

# Planetary Health Report Card (Medicine):

# University of Connecticut School of Medicine





2023-2024 Contributing Team:

• Students: Singh-Smith, Kiran, MS3 <singhsmith@uchc.edu>; Agresta, Hanako Ohta, MS3 <hagresta@uchc.edu>; Dellert, Audrey Marie, MS4 <dellert@uchc.edu>; Wilson, Edward Patrick, MS3 <edwilson@uchc.edu>; Sagehorn, Braeden Reev, MS2 <sagehorn@uchc.edu>; Marczuk, Stefan, MS1 <<u>marczuk@uchc.edu</u>>; Bradley, Xenia Gia, MS4 <xbradley@uchc.edu>

• Faculty Mentors: Kirsten Ek, M.D. <<u>ek@uchc.edu</u>>

• \*Primary Contact: Dellert, Audrey Marie <dellert@uchc.edu>

# **Summary of Findings**

Overall	B-
Curriculum	A-
<ul> <li>The University of Connecticut School of Medicine (UConn SOM) does include planetary health curriculum and has recently expanded its coverage of topics like climate change in required first year courses. Students and faculty at the medical school continue to actively work on ways to in more planetary health topics into the curriculum.</li> <li>Recommendations: Continue to work planetary health topics into the curriculum longitudinally to incorporating sustainable clinical practices into the core curriculum and increase administrati for its integration.</li> </ul>	i in the t and second itegrate y in addition ve support
Interdisciplinary Research	B-
<ul> <li>UConn SOM does not have dedicated departments for interdisciplinary research regarding plane There are conferences regarding planetary health but they are not directed towards medical stud</li> <li>Recommendations: UConn SOM should organize a conference related to Planetary Health. also officially join the Planetary Health Alliance, the Global Consortium on Climate and Health and set up a website with planetary health news with specific discussions relating to the medical</li> </ul>	etary health. ents. They could h Education, l field.
Community Outreach and Advocacy	С
<ul> <li>UConn SOM does not have much in the line of community outreach and advocacy. Few resource available to patients, institution staff only receive some singular presentations, and there are no partnerships or educational materials.</li> <li>Recommendations: We recommend that UConn SOM build community partnerships relating to health and that the hospital system focuses on emphasizing planetary health in patient education</li> </ul>	es are ongoing o planetary nal materials.
Support for Student-Led Initiatives	В
<ul> <li>UConn supports student groups dedicated to planetary health. There is one medical group (Susta UConn Health) that works closely with a faculty mentor and allies within the medical school. The also works together with the Sustainability Working Group at UConn Health to help direct policic change. In addition, UConn offers opportunities for students to participate in planetary health-reference. However, these opportunities must be explicitly sought out. UConn does offer the Env and Social Sustainability Small Grants program for students.</li> <li>Recommendations: Offer increased support to students interested in sustainable initiatives.</li> </ul>	ainability at his group y and lated vironmental
<u>Campus Sustainability</u>	D+
<ul> <li>UConn SOM has made some efforts to be a sustainable campus. In conjunction with the wider U sustainable building practices are utilized for new buildings and the majority of old buildings has retrofitted to be more sustainable. The new food service company has sustainability guidelines for beverages. Additionally, the medical school offers environmentally-friendly transportation option</li> <li>Recommendations: A designated staff member and/or committee in charge of medical school a hospital sustainability would be an asset in the plans to improve campus/hospital sustainability. recommend a more ambitious CO2 emission reduction goal and divesting from fossil-fuel compalso recommend focusing on making lab spaces more sustainable, introducing composting on catimproving/introducing sustainable guidelines for events and supply procurement.</li> </ul>	Jniversity, ive been for food and ons. and/or We also panies. We ampus, and

### **Statement of Purpose**

### Planetary health is human health.

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

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

With the purpose of increasing planetary health awareness and accountability among medical schools, we have created a Planetary Health Report Card that medical students internationally can use to grade and compare their home institutions on an annual basis. This medical-student-driven initiative aims to compare medical schools nationally and internationally on the basis of discrete metrics in five main category areas: 1) planetary health curriculum, 2) interdisciplinary research in health and environment, 3) university support for student planetary health initiatives, and 4) community outreach centered on environmental health impacts 5) medical school campus sustainability.

### **Definitions & Other Considerations**

### **Definitions:**

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

2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.

3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.

