population from mold exposure in their home. In the M2 core curriculum, a lecture titled “Environmental Lung Disease” discusses air pollution, particulate matter, and their tendency to exacerbate respiratory illness.	

1.6. Does your medical school curriculum address the cardiovascular health effects of climate change, including increased heat?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	1
Score explanation: This topic was not covered at all in the core curriculum at the medical school. However, this topic was extensively covered in the Planetary Health elective course by numerous guest lecturers. More specifically, these lectures explored the impact of per- and polyfluoroalkyl substances (PFAS) on cardiovascular health as well as the prevalence of PFAS in blood samples. Furthermore, an additional lecture discussed extreme heat and its effect on healthcare which included discussion of the effect of extreme heat on cardiovascular health.	

1.7. Does your medical school curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	0
Score explanation: This topic was previously covered in the required first-year curriculum in lectures titled "Occupational Health and Climate Change" and "Planetary Health," however these lectures were not included in the curriculum this year.	

1.8. Does your medical school curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?
This topic was explored **in depth** by the **core** curriculum. (3 points)
This topic was **briefly** covered in the **core** curriculum. (2 points)
This topic was covered in **elective** coursework. (1 point)
This topic was **not** covered. (0 points)

Score Assigned:	3

Score explanation:
Within the required first-year curriculum at Brown, content addressing the relationship between health, individual patient food and water security, ecosystem health, and climate change is covered in the course Scientific Foundations of Medicine. The lectures “Introduction to Nutrition Science” and “Energy Balance” discuss how climate change, land use practices, water availability, and evolving food systems influence nutrition, chronic disease risk, and population health. Through these sessions, students are introduced to the connections between environmental change, food systems, and human health, emphasizing how both global environmental shifts and individual behaviors shape health outcomes.

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

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

Score Assigned:	3

Score explanation:
Within the first-year curriculum at Brown, issues of climate change and health equity are addressed in the Health Systems Science course through the lectures “Indigenous and Territorial Health” and “US and RI Health.” These sessions highlight how climate change can exacerbate existing socioeconomic inequities by disproportionately affecting populations with low incomes, racial and ethnic minority groups, immigrants, women, children, older adults, and individuals with chronic illnesses or disabilities, though discussion of these groups is relatively brief. In addition, students are introduced to the heightened climate vulnerability of U.S. territories and island communities in the Caribbean and Pacific, including the effects of warming waters, stronger tropical storms, and shifting precipitation patterns. These sessions further note disparities in access to disaster relief and climate recovery funding for U.S. territories compared with states.

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

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

Score Assigned:	3

Score explanation: In the required first-year curriculum at Brown, the lecture "Indigenous and Territorial Health" addresses unequal regional health impacts of climate change. The session highlights the disproportionate effects of hurricanes and severe storms on Caribbean island communities, Pacific Islands, and U.S. territories, including threats to housing, infrastructure, and access to care. It also discusses disparities in disaster relief funding, recovery resources, and access to medical care compared with U.S. states, illustrating how structural inequities contribute to greater climate-related health risks in these regions.

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

1.11. Does your medical school curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides, microplastics)?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score explanation: A first-year lecture entitled "Teratogens" in the required Scientific Foundations of Medicine course outlined the effect of ionizing radiation on fetal development. Additionally, the Planetary Health elective included a lecture addressing the relationship between pediatrics, obstetrics, and environmental health which included discussion of the effect of per- and polyfluoroalkyl substances (PFAS) on reproductive health.	

1.12. Does your medical school curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score explanation: The required Health Systems Science course dedicated 2 small group sessions to the discussion of how mold exposure affects the development of pediatric respiratory illnesses such as asthma. In addition to these small group sessions, there was a required assignment which involved drafting a mock testimony to support the passage of a bill protecting Rhode Island's pediatric population from mold exposure in their home. This involved students working in groups and conducting a preliminary literature review of how these exposures affect the pediatric population as well as the	

prevalence of mold exposure in Providence and Rhode Island. While this was an in-depth exploration of mold and its health effects, the required curriculum did not cover the topic of human-caused environmental threats very broadly.

1.13. To what extent does your medical school emphasise the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score explanation: The required first-year course Health Systems Science included a lecture titled "Indigenous and Territorial Health" that discusses the important connections between Indigenous populations, land, food sovereignty, and health outcomes. Planetary health solutions and conservation practices were discussed in the context of the indigenous Chamoru population of Guam.	

1.14. Does your medical school curriculum address the outsized impact of anthropogenic environmental toxins on marginalised populations such as those with low SES, women, communities of colour, children, homeless populations, Indigenous populations, and older adults?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: As was mentioned in section 1.12, the Health Systems Science course dedicated 2 small group discussion based sessions to the discussion of how anthropogenic toxins, in this case mold exposure, affects the development of pediatric respiratory illnesses such as asthma. In addition to these small group sessions, there was a required assignment where first year students researched and prepared mock legislative testimonies on protecting children and vulnerable populations from household environmental exposures. Through this assignment, students were able to learn about environmental justice disparities at the local and national level.	

