

Planetary Health Report Card: University College Cork (Graduate Entry)



Coláiste na hOllscoile Corcaigh

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Summary of Findings

Curriculum

• While some PH connections do exist in the curriculum, there is very little in the way of how planetary health or the environment plays a role in our health. There is some mention in passing during respiratory lectures, when looking specifically at environmental exposures to smoke inhalation, living on a farm (with cattle), or living in "old" housing. However, PH connections can be made more explicit, and with more dedicated time. For example, in components with "nutrition" – emphasis can be made on why plant-based diets could be better, instead of focusing only on the anemia aspect. It might also be worth noting that perhaps highlighting PH in learning objectives and test questions will make them more easily incorporated into our day-to-day lectures and tutorials.

Interdisciplinary Research

- UCC as an institution has a strong academic environment on the topic of planetary health. However, there is little research led or with direct input from the School of Medicine, resulting in the lower score. However, there are many conferences, workshops, and events that medical students can participate in, as long as they are made aware of it.
- One important aspect that can be improved, is making it easier to find and contact faculty members with conducting research on healthcare sustainability and planetary health.

Community Outreach and Advocacy

• The School of Medicine does not offer community-facing education opportunities, but UCC's School of Public Health does cover planetary health education opportunities for the general public. The HSE website – through which all Irish schools and public hospitals are affiliated – does contain information on planetary health and its impacts on human health. It is important to make these more readily available in hospitals and to patients.

Support for Student-Led Initiatives

• UCC has many environmental-based societies, available to all UCC students, but this is limited in context of the School of Medicine. However, the School of Medicine allows for students to undertake a research project in any specialty they prefer, including planetary health, and will offer time and enthusiasm for this. Individuals from the School of Public Health have also reached out to offer their support on any initiatives by students, whether medical or not.

Sustainability

• The school is doing well in this respect. There were a lot of things that we didn't even know until we were doing this project e.g., how Western Gateway Building is a "near zero" building, harnessing the River Lee's energy to power itself. This, paired with the school's dedication to reducing their carbon footprint, and reducing their overall carbon usage overall, makes for an impressive score.

D

C+

C-

C

B+

Statement of Purpose

Planetary health is human health.

The Planetary Health Alliance defines planetary health as "a field focused on characterizing the human health impacts of human-caused disruptions of Earth's natural systems." 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 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.

Planetary Health Curriculum

<u>Section Overview:</u> This section evaluates the integration of relevant planetary health topics into the medical school curriculum. Today's medical students will be on the frontlines of tackling the health effects of climate change. Therefore, it is critical that medical students are trained to understand the health effects of climate change, as well as planetary health 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. Did your medical school offer elective courses to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?	
3*	Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year.
2	Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year.
1	The medical school does not have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a lecture on planetary health.
0	No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year.
Score Explanation: MX3006 is a student selected special study module in medicine that can incorporate ESH/planetary health components <u>https://www.ucc.ie/admin/registrar/modules/</u> - search "medicine" and "MX3006" The module objective is: 'To allow students to self-organise a special study module in an area of special interest in Medicine.'	

Curriculum: Health Effects of Climate Change

2. Does your medical school curriculum address the relationship between extreme temperature health risks and climate change, as well as the socioeconomic/racial disparities in extreme heat exposure?

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: GM2020 – discusses 'Current major population health issues in the local national and global context including obesity, tobacco control and climate change' – as part of module content <u>https://www.ucc.ie/admin/registrar/modules/</u> - look for medicine, GM2020

There is also the theoretical option of doing the 'research' module GM2030 + MX4091 + MX5091

Summer theoretical option of doing "research and professionalism" option of doing MX5090 (this course was "cancelled" and done online secondary to COVID pandemic)

3. Does 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: Not listed in any specific learning outcomes	

4. Does your medical school curriculum address the impact of climate change on the changing patterns of infectious diseases?

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

Score Explanation: Briefly covered in <u>GM2020</u> i.e., 'Health, Disease and Society II' as part of the module content: 'Current major population health issues in the local national and global context including obesity, tobacco control and climate change.'

	5. Does your medical school curriculum address the cardiorespiratory health effects of climate change, including air pollution?	
3	This topic was explored in depth by the core curriculum.	
2	This topic was briefly covered in the core curriculum.	
1	This topic was covered in elective coursework.	
0	This topic was not covered.	
Score Explanation: Briefly covered in GM2015, GM1002 – respiratory conditions as 1-2 slides, and GP (family medicine) rotation briefly for some individuals		

6. Does your medical school 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: Not found in any course curricula

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

Score Explanation: GM2020 covered this briefly when looking at sustainable development goals.

