

Planetary Health Report Card:

University of Birmingham Medical School



2021-2022 Contributing Team:

- Students: *Rhea Khosla, Vindhya Maripuri, Mark Baker
- Faculty Mentors: Rachel Westacott, Christopher McCabe
- *Primary Contact: Rhea Khosla, RXK983@student.bham.ac.uk

Summary of Findings

Overall C-

<u>Curriculum</u> D-

- The Medical School has given an opportunity to study planetary health in the student selected component however the core curriculum is currently greatly lacking in planetary health content.
- Further efforts need to be made to include planetary health in the learning objectives, lectures, and small group teaching sessions. One way planetary health could be easily integrated is in the Medicine in Society modules in years one and two. In addition, we feel that almost every lecture could easily include one line about the environment and how it impacts a certain health condition.
- It has been noted that the curriculum at Birmingham is currently being redesigned and planetary health is being made a topic that will be covered in the future.

Interdisciplinary Research

B-

- The University of Birmingham along with the Medical School have great ties with the Institute of Applied Health Research and this is reflected in this score for the section.
- To further improve students' development, advertisement of research positions, particularly to pre-clinical years would be useful, particularly if students and the wider community could have more influence in the direction of research projects.

Community Outreach and Advocacy

 \mathbf{F}

- There have been many recent improvements in community outreach with the opening of the Green Heart and the associated environmental health events.
- The Medical School lacks partnership with organisations promoting planetary health directly, perhaps if a position was made available on CAWC as student sustainability chair, the Medical School would be able to have a more positive community impact, especially as there is enough student demand.
- The low score reflects the need for increased communication from the Medical School to both students and wider communities with the aim of education on such topics.

Support for Student-Led Initiatives

 \mathbf{C}

- Overall, the administration is supportive of student-led initiatives and there are many opportunities to secure funding for these initiatives, the faculty are very willing to donate their time and knowledge in aid of such initiatives, however currently there is not much direct involvement of faculty members.
- There are intentions to start a "Student Sustainability Champion" Scheme to increase student and staff combined involvement in incorporating planetary health in the curricula across colleges

Campus Sustainability

B

- The University and the Medical School have made big steps to ensure a more sustainable campus, with notable accomplishments including achieving a 20% reduction in carbon footprint 5 years before the original goal.
- The main goal realised by this section is the need for fossil fuel divestment in addition to a set time goal and plan for moving towards carbon neutrality on campus.

Statement of Purpose

Planetary health is human health.

The Planetary Health Alliance describes planetary health as "a solutions-oriented, transdisciplinary field and social movement focused on analysing and addressing the impacts of human disruptions to Earth's natural systems on human health and all life on Earth." This definition is intentionally broad, intended to encompass the multitude of ways that the environment can affect health, including water scarcity, changing food systems, urbanisation, biodiversity shifts, natural disasters, climate change, changing land use and land cover, global pollution, and changing biogeochemical flows. The health of humanity is dependent on our environment and our environment is changing rapidly and in disastrous ways. Although the World Health Organization has called climate change "the greatest threat to global health in the 21st century," many 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 colour, older adults sensitive to health threats, and individuals in low-resource settings), these issues are inherently ones of equity and justice.

With the purpose of increasing planetary health awareness and accountability among 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 centred 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 analysing 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.
 Paediatrics, 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 <u>Literature Review by Metric</u> collates the evidence behind each of the metrics in the Planetary Health Report Card. It serves as a collection of references for further learning and a resource for those advocating for increased planetary health engagement at their institutions.

Planetary Health Curriculum

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

Curriculum: General

1. Did your medical school offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?	
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:

An opportunity that was previously available was the Global Health intercalation, however this year this has been redacted, removing this option which involved several lectures about planetary health. There are no intercalations available with planetary health as the focus.

Curriculum: Health Effects of Climate Change

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

Score explanation:

Although we have given a score of 2, it was only mentioned very briefly (one lecture) in the core curriculum.