1.15. Does your medical school curriculum address the environmental and health co-benefits of a plant-based diet?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 point)	
Score Assigned:	3
Score explanation: In the first year curriculum at Brown, these topics are addressed in the required Scientific Foundations of Medicine course through the lectures “Energy Balance” and “Introduction to Nutritional Sciences.” These sessions discuss how dietary patterns influence both human health and environmental sustainability, including the role of plant-forward diets such as Mediterranean and vegetarian dietary patterns in reducing the environmental footprint of food production. The lectures also introduce the connections between greenhouse gas emissions, food waste, and agricultural intensification, emphasizing how food system practices affect climate change and population health..	

1.16. Does your medical school curriculum address the carbon footprint of healthcare systems?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	1
Score explanation: The Planetary Health elective discussed the carbon footprint of the healthcare system and recent efforts to quantify its impact on the climate. Dr. Kyle Martin spoke to the fact that the healthcare industry is responsible for a large proportion of the United States carbon emissions due to electricity and waste production. This highlighted the reciprocal impacts of the healthcare industry on climate change, and the impacts of climate change on healthcare. Additionally, a visiting lecturer spoke of the impact that waste in operating rooms has on greenhouse gas emissions while also discussing existing strategies to mitigate waste in this setting.	

1.17. Does your medical school curriculum cover these components of sustainable clinical practice in the core curriculum? (points for each)	**Score**
The health **and** environmental **co-benefits** of **avoiding** over-medicalisation, over-investigation and/or over-treatment (2 points)	0
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 fulfil this metric. (2 points) .	0
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 point)	1
Environmental impact of **surgical** healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point)	0
The impact of **anaesthetic** gases on the healthcare carbon footprint and ways to reduce anaesthesia's environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions. (1 point)	0
The impact of **inhalers** on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point)	0
Waste production within healthcare **clinics** and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting) (1 point)	0
Score explanation: In the "Energy Balance" and "Introduction to Nutrition" lectures within the required Scientific Foundations of Medicine course, the topics of substituting exercise for pharmaceutical treatment of conditions such as diabetes was briefly covered.	

Curriculum: Clinical Applications

1.18. In training for patient encounters, does your medical school's curriculum introduce strategies to have conversations with patients about the health effects of climate change?	
Yes, there are strategies introduced for having conversations with patients about climate change in the **core** curriculum. (2 points)	
Yes, there are strategies introduced for having conversations with patients about climate change in **elective** coursework. (1 point)	
No, there are **not** strategies introduced for having conversations with patients about climate change. (0 points)	
Score Assigned:	0
Score explanation:	

This topic was not specifically included in the core curriculum or in elective coursework.

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?	
Yes, the **core** curriculum includes strategies for taking an environmental history. (2 points)	
Only **elective** coursework includes strategies for taking an environmental history. (1 point)	
No, the curriculum does **not** include strategies for taking an environmental history. (0 points)	
Score Assigned:	2
Score explanation: As part of the year one Doctoring curriculum at Brown, the medical interview includes an exposure history where students learn to ask questions about environmental exposures and hazards at home and at work. Questions include "Have you ever changed or wanted to change your residence due to a health concern?" "Is there anything about your current physical home and neighbourhood that might be impacting your health?" and "Are you exposed to any health hazards at work such as chemicals and dust?"	

Curriculum: Administrative Support for Planetary Health

1.20. 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. (4 points)	
Yes, the medical school is currently in the process of making **minor** improvements to ESH/planetary health education. (2 points)	
No, there are **no** improvements to planetary health education in progress. (0 points)	
Score Assigned:	4
Score explanation: As part of a restructuring of the preclinical curriculum, the Planetary Health Curricular Integration Committee and now the Planetary Health Initiative have assisted in the process of pitching additional planetary health related material to most courses in the pre-clinical educational sequence. The Office of Medical Education has expressed support for this effort and encouraged meeting with course leaders to discuss appropriate inclusion within each course. Students have met with faculty who teach during four learning blocks, Microbiology/Infectious Diseases, Nutrition/Metabolism, Cardiology, and Pulmonology, to discuss ways in which they can incorporate planetary health into their curriculum. Some faculty have already expressed interest in adding a slide or case study into their lectures where planetary health is applicable. Within the M2 curriculum, faculty have incorporated planetary health concepts into various Integrated Clinical Curriculum (ICC) cases relevant to specific systems blocks (e.g., within the pulmonology block, discussing connections between pediatric asthma and various planetary health topics).	

The school has recently approved planetary health as one of twelve longitudinal threads to incorporate into curricular revision. Learning objectives include describing how anthropogenic changes to natural systems influence health outcomes, articulating the disproportionate impact of environmental changes on marginalized populations, incorporating knowledge of environmental change into clinical practice, proposing strategies to engage marginalized populations in making decisions that af ect health of populations and ecosystems, communicating messages on planetary health to patients and lay audiences, and proposing strategies to achieve “patient-planet health co-benefits.”