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

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

Score Explanation: Not found in any course curricula

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

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

Score Explanation: briefly mentioned as part of the aforementioned GM2020 module.

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

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

Score Explanation: CP4003 (Reproduction, Pregnancy, Child Health and Development), CP5300/CP5400 – covered toxins that might lead to miscarriage and developmental delay. Pollution as a potential respiratory toxin has also been mentioned, but it's not consistently covered.

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

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

Score Explanation: Not listed in course curricula

12. Does your medical school curriculum address the unique climate and environmental health challenges that have impacted and are impacting Indigenous communities?

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: Not listed in course curricula

13. Does your medical school curriculum address the outsized impact of anthropogenic environmental toxins on marginalized populations such as those with low SES, women, communities of color, children, homeless populations, 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: Not listed in course curricula

Curriculum: Sustainability

14. Does your medical school curriculum address the environmental and health cobenefits 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: GM2020 discussed how the production of meat uses more energy than a vegetarian based diet

15. Does your medical school curriculum highlight the waste generated by the healthcare system and identify ways to advocate for and implement sustainable best practices in health care?

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: Not listed in course curricula

16. 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?

- 2 Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum.
- 1 Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework.
- 0 No, there are not strategies introduced for having conversations with patients about climate change

Score Explanation: No

17. In training for patient encounters, does your medical school's curriculum introduce strategies for taking an environmental history or exposure history?

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

Score Explanation: They ask about exposure risk factors – living on a farm, old housing, living with people who smoke/smoking etc.

Curriculum: Administrative Support for Planetary Health

	18. Is your medical school currently in the process of 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: None found by online search

19. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the core curriculum?

6	Planetary health/ESH topics are well integrated into the core medical school curriculum.
4	Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum.
	Planetary health/ESH is not integrated and is primarily addressed in (a) standalone

- 2 Planetary health/ESH is not integrated and is primarily addressed in (a) standard lecture(s).
- 0 There is minimal/no education for sustainable healthcare.

Score Explanation: These topics are primarily addressed in individual lectures and relies heavily on individual lectures. The aforementioned GM2020 module provides a good starting point/ foundation for further teaching on the topics of PH and ESH, but as of now, further implementation remains sparse.

20. Bonus: Does your medical school have a program that offers incentives for faculty/departments to develop new planetary health/ESH courses and/or incorporate planetary health/ESH into existing courses?

- 1* Yes, the medical school has an incentive program.
- 0 No, the medical school does not have an incentive program.

Score Explanation: None found by online search

Section Total (19 out of 58)

19

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.

1.Are there researchers engaged in planetary health research and healthcare sustainability research at your medical school?

- Yes, there are faculty members at the School of Medicine who have a primary research focus in planetary health and healthcare sustainability.
 Yes, there are faculty members at the School of Medicine who have a primary research focus in a planetary health or healthcare sustainability.
 Yes, there are individual faculty members at the School of Medicine who are conducting research related to planetary health or healthcare sustainability, but it is not their primary research focus.
 There are planetary health and/or healthcare sustainability researchers at the institution, but none associated with the medical school.
 - 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 a large number of researchers working within a vast span planetary health and healthcare sustainability research at the institution e.g., <u>Environmental Research Institute (ERI)</u>, <u>APC Microbiome Institute</u> and <u>MaREI</u>, the SFI Research Centre for <u>Energy</u>, <u>Climate and Marine</u>, but none are directly associated with the medical school.

2. Is there a dedicated department or institute for interdisciplinary planetary health research at your institution?

There is at least one dedicated department or institute for interdisciplinary planetary health research.
 There is not currently a department or institute for interdisciplinary planetary health research, but there are plans to open one in the next 3 years.

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

Score Explanation: <u>https://www.ucc.ie/en/research/sustainabilityclimateaction/</u> e.g. The Environmental Research Institute (ERI) at UCC is a university flagship research institute that brings together over 350 researchers from 17 UCC Schools and Departments and 6 Research Centres to work in an interdisciplinary approach to address global sustainability challenges.

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 medical school?