• Medical School vs. Institution: When "medical school" is specified in the report card, this only refers to curriculum and resources offered by the School of Medicine and does not include offerings from other parts of the university (e.g. undergraduate departments (USA), other related departments (e.g. Public Health, Population Health departments). In contrast, when "institution" is specified in the report card, we are referring to the university more

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

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

### **Other considerations:**

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

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

# **Planetary Health Curriculum**

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

### Curriculum: General

**1.1.** Did your <u>medical school</u> offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?

3	Yes, the medical school has offered <b>more than one</b> elective whose primary focus is ESH/planetary health in the past year.
2	Yes, the medical school has offered <b>one</b> elective whose primary focus is ESH/planetary health in the past year.
1	The medical school does <b>not</b> have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a <b>lecture</b> on planetary health.
0	No, the medical school has <b>not</b> offered any electives on planetary health or electives that include ESH/planetary health topics in the past year.
Score explanation: The medical school's Department of Public Health offers several electives on planetary health, including one called Climate Change and another course called Environmental Public Health. Medical students who are also in the MPH program can take these courses, though they are not advertised well to the rest of the medical school.	

### Curriculum: Health Effects of Climate Change

<b>1.2.</b> Does your <u>medical school</u> curriculum address the relationship between extreme heat, health risks, and climate change?	
3	This topic was explored <b>in depth</b> by the <b>core</b> curriculum.
2	This topic was <b>briefly</b> covered in the <b>core</b> curriculum.
1	This topic was covered in <b>elective</b> coursework.
0	This topic was <b>not</b> covered.
Score explanation: The first-year medical school curriculum at UConn contains a session in the	

Score explanation: The first-year medical school curriculum at UConn contains a session in the required VITAL (Vertically Integrated Teams Aligned in Learning and Scholarship) course entitled "Clinical Implications of Climate Change." One objective of the session reads "describe several key expected health implications of a warming planet, such as heat related illness, infectious disease,

cardiopulmonary, renal, neurological, mental health, malnutrition, and other conditions." It also discusses climate sensitive medical conditions. Medical students also presented such topics during the Department of Medicine Grand Rounds in January 2024.

# 1.3. Joes your medical school curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems? 3 This topic was explored in depth by the core curriculum. 2 This topic was briefly covered in the core curriculum. 1 This topic was covered in elective coursework. 0 This topic was not covered.

Score explanation: The first-year medical school curriculum at UConn contains a session in the required VITAL (Vertically Integrated Teams Aligned in Learning and Scholarship) course entitled Clinical Implications of Climate Change." This session discusses the increased incidence of extreme weather events due to climate change. Additionally, there is a first-year medical school course called PACTS (Patient Advocacy in Communities, Teams, and Health Systems) that dedicates an entire session to discussing the role of physicians in natural disasters and disaster preparedness. Medical students also presented such topics during the Department of Medicine Grand Rounds in January 2024.

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

3	This topic was explored <b>in depth</b> by the <b>core</b> curriculum.
2	This topic was <b>briefly</b> covered in the <b>core</b> curriculum.
1	This topic was covered in elective coursework.
0	This topic was <b>not</b> covered.
Score explanation: UConn's VITAL session "Clinical Implications of Climate Change" has a portion of the session that discusses the implications of a warming planet on infectious discusses. Medical students	

Score explanation: UConn's VIIAL session "Clinical Implications of Climate Change" has a portion of the session that discusses the implications of a warming planet on infectious diseases. Medical students also presented such topics during the Department of Medicine Grand Rounds in January 2024. Infectious diseases are additionally a major component of Block E for second year medical students, during which the impact of climate change is touched on.

# **1.5.** Does your <u>medical school</u> curriculum address the respiratory health effects of climate change and air pollution?

3	This topic was explored <b>in depth</b> by the <b>core</b> curriculum.
2	This topic was <b>briefly</b> covered in the <b>core</b> curriculum.
1	This topic was covered in elective coursework.

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

Score explanation: As part of the Vertically Integrated Teams Aligned in Learning and Scholarship (VITAL) course, UConn has required a session entitled "Particulate matter air pollution: Do we need better regulation to reduce morbidity and mortality?" entirely dedicated to the health impacts of particulate matter, including individual health and global morbidity and mortality. Students are encouraged to think about methods of reducing air pollution on the individual and policy-wide level. Another VITAL session, "Clinical Implications of Climate Change" discusses cardiopulmonary implications of a warming planet. Another course called PACTS has an entire session dedicated to occupational health, including a discussion on the respiratory effects of pollutants like particulate matter and chemicals.

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

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

Score explanation: The VITAL session "Clinical Implications of Climate Change" discusses the cardiopulmonary implications of a warming planet, including the physiology behind heat exhaustion, heat stroke, etc., as well as medical conditions and medications that put certain groups of people at greater risk. The session also provides anticipatory guidance for how future physicians can care for their patients, especially those vulnerable populations.

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

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

Score explanation: UConn's VITAL session "Clinical Implications of Climate Change" discusses the mental health implications of climate change, such as depression, PTSD, domestic violence, solastalgia, etc. Neurological implications are also covered, such as the effects of heat on patients with multiple sclerosis and other neurological diseases. Additionally, the COrE course has a session with an objective that states "recognize the connection between rising global temperatures and emotional, academic, and interpersonal development for adolescents."