1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> curriculum?	
Planetary health/ESH topics are **well integrated** into the core medical school curriculum. (6 points)	
Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum. (4 points)	
Planetary health/ESH is not integrated and is primarily addressed in **(a) standalone lecture(s).** (2 points)	
There is **minimal/no** education for sustainable healthcare. (0 points)	
Score Assigned:	4
Score explanation: For the 2025–2026 academic year, topics related to planetary health and environmental sustainability in healthcare (ESH) have been incorporated into multiple lectures across the core curriculum. However, the inclusion of these topics remains somewhat sporadic, with more in-depth coverage limited to areas such as metabolism, infectious disease, and public health. While these targeted discussions provide valuable context, there is significant opportunity to integrate planetary health and ESH concepts more consistently throughout the curriculum, ensuring that students gain a broader understanding of their relevance across diverse areas of medical education.	

1.22. Does your <u>medical school</u> employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?	
Yes, the **medical school** has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (1 point)	
No, the **medical school** does **not** have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points)	
Score Assigned:	0
Score explanation: As of 2025-26, the medical school does not have a specific faculty/staff member responsible for this aspect of curricular integration nor are there any plans in place for the designation of such a position, although Dean Katherine Smith and Dr. Kyle Martin are serving in this capacity.	

1.23. Does your health professional curriculum include teaching on civic engagement/advocacy to address the environmental and structural determinants of health?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: Civic engagement and advocacy to address environmental and structural determinants of health are covered in depth in the Doctoring curriculum. For example, in small-group sessions, students discuss the role of physician advocacy in real-world contexts, such as the Flint water crisis, emphasizing how healthcare professionals can influence policy and community health outcomes. In addition, the curriculum includes a requirement for first-year students to complete four hours of community service, with encouragement to participate in activities that address social and environmental determinants of health. These components are designed to provide students with both the knowledge and practical experience necessary to engage in meaningful advocacy and civic action throughout their medical training.	

Section Total (48 out of 75)	**64%**

Back to Summary Page here

Interdisciplinary Research

Section Overview: ***This section evaluates the quality and quantity of interdisciplinary planetary health research at the 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, institutions 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 emphasised.*

2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your institution?	
Yes, there are faculty members at the **institution** who have a **primary** research focus in planetary health **or** sustainable healthcare/vetcare. (3 points)	
Yes, there are individual faculty members at the **institution** who are conducting research **related** to planetary health or healthcare sustainability, OR are part of a national/international sustainability working group, but it is not their primary research focus. (2 points)	
There are sustainability researchers at the **institution**, but not specifically associated with healthcare/vetcare. (1 point)	
No, there are **no** planetary health and/or sustainability researchers at the **institution** at this time. (0 points)	
Score Assigned:	3
Score explanation: There are several investigators affiliated with the medical school who have a primary research focus in planetary health, specifically the human health consequences of environmental/occupational toxin exposures and reducing hospital waste. Many faculty in Pathology and Laboratory Medicine at Brown focus on environmental exposures, including Dr. Jeff Bailey. Dr. David A. Savitz, Professor of Epidemiology with joint appointments in OB/GYN and Pediatrics, conducts research on the health effects of environmental agents on reproductive health outcomes. In addition, Assistant Professors of emergency medicine Dr. Katelyn Moretti and Dr. Kyle Denison Martin are working with several medical students to reduce waste in the ED at Miriam Hospital and Kent Hospital. Dr. Allan Just and Dr. Joseph Braun in theSchool of Public Health study the effects of air pollution and chemical toxins, respectively, on human health. Dr. Bryce Perler is leading a composting effort at Rhode Island Hospital in addition to research on the sustainability of plant-based diets in the healthcare system. Dr. Ankur Shah, an Assistant Professor of Medicine, has been involved in climate change advocacy both regionally and nationally, and contributed to the American Society of Nephrology's statement on climate change. This is not a comprehensive listing of all faculty interested in this area, and there have been increasing numbers of professors interested in this area. In May 2022, the medical school introduced the Ruth Sauber Medical Education Fund for Planetary Health. This new initiative will allow third and fourth year medical students to pursue a gap year conducting research projects related to planetary health.	

2.2. 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. (3 points)	
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. (2 points)	
There is an **Occupational and Environmental Health department**, but no interdisciplinary department or institute for planetary health research. (1 point)	
There is **no** dedicated department or institute. (0 points)	
Score Assigned:	2
Score explanation: The Planetary Health Initiative (PHI) has been formally launched within the Division of Biology and Medicine as of early 2025. It has established co-directors (Dr. Kyle Martin and Dr. Kate Smith), an official website, a steering committee including medical students, PhD students, and undergraduate students, and four programmatic pillars: education, research, clinical leadership, and community engagement. The PHI has applied for grants to support research on emerging fungal pathogens and healthcare sustainability, hosted an inaugural Planetary Health Symposium on May 1, 2025, and intends to serve as the natural home for interdisciplinary planetary health research at Brown. A standalone department or institute has not been established yet; the PHI remains situated within the Division of Biology and Medicine. The Center for Climate, Environment, and Health within the School of Public Health also exists, providing relevant research on that sector. Brown has a Department of Environmental Health and Safety to field inquiries related to campus environmental health.	

