

Planetary Health Report Card:

University of Leeds



2021-2022 Contributing Team:

- Students: Austin Keane (um20ak@leeds.ac.uk), Chiara Del Galdo (um21cdg@leeds.ac.uk), Fatika Waseem (hc19fw@leeds.ac.uk), Jessica Burt (um16jfb@leeds.ac.uk), Oliver Sargeant (um16os@leeds.ac.uk), Rebecca Archer (um21rla@leeds.ac.uk) Ridhi Surti (um19r2s@leeds.ac.uk)*, Sarthak Sinha (um20ss@leeds.ac.uk), Shiwei Ooi (shiwei00198@gmail.com), Shuya Sheng (um21s2s@leeds.ac.uk), Tchomig Forder (um19tssf@leeds.ac.uk)
- Faculty Mentors: n/a
- *Primary Contact: Ridhi Surti (um19r2s@leeds.ac.uk)

Summary of Findings

Overall C Curriculum C+

The University of Leeds has made some provision to include planetary health (PH) teachings introduced in 2021/2022 curriculum. The core principles of PH teachings are taught however, still lacks teachings on intersectionalities of climate change, how doctors can communicate PH to patients etc. possibly due to the lack of time available in this short module. This new module also currently has minimal outreach amongst clinical years.

Recommendations: There are currently plans for students to get involved in becoming PH advocates for each core body system within the faculty. Having a particular sustainable healthcare lead who's able to map the curriculum and help clinicians include planetary health in the general curriculum would be helpful. Supporting student initiatives and ensuring that every student is Carbon Literacy trained can help expose PH to those who did not undertake the module.

Interdisciplinary Research

D-

The wider University has a strong research commitment where they encourage students to highlight their sustainable research/projects e.g. annual sustainability research conference e.g. Leeds Healthcare Students for Climate Action (HeSCA) initiative was awarded highly commendable for delivering first Carbon Literacy Training for Healthcare students 2021.

Recommendations: Leeds Medical School could organise a conference directly related to Planetary Health or support student-led initiatives through funding, expertise etc. They could also join the Planetary Health Alliance and the Global Consortium on Climate and Health Education, to be more informed around the topic and also add PH section into newsletters to help staff and students engage more into this. There could also be more PH research projects promoted for students.

Community Outreach and Advocacy

C

The medical school, in general, are invested in community outreach e.g. working with patient care community to improve patient safety however lacks initiatives focussed on PH. HeSCA have organised several community outreach events such as tree planting and litter picking but lacked engagement from central staff to help promote and engage in these projects.

Recommendations: Work with student-led initiatives to help promote their events amongst both students and staff to increase reach and accessibility. The central university's sustainability team to liaise with the medical school to promote sustainable activities.

Support for Student-Led Initiatives

C -

There is a society, Leeds HeSCA dedicated to advocating for planetary health in all healthcare departments in Leeds. The staff at the medical school has been fairly receptive to our ideas but most of the support we've received is based off of University-wide initiatives (funding from the LUU etc.).

Recommendations: Support for student-led initiatives mostly comes from the wider University rather than the Medical School. It would be helpful to have a dedicated to implementing PH staff, who can work with HeSCA to help support their initiatives.

Campus Sustainability

C+

Leeds Medical School has made good progress in improving sustainability on campus through hiring a 'Sustainability Architect' for the faculty and many infrastructures have been made more sustainable in line with the central universities sustainability goals. However, some aspects of the medical school e.g. travel to placements are not included in the universities sustainability plan. **Recommendations**: The medical school and university have not declared a climate emergency and there are no clear goals and plans set in place in terms of sustainability in the medical school.

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 "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." 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.
- Education for Sustainable Healthcare (ESH): is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:
 - 1. Describe how the environment and human health interact at different levels.
 - 2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
 - 3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.
- Medical School vs. Institution: When "medical school" is specified in the report card, this only refers to curriculum and resources offered by the School of Medicine and does not include offerings from other parts of the university (for example, undergraduate departments (USA), other related departments eg 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:

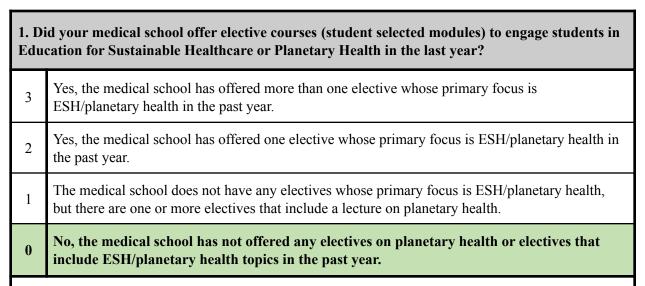
• If there are more than one "tracks" at your medical school with two different curricula (for example, Harvard Medical School has a Pathways and HST curriculum track), you can choose to fill out a report card for each track, or fill out just one report card and average the scores received by each track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