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

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

Score explanation: UConn's VITAL session "Clinical Implications of Climate Change" briefly covers water and food insecurity, and the resulting effects on different populations and ecosystems around the world. For example, the class discusses the worsening droughts in Somalia and Tunisia, and connects such climate effects to the increasing prevalence of food and water scarcity, as well as malnutrition, in those regions.

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

3	This topic was explored <b>in depth</b> by the <b>core</b> curriculum.
2	This topic was <b>briefly</b> covered in the <b>core</b> curriculum.
1	This topic was covered in <b>elective</b> coursework.
0	This topic was <b>not</b> covered.
Score explanation: UConn's VITAL session "Clinical Implications of Climate Change" discusses the outsized impact of climate change on marginalized populations, with an objective that states "identify	

outsized impact of climate change on marginalized populations, with an objective that states "identify vulnerable groups with climate sensitive occupations and medical conditions". UConn's PACTS session called "Environmental Health & Justice" similarly discusses the disproportionate effects of pollution and other environmental threats on marginalized communities, focusing on local examples.

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

3	This topic was explored <b>in depth</b> by the <b>core</b> curriculum.
2	This topic was <b>briefly</b> covered in the <b>core</b> curriculum.
1	This topic was covered in elective coursework.
0	This topic was <b>not</b> covered.
Score explanation: UConn's VITAL session "Clinical Implications of Climate Change" briefly discusses the unequal regional health and socioeconomic impacts of climate change globally,	

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

specifically covering topics like forced migration, displacement, malnutrition, and infectious disease.

1.11. Does your <u>medical school</u> curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?

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

Score explanation: The UConn PACTS session "Environmental Health & Justice" discusses the perfluoroalkyl substances (PFAS) family of chemicals and persistent organic pollutants (POPs) that can have adverse effects on reproduction. Another course, titled COrE, covers a session in Block D for the second year students about environmental teratogens.

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

3	This topic was explored <b>in depth</b> by the <b>core</b> curriculum.
2	This topic was <b>briefly</b> covered in the <b>core</b> curriculum.
1	This topic was covered in <b>elective</b> coursework.
0	This topic was <b>not</b> covered.
Score explanation: The UConn PACTS session "Environmental Health & Justice" discusses local	

Score explanation: The UConn PACTS session "Environmental Health & Justice" discusses local bodies of water with fish that can contain contaminants. It also discusses Superfund (polluted areas in the United States (designated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)) that require a long term response to clean up hazardous contaminants) and Brownfield (previously developed land that is not currently in use due to the potential presence of a hazardous substance, pollutant or contaminant) sites in CT. An additional topic discussed in this session is the Hartford Trash Incinerator and the negative health impacts it causes in the community. Another PACTS session entitled "Toward Health Equity in Clinical Practice" discusses the lack of green spaces in surrounding communities.

1.13. To what extent does your <u>medical school</u> emphasize the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?	
3	Indigenous knowledge and value systems are <b>integrated throughout</b> the medical school's planetary health education
2	Indigenous knowledge and value systems as essential components of planetary health solutions are included <b>briefly</b> in the core curriculum.
1	Indigenous knowledge and value systems as essential components of planetary health solutions are included in <b>elective</b> coursework.
0	This topic was <b>not</b> covered.

Score explanation: Indigenous knowledge and value systems are not covered in any core curriculum sessions

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

- 3 This topic was explored in depth by the 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 UConn PACTS session "Environmental Health & Justice" discusses how environmental toxins adversely affect marginalized populations, for example, there is a discussion on the Hartford Trash Incinerator and its placement within a marginalized community. Additionally, the VITAL course "Particulate matter and air pollution: Do we need better regulation to reduce morbidity and mortality?" discusses the impact of air pollution on older individuals.

### Curriculum: Sustainability

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

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

Score explanation: Three of UConn's required core classes, known as COrE, VITAL, and DoCC, contain sessions focusing on a plant-based diet. These sessions highlight the environmental benefits and the health co-benefits of consuming a plant-based diet, and encourage students to think about how they would use those benefits to counsel patients on adopting a plant-based diet. The connection between plant-based diets and planetary health, along with individual health, is emphasized.

1.16. Does your <u>medical school</u> curriculum address the carbon footprint of healthcare systems?	
3	This topic was explored <b>in depth</b> by the <b>core</b> curriculum
2	This topic was <b>briefly</b> covered in the <b>core</b> curriculum.
1	This topic was covered in <b>elective</b> coursework.
0	This topic was <b>not</b> covered.

Score explanation: UConn's VITAL session "Clinical Implications of Climate Change" briefly discusses the carbon footprint of the U.S. healthcare industry and Health Care Without Harm, a global movement for environmentally responsible health care. The UConn PACTS session "Environmental Health & Justice" also discusses UConn Health's waste production.