Year 1: 'Determinants of Health' lecture

Year 2: This has now been offered as an option for the year 2 personal interest project (PIP) module, where students can research into a topic of choice. However this is a student selected component and not directly in the curriculum

Year 3: The NHS doesn't need more doctors & nurses it needs fewer patients

Year 4: Nothing in curriculum

Year 5: Nothing in curriculum

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:

A score of 1 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5. There is an opportunity for any chosen topic to be studied in the PIP module (including Sustainability in Secondary Haematology), however this is only elective and not part of the core curriculum, meaning only a few students in the year will undertake this.

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:

A score of 2 is given as this is mentioned briefly in some of the year 2 and year 3 lectures.

Year 1: Not included

Year 2: Infection, Immunology and Haematology module - single slide highlighting poor sanitation and urban sewage(environment) had lead to an increase in antibiotic resistance

Year 3: One line about the environment accelerating the effect of antimicrobial resistance (Antimicrobial lecture)

Year 4: Not included

Year 5: Not included

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.

Score explanation:

A score of 2 is given as this is mentioned briefly in some of the year 1, year 2 and year 3 lectures.

- Year 1: Intro to Respiratory Medicine module Airway Diseases
- Year 2: Cancer module lecture about "Cancer and Environmental factors" including air pollution in relation to lung cancer.
- Year 3: Lung cancer lecture, Briefly in Pathology of Lung, CC2 states students should have awareness of social and environmental factors as determinants of disease and the importance of public health roles fulfilled by doctors including major pollutants in the general environment and the understanding of their effects on patterns on health and disease
- Year 4: Not mentioned
- Year 5: Not mentioned

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.

Score explanation:

A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5. There is an opportunity for any chosen topic to be studied in the PIP module, however this is only elective and not part of the core curriculum, meaning only a few students in the year will undertake this.

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. O This topic was not covered.

Score explanation:

A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5. There is an opportunity for any chosen topic to be studied in the PIP module, however this is only elective and not part of the core curriculum, meaning only a few students in the year will undertake this.

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.
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:

A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5. There is an opportunity for any chosen topic to be studied in the PIP module, however this is only elective and not part of the core curriculum, meaning only a few students in the year will undertake this.

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

Score explanation:

A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5. There is an opportunity for any chosen topic to be studied in the PIP module, however this is only elective and not part of the core curriculum, meaning only a few students in the year will undertake this.

- 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.

Score explanation:

A score of 2 was given as this topic is briefly mentioned in the year 3 and year 5 curriculum

- Year 1: Not mentioned
- Year 2: Not mentioned
- Year 3: Unequal regional health impacts of climate mentioned, but not in relation climate change
- Year 4: Not mentioned
- Year 5: A learning objective of the year 5 lecture in the obstetrics and gynaecology module was to "Outline environmental factors which can affect foetal development". However, the only physical agents mentioned affecting development were x-rays and hyperthermia.

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)?
- 3 This topic was explored in depth by the core curriculum.
- 2 This topic was briefly covered in the core curriculum.

This topic was covered in elective coursework.
 This topic was not covered

Score explanation:

A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5. There is an opportunity for any chosen topic to be studied in the PIP module, however this is only elective and not part of the core curriculum, meaning only a few students in the year will undertake this.

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.

O This topic was not covered.

Score explanation:

A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5. There is an opportunity for any chosen topic to be studied in the PIP module, however this is only elective and not part of the core curriculum, meaning only a few students in the year will undertake this.

13. To what extent does your medical school emphasise 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. This topic was not covered.

Score explanation:

A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5. There is an opportunity for any chosen topic to be studied in the PIP module, however this is only elective and not part of the core curriculum, meaning only a few students in the year will undertake this.

- 14. Does your medical school curriculum address the outsized impact of anthropogenic environmental toxins on marginalised populations such as those with low SES, women, communities of colour, children, homeless populations, Indigenous populations, and older adults?
- 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:

A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5. There is an opportunity for any chosen topic to be studied in the PIP module, however this is only elective and not part of the core curriculum, meaning only a few students in the year will undertake this.