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 institution?	
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. (3 points)	
Yes, there is a process in which community members impacted by climate and environmental injustice **advise** the climate + environmental research agenda. (2 points)	
No, but there are **current efforts** to establish a process for community members to advise or make decisions on the research agenda. (1 point)	
There is **no** process, and **no** efforts to create such a process. (0 points)	
Score Assigned:	1

Score explanation:
There are multiple efforts currently underway at the medical school to incorporate the contributions of disproportionately impacted communities in the work of researchers. The Division of Biology and Medicine has established a dedicated Community Engagement division, which could play a key role in this process, connecting students to teaching and support opportunities around the Rhode Island community. This is particularly helpful towards establishing planetary health education into curricula taught at different centers, as well as in patient education. The Division's newly revised mission statement (fall 2023) explicitly emphasizes planetary health: "The mission of the Division of Biology and Medicine at Brown University is to advance knowledge and the health and well-being of people and planet." This strategic shift reflects a significant accomplishment and the culmination of long-standing advocacy efforts, creating a clear framework for future action. The establishment of the Planetary Health Initiative further reaffirms this commitment, and the PHI steering committee aims to elucidate ways for community members to advise and make decisions on the research agenda in the coming years.

2.4. Does your institution have a planetary health website that centralises ongoing and past research related to health and the environment?	
There is an **easy-to-use, adequately comprehensive** website that **centralises** 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. (3 points)	
There is a website that **attempts to centralise** various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive. (2 points)	
The **institution** has an **Office of Sustainability website** that includes **some** resources related to health and the environment. (1 point)	
There is **no** website. (0 points)	
Score Assigned:	3
Score explanation: There is a centralized integrated website specifically dedicated to planetary health: https://planetary-health.brown.edu/. This supplements the broader institution's Office of Sustainability's website, Sustainability at Brown, features relevant campus sustainability news, student-led efforts, interdisciplinary collaborations, global engagement, and opportunities to get involved. The website connects to the Institute at Brown for Environment and Society's website which further highlights environmental science research at the institution. vivo.brown.edu is a comprehensive, searchable catalog of researchers, including planetary health researchers, and their interests/publications.	

2.5. Has your institution recently hosted a conference or symposium on topics related to planetary health?	
Yes, the **institution** has hosted at least one conference or symposium on topics related to planetary health in the past year. (4 points)	
Yes, the **institution** has hosted at least one conference or symposium on topics related to sustainable healthcare/vetcare in the past year. (3 points)	
Yes, the **institution** has hosted a conference on topics related to planetary health / sustainable healthcare/vetcare in the past three years. (2 points)	
The **institution** has not hosted any conferences directly, but they have provided financial support for a local planetary health event. (1 point)	
No, the **institution** has not hosted a conference on topics related to planetary health in the past three years. (0 points)	
Score Assigned:	4
Score explanation: Brown's Office of Sustainability granted a seed grant to Dr. Alison Hayward, an emergency medicine attending, to hold an in-person symposium at the medical school on Climate Change and Health in Spring 2024. This was a regional conference about solutions to address the health impacts of climate change. The inaugural Planetary Health Symposium was then held on May 1, 2025, hosted by the newly launched Planetary Health Initiative. It featured the 2025 Levinger Lecture by Dr. Sam Myers (Executive Director of the Planetary Health Alliance), a student research showcase, a plenary session on climate change and emerging fungal pathogens, and interactive workshops on climate modeling, environmental exposures, food systems sustainability, and planetary health advocacy.	

2.6. Is your institution a member of a national or international planetary health or ESH/ESV organisation?	
Yes, the institution is a member of a national or international planetary health **or** ESH/ESV organisation. (1 point)	
No, the institution is **not** a member of such an organisation. (0 points)	
Score Assigned:	1
Score explanation: The medical school is a part of both the Planetary Health Alliance and the Global Consortium on Climate and Health Education.	

Section Total (14 out of 17)	**82%**

Back to Summary Page here

Community Outreach and Advocacy

Section Overview: ***This section evaluates a school's 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 colour. 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 institution partner with community organisations to promote planetary and environmental health?	
Yes, the **institution** meaningfully partners with **multiple** community organisations to promote planetary and environmental health. (3 points)	
Yes, the **institution** meaningfully partners with **one** community organisation to promote planetary and environmental health. (2 points)	
The **institution** does not partner with community organisations, but participates in community focused events relating to planetary health. (1 point)	
No, there is **no** such meaningful community partnership. (0 points)	
Score Assigned:	3
Score Explanation: The medical school continues to partner with the Providence Neighborhood Planting Program (pnpp.org) and Farm Fresh Rhode Island (farmfreshri.org). PNPP works closely with the City of Providence to develop green spaces within the city through planting trees, and Farm Fresh RI works to reduce food waste and increase accessibility to locally sourced foods. Brown medical students had two opportunities, in the spring of 2024 and again in the fall of 2024, to attend neighborhood tree planting events. Outside of the medical school, there are other opportunities offered through Brown University, such as Clean Break, where items that are going to be thrown away by students are donated to the Providence community. On the community partnerships and volunteering portal "Brown Engage," there are additional community partners where Brown students have volunteered in the past that are related to planetary health initiatives. However, these partnerships are through Brown University and not the medical school. The Planetary Health Elective encourages students to volunteer with various climate-oriented community organizations of personal interest and develop their own longitudinal relationships with these groups.	