1.17. Does your <u>medical school</u> curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum? (points for each)	
2	The health <b>and</b> environmental <b>co-benefits</b> of <b>avoiding</b> over-medicalisation, over-investigation and/or over-treatment
2	The environmental impact of <b>pharmaceuticals</b> and over-prescribing as a cause of climate health harm. Alternatively teaching on <b>deprescribing</b> where possible and its environmental and health co-benefits would fulfill this metric.
1	The health <b>and</b> environmental <b>co-benefits</b> of <b>non-pharmaceutical management</b> of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK.
1	Environmental impact of <b>surgical</b> healthcare on planetary health and the climate crisis, and how can it be mitigated
1	The impact of <b>anaesthetic</b> gases on the healthcare carbon footprint and ways to reduce anesthesia environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions
1	The impact of <b>inhalers</b> on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers.
1	<b>Waste production</b> within healthcare <b>clinics</b> and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting)
	Score explanation: UConn's VITAL session "Clinical Implications of Climate Change" briefly discusses the carbon footprint of the U.S. healthcare industry and Health Care Without Harm, a global movement for environmentally responsible health care. It also briefly mentions the impact of anaesthetic gases on the atmosphere. Additionally, it touches on counseling about health co-benefits of climate-friendly choices. Another VITAL session focuses on the Choosing Wisely campaign to avoid over-medicalization, over-investigation, and over-treatment. The DoCC session on nutrition and obesity also discusses co-benefits on non-pharmaceutical management of conditions like diabetes and obesity. The UConn PACTS session "Environmental Health & Justice" briefly discusses the large generation of waste and waste disposal within UConn Health's surgical departments and ORs, as well as UConn Health as a whole.

**Curriculum:** Clinical Applications

**1.18.** In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies to have conversations with patients about the health effects of climate change?

2 Yes, there are strategies introduced for having conversations with patients about climate change in the **core** curriculum.

1	Yes, there are strategies introduced for having conversations with patients about climate change in <b>elective</b> coursework.
---	---

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

Score explanation: UConn's VITAL session "Clinical Implications of Climate Change" discusses what role the healthcare community should have in conveying climate-related health concerns to the public. UConn's Case Oriented Essentials course also asks students to consider how they would counsel a patient on a behavior that has health and environmental co-benefits, such as a plant-based diet.

# **1.19.** In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies for taking an environmental history or exposure history?

2 Yes, the **core** curriculum includes strategies for taking an environmental history.

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

Score explanation: UConn's PACTS course session "Environmental Health & Justice" provides materials to learn how to take an environmental/exposure history, encompassing details like present and previous home locations, water supply, and food sources. Sessions in the DoCC and VITAL courses focus on teaching students how to take an occupational history in a way that draws parallels to an environmental history.

### 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?

- 4 Yes, the medical school is currently in the process of making **major** improvements to ESH/planetary health education.
- 2 Yes, the medical school is currently in the process of making **minor** improvements to ESH/planetary health education.
- 0 No, there are **no** improvements to planetary health education in progress.

Score explanation: At UConn, there are efforts to expand climate health education within the general curriculum. Though many of these efforts are student-driven, there is administrative support from physicians and professors, such as Dr. Kirten Ek. The Department of Medicine at UConn Health has welcomed educational efforts with a Grand Rounds session on climate change. Students have successfully incorporated more discussion of climate change and sustainability into the core curriculum through a course called Case Oriented Essentials, and continue to work on this endeavor. UConn also has a Sustainability Working Group that meets every 3 months, in which faculty, staff, and students come together to discuss how to make the institution more sustainable.

# **1.21.** How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> curriculum?

- 6 Planetary health/ESH topics are **well integrated** into the core medical school curriculum.
- 4 **Some** planetary health/ESH topics are appropriately integrated into the core medical student curriculum.
- 2 Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s).
- 0 There is **minimal/no** education for sustainable healthcare.

Score explanation: At UConn, ESH and Planetary Health are largely covered in the first two years of medical school through two VITALs sessions, three PACTS courses, and a few COrE sessions. Years three and four of the medical school curriculum currently do not have class-wide ESH or Planetary Health education. However, one M3 student recently gave a brief talk to the psychiatry department on the impact of climate change on mental health/psychiatric conditions during her psychiatry clerkship. Additionally, any third and fourth year students rotating in inpatient medicine received the Grand Rounds lecture on the implications of climate change on health.

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

**Yes,** the **medical school** has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare

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

Score explanation: Although we have faculty members who are passionate about these issues, namely Dr. Kirsten Ek, the medical school does not employ a faculty member to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course.

### Section Total (58 out of 72)

1

0

80.6%

### Back to Summary Page here

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

# **Interdisciplinary Research**

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

2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your <u>medical school</u>?

- 3 Yes, there are faculty members at the **medical school** who have a **primary r**esearch 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: There are no researchers at the School of Medicine whose primary research focus is planetary health or healthcare sustainability. The Department of Public Health Sciences, which falls under the School of Medicine does have a few faculty members whose research goals align with planetary health. For example, Dr. Zamora and Dr. Brugge both research air quality and pollution.