Curriculum: Sustainability

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

Score explanation:

A score of 2 was given as this topic is briefly mentioned in the year 2 and year 4 curriculum

- Year 1: Not mentioned
- Year 2: Not mentioned, whilst it is mentioned in the Environmental Factors and Cancer lecture to reduce red and processed meat consumption, this does not necessarily encourage a plant based diet
- Year 3: Not mentioned
- Year 4: Cardiovascular Disease Prevention Lecture mentioned that plant based diet reduces risk
- Year 5: Not mentioned
- 16. Does your medical school curriculum address the carbon footprint of healthcare systems?
 - 3 This topic was explored in depth by the core curriculum
- 2 This topic was briefly covered in the core curriculum.
- 1 This topic was covered in elective coursework.

0 This topic was not covered.

Score explanation:

Although difficult situations are often covered in clinical communication sessions, there have been no scenarios involving communication around planetary health.

	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 of dry powdered inhalers over metered dose inhalers.	
1	The impact of anaesthetic gases on the healthcare carbon footprint and ways to reduce anaesthesia 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 fulfil this metric.	
1	The health and environmental co-benefits of non-pharmaceutical management of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes 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	

Score explanation:

A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5. There is an opportunity for any chosen topic to be studied in the PIP module, however this is only elective and not part of the core curriculum, meaning only a few students in the year will undertake this. In the year 5 curriculum the costs of over-prescribing are mentioned, but not its carbon footprint.

Curriculum: Clinical Applications

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

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

Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework.

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

Score explanation:

A score of 0 was given as this topic was not mentioned in the learning outcomes, lectures or small group teachings for years 1-5. There is an opportunity for any chosen topic to be studied in the PIP module, however this is only elective and not part of the core curriculum, meaning only a few students in the year will undertake this.

In the community based medicine module we learn about the importance of health promotion in GP consultations to encourage healthy lifestyles but not how to talk about climate change,

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

In placement students receive lectures and tutorials on how to take a medical history. This includes consideration of exposure to asbestos, chemicals, radiation, air pollution and other environmental hazards as part of the social history as they are risk factors for many conditions.

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.
- No, there are no improvements to planetary health education in progress.

Score explanation:

The Medical School is currently in the talks with a student-led sustainability group (Earth Resuscitation Team), however it is primarily in the students hands to establish this. There are still plans being made as to whether there will be someone to work across the board as part of the main university to get this included in all colleges.

The University as whole is also in the process of designing a new curriculum with the hope of making sustainable healthcare a more prominent part of the curriculum.

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.

Score explanation:

There is minimal teaching on these topics in the current core curriculum however it is in the process of being updated with the hope of including more education on sustainable healthcare.

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.

Score explanation:

As mentioned earlier, there are plans to have this in the future, but at the moment no member is dedicated to this role.

Section Total (17 out of 69)	D-
------------------------------	----

Back to Summary Page here

Interdisciplinary Research

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

1.Are there researchers engaged in planetary health research and healthcare sustainability research at your medical school?	
3	Yes, there are faculty members at the School of Medicine who have a primary research focus in planetary health or healthcare sustainability.
2	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.
1	There are planetary health and/or healthcare sustainability researchers at the institution, but none associated with the medical school.
0	No, there are no planetary health and/or healthcare sustainability researchers at the institution or medical school at this time.

Score explanation:

We have given a score of 3 as there are faculty members at the School of Medicine who have a primary research focus in planetary health **or** healthcare sustainability.

The Medical School is involved with the Institute of Applied Health research, through which students have been able to be work with these researchers.

Professor Roy Harrison FRS OBE, Queen Elizabeth II Birmingham Centenary Professor of Environmental Health, is running an international, multidisciplinary research team looking into air pollution and its effects internationally with the University of Birmingham campus being one of three 'supersites' from the UK. More locally, Professor William Bloss, Professor Francis Pope and Dr Suzanne Bartington are part of the team working on WM-Air, the West Midlands Air Quality Improvement Programme.