3.2. Does your institution offer community-facing courses or events regarding planetary health?	
The **institution** offers community-facing courses or events at least once every year. (3 points)	
The **institution** offers courses or events open to the community at least once per year, but they are not primarily created for a community audience. (2 points)	
The **institution** has promoted community-facing courses or events, but was not involved in planning those courses or events. (1 point)	
The **institution** has not offered such community-facing courses or events. (0 points)	
Score Assigned:	2
Score Explanation: Beginning in 2025, Brown has begun hosting an annual Planetary Health Symposium. This event consists of a keynote lecture followed by a poster reception and several workshops on topics such as planetary health or healthcare sustainability. This event is open to students, faculty, and community members, but it is primarily tailored towards a student audience. While this symposium only recently began in 2025, it is planned as an annual event with the next symposium planned for the spring of 2026.	

3.3. Does your institution have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?	
Yes, all students **regularly** receive communication updates dedicated to planetary health and/or sustainable healthcare. (2 points)	
Yes, planetary health and/or sustainable healthcare topics are regularly included in communication updates to **some courses**. (1 point)	
Students **do not** receive communications about planetary health or sustainable healthcare. (0 points)	
Score Assigned:	1
Score Explanation: The Division of Biology and Medicine, including the medical school, has a full website for the Planetary Health Initiative at Brown University (site - https://planetary-health.brown.edu/). On the medical school website, under “News”, there are occasionally articles and public events advertising regarding planetary health. Additionally, Today@Brown is a newsletter sent out to students and Brown community members which occasionally advertises planetary health events.	

3.4. Does the institution or main affiliated hospital trust 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. (2 points)	
Yes, the **institution** or **main affiliated hospital trust** offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers. (1 point)	
There are **no** such accessible courses for post-graduate providers. (0 points)	
Score Assigned:	0
Score Explanation: The medical school and Affiliated Hospital do not currently (February 2026) offer continuing medical education courses pertaining to planetary health or sustainability in health care. Searches for “planetary health”, “climate”, “climate change”, “environmental health” provide no results, while more broad searches for “sustain” and “planet” offer a single result regarding Lifestyle Medicine. Existing efforts for climate-focused Emergency Medicine fellowships have yet to come to fruition, though we do note the Disaster Medicine fellowship has been longstanding (est. 2007).	

3.5. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about environmental health exposures?	
Yes, the **institution** or **all affiliated hospitals** have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated medical centres have accessible educational materials for patients. (0 points)	
Score Assigned:	1
Score explanation: There are no online resources about environmental health exposures available for patients on the medical school website. There was a free public online lecture on lead poisoning through the Brown University Health Community Health Ambassador series in January 2023, however the recording is not very easily accessible through online searching. Brown University Health is the medical school’s hospital system affiliate. According to physicians, some of the affiliated hospitals have provided educational materials for patients but no public-facing information was found on internet search.	

3.6. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about the health impacts of climate change?	
Yes, the **institution** or **all affiliated hospitals** have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated hospitals have accessible educational materials for patients. (0 points)	
Score Assigned:	1
Score explanation: There are no online resources about environmental health exposures available for patients on the medical school website. There was a free public online lecture on lead poisoning through the Brown University Health Community Health Ambassador series in January 2023, however the recording is not very easily accessible through online searching. Brown University Health is the medical school's hospital system affiliate. According to physicians, some of the affiliated hospitals have provided educational materials for patients but no public-facing information was found on internet search.	

Section Total (8 out of 14)	**57%**

Back to Summary Page here

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 institution offer support for students interested in enacting a sustainability initiative/QI project?	
Yes, the **institution** *either* offers grants for students to enact sustainability initiatives/QI projects *or* sustainability QI projects are part of the core curriculum. (2 points)	
The **institution** encourages sustainability QI projects (to fulfil 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. (1 point)	
No, the institution does not offer opportunities or support for sustainability initiatives or QI projects. (0 points)	
Score Assigned:	1
Score Explanation: Given the withdrawal of the composting program and prohibitive barriers to a student-led initiative reinstituting it, we subtract a point. To be clear, funding is available, but meeting the institutional requisite threshold for a QI project is deemed unachievable in the near-term.	

4.2. Does your institution offer opportunities for students to do research related to planetary health and/or sustainable healthcare/vetcare?	
The **institution** has a **specific** research program or fellowship for students interested in doing planetary health/sustainable healthcare/vetcare research. (2 points)	
There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these **require student initiative** to seek them out and carry them out in their spare time. (1 point)	
There are **no opportunities** for students to engage in planetary health/sustainable healthcare research. (0 points)	
Score Assigned:	2
Score Explanation: The medical school offers a Planetary Health Scholarly Concentration (https://education.med.brown.edu/scholarly-concentrations-program/planetary-health) which includes symposium and conference poster presentations, research funding through the Summer Research Assistantship program, and longitudinal mentorship throughout all four years of medical school.	