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

4. Does your institution have a planetary health website, or a website centralizing various campus resources related to health and the environment?

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

5. Has your institution recently hosted a conference or symposium on topics related to planetary health?	
4	Yes, the institution has hosted more than one conference or symposium on topics related to planetary health in the past year, including at least one on climate change.
3	Yes, the institution has hosted one conference or symposium on topics related to planetary health in the past year.
2	Yes, the institution has hosted a conference on topics related to planetary health in the past three years.
1	The 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: Several conferences and webinars have been hosted in the last year e.g., <u>Webinar: The Emerging Role of Online Food Retail Systems for Sustainability</u> and <u>Beyond</u> <u>Capitalism: Mapping an Eco-Social Future</u> .	

6. Has your institution or medical school joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education?	
2	Yes, the medical school has joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education.
1	Yes, the institution has joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education, but the medical school specifically has not.
0	No, the institution has not joined the Planetary Health Alliance or the Global Consortium on Climate and Health Education.
Score Explanation: UCC Is not part of the PHA or GCCHE; however, please take note of the following below: UCC has won multiple designations as a green school <u>https://www.ucc.ie/en/eri/aboutus/uccgreencampus/</u> - it states that UCC has "world class ranking" for green sustainability.	

Section Total (11 out of 19)

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.

1. Does your medical school partner with community organizations to promote planetary and environmental health?	
3	Yes, the medical school meaningfully partners with multiple community organizations to promote planetary and environmental health.
2	Yes, the medical school meaningfully partners with one community organization to promote planetary and environmental health.
1	The institution partners with community organizations, but the medical school is not part of that partnership.
0	No, there is no such meaningful community partnership.
The Irish Global Health Network – UCC branch contains medical students, and though the student group isn't fully supported by UCC or the School of Medicine, they do partner with various planetary and environmental health groups, including Irish Doctors for the Environment.	

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

Score Explanation:

The aforementioned webinars/ conferences i.e. <u>Webinar: The Emerging Role of Online Food</u> <u>Retail Systems for Sustainability</u> and <u>Beyond Capitalism: Mapping an Eco-Social Future</u>.

'Green Week' initiative for UCC Community (kind of like April 22 in America, but it's a week focused on environment/sustainability/etc; there are multiple talks during this time as well

3. Does your medical school 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 regularly receive communications about planetary health or sustainable healthcare.

4. Do hospitals affiliated with your medical school have accessible educational materials for patients about environmental health exposures?

2 Yes, 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: Educational material is free and available through the HSE website e.g. <u>https://www2.hse.ie/wellbeing/child-health/poisoning-in-young-children/poison-risks-to-your-child.html</u> – but they can be better used/referred to in clinical practice

5. Do hospitals affiliated with your medical school have accessible educational materials for patients about climate change and health impacts?

- 2 Yes, all affiliated hospitals have accessible educational materials for patients.
- 1 Some affiliated hospitals have accessible educational materials for patients.
- 0 No affiliated hospitals have accessible educational materials for patients.

Score Explanation:

Educational material is free and available through the HSE website – but they can be better used/referred to in clinical practice <u>https://www.hse.ie/eng/about/who/healthbusinessservices/national-health-sustainability-office/climate-change-and-health/</u>

It is noted that Cork University Hospital is noted as a "Green Campus"

Reference: <u>https://www.cuh.hse.ie/About-Us/Achieving-Sustainable-Healthcare-Living/</u> - they also have a plaque on one of the walls/gates surrounding the hospital building

Section Total (5 out of 12)

5

Support for Student-Led Planetary Health Initiatives

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

1. Does your institution offer support for medical students interested in enacting a sustainability initiative?

- 2 Yes, the institution offers grants available to medical students for students to enact sustainability initiatives.
- The medical school 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.
- 0 No, the institution does not offer opportunities or support for sustainability initiatives.

Score Explanation: The courses MX4091/MX5091 could potentially be used for this purpose, but they are not specially focusing on sustainability initiatives.

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

- 2 The institution offers paid research opportunities for students and planetary health/sustainable healthcare projects would be considered eligible.
- ¹ There are unfunded research opportunities for students to perform research related to planetary health/sustainable healthcare.
- 0 There are no opportunities for students to receive funding for planetary health/sustainable healthcare research.

Score Explanation: The courses MX4091/MX5091 could potentially be used for this purpose, but they are not specially focusing on sustainability initiatives.