Link: https://www.birmingham.ac.uk/research/heroes/air-pollution.aspx

Another relevant research project currently being run by the Institute of Applied Health Research at Birmingham is: "NIHR Global Health Research Group on Chronic Obstructive Pulmonary Disease (COPD) - Breathe Well" led by Dr Rachel Jordan and Professor Peymané Adab Link: https://www.birmingham.ac.uk/research/applied-health/research/breathe-well/index.aspx

Professor Willem van Schaik, Director of the Institute of Microbiology and Infection, writes an opinion piece on how the dynamics of infectious diseases will change on a warming planet. (17/11/21) Opinion – A climate for microbes: how the dynamics of infectious diseases will change on a warming planet

15

Link:

https://www.birmingham.ac.uk/university/colleges/mds/news/2021/11/schaik-climate-for-microbes.aspx

Genetic study reveals ancient human adaptation to agriculture and climate change in Middle East - The most comprehensive study so far of genetic diversity in the Middle East has given a glimpse into the lives of ancient humans who lived through seismic events including the formation of the Arabian Desert Link:

https://www.birmingham.ac.uk/research/cancer-genomics/news/2021/08/genetic-study-middle-east-human.aspx

Funding awarded for five new innovative clean air projects. The University of Birmingham-led TRANSITION Clean Air Network today announces it is funding five new research projects aimed at improving air quality by reducing harmful transport emissions. Link:

 $\underline{https://www.birmingham.ac.uk/university/colleges/mds/news/2021/05/funding-awarded-clean-air-projects.aspx}$

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.

Score explanation:

We have given this a score of 3 as there is at least one dedicated department or institute for interdisciplinary planetary health research.

UoB has a department of environmental health sciences, who address a range of research issues concerning human and environmental health. There is an MSc course about environmental health run by the department, specifically addressing the impacts that health stressors have on the physical health and social well-being of individuals and communities. The department carries out extensive research in environmental health, funded partly by grants from the environment agency, the health effects institute and UK research councils.

Link: https://www.birmingham.ac.uk/research/activity/environmental-health/index.aspx

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. There is no process, and no efforts to create such a process.

Score explanation:

There is an 'internal' committee at the University, who act on their own to address sustainability issues within the college.

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

Score explanation:

We have given a score of 2 as part of the University of Birmingham website is dedicated to the Global Health Research Network, which compiles upcoming meetings and events, funding opportunities, current global health research and key contacts for planetary health within the University. It is important to note, this is hard to navigate.

Link:

 $\frac{https://www.birmingham.ac.uk/research/activity/mds/projects/global-health-research-network/about.as}{px}$

5. Has your institution recently hosted a conference or symposium on topics related to planetary health?

Yes, the **medical school** has hosted at least one conference or symposium on topics related to planetary health in the past year.

Yes, the **institution** has hosted at least one conference or symposium on topics related to planetary health in the past year.

Yes, the institution has hosted a conference on topics related to planetary health in the past three years.

The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event.

No, the institution has not hosted a conference on topics related to planetary health in the past three years.

Score explanation:

First sustainability fair 2020

03/11/2021 - Trees for the Future - Diversity and complexity for resilience and carbon storage

COP26 round tables - platform for discussion and debate for students and researched

- 20/10/21 Environmental activism and climate change
- 17/11/21 Reflections on COP 26

26-27/01/2022 - Transforming our understanding of global forests - BIFoR sixth annual community meeting - global forest research

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

Score explanation:

The University of Birmingham is not a member of the Planetary Health Alliance or the Global Consortium on Climate and Health Education.

Section Total (11 out of 18)	В-
------------------------------	----

Back to summary page <u>here</u>

Community Outreach and Advocacy

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

1. Does your medical school partner with community organisations to promote planetary and environmental health?	
3	Yes, the medical school meaningfully partners with multiple community organisations to promote planetary and environmental health.
2	Yes, the medical school meaningfully partners with one community organisation to promote planetary and environmental health.
1	The institution partners with community organisations, but the medical school is not part of that partnership.
0	No, there is no such meaningful community partnership.

Score explanation:

There are many planetary health societies that engage in community outreach promoting planetary and environmental health such as Earth Resuscitation Team (IG: @earthresusteam, Twitter: @earthresusteam), Students for Global Health (IG: @wearestudentsforglobalhealth, Twitter: @SfGH_climate), Docs not Cops (IG:@uobdnc) and Model UN; however these societies are part of 'MedSoc' and do not receive support/funding from the Medical School directly so have not been included in this metric. We have found no evidence of the Medical School partnering with community organisations directly, but the University has multiple community links, including with the Canal and River Trust locally.