Added to our resources this year, the Planetary Health Report Card Literature Review by Metric 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

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

Curriculum: General



At the end of year 4, students undertake an elective placement in an area of interest to them. The medical school provided a list of pre-arranged electives, one of which was a research placement with the Oxford-based Center for Sustainable Healthcare, during which students had the opportunity to undertake sustainability-focussed quality improvement projects. However, this was not a medical-school specific elective, and did not feature lectures from the medical school, so this does not score any marks.

Also during year 4, students undertake an Extended Student Research and Evaluation Project (ESREP). The medical school provided a list of pre-arranged projects, none of which involved research into sustainable healthcare or planetary health.

In years 2-3, students ordinarily undertake an elective Special Studies Project (SSP), which could be an opportunity to provide planetary health modules. However, due to the COVID-19 pandemic, this did not run last year.

Recommendations: Provide more opportunities for student-selected modules in planetary health through the SSP, ESREP and elective programmes.

Curriculum: Health Effects of Climate Change

2. Does your medical school curriculum address the relationship between extreme heat, health risks, and climate change? This topic was explored in depth by the core curriculum. This topic was briefly covered in the core curriculum. This topic was covered in elective coursework. This topic was not covered.

In April 2021, there was a planetary health module launched as part of the 'Individuals and Populations' teaching. This was developed by Dr Emma O'Neill and it includes teaching on the relationship of extreme heat due to climate change to health. For example, there is information on forest fires and the implications this can have on health as a result.

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.

There is an e-learning pack in the Individuals and Populations module that discusses the impact of extreme weather events on individual health - Dr. O'Neill was planning to put in a couple of lines on how it affects healthcare systems this year but it wasn't in last year. Whether this e-learning is testable was unclear, so for this reason and its brief nature it is allocated a score of 2.

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.

There is a climate elearning pack in the Individuals and Populations module and within this it discusses the impact of climate change on infectious disease patterns globally and in the UK. This was allocated a score of 2 because the pack discusses it but again, it is unclear if it is directly testable or on how much detail the e-learning pack goes into.

5. Does your medical school curriculum address the respiratory health effects of climate change and air pollution?

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

The planetary health module launched as part of the 'Individuals and Populations' teaching in April 2021 by Dr Emma O'Neil includes teaching on the effects of respiratory health due to climate change and air pollution. To help explain the wider implications of climate change, there is a specific case study about Ella Adoo-Kissi-Debrah who was the first person in the UK to have air pollution as a cause of death. Additionally, there is teaching on how to take an environmental history, which helps to understand how a patient's condition may have been impacted by the environmental conditions- there is a case about air pollution being linked to asthma.

6. Does your medical school curriculum address the cardiovascular health effects of climate change, including increased heat?

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

The planetary health module launched as part of the 'Individuals and Populations' teaching in April 2021 by Dr Emma O'Neil includes teaching on the effects of cardiovascular health due to climate and increased heat. There is some mention of the consequences such as heart attacks and cardiovascular

disease. However, there is not a separate section for cardiovascular health, rather it is intertwined within other case studies and teachings.

7. 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.

In the year 2 Individuals and Populations module, students undertake an e-learning package on climate change. This covers the effect of ecosystem transformation on mental health, the positive impact of green spaces on mental health, and the increasingly common phenomenon of eco-anxiety. However, this teaching is isolated and not built upon in later years.

In year 4, students undertake a psychiatry module, which involves a number of lectures on various psychiatric subspecialties. However, none of these lectures, nor the list of core conditions, included content on the effects of climate change on mental wellbeing.

Recommendations: include more in-depth teaching on the subject in the 4th year curriculum to build on teaching from year 2, thus embedding the subject in the spiral curriculum.

8. 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.
- *This topic was briefly covered in the core curriculum.*
- *1 This topic was covered in elective coursework.*
- *0* This topic was not covered.

The Climate and Human Health e-learning packages of Year 2 "Individual & Population" module cover the transformation of the ecosystem and the health consequences, particularly climate change, benefits of biodiversity, land use change, deforestation, food and water systems. The learning content also recognises the anthropogenic (human-induced) drivers for infectious disease, pandemic risks, and antimicrobial resistance.