# **2.2.** Is there a dedicated department or institute for interdisciplinary planetary health research at your <u>institution</u>?

3	There is <b>at least one</b> dedicated department or institute for interdisciplinary planetary health research.
2	There is <b>not currently</b> a department or institute for interdisciplinary planetary health research, but there are <b>plans</b> to open one in the next 3 years.
1	There is an <b>Occupational and Environmental Health department</b> , but no interdisciplinary department or institute for planetary health research.
0	There is <b>no</b> dedicated department or institute.
Score explanation: The University of Connecticut has an <u>Institute of the Environment</u> which is dedicated towards "solving environmental problems related to climate change, sustainability food	

dedicated towards "solving environmental problems related to climate change, sustainability, food security, pollution, and species extinction with an interdisciplinary approach." It was created in 2019 and includes over 170 faculty members across four administrative units.

2.3. Is there a process by which communities disproportionately impacted by climate change and environmental injustice give input or make decisions about the research agenda at your <u>medical school</u>?

3	Yes, there is a process in which community members impacted by climate and environmental injustice have <b>decision-making power</b> in the climate + environmental research agenda.
2	Yes, there is a process in which community members impacted by climate and environmental injustice <b>advise</b> the climate + environmental research agenda.
1	No, but there are <b>current efforts</b> to establish a process for community members to advise or make decisions on the research agenda.
0	There is <b>no</b> process, and <b>no</b> efforts to create such a process.
Score explanation: There is no process by which communities disproportionately impacted by climate	

Score explanation: There is no process by which communities disproportionately impacted by climate change are given stakeholder status in research agendas set by the medical school. It would be up to individual investigators to get stakeholder buy-in from these communities.

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

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

Score explanation: The University of Connecticut has an easy-to-use <u>Office of Sustainability website</u> that is dedicated to highlighting the institution's sustainability efforts and progress, research, events, leaders, funding, and more.

<b>2.5.</b> Has your <u>institution</u> recently hosted a conference or symposium on topics related to planetary health?	
4	Yes, the <b>medical school</b> has hosted at least one conference or symposium on topics related to planetary health in the past year.
3	Yes, the <b>institution</b> has hosted at least one conference or symposium on topics related to planetary health in the past year.
2	Yes, the <b>institution</b> has hosted a conference on topics related to planetary health in the past three years.

- 1 The **institution** has not hosted any conferences directly, but they have provided financial support for a local planetary health event.
- 0 No, the **institution** has not hosted a conference on topics related to planetary health in the past three years.

Score explanation: Medical students can apply for funding to go to the Conference of the Parties (COP). On October 18-20, 2023, the Institute of the Environment, the College of Agriculture, Health and Natural Resources, the College of Liberal Arts and Sciences, and the College of Engineering sponsored a cross-college symposium "Securing a Sustainable Environmental Future" hosted at the University of Connecticut, Storrs campus. Video recordings of each of the lectures can be found here.

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

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

Score explanation: UConn Health is not a member of any national or international planetary health of education for Sustainable Healthcare organization.

### Section Total (11 out of 17)

64.7%

Back to Summary Page here

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

# **Community Outreach and Advocacy**

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

# **3.1.** Does your <u>medical school</u> partner with community organizations to promote planetary and environmental health?

3	Yes, the <b>medical school</b> meaningfully partners with <b>multiple</b> community organizations to
	promote planetary and environmental health.

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

Score explanation: The school of medicine partners with community members and organizations for one of its required courses called PACTS. One of these partnerships is with the North Hartford Promise Zone and other community members of Hartford, who come to teach the medical students about the health impacts of pollution. The session focuses on environmental justice and how some areas are disproportionately affected by pollution from trash incinerators, landfills, water pollution, etc. Medical students this past year also worked together to brainstorm important issues in terms of the conservation and development of the Greater Hartford region and provided a report to the Capitol Region Council of Governments. Students and faculty have also become involved with CT Health Professionals for Climate Action, an alliance of health professionals to help advocate and educate in areas regarding the harms of climate change in Connecticut. Additionally, during the orientation period for new medical students, students were required to volunteer with a local organization, including an option at a local community garden. The Sustainability at UConn Health student group leads outings with ORCA to aid in local beach clean-ups and has partnered with a local 4H organization to foster youth sustainability education. An area of improvement would be to increase the number of outreach programs operated and recognized by the medical school and institution, as some of these endeavors are student-initiated.

# **3.2.** Does your <u>medical school</u> offer community-facing courses or events regarding planetary health?

3 The **medical school** offers community-facing courses or events at least once every year.

- 2 The **medical school** offers courses or events open to the community at least once per year, but they are not primarily created for a community audience.
- 1 The **institution** has offered community-facing courses or events, but the **medical school** was not involved in planning those courses or events.
- 0 The **institution/medical school** have not offered such community-facing courses or events.