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.

The medical school has not offered such community-facing courses or events.

Score explanation:

We have given a score of 1 as in January 2019, Birmingham University opened its new Green Heart space. Green Heart is a 12-acre eco-friendly parkland offering a unique space for performances, socialising, meeting and studying, for students, staff and the local community. Since its opening, the following events relating to planetary health have been scheduled:

- Poetry in an age of environmental crisis Talk to show how poetry can help us to face up to the impact that human beings are having on the environment and other living things, and to find the imagination and the hope required to get us, individually and collectively, through to a better, more sustainable future.
- Everyday activism: harnessing anger for change Panel talk, Q&A and an informal discussion to explore all things activism (including environmental activism).
- Leaving no one behind: Localising Sustainable Development Goals thinking amongst youth Workshop which aims to strengthen paths in which UN SDGs could be achieved. Hence, supporting Britain to deliver its Agenda 2030 commitments, with 11 years left.
- Planetary Health Workshop This workshop will explore the global planetary health landscape and investigate existing and future research synergies and linkages between these universal themes of health, environmental and sustainable development
- The Lapworth Museum on campus has hosted some events, however the medical school is not involved in this.

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.

Score explanation:

We have given a score of 0 as this is not a topic that is communicated regularly to students. Whilst there are weekly bulletins sent to the students from the medical school, planetary health is a topic that is rarely if at all mentioned.

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

Score explanation:

We have given a score of 0 as we have been able to find information on and we have not been informed of such professional education activities.

- 5. Does your medical school or its primary affiliated hospital 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 centres have accessible educational materials for patients.

Score explanation:

The University of Birmingham College of Medical and Dental sciences is affiliated with 11 hospital trusts in the West Midlands. All of these trusts' Patients Advice and Liaison Services (PALS) were contacted. Of the four trusts who replied (Royal Wolverhampton, Dudley Group, Worcester Acute Hospitals, and Birmingham Women and Childrens) none provided educational information for patients about environmental health exposure education.

- 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.

Score explanation:

The University of Birmingham College of Medical and Dental sciences is affiliated with 11 hospital trusts in the West Midlands. All of these trusts' Patients Advice and Liaison Services (PALS) were contacted. Of the four trusts who replied (Royal Wolverhampton, Dudley Group, Worcester Acute Hospitals, and Birmingham Women and Childrens) none provided educational information for patients about climate change and health impacts.

Section Total (2 out of 14)	F
-----------------------------	---

Back to summary page here

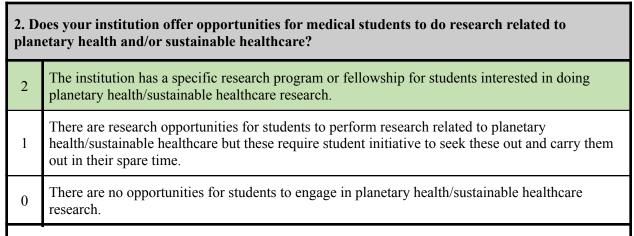
Support for Student-Led Planetary Health Initiatives

<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/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 fulfil clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, but there is no student funding available and there is no requirement to participate.
0	No, the institution does not offer opportunities or support for sustainability initiatives or QI projects.

Score explanation:

There is funding available for student initiatives through the Alumni Impact fund, linked here https://www.birmingham.ac.uk/alumni/current-students/alumni-impact-fund-for-students.aspx . Although this is not a fund specifically set up for sustainability, initiatives with the goal of sustainability will be considered.



Score explanation:

There is the University of Birmingham Undergraduate Research Experience scheme, which all students can apply for and Planetary Health and Sustainable Healthcare research projects would be considered.

Link:

https://intranet.birmingham.ac.uk/as/employability/careers/internships-and-work-experience/funding/bursary-schemes/research-experience-bursary-scheme.aspx

In addition there is the Global Health Research Network that helps researchers including students to capitalise on funding opportunities both within the college, collaborating with the university and with teams abroad.

Link:

 $\underline{\text{https://www.birmingham.ac.uk/research/activity/mds/projects/global-health-research-network/index.as} \ \underline{\text{px}}$

- 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.