- 9. Does your medical school curriculum address the outsized impact of climate change on marginalized populations such as those with low SES, women, communities of color, Indigenous communities, children, homeless populations, and older adults?
- 3 This topic was explored in depth by the core curriculum.
- 2 This topic was briefly covered in the core curriculum.
- 1 This topic was covered in elective coursework.
- 0 This topic was not covered.

The 'Climate and Health' Section of the year 2 'Individuals and Populations' module teaches environmental justice and the disproportionate impact of climate change on low income countries and low SES. The 'Ecosystem Transformation' module discusses the impact of climate change and deforestation on indigionous populations. The module also discusses the outsized impact of air pollution on children. However, the effect on women, homeless populations and older populations are not discussed.

- 10. Does your medical school curriculum address the unequal regional health impacts of climate change globally?
- 3 This topic was explored in depth by the core curriculum.
- 2 This topic was briefly covered in the core curriculum.
- 1 This topic was covered in elective coursework.
- 0 This topic was not covered.

In the Climate e-learning package of Year 2 "Individual & Population" module, Dr. Oneill covers the health inequalities both in the UK and globally, including climate & environmental injustice, intergenerational injustice, climate change impacts on indigenous populations, and industrial impacts on inequality.

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

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

The module 'Individuals & Populations' in Year 2 briefly discusses the effects of pesticides on reproductive health.

12. 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.

The curriculum discusses air pollution but not directly relating to university's surrounding area, and it discusses water pollution - Dr O'Neill is planning to discuss river pollution in the surrounding area in this year's teaching more. Due to the brief nature and lack of including the local area, this will be awarded 2 points.

13. To what extent does your medical school emphasize the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?

- Indigenous knowledge and value systems are integrated throughout the medical school's planetary health education
- Indigenous knowledge and value systems as essential components of planetary health solutions are included briefly in the core curriculum.
- Indigenous knowledge and value systems as essential components of planetary health solutions are included in elective coursework.
- 0 This topic was not covered.

Topic not covered

- 14. Does your medical school curriculum address the outsized impact of anthropogenic environmental toxins on marginalized populations such as those with low SES, women, communities of color, children, homeless populations, Indigenous populations, and older adults?
- This topic was explored in depth by the core curriculum.
- 2 This topic was briefly covered in the core curriculum.

1 This topic was covered in elective coursework.

0 This topic was not covered.

Topic not covered

Curriculum: Sustainability

15. Does your medical school curriculum address the environmental and health co-benefits of a plant-based diet? 3 This topic was explored in depth by the core curriculum. 2 This topic was briefly covered in the core curriculum. 1 This topic was covered in elective coursework. 0 This topic was not covered.

The Climate e-learning package of Year 2 "Individual & Population" module covers the changes you can make to reduce damage to the ecosystem and contribute to a sustainable health system. Specifically, EAT-Lancet diet and the health benefits of a plant-based diet to individuals as well as the environment were discussed and explored. It also provides great details about the current global food system, diet habits, and evolving trend of food consumption.

16. I	Does your medical school curriculum address the carbon footprint of healthcare systems?
3	This topic was explored in depth by the core curriculum
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

In the Climate e-learning package of Year 2 "Individual & Population" module, it briefly mentions the environmental impact of the healthcare system including the impact of inhalers, anesthesia gasses, pharmaceutical waste, clinical equipment, and an increasing concern during the pandemic.

17. Does your medical school curriculum cover these components of sustainable clinical practice in the <u>core</u> curriculum? (1 point each)

1	Waste production within the healthcare system and strategies for reducing waste in clinical activities, such as in the operating room	
1	The impact of inhalers on the healthcare carbon footprint and the environmental benefit dry powdered inhalers over metered dose inhalers.	
1	The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anesthesia environmental impacts, such as total intravenous anaesthesia or choosing less environmentally anaesthetic gas options with reduced greenhouse gas emissions	
1	The environmental impact of pharmaceuticals and over-prescribing as a cause of climate health harm. Alternatively teaching on deprescribing where possible and its environmental and health co-benefits would fulfill this metric.	
where appropriate such as exercise or yoga classes for type 2 diabetes; social group	The health and environmental co-benefits of non-pharmaceutical management of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes for obesity. This is commonly known as social prescribing in the UK.	
1	The health and environmental co-benefits of avoiding over-medicalisation, over-investigation and/or over-treatment	

- 2. In the elearning packages of the year 2 'Individuals and Populations' module, the lecturer explains the clinical use of inhalers and their environmental impact.
- 3. In the elearning packages of the year 2 'Individuals and Populations' module, the lecturer discusses the greenhouse emissions from anaesthesia gases and related ideas.
- 4. The module also highlights the issue of pharmaceutical waste and the increase in plastic pollution noted throughout the pandemic. The last two points are planned into this year's course.