4.3. Does the institution have a webpage where students can find specific information related to planetary health and/or sustainable healthcare/vetcare activities and mentors within the institution? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.	
The institution has a webpage with specific information related to planetary health or sustainable healthcare/vetcare that includes up-to-date information on relevant initiatives and contact information of potential mentors. (2 points)	
There is an institution webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the institution, but it lacks key information. (1 point)	
There is **no institution** specific webpage for locating planetary health and/or sustainable healthcare projects or mentors. (0 points)	
Score Assigned:	2
Score Explanation: With the Planetary Health Scholarly Concentration, a list of mentors who work in the field of planetary health is posted on the scholarly concentration website (https://education.med.brown.edu/scholarly-concentrations-program/planetary-health).	

4.4. Does your institution 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 organisation **with faculty support** at my institution dedicated to planetary health or sustainability in healthcare. (2 points)	
Yes, there is a student organisation at my institution dedicated to planetary health or sustainability in healthcare but it **lacks faculty support.** (1 point)	
No, there is **not** a student organisation at my institution dedicated to planetary health or sustainability in healthcare. (0 points)	
Score Assigned:	2
Score Explanation: The medical school's Environmental Coalition ("ECo") has been maintained as a student-run group that promotes the intersection of health and environment. Funding is provided through the medical school and faculty support is spearheaded by Drs. Kyle Martin and Kate Smith. The Planetary Health Curricular Integration Committee sought to integrate planetary health into the preclinical curriculum.	

4.5. Is there a student liaison representing sustainability interests who serves on a department or institutional decision-making council to advocate for curriculum reform and/or sustainability best practices?	
Yes, there is a student representative who serves on a department or institutional decision-making council/committee. (1 point)	
No, there is no such student representative. (0 points)	
Score Assigned:	1
Score Explanation: The Planetary Health Initiative in the Department of Biology and Medicine has a steering committee for this purpose specifically across the undergraduate and medical campuses.	

4.6. In the past year, has the institution had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	**Score**
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.	0
Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.	1
Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)	1

Score Explanation:
The planetary health pre-clinical elective hosted multiple panels and community researchers, several of whom recommended advocacy, network engagement, and shared resources. They also recommended involvement in leadership for local sustainability communities. These panels and events were intended primarily for undergraduate and medical students at Brown.

The Brown Market Shares Program provides a weekly supply of locally and sustainably sourced produce, dairy, eggs, and meat to students and other members of the Brown community, with subsidies available to medical students to improve affordability.

Students have had opportunities to volunteer with the Providence Neighborhood Tree Planting Program to plant trees throughout the city, with plans to collaborate again this spring.

A pre-clinical elective, “Wilderness Medicine,” was offered to medical students in fall 2025. The Brown Outing Club (BOC) organizes local and regional outdoor trips, offers subsidized gear rentals, and maintains a no-questions-asked financial aid policy for trip participation.

Section Total (13 out of 15)	**87%**

Back to Summary Page here

Campus Sustainability

Section Overview: ***This section evaluates the support and engagement in sustainability initiatives by the 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 endeavour, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinising 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 institutions, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimising environmental impact.*

5.1. Does your institution have an Office of Sustainability?	
Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is **at least one designated staff member** for sustainability at the hospital. (3 points)	
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 hospital sustainability. (2 points)	
There are **no salaried sustainability staff,** but there is a sustainability task force or committee. (1 point)	
There are **no** staff members **or** task force responsible for overseeing campus sustainability. (0 points)	
Score Assigned:	2
Score explanation: Brown University maintains an active Office of Sustainability with eight full time staff members and several undergraduate interns. There is no specific staff member assigned to the medical school and/or affiliated hospitals.	

5.2. How ambitious is your institution's plan to reduce its own carbon footprint?	
The institution has a **written and approved plan** to achieve carbon neutrality by **2030** (5 points)	
The institution has a **written and approved plan** to achieve carbon neutrality by **2040** (3 points)	
The institution has a stated goal of carbon neutrality by **2040** but has **not created a plan** to reach that goal or the **plan is inadequate** (1 point)	
The institution does **not** meet any of the requirements listed above (0 points)	
Score Assigned:	3
Score explanation:	

Brown University (including the medical school) is not currently carbon neutral. However, Brown's sustainability plan had proposed to achieve carbon neutrality by 2040 with a 75% reduction by 2025 via carbon offset, renewable natural gas offset, renovation of the main campus heat generation plant, and construction of net-zero buildings. This carbon offset will be achieved through investment into a Texan wind farm and a Rhode Island-based solar farm. This initiative, however, has been slightly delayed due to budget constraints in light of recent federal funding issues.

5.3. Do buildings/infrastructure used by the institution for teaching (not including the hospital) utilize renewable energy?	
Yes, institution buildings are **100%** powered by renewable energy. (3 points)	
Institution buildings source **>80%** of energy needs from off-site and/or on-site renewable energy. (2 points)	
Institution buildings source **>20%** of energy needs from off-site and/or on-site renewable energy. (1 point)	
Institution buildings source **<20%** of energy needs from off-site and/or on-site renewable energy. (0 points)	
Score Assigned:	3
Score explanation: The medical school building does not have any on-site renewable energy sources and is supplied by the ISO-New England grid, a part of the Eastern interconnection grid. In 2023, an initiative was launched to install blade light controls within the building, which are programmed to shut off at 11:00 PM each night and stay off until sunset the following day. The building achieved LEED Gold at completion of its 2013 Renovation, with full LED conversion in 2017. Additional decarbonization measures such as converting the domestic hot water heaters from natural gas to electric resistance were implemented. The medical school building offsets all of its electricity use through solar RECs. All new buildings on the main campus, such as the new Chen and Danoff residency halls, are also LEED Gold certified.	