Score explanation:

Whilst there is a page by the Institute of Applied Health Research sharing Global Health research projects and supervisors, as well as Global Health Research Network from the medical colleges, there is not a medical-school produced page for students to access planetary health activities or mentors. The medical school website does link to the MedSoc website which contains details of several planetary health societies, however these are student-led and separate to the medical school

- 4. Does your medical school have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?
- Yes, there is a student organisation with faculty support at my medical school dedicated to planetary health or sustainability in healthcare.
 - Yes, there is a student organisation at my medical school dedicated to planetary health or sustainability in healthcare but it lacks faculty support.

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

Score explanation:

There are 'MedSoc' societies but these are student led, rarely sponsored by staff, and not funded by the medical school, MedSoc societies related to planetary health include Earth Resuscitation Team (which is dedicated to this topic), Students for Global Health, Friends of MSF, DocsNotCops, Global Brigades, AMECA, MedSoc Language Exchange

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?

- Yes, there is a student representative that serves on a medical school or institutional decision-making council/committee.
- 0 No, there is no such student representative.

Score explanation:

The student representative committee, CAWC (Curriculum and Wellbeing Committee), currently does not have a student specifically focussed on planetary health and due to limits on the number of committee. No current member of CAWC is working on sustainability or planetary health on the curriculum.

There are future plans to introduce a "Student Sustainability Champions" scheme to encourage teaching about planetary health and sustainability across all colleges. There are plans to incentivise students to take up this role by some form of recognition at the end of their degree.

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)

- 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 as an intended audience.
- 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.
- Cultural arts events, installations or performances related to planetary health that have students as an intended audience.
- Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.

Wilderness or outdoors programs (e.g., that organise hiking, backpacking, kayaking, or other outings for students)

Score explanation:

1

In June and November 2019 there were conferences on campus, the former being on planetary health and the latter entitled 'Clean air for All'. Students were encouraged to attend.

Links: https://www.birmingham.ac.uk/research/activity/ias/workshops/2019/Planetary-Health.aspx
https://www.birmingham.ac.uk/university/colleges/mds/events/2019/11/suzanne-bartington-Clean-Air.aspx
https://www.birmingham.ac.uk/university/colleges/mds/events/ac.uk/university/colleges/mds/events/ac.uk/university/colleges/mds/events/ac.uk/university/colleges/mds/events/ac.uk/university/colleges/mds/events/ac.

Since the Green Heart has opened in January 2019, there have been several planetary health focussed events including:Poetry in an age of environmental crisis, Everyday activism: harnessing anger for change - Panel talk, Planetary Health Workshop and Leaving no one behind: Localising Sustainable Development Goals thinking amongst youth.

The Wilderness Medicine Society has organised outdoor programs following Leave No Trace principles however due to this being a completely student organised event without medical school/university funding, the points have not been allocated.

Section Total (8 out of 15)	C

Back to summary page <u>here</u>

Campus Sustainability

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

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

Score explanation:

Christopher McCabe is the MDS sustainability lead, who oversees sustainability developments in the medical and dental schools as well as sitting on the university's sustainability steering group. https://www.birmingham.ac.uk/staff/profiles/metabolism-systems/mccabe-chris.aspx

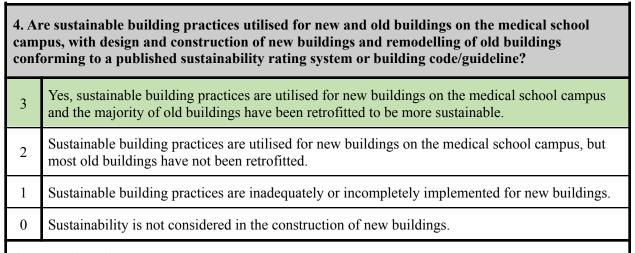
2. How ambitious is your medical school/institution's plan to reduce its own carbon footprint?		
4	The institution has a stated goal of carbon neutrality by 2030 or earlier and the medical school / institution has a well-defined and adequate plan in place to achieve this goal.	
3	Yes, there is a stated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

The University of Birmingham previously had a 2020 target to reduce emissions to 20% of their 2005/6 baseline emissions, which they had achieved, however there is no information on the website about whether they have any goals or plans to become carbon neutral in the future.