Curriculum: Clinical Applications

	n training for patient encounters, does your medical school's curriculum introduce strategies ave 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

Throughout the curriculum, although particularly in years 1-3, there are sessions on communication skills including simulated patient scenarios. These help students develop a good bedside manner, including advice on listening skills, empathy and health promotion discussions. While these sessions provide transferable skills which could be utilised in discussions surrounding climate change, there is no specific teaching on how to communicate about climate change.

<u>Recommendation</u>: include teaching on how to conduct conversations about planetary health in communication skills sessions and the climate/ecosystem transformation e-learning package

19. 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.
- No, the curriculum does not include strategies for taking an environmental history.

In the curriculum there are case studies within both e-learning packs - on air pollution within an asthma history and an environmental history case study in the ecosystems transformation e-learning pack regarding exposure to harmful algal blooms so it takes the student through what questions to ask and what steps to take. It will be awarded a score of 2 as it is part of the mandatory curriculum.

Curriculum: Administrative Support for Planetary Health

20. Is your medical school currently in the process of implementing or improving Education for Sustainable Healthcare (ESH)/planetary health education?

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

The 'Individuals and Populations' module was introduced in April 2021 for the first time. It was the first module that was made compulsory, educating students around the importance of planetary health. Although the teaching is limited to one module in one year group, the feedback received from the module was excellent, where 91% students agreed that Planetary Health should be part of the medical curriculum. The members of Leeds Healthcare Students for Climate Action and PHRC are currently

working closely with the Head of MBChB, Dr. Andrew Lewington to implement planetary health advocates for each core body system. Planetary Health Advocates will work closely with each core lead to identify gaps within the curriculum and look for opportunities where planetary health teachings can be implemented.

21. 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.
- Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum
- 2 Planetary health/ESH is not integrated and is primarily addressed in (a) standalone lecture(s).
- There is minimal/no education for sustainable healthcare.

The I&P module for year 2 students are all compulsory and key components of planetary health teaching offered to medical students at the University of Leeds.

In between 4th year and 5th year, students are required to complete a 6-8 week elective. This is an opportunity to explore a different healthcare system outside of the University of Leeds. Students can either design their own electives or have the opportunity or choose from a selection of pre-organised electives. The University of Leeds have partnered up with the Centre for Sustainable Healthcare based in Oxford which delivers sustainable healthcare training for healthcare professionals, deliver talks, create blogs, support staff and students on green audits and provide healthcare professionals with a hub of information to learn about planetary health.

22. Does your medical school 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.

Although Dr, Jemma Ashwell is the I&P module lead and have contributed to advocating and delivering the planetary health curriculum, there is no appointed staff that overseas planetary health throughout the course.

Section Total (x out of 69)	41
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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 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. No, there are no planetary health and/or healthcare sustainability researchers at the institution or medical school at this time.

Nuffield Centre for International Health and Development if based within the University of Leeds School of Medicine. One of their six research themes is Planetary Health, lead by Professor Berrang Ford, focusing on "Effectiveness of interventions responding to the health impacts of climate change in LMIC".

 $\underline{https://medicinehealth.leeds.ac.uk/faculty-/dir-record/research-groups/651/research-at-the-nuffield-cent}\\ \underline{re-for-international-health-and-development}$

2. Is there a dedicated department or institute for interdisciplinary planetary health research at your institution? There is at least one dedicated department or institute for interdisciplinary planetary health research. There is not currently a department or institute for interdisciplinary planetary health research, but there are plans to open one in the next 3 years. There is an Occupational and Environmental Health department, but no interdisciplinary department or institute for planetary health research.

0 There is no dedicated department or institute.

The Nuffield Centre for International Health and Development conducts education and research on global health. This includes research projects on the health effects of climate change, including student-led projects. Medical students can choose to study within this institution for their intercalated degree. However, as this institution is not specifically dedicated to planetary health, it does not score marks.

https://medicinehealth.leeds.ac.uk/dir-record/research-groups/651/research-at-the-nuffield-centre-for-international-health-and-development

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

There is no such process.

4. Does your institution have a planetary health website that centralizes ongoing and past research related to health and the environment?