3. Does the medical school 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 medical school has a webpage with specific information related to planetary health or sustainable healthcare that includes up-to-date information on relevant initiatives and contact information of potential mentors.
1	There is a medical school webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information.
0	There is no medical-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.
Score Explanation: Websites are available, but they are not at all medical-school specific e.g.: <u>https://www.ucc.ie/en/eri/people/ourpeople/?c3=Academic</u> <u>https://www.marei.ie/about-us/people/</u> <u>https://apc.ucc.ie/people/apc-faculty/</u>	

4. Does your medical school have funded, 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 funded 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 and/or funding.

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

Score Explanation: The Irish Global Health Network – UCC Branch (formerly Student Forum for Global Health – UCC) is a student run organization that is not an "official" UCC student group, but run by UCC students for other UCC students.

5. Is there a student liaison representing sustainability interests who serves on a medical school or institutional decision-making council to advocate for sustainability best practices?

1 Yes, there is a student representative that serves on a medical school or institutional decision-making council.

0 No, there is no such student representative.

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)		
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) that follow Leave No Trace principles.	
Scor	Score Explanation:	
	<i>Projects - <u>UCC Community Garden</u> are jointly owned by the Environmental Society and the International Development Society and are run by staff and students of UCC.</i>	
Panel/speaker series – as listed before, many available, through school of public health; some available via student-led programs.		
	Arts - <u>http://greencampus.ucc.ie/teaching-learning/the-glucksman-gallery/</u> Wilderness/outdoor programs – through various student-led groups.	

Section Total (7 out of 14)

Campus Sustainability

<u>Section Overview:</u> This section evaluates the support and engagement in sustainability initiatives by the medical school and/or institution. The healthcare industry is a major

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

1. D	1. Does your medical school and/or institution have an Office of Sustainability?	
3	Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is at least one designated staff member for sustainability at the hospital and/or medical school.	
2	There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but no specific staff member in charge of medical school and/or hospital sustainability.	
1	There are no salaried sustainability staff, but there is a sustainability task force or committee	
0	There are no staff members or task force responsible for overseeing campus sustainability	
Score Explanation: <u>https://greencampus.ucc.ie/about/</u> - Coleman Casey from the College of Medicine (medical school), Dr Michael Byrne (Student Health), Kate McSweeney (School of Nursing)		

2. Does your medical school and/or institution have a stated goal of carbon neutrality by 2050? 4* The medical school is already carbon neutral. 3 Yes, there is a stated carbon neutrality goal, and the medical school has a well-defined and adequate plan in place to achieve this goal. 2 Yes, there is a stated carbon neutrality goal, but the medical school has not created a plan to reach that goal, or the plan is inadequate.

- 1 There is a CO2 emission reduction goal, but it is not one of carbon neutrality.
- 0 There is no stated goal for reduction of CO2 emissions.

Score Explanation:

University College Cork as an institution, has made several impressive efforts to improve their sustainability and carbon footprint. The Cork city campus ranked ninth-best university in the world on a sustainability index which ranks third-level institutions across operations, educational and research activities in 2018. UCC was also named the first university outside the United States to win a gold standard in the Sustainability Tracking Assessment & Rating System (STARS) from the Association for the Advancement for Sustainability in Higher Education (AASHE).

The "Western Gateway Building", one of two buildings used by the medical school uses a *1MW(th)* Ground Source Heat Pump (GSHP) which provides heating & cooling to the building. Utilising waste heat from computer rooms combined together with a ground source heat pump, the buildings heating demands are met

However, although these efforts and accolades are impressive, and shows a commitment towards increased sustainability, we were unable to find clear goals from the institution in terms of carbon neutrality.

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

Score Explanation:

<u>https://greencampus.ucc.ie/energy-water-climate-change/iso-50001/</u> - see Procurement of energy services, products, equipment and energy".

The aforementioned "Western Gateway Building" should also be mentioned here.