Score explanation: There have been a number of one-off internal events put on by the institution (such as a session put on by the UConn Program in Applied Public Health Sciences). However, none of these events have been intended for the larger community surrounding UConn Health. The Sustainability at UConn Health student group has partnered with a local 4H organization to foster youth sustainability education, but this is not an effort led by the institution.

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

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

Score explanation: There have been a number of instances of relevant planetary health or sustainable healthcare news included within the regular UConn Health newsletter. There is no regularly scheduled email sent out specifically for the purpose of communicating environmental news.

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

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

Score explanation: This year, a grand rounds session was held for post-graduate providers regarding climate change and the relationship to health and healthcare. More specifically, physicians were educated on climate science, greenhouse gasses, heat and heat stroke, extreme weather events, flooding, drought, famine, sea level rise, infectious disease, etc. They were also educated on the role of healthcare professionals in fighting this major public health crisis, including advocacy, counseling about health co-benefits, and providing anticipatory guidance for vulnerable populations. They were

also made aware of the huge carbon footprint that the USA's healthcare system has, and were informed of ways they can make their own practices more sustainable.

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

- 2 Yes, the **medical school** or **all affiliated hospitals** have accessible educational materials for patients.
- 1 **Some** affiliated hospitals have accessible educational materials for patients.
- 0 No affiliated medical centers have accessible educational materials for patients.

Score explanation: UConn Health providers use the Elsevier patient education content database as a resource to provide specific discharge information to patients who present with health concerns that require consideration of environmental factors. All other affiliated hospitals provide information to patients regarding their diagnoses and relevant factors, including relevant risk factors, on discharge. Furthermore, all hospitals have an occupational medicine team that provides treatment and patient education regarding occupational and environmental health exposures. Although this information is available to patients of these facilities, there is no publicly available information provided online regarding these environmental health exposures at most facilities.

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

- 2 Yes, the **medical school** or **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: Some affiliated hospitals have accessible educational materials for patients about climate change and health impacts. Hartford Hospital has information available regarding the connection between climate change, catastrophic weather events, and public health.

### Section Total (7 out of 14)

50.0%

### Back to Summary Page here

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

# Support for Student-Led Planetary Health Initiatives

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

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

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

Score explanation: Medical students can apply for a summer research project grant, which could be toward a sustainability QI should the student choose, but there are no sustainability initiative grants or funds for medical students specifically. The larger institution of UConn does have an Environmental and Social Sustainability Small Grants program for those who want to design sustainability initiatives/QI projects that medical students qualify to receive.

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

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

Score explanation: The UConn School of Medicine provides research opportunities to students throughout their four years at school, particularly during the summer between the first and second years. Students can perform research related to planetary health/sustainability if they seek out the opportunities themselves.

4.3. Does the <u>medical school</u> have a webpage where medical students can find specific information related to planetary health and/or sustainable healthcare activities and mentors

within the medical school? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.

2	The <b>medical school</b> 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.
1	There is a <b>medical school</b> webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information.
0	There is <b>no medical-school</b> specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.
C	

Score explanation: The larger institution of UConn has a webpage devoted to sustainability. On this page, students can find information pertaining to school initiatives, ways to become involved, who to contact, and grant information. The School of Medicine does not have a page dedicated to planetary health. However, there is a web page that provides information about the medical and dental student group that is focused on planetary health, Sustainability at UConn Health.

4.4. Does your <u>medical school</u> have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?

- 2 Yes, there is a student organization **with faculty support** at my medical school dedicated to planetary health or sustainability in healthcare.
- 1 Yes, there is a student organization at my medical school dedicated to planetary health or sustainability in healthcare but it **lacks faculty support.**
- 0 No, there is **not** a student organization at my institution dedicated to planetary health or sustainability in healthcare.

Score explanation: Sustainability at UConn Health is an interdisciplinary student group at the University of Connecticut School of Medicine aimed at improving sustainable initiatives and knowledge within the University of Connecticut's health center. The group is student-led with a faculty mentor Dr. Ek.

4.5. Is there a student liaison representing sustainability interests who serves on a <u>medical school</u> or <u>institutional</u> decision-making council to advocate for curriculum reform and/or sustainability best practices?

0 No, there is no such student representative.

Score explanation: There is a Sustainability Working Group that meets every 3 months, and the members of Sustainability at UConn Health are invited to attend these meetings. The working group is composed of UConn administrators, physicians, nurses, facilities staff, tech staff, students, etc.