5.4. Are sustainable building practices utilised for new and old buildings on the institution's campus, with design and construction of new buildings and remodelling of old buildings conforming to a published sustainability rating system or building code/guideline?
Yes, sustainable building practices are utilised for new buildings on the institution's campus and the **majority** of old buildings **have been retrofitted** to be more sustainable. (3 points)
Sustainable building practices are utilised for new buildings on the institution's campus, but most old buildings have **not been retrofitted.** (2 points)
Sustainable building practices are **inadequately or incompletely** implemented for new buildings. (1 point)
Sustainability is **not considered** in the construction of new buildings. (0 points)

Score Assigned:	3

Score explanation:
The medical school is housed in a renovated building that previously served as the headquarters of a jewelry manufacturing company. The building was completed in 2011 and achieved a LEED Gold rating in 2013. The property's automation system undergoes continuous commissioning using analytics tools. Brown is currently constructing the William A. and Ami Kuan Danoff Life Sciences Laboratories, a 300,000-square-foot, seven-story facility in the Jewelry District with targeted completion in 2027. This facility will be Brown's first all-electric laboratory building powered by 100% renewable electricity, the first to conduct a full embodied carbon life-cycle analysis, and one of the first "net zero" lab constructions in New England. A topping-off ceremony was held in August 2025. Once operational, the medical school building will transition to a district heating and cooling system connected to the Danoff Laboratories, effectively eliminating the need for boiler operations.

5.5. Has the institution implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?

Yes, the 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-utilised by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default. (2 points)

The institution has implemented **some** strategies to provide environmentally-friendly transportation options, but the options are **unsatisfactorily** accessible or advertised. (1 point)

The institution has **not** implemented strategies to encourage and provide environmentally-friendly transportation options. (0 points)

Score Assigned:	2

Score explanation:
The medical school generally discourages commuting to school via automobile, as students must pay for on campus parking or utilize metered street parking. Bus rides with the Rhode Island Public Transit Authority (RIPTA) system are free to all members of the Brown community via ID card. In recent years, the university’s Office of Sustainability and Resiliency (OSR) conducted a review of medical student commuting behaviors and suggested the implementation of a carpooling network for students, expanded shuttle schedules, and added more secure and accessible bike storage. The university has since expanded shuttle service to the medical school and added additional bike racks beside the medical school building. Brown supports a partnership between the city of Providence and Spin Bikes/Scooters but has no financial stake in the partnership; the Office of Transportation does offer several resources including free bike repair through a community organization (Bikes at Brown). There is one unit with two electric vehicle charging ports at the medical student parking lot. Additionally, the OSR provides “Sustainability Tips” on their website, advising students on eco-friendly practices such as maintaining the proper PSI since low tire pressure increases fuel consumption and CO2 emissions.

5.6. Does your institution have an organics recycling program (compost) and a conventional recycling program (aluminium/paper/plastic/glass)?	
Yes, the institution has **both** compost **and** recycling programs accessible to students and faculty. (2 points)	
The institution has **either** recycling **or** compost programs accessible to students and faculty, but not both. (1 point)	
There is **no** compost or recycling program at the institution. (0 points)	
Score Assigned:	1
Score explanation: The medical school building has long standing aluminum, paper, plastic, and glass recycling programs. The medical school began implementing its composting program in 2019, but recently ended it due to a stated lack of product compared to associated costs. This also exists as a general institution-level initiative.	

5.7. Does the institution apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?	
Yes, the institution has a**dequate s**ustainability requirements for food and beverages, including meat-free days or no red-meat, and **is engaged** in efforts to increase food and beverage sustainability. (3 points)	
There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution **is engaged** in efforts to increase food and beverage sustainability. (2 points)	
There are sustainability guidelines for food and beverages, but they are **insufficient or optional.** The institution is **not** engaged in efforts to increase food and beverage sustainability. (1 point)	
There are **no** sustainability guidelines for food and beverages. (0 points)	
Score Assigned:	1
Score explanation: There has been no significant change to this since the last PHRC. There is one third party food vendor located within the medical school building. It is not required by the university to adhere to any food sustainability standards. The medical school utilizes Brown Dining's catering service for school sponsored events but does not participate in catering's "Green Event"option, which includes sustainably sourced food and reusable dining ware. Food is usually served in paper containers with plastic utensils, and food waste is composted. While Brown's Dining Services has food sourcing and sustainability goals, the medical school is not actively engaged in these efforts. Leftover food from events is frequently placed in student lounges to avoid food waste.	