Of note, <u>UCC is the first university in the country to achieve the Government's 33% energy</u> <u>efficiency target for the public sector - three years ahead of schedule.</u>

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

3	Yes, sustainable building practices are utilized for new buildings on the medical school campus and the majority of old buildings have been retrofitted to be more sustainable.
2	Sustainable building practices are utilized for new buildings on the medical school campus, but most old buildings have not been retrofitted.
1	Sustainable building practices are inadequately or incompletely implemented for new buildings.
0	Sustainability is not considered in the construction of new buildings.
Score Explanation: see the links below for details on initiatives <u>https://greencampus.ucc.ie/energy-water-climate-change/iso-50001/</u> <u>https://greencampus.ucc.ie/energy-water-climate-change/building-design-at-university-</u> <u>college-cork/</u>	

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

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

- ¹ The medical school has implemented some strategies to provide environmentally-friendly transportation options, but the options are unsatisfactorily accessible or advertised.
- 0 The medical school has not implemented strategies to encourage and provide environmentally-friendly transportation options.

Score Explanation: Cork is relatively walk-able (everything is within a ~40) Medical students often rely on private cars to get to and from clinical placements due to the distance between accommodations and assigned hospital or alternative clinical setting. Recently, medical staff in Cork started campaigning for improved cycling facilities between Cork's main hospitals e.g., <u>https://www.irishexaminer.com/news/arid-31005316.html</u> The campaign calls for a set-up of a safe and segregated cycle route connecting CUH, the BonSecours and Mercy hospitals via UCC to the City Centre, also extending to CIT. This route would provide a safe travel option to, from and between the hospitals, but also to UCC (not only for our medical staff and students).

6. Does your medical school 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:

<u>https://www.ucc.ie/en/build/environment/recycling/recyclinginucc/</u> Recycling is readily available, Limited compost program available.

7. Does the medical school apply sustainability criteria when making decisions about the	e
campus food and beverage selections?	

- ³ Yes, the medical school has adequate sustainability requirements for food and beverages and is engaged in efforts to increase food and beverage sustainability.
- There are sustainability guidelines for food and beverages, but they are insufficient or optional. The medical school is engaged in efforts to increase food and beverage sustainability.
- There are sustainability guidelines for food and beverages, but they are insufficient or optional. The medical school is not engaged in efforts to increase food and beverage sustainability.
- 0 There are no sustainability guidelines for food and beverages.

Score Explanation:

UCC as an institution is primarily trying to source "local" ingredients through the provider "KSG". The use of "reusable cups" and reusable plates/cutlery is also highlighted. <u>https://greencampus.ucc.ie/food-health-well-being/</u>

8. Does the medical school or associated institution apply sustainability criteria when making decisions about supply procurement?

³ Yes, the medical school has adequate sustainability requirements for supply procurement and is engaged in efforts to increase sustainability of procurement.

2	There are sustainability guidelines for supply procurement, but they are insufficient or optional. The medical school is engaged in efforts to increase sustainability of procurement.
1	There are sustainability guidelines for supply procurement, but they are insufficient or optional. The medical school is not engaged in efforts to increase sustainability of procurement.
0	There are no sustainability guidelines for supply procurement.
Score Explanation:	

https://greencampus.ucc.ie/procurement-contracts/

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

2	Every event hosted at the medical school must abide by sustainability criteria.	
1	The medical school strongly recommends or incentivizes sustainability measures, but they are not required.	
0	There are no sustainability guidelines for medical school events.	
Score Explanation: https://greencampus.ucc.ie/resources/greenguidelines/		

10. Does 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.

Score Explanation: a UCC Sustainable Events Checklist is readily available. <u>https://greencampus.ucc.ie/research/green-research-priorities/</u>

11. Does your institution's endowment portfolio investments include fossil-fuel companies?

4	The institution is entirely divested from fossil fuels and has made a commitment to reinvest divested funds into renewable energy companies or renewable energy campus initiatives.		
3	No, the institution is entirely divested from fossil fuels.		
2	The institution has partially divested from fossil-fuel companies.		
1	The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organized advocacy for divestment.		
0	Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that.		
Score Explanation: <u>UCC divested from fossil fuels a number of years ago, and all of the</u> <u>university's trust fund is ethically invested.</u>			

Section Total (22 out of 29)

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 College Cork_ School of Medicine

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

Section	Raw Score	Grade
Planetary Health Curriculum (30%)	19 / 58 = 32.76%	D
Interdisciplinary Research (17.5%)	11 / 19 = 58%	C+
Community Outreach and Advocacy (17.5%)	5/ 12 = 42%	C-
Support for Student-led Planetary Health Initiatives (17.5%)	7 / 14 = 50%	С
Campus Sustainability (17.5%)	22 / 29 = 76%	B+
Institutional Grade	49.28%	С