4.6. In the past year, has the <u>institution</u> had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)

1	Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.
1	Panels, speaker series, or similar events related to planetary health that have students as an intended audience.
1	Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.
1	Cultural arts events, installations or performances related to planetary health that have students as an intended audience.
1	Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.
1	Wilderness or outdoors programs (e.g., that organize hiking, backpacking, kayaking, or other outings for students)
Score explanation: At the UConn Storrs campus there is the Spring Valley Student Farm where student's learn about sustainable community living, organic food growing methods, and the business aspects of how food is harvested, processed, and presented to the UConn dining community. UConn Storrs does panels and summits such as the The Sustainable Clean Energy Summit: Decarbonizing Society and the Grid that was held December 2023. At the Nafe Katter Theatre at the UConn Storrs	

Society and the Grid that was held December 2023. At the Nafe Katter Theatre at the UConn Storrs campus held a performance of A Hundred Words for Snow by Tatty Hennessy which had themes related to climate change and climate refugees. However, all of these events are largely inaccessible to medical students. The Wellness Committee at UConn School of Medicine hosts outdoor programs for the students, as well as the Wilderness Medicine interest group.

### Section Total (11 out of 15)

73.3%

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

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

# **Campus Sustainability**

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

5.1. Does your medical school and/or institution have an Office of Sustainability?	
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 <b>at least one designated staff member</b> for sustainability at the hospital and/or medical school.
2	There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but <b>no specific staff member</b> in charge of medical school and/or hospital sustainability.
1	There are <b>no salaried sustainability staff</b> , but there is a sustainability task force or committee
0	There are <b>no</b> staff members <b>or</b> task force responsible for overseeing campus sustainability
Score explanation: While the University of Connecticut has an office of sustainability, the School of Medicine and UConn Health does not have a designated staff member. However, UConn does have an official Sustainability working group that meets every 3 months, composed of UConn administrators, physicians, nurses, facilities staff, tech staff, students, etc.	

5.2. How ambitious is your <u>institution/medical school</u> plan to reduce its own carbon footprint?		
5	The institution/medical school has a <b>written and approved plan</b> to achieve carbon neutrality by <b>2030</b>	
3	The institution/medical school has a <b>written and approved plan</b> to achieve carbon neutrality by <b>2040</b>	
1	The institution/medical school has a stated goal of carbon neutrality by <b>2040</b> but has <b>not created a plan</b> to reach that goal or the <b>plan is inadequate</b>	
0	The institution/medical school does <b>not</b> meet any of the requirements listed above	
	Score explanation: The University has pledged to achieve carbon neutrality by 2050 and committed to a Climate Action Plan (CAP) in 2010, with nearly 200 recommended measures for achieving carbon reduction targets. The CAP was reaffirmed by President Herbst in 2012 and an interim assessment was conducted in 2015. <u>https://sustainability.uconn.edu/climate-action-plan/</u> .	

5.3. Do buildings/infrastructure used by the <u>medical school</u> for teaching (not including the hospital) utilize renewable energy?		
3	Yes medical school buildings are 100% powered by renewable energy	
2	Medical school buildings source >80% of energy needs from off-site and/or on-site renewable energy.	
1	Medical school buildings source >20% of energy needs from off-site and/or on-site renewable energy.	
0	Medical school buildings source <b>&lt;20%</b> of energy needs from off-site and/or on-site renewable energy.	
Score explanation: UConn Health does not use any renewable energy.		

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

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

Score explanation: The University of Connecticut uses efficiency guidelines with designing and retrofitting existing buildings. There are incentives from the government that UConn has taken advantage of to reduce their energy consumption by using highly efficient systems. In the past year, UConn Health's sustainability working group has been developing an initiative to convert outdoor lighting to LED, and initiated a Steam Trap Survey to increase condensate collection and reduce heat and new water utility.

5.5. Has the medical school or institution implemented strategies to encourage and provide<br/>environmentally-friendly transportation options for students and reduce the environmental<br/>impart of commuting?2Yes, the medical school or institution has implemented strategies to encourage and provide<br/>environmentally-friendly transportation options such as safe active transport, public transport,<br/>or carpooling and these options are well-utilized by students. Alternatively, the campus location<br/>is not amenable to unsustainable forms of transportation by default.1The medical school or institution has implemented some strategies to provide<br/>environmentally-friendly transportation options, but the options are unsatisfactorily accessible<br/>or advertised.

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

Score explanation: The UConn medical school currently has a shuttle that picks up medical students close to common student dwellings. This shuttle also transports students, patients, and employees around the UConn Health campuses (e.g., parking lots, buildings).

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

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

Score explanation: There are currently bins that are marked to collect recycling located in the classrooms, some hallways, and near the dining hall. The bins in the classrooms look very similar to the trash bins. There is often a lack of signage regarding what is appropriate to recycle and inappropriate items end up contaminating the recycling.

Currently, there is no option to compost at the UConn medical school or health center. Blue Earth is a composting facility that is located nearby (Hartford, CT). Blue Earth provides composting services to a nearby university Trinity College (Hartford, CT). Additionally, Connecticut has an anaerobic digester in Southington, Connecticut called Quantum Biopower. Yale University (New Haven, CT), Wesleyan University (Middletown, CT), parts of the University of Connecticut, and Quinnipiac University (Hamden, CT) have begun to send their food waste products to Quantum Biopower. Opportunities for composting are available. We look forward to collaborating with our institution on implementing a pathway for students, and employees to compost. Education on what is appropriate to compost will also be necessary.