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

A study led by the University of Leeds has found that no country currently meets its citizens' basic needs at a globally sustainable level of resource use; this was published in 'Nature Sustainability –

2018'. There are several research articles focusing on planetary sustainability. The university ranks in Top 20 in the world for sustainability. The university also collaborates with other researchers around the world in regards to planetary health and has a website dedicated to sustainability: The Sustainability Service at the University of Leeds

	5. Has your institution recently hosted a conference or symposium on topics related to planetary health?	
4	Yes, the medical school has hosted at least one conference or symposium on topics related to planetary health in the past year.	
3	Yes, the institution has hosted at least one conference or symposium on topics related to planetary health in the past year.	
2	Yes, the institution has hosted a conference on topics related to planetary health in the past three years.	
1	The 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.	

University of Leeds has organised various sustainability events such as:

- COP26 Sustainability Engagement Day at Leeds University Union 11 NOVEMBER 2021
- The annual University of Leeds Student Sustainability Research Conference <u>Student</u> Sustainability Research Conference 2021 Sustainability (leeds.ac.uk)

6. Is your medical school a member of a national or international planetary health or ESH organization? Yes, the medical school is a member of a national or international planetary health or ESH organization No, the medical school is not a member of such an organization

Leeds Medical School is not a member of any planetary health organisation in the UK or internationally.

Section Total (x out of 17)	4
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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? Yes, the medical school meaningfully partners with multiple community organizations to promote planetary and environmental health. Yes, the medical school meaningfully partners with one community organization to promote planetary and environmental health. The institution partners with community organizations, but the medical school is not part of that partnership. No, there is no such meaningful community partnership.

University of Leeds partners with several community organisations such as several state schools and third party organisations also known as positive impact partners (Wakefield District Sight Aid and Katheryn Watson, International Mixed Ability Sport (IMAS) and Ben Williams) etc.

In the medical school curriculum, medical students collaborate with several local charities and organisations to increase their awareness of community cohesion.

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.

No such courses or events are offered.

- 3. Does your medical school have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?
- Yes, all students regularly receive communication updates dedicated to planetary health and/or sustainable healthcare.
- Yes, planetary health and/or sustainable healthcare topics are sometimes included in communication updates.
- Students do not regularly receive communications about planetary health or sustainable healthcare.

While students receive a weekly newsletter from the medical school, this is focussed on student wellbeing, and does not address planetary health.

Recommendation: include information on planetary health in regular communications to students; perhaps dedicating a weekly/monthly newsletter to the subject.

- 4. Does the institution or main affiliated hospital trust engage in professional education activities targeting individuals post graduation with the aim of ensuring their knowledge and skills in planetary health and sustainable healthcare remain up to date during their professional career?
- Yes, the institution or main affiliated hospital trust offers multiple in-person or online courses relating to planetary health and/or sustainable healthcare for post-graduate providers, including at least one with a primary focus of planetary health.
- 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

The Faculty of Medicine and Health offers a 1 hour CPD course entitled 'Sustainability in the MBChB.' The course is aimed at professionals looking to teach Leeds medical students and can be out towrds GMC accreditation.

https://medicinehealth.leeds.ac.uk/dir-record/short-courses/517/sustainability-in-the-mbchb

The Leeds Teaching Hospitals have published a case study to reduce the use of the most environmentally damaging anaesthetic gases to reduce carbon emissions. https://medicinehealth.leeds.ac.uk/dir-record/short-courses/517/sustainability-in-the-mbchb

They have also implemented the 'GRASP' campaign. https://www.leedsth.nhs.uk/about-us/sustainability/grasp/

5. Does your medical school or its primary affiliated hospital have accessible educational materials for patients about environmental health exposures? Yes, all affiliated hospitals have accessible educational materials for patients. Some affiliated hospitals have accessible educational materials for patients. No affiliated medical centers have accessible educational materials for patients.

Leeds Teaching Hospitals has a website dedicated to sustainability where there is up to date information about several campaigns such as GRASP (Green, Recycle, be Aware, be Sustainable for our Patients).

6. Does your medical school or its primary affiliated hospital 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.

Leeds, Bradford and Calderdale hospitals all have websites dedicated to environmental health impact:s

Leeds https://www.leedsth.nhs.uk/about-us/sustainability/
Bradford https://www.bradfordhospitals.nhs.uk/green-plan/
Calderdale https://thecupboard.cht.nhs.uk/ingredients/going-green/

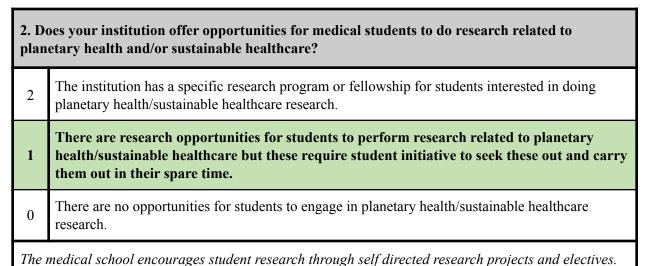
Section Total (x out of 14)	7

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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.