5.8. Does the institution apply sustainability criteria when making decisions about supply procurement?	
Yes, the institution has **adequate** sustainability requirements for supply procurement **and** is **engaged** in efforts to increase sustainability of procurement. (3 points)	
There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The institution is **engaged** in efforts to increase sustainability of procurement. (2 points)	
There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The institution is **not engaged** in efforts to increase sustainability of procurement. (1 point)	
There are **no** sustainability guidelines for supply procurement. (0 points)	
Score Assigned:	1
Score explanation: Brown University provides its departments with broad sustainability guidelines to steer their sourcing decisions. The university has banned the purchase of any furniture containing flame retardants, and GreenSeal and Eco certified cleaning products are used exclusively in all university buildings. The medical school does not have any specific sustainability criteria for the sourcing of its other materials.	

5.9. Are there sustainability requirements or guidelines for events hosted at the institution?	
Every event hosted at the institution **must** abide by sustainability criteria. (2 points)	
The institution **strongly recommends or incentivizes** sustainability measures, but they are **not required.** (1 point)	
There are **no** sustainability guidelines for institution events. (0 points)	
Score Assigned:	1
Score explanation: There are no sustainability requirements or criteria for events hosted at the medical school. However, medical school staff do undertake measures to make events as paper-free (ex. online instead of paper handouts) as possible.	

5.10. Does your institution have programs and initiatives to assist with making lab spaces more environmentally sustainable?	
Yes, the institution has **programs** and **initiatives** to assist with making lab spaces more environmentally sustainable. (2 points)	
There are **guidelines** on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point)	
There are **no** efforts at the institution to make lab spaces more sustainable. (0 points)	
Score Assigned:	2
Score explanation: Across Brown, an initiative to reduce lab ventilation during unoccupied periods was implemented. The medical school's anatomy lab ventilation optimization was completed in 2017. The labs of the medical building require 24/7 ventilation, but unoccupied ventilation rates were deemed satisfactory after inspection by an industrial hygienist. In addition, Brown has a laboratory ventilation management team that meets quarterly to review energy and safety initiatives. Lab ventilation standards have been developed and continued measures are being evaluated to reduce energy use from fume hoods and sash positions. A student-led project funded by a Spring 2024 Sustainability Seed Grant, titled "Cutting Waste, Not Just Tissue," conducted a pilot study comparing waste from individually wrapped versus bulk-packaged scalpel blades across all three sections of the Anatomy I course during the Fall 2024 semester. The study used lifecycle analysis to assess comprehensive waste reduction, aiming to reduce scalpel wrapper waste from cadaver dissections to effectively zero, and plans to share results with administration and other institutions as a scalable model for sustainable medical education.	

5.11. Does your institution's endowment portfolio investments include fossil-fuel companies?	
The institution is **entirely divested** from fossil fuels **and** has made a **commitment to reinvest divested funds** into renewable energy companies or renewable energy campus initiatives. (4 points)	
The institution is **entirely divested** from fossil fuels. (3 points)	
The institution has **partially divested** from fossil fuel companies **or** has made a **commitment to fully divest**, but **currently** still has fossil fuel investments. (2 points)	
The institution has **not divested** from fossil-fuel companies, but faculty and/or students are **conducting organised advocacy** for divestment. (1 point)	
Yes, the institution has investments with fossil-fuel companies and there have been **no efforts** to change that. (0 points)	
Score Assigned:	2
Score explanation: Brown University's Investment Office began selling fossil fuel extraction holdings in October 2017 and had divested approximately 90% of those holdings by March 2020, with the stated intent to liquidate the remainder. As of 2024, Brown's CIO confirmed that the endowment has sold out of	

effectively all dedicated fossil fuel energy strategies. However, Brown has not adopted a formal written divestment policy, meaning the current posture reflects an investment office decision rather than a binding institutional commitment. No new direct investments in fossil fuel extraction companies are planned. Approximately 96% of the endowment is held through third-party external managers, and potential residual indirect exposure through multi-sector funds cannot be fully excluded. The endowment now stands at $8 billion (FY2025) and applies ESG criteria to all investment decisions.

Section Total (21 out of 32)	**66%**

Back to Summary Page here

Grading

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

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

**Within each grade bracket, a score in the top 5% (_5 to_9%), receives a "+", and a score in the bottom 5% (_0-_4%) receives a "--". For example, a percentage score of 78% would be a B+.*

Planetary Health Grades for the Warren Alpert School of Medicine.
The following table presents the individual section grades and overall institutional grade for the Warren Alpert School of Medicine on this Planetary Health Report Card.

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	(48/75) x 100 = 64%	B-
Interdisciplinary Research (17.5%)	(14/17) x 100 = 82%	A-
Community Outreach and Advocacy (17.5%)	(8/14) x 100 = 57%	C+
Support for Student-led Planetary Health Initiatives (17.5%)	(13/15) x 100= 87%	A
Campus Sustainability (17.5%)	(21/32) x 100 = 66%	B
Institutional Grade	**(Ax0.3 + Bx0.175 + Cx0.175 + Dx0.175 + Ex0.175) = 70%**	**B**

Report Card Trends

Section Overview
This graph demonstrates trends in overall and section grades for the years in which The Warren Alpert Medical School of Brown University has participated in the Planetary Health Report Card initiative.