In the past year, UConn Health's sustainability working group has performed a recycling survey and begun working on composting contracts. There is an existing electronic recycling program which recycled 13,712 lbs between June-August 2023, and 585 units of toner have been recycled in that time period as well (950 lbs).

5.7. Does the <u>medical school</u> apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?		
3	Yes, the medical school has a <b>dequate s</b> ustainability requirements for food and beverages, including meat-free days or no red-meat, and <b>is engaged</b> in efforts to increase food and beverage sustainability.	
2	There are sustainability guidelines for food and beverages, but they are <b>insufficient or optional</b> . The medical school <b>is engaged</b> in efforts to increase food and beverage sustainability.	
1	There are sustainability guidelines for food and beverages, but they are <b>insufficient or optional</b> . The medical school is <b>not</b> engaged in efforts to increase food and beverage sustainability.	

### 0 There are **no** sustainability guidelines for food and beverages.

Score explanation: The Health Center at the University of Connecticut changed its food service company effective January 1, 2022, to Morrison Healthcare which is part of Compass Group-USA. At this time there are no designated meat-free days or no red-meat days. However, there are non-meat options available. Morrison Healthcare is open to the idea of increasing sustainable practices such as composting food waste.

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

Yes, the medical school has adequate sustainability requirements for supply procurement and is engaged in efforts to increase sustainability of procurement.
 There are sustainability guidelines for supply procurement, but they are insufficient or optional. The medical school is engaged in efforts to increase sustainability of procurement.
 There are sustainability guidelines for supply procurement, but they are insufficient or optional. The medical school is 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: At this time there are no sustainability criteria that are made available.

5.9. Are there sustainability requirements or guidelines for events hosted at the medical school?		
2	Every event hosted at the medical school <b>must</b> abide by sustainability criteria.	
1	The medical school <b>strongly recommends or incentivizes</b> sustainability measures, but they are <b>not required.</b>	
0	There are <b>no</b> sustainability guidelines for medical school events.	
~		

Score explanation: None exist.

# 5.10. Joes your medical school have programs and initiatives to assist with making lab spaces more environmentally sustainable? 2 Yes, the medical school has programs and initiatives to assist with making lab spaces more environmentally sustainable. 1 There are guidelines on how to make lab spaces more environmentally sustainable, but not programs or initiatives. 0 There are no efforts at the medical school to make lab spaces more sustainable. Scorr explanation: There are expanded recycling guidelines for lab spaces, but no programs or initiatives.

5.11. Does your <u>institution's</u> endowment portfolio investments include fossil-fuel companies?		
4	The institution is <b>entirely divested</b> from fossil fuels <b>and</b> has made a <b>commitment to reinvest divested funds</b> into renewable energy companies or renewable energy campus initiatives.	
3	The institution is <b>entirely divested</b> from fossil fuels.	
2	The institution has <b>partially divested</b> from fossil fuel companies <b>or</b> has made a <b>commitment to fully divest</b> , but <b>currently</b> still has fossil fuel investments.	
1	The institution has <b>not divested</b> from fossil-fuel companies, but faculty and/or students are <b>conducting organized advocacy</b> for divestment.	
0	Yes, the institution has investments with fossil-fuel companies and there have been <b>no efforts</b> to change that.	
Score explanation: UConn's President Working Group on Sustainability and the Environment produced a report in May 2021 encouraging the university to divest all UConn Foundation holdings in fossil fuels and supporting investment in renewable technologies. However, no action (that has been disclosed) has been taken. The Foundation has a statement on divestment that states they only have 2% of their holdings in fossil fuels; however, this still amounts to about 10-12 million dollars. There is also no current responsibility for the Foundation to be transparent or acknowledge if there are indirect investments in fossil fuels.		

### Section Total (12 out of 32)

37.5%

Back to Summary Page here

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

# Grading

### **Section Overview**

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

Letter Grade*	Percentage
А	80% - 100%
В	60% - 79%
С	40% - 59%

D	20% - 39%	
F	0% - 19%	

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

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(58/72) \ge 100 = 80.6\%$	A-
Interdisciplinary Research (17.5%)	(11/17) x 100 = 64.7%	В-
Community Outreach and Advocacy (17.5%)	(7/14) x 100 = 50%	С
Support for Student-led Planetary Health Initiatives (17.5%)	(11/15) x 100 = 73.3%	В
Campus Sustainability (17.5%)	(12/32) x 100 = 37.5%	D+
Institutional Grade	(80.6x0.3 + 64.7x0.175 + 50x0.175 + 73.3x0.175 + 37.5x0.175) = 63.6%	В-

### **Report Card Trends**

### **Section Overview**

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



### Planetary Health Report Card Trends for University of Connecticut School of Medicine