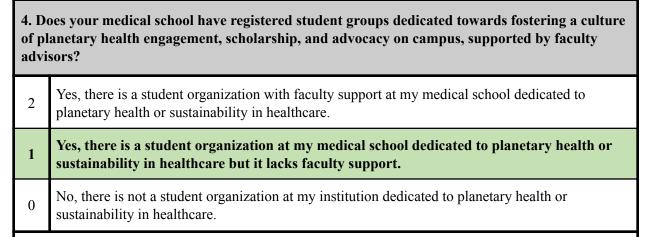
	oes your institution offer support for medical students interested in enacting a sustainability ative/QI project?
2	Yes, the institution <i>either</i> offers grants for students to enact sustainability initiatives/QI projects <i>or</i> sustainability QI projects are part of the core curriculum.
1	The 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 and there is no requirement to participate.
0	No, the institution does not offer opportunities or support for sustainability initiatives or QI projects.
None	e identified



Students could choose to theme these around sustainability/ planetary health.

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. The medical school has a webpage with specific information related to planetary health or sustainable healthcare that includes up-to-date information on relevant initiatives and contact information of potential mentors. There is a medical school webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information. There is no medical-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors. No such webpage available.



Leeds HESCA - Leeds Healthcare Students for Climate Action are a group of students working to improve the environmental impact of the Faculty of Medicine and Health and to those who use it. Through implementing ideas, action and awareness we hope to bring lasting change to the carbon impact of the faculty and the mindset of students.

Although we have had many meaningful meetings with the faculty, who were keen to listen to our ideas and support our projects, the initiatives such as community tree planting, carbon literacy training, litter picking etc. were still mainly society led.

insti	5. Is there a student liaison representing sustainability interests who serves on a medical school or institutional decision-making council to advocate for curriculum reform and/or sustainability best practices?	
1	Yes, there is a student representative that serves on a medical school or institutional decision-making council/committee.	

No, there is no such student representative.

No representative.

1

	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.	
Panels, speaker series, or similar events related to planetary health that have students 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.	

2- Leeds HeSCA - created a SHS (Sustainable Healthcare Series) in collaboration with Manchester Eco-medics and SfGH Liverpool hosting talks and discussions, inviting speakers in the sustainable healthcare field etc. 'Sustainable Solutions' talk.

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

- 3- Leeds HeSCA have organised several community litter picking events in collaboration with other green action societies, a 'Tree Planting Day' to help engage the community and raise awareness on climate health.
- 4 LUU COP 26 Climate Week Leeds HeSCA was involved with the Clothes Swap and a film screen 'The Ripple Effect' in honour of COP 26.
- 5- Leeds HeSCA have organised several community litter picking events in collaboration with other green action societies, a 'Tree Planting Day' to help engage the community and raise awareness on climate health.

Leeds Wilderness Society, Leeds Hiking Club, Wilderness Medicine

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other outings for students)

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. Does your medical school and/or institution have an Office of Sustainability? Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is at least one designated staff member for sustainability at the hospital and/or medical school. 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. There are no salaried sustainability staff, but there is a sustainability task force or committee There are no staff members or task force responsible for overseeing campus sustainability

There is a dedicated campus-wide sustainability team consisting of 12 paid members—dictated by UN Sustainable Development Goals (SDGs)—covering management, environmental compliance, sustainability projects and communications, publishing annual reports. Additionally, there is a staff sustainability architect, James Wilmoth, who is the human resources officer for the faculty of Medicine and Health. This is a role existing since 2017 and is a flexible position.

https://sustainability.leeds.ac.uk/get-involved/make-an-impact/staff-sustainability-architects/

2. How ambitious is your medical school/institution's plan to reduce its own carbon footprint? 4 The institution has a stated goal of carbon neutrality by 2030 or earlier and the medical school / institution has a well-defined and adequate plan in place to achieve this goal. Yes, there is a stated carbon neutrality goal by at least 2040 and the medical school/institution has a well-defined and adequate plan in place to achieve this goal.

- Yes, there is a stated carbon neutrality goal by at least 2040, but the medical school/institution 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.