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

Score explanation:

All electricity procured to power the campus is from a renewable source, 0.5% of energy used is from onsite PV (photovoltaics) and there are plans to commission and invest in more onsite PV's.



Score explanation:

As detailed in the Universities Carbon Management Implementation Plan, retrofitting of older buildings has been achieved with more environmental alternatives such as: cavity wall insulation, draught proofing, heat zoning.

Link: https://www.birmingham.ac.uk/Documents/university/environment/carbon-plan.pdf
One of the 4 main principles of the estates team for new developments is being efficient with space, with the university saying 'significant CO2 savings are expected from space utilisation'. There is an innovation portal available on the University of Birmingham Intranet where people are encouraged to share their ideas to help in the development and retrofitting of buildings.

Link: https://apply.innovationgateway.com/uob

An example of such retrofitting includes the RICS SKA Accreditation for the recent lab refurbishments in the IBR building.

Link:

https://universitas21.com/agm-2020/symposium-posters/sustainable-laboratories-program-and-rics-skagold-accreditation

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-utilised by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default.
- The medical school has implemented some strategies to provide environmentally-friendly transportation options, but the options are unsatisfactorily accessible or advertised.
- The medical school has not implemented strategies to encourage and provide environmentally-friendly transportation options.

Score explanation:

The university has a page dedicated to methods of sustainable travel.

Link: https://intranet.birmingham.ac.uk/campus-services/sustainable-travel/index.aspx

When placement details are released to students by the online system, it allows you to sign up as a driver or passenger to encourage carpooling (pre-COVID-19) however this was never advertised as an environmentally friendly method, meaning that the metric has not been awarded full points.

6. Does your medical school have an organics recycling program (compost) and a conventional recycling program (aluminium/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.

Score explanation:

Recycling schemes have been fully rolled out across campus, other schemes such as the reusable cup scheme (although currently not in action due to COVID-19) have also been successfully rolled out across campus coffee shops. Grounds management compost waste is reused on campus, in addition to this food waste from the large catering units on campus, excluding the medical school canteen, is collected and composted, however as this is not fully available to students, particularly in the medical school it has not met the full points for this metric. We have been advised that the university are in the

process of launching a food composting station for students on campus, so hopefully by next year this metric will be fully met.

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)?		
3	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.	
2	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.	
1	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:

Recently the Medical School has switched from plastic utensils in the cafeteria to wooden and metal utensils. In addition across all food sites on campus there are plant-based and organic options available. The University has been a fairtrade university since 2003, there are requirements set in place for all meat, eggs and milk to come from farms of 'Red Tractor Status' indicating good animal welfare. All fish used have to meet the sustainability standards set in the 'Marine Stewardship Council Certification'. More than 50% of the Universities Catering Suppliers are from the West Midlands and local produce where viable is used in preference.

Links: https://www.birmingham.ac.uk/community/university-campus/retail/Foodfacts.aspx
https://www.birmingham.ac.uk/Documents/environment/university-of-birmingham-catering-charter.pdf

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:

Since 2014 the University has been part of the West Midlands Universities Procurement Group (WMUPG), a group set up to collaborate and support ambitions of effective procurement. Through

WMUPG regional, national and global sustainability issues are discussed and effective procurement within set sustainability guidelines. The group has over 1220 suppliers who have committed to sustainability action plans as part of their supplier engagement initiative, the action plans are directly linked to the principles set out in the UN sustainability guidelines. 1. No Poverty 2. Zero Hunger 3. Quality Education 4. Decent Work and Economic Growth 5. Industry, Innovation and Infrastructure 6. Sustainable Cities and Communities. In the 'Procurement Strategy' released in 2020, sustainable procurement was said to be central to the universities approach with particular mention to developments in sustainable transport. The University is committed to working with organisations such as 'The Workers' Rights Consortium', 'Electronics Watch' and the Fairtrade foundation to ensure ethical procurements are made, also taking into consideration the following initiatives: The Flexible Framework for Sustainable Procurement (Level 5), The Social Value Act 2013, Innovation