Since 2014, the institution has promised no direct carbon emissions by 2050. More recently, in the latest annual report, there were 7 defined climate principles, one relating specifically to their revised climate plan of net zero carbon by 2030. This has been developed since December 2018 to give a potential pathway: £174 million will be invested over the next decade, more than £150 million of which will be put towards achieving the goal of net zero greenhouse gas emissions by 2030. The plan is a collaborative effort across the University community, involving academic staff, professional services and students—it gives clearly defined terms for this plan and what will be required to achieve it. However, the medical institution has not had any clear plans and initiatives in showing their plans on how they plan to achieve this goal in relation to the university wide goals.

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

Unable to find specifics - estimate: The University of Leeds campus comprises of more than 300 residential and academic buildings with a gross internal area of 555,111m2 and has approximately 800 meters that are used for energy billing purposes. There are a variety of different utilities required to keep the campus running: Grid electricity, natural gas, water, heat and electricity generated from onsite CHP and onsite renewables. The combined annual consumption in 2018 was 160,097,366 kWh of energy and 702,016 m3 of water. Some of this energy is provided by our own Generating Station Complex (GSC) and the remainder procured from energy providers. We have an annual utilities expenditure of over £12 million and on a monthly basis we can receive approximately 700 energy bills to process for payment. We use eSight, a web based energy management platform which collects and

monitors data from our network of meters in all of our buildings which also feeds into our Dashboard so people can monitor their own energy usage in their buildings.

- 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 sustainability rating system or building code/guideline?
- Yes, sustainable building practices are utilized for new buildings on the medical school campus and the majority of old buildings have been retrofitted to be more sustainable.
- 2 Sustainable building practices are utilized for new buildings on the medical school campus, but most old buildings have not been retrofitted.
- 1 Sustainable building practices are inadequately or incompletely implemented for new buildings.
- 0 Sustainability is not considered in the construction of new buildings.

Campus construction – Introduction of a low carbon element that connects to the Grade II Old Mining Building. The building has been thoughtfully repurposed, with the addition of a new storey. Portland stone and engineered precast stone materials have been chosen to accompany the existing budling to conserve its historic character.

https://sustainability.leeds.ac.uk/wp-content/uploads/sites/106/2020/09.Post-June-2019-Sustainability-Consturction-Standard.pdf

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

University of Leeds:

In 2017-2018 roughly 70% of students were commuting by walking, 5% by bicycle, 11% by bus, 5% by train and 5% by single occupant cars. Over the last 6 years between 90-95% of students

have commuted by sustainable means. The University of Leeds is a city centred university so almost all students walk by default.

Incentivised staff uptake of electric vehicles by providing electricity free of charge. Incentivised carpooling through Liftshare which provides 100 parking permits to its users and dedicates 76 parking bays to car shares. There has also been a development of a parking permit application process which specifies a 2-mile exclusion zone for increasing use of public transport. Action plan includes promotion of electric bikes as part of a try-cycling scheme which can also be purchased in the cycle-to-work scheme. Under annual review, there are developments across campus in order to increase safety for pedestrians and promote active travel. However, there is minimal promotion of these options and direct implementation from the medical school as these results are from the entire University. It has not been taken into account travel of students to and from placement although some placements do offer reimbursement for public transport but this is not the medical school.

Thus, the score is not 0 as there are some methods implemented by the entire University that includes the medical school. However, it does not score more than as the medical school has made minimal to no use of these options in terms of transport to placement after year 2 and transportation strategies are not well-utilized due to insufficient promotion and advertisement. There is however a shuttle bus between the LGI and St James hospitals for NHS staff which reduces the use of single car rides.

6. Does your medical school have an organics recycling program (compost) and a conventional recycling program (aluminum/paper/plastic/glass)?

- Yes, the medical school has both compost and recycling programs accessible to students and faculty.
- 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.

The Worsley building has multiple bins accessible to students and faculty—an empty cups bin, with compartments for lids, liquids and empty cups; a glass bin; a 3-in-1 bin comprising general waste, plastic and metal; a compost bin—placed near dining tables, in corridors throughout Worsley and near building entrance. The campus itself, and surrounding Worsley has a sustainability garden with compost bins and further access to general waste and recycling bins.

7. Does the medical school apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)? Yes, the medical school has adequate sustainability requirements for food and beverages, including meat-free days or no red-meat, and is engaged in efforts to increase food and beverage sustainability. There are sustainability guidelines for food and beverages, but they are insufficient or optional. The medical school is engaged in efforts to increase food and beverage sustainability. There are sustainability guidelines for food and beverages, but they are insufficient or optional. The medical school is not engaged in efforts to increase food and beverage

sustainability.There are no sustainability guidelines for food and beverages.

The medical school's catering is provided by the central University Conferencing and Catering Service: Great Food at Leeds, Deli(very) which has been supporting and selling Fairtrade products since 2003. Great Food uses locally sourced food wherever possible, 65% of suppliers within 40 miles of the University (pollution and congestion minimised). The Sustainable Restaurant Association rated three stars for the 'Food Made Good' sustainability with high ratings in:

- Supporting the community
- Monitoring and reducing food waste
- Treating customers and staff fairly
- Supporting farmers to keep supply chains healthy and predictable

Goals for the next 5 years:

- Reducing aim of single use packaging with an aim of using no single-use plastics by 2023
- Collaborating with Food Science and Nutrition to increase the availability of healthier food and improve nutritional content
- Reducing overall meat content across meals and increase the amount of meat-free/vegan meals available
- Increasing the amount of locally and seasonally produced food
- Decreasing food waste on campus
- Reducing the impact of food on the environment
- Sustainability of fish sold
- Supporting animal and farmer welfare
- Reducing carbon emissions in the supply chain

Great Food at Leeds has further collaborations with Planglow to produce a bio-wrap film for inhouse products instead of plastic sheets which was custom created through supplier engagement. In addition, there is a collaboration with Too Good to Go to achieve less than 5% waste target including promotions of the app to widen user engagement. The medical school is encompassed by the entire University of Leeds and the Good Food at Leeds scheme, however the medical school itself has insufficient promotions of these options. There is also minimal information suggesting medical school involvement with these schemes in and of itself and so scores 1 as a result. Supporting a sustainable future for our University and community - Great Food at Leeds

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

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

The university have a standard outline on how they will achieve strategic sustainability through procurement of its goods and services. They are committed to ensure sustainability is embedded into decision making at the earliest stages. The priorities for sustainable procurement have been agreed and established with the Purchasing and Sustainability services. The current priorities include:

- Ensure the modern slavery statement is met within the supply chain
- Support the achievement of the university's climate plan and 7 principles to mitigate climate change
- Support the university's to achieve its pledge to remove single-use plastic from the university by 2023
- Create positive social impact in the local and wider community through our supply chains

https://sustainability.leeds.ac.uk/wp-content/uploads/sites/106/2020/11.Post-June-2019-Sustainable-procurement-standard-2020.pdf

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

- 2 Every event hosted at the medical school must abide by sustainability criteria.
- The medical school strongly recommends or incentivizes sustainability measures, but they are not required.
- **1** There are no sustainability guidelines for medical school events.

No guidelines are readily available, however as a result of COVID-19 the university has moved towards more sustainable events, e.g. hosting webinars and events on zoom or Microsoft teams to avoid carbon emissions during commute.

10. Does your medical school have programs and initiatives to assist with making lab spaces more environmentally sustainable?

- Yes, the medical school has programs and initiatives to assist with making lab spaces more environmentally sustainable.
- There are guidelines on how to make lab spaces more environmentally sustainable, but not programs or initiatives.
- There are no efforts at the medical school to make lab spaces more sustainable.

The University of Leeds is piloting the LEAF (Laboratory Efficiency Assessment Framework), which is a framework developed by UCL to improve sustainability and efficiency of their laboratories. Areas included: waste and recycling, equipment management, procurement and more with a criteria, based on the efficiency of other laboratories. This includes people working in NHS areas.

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

- 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.
- The institution has partially divested from fossil fuel companies or has made a commitment to fully divest, but currently still has fossil fuel investments.
- The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organized advocacy for divestment.
- Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that.

As part of its Climate Active Strategy, the University has withdrawn investment from certain fossil fuel extractors: Total, BP and Shell (Royal Dutch Shell); it's now fully divested from significant investors.

The University's exposure to fossil fuel extraction is now minimal, with the limited investment in this sector now focused on supporting companies who are evidently making the transition to alternative energy sources and a low-carbon economy.

Section Total (x out of 31)	18

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Grading

Section Overview

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

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

Planetary Health Grades for the Leeds School of Medicine

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

Section	Raw Score	Letter Grade
Planetary Health Curriculum (30%)	$(41/69) \times 100 = 59\%$	C+
Interdisciplinary Research (17.5%)	$(4/17) \times 100 = 24\%$	D-
Community Outreach and Advocacy (17.5%)	(7 / 14) x 100 = 50%	С
Support for Student-led Planetary Health Initiatives (17.5%)	(7/ 15) x 100= 47%	C-
Campus Sustainability (17.5%)	$(18/31) \times 100 = 58\%$	C+
Institutional Grade	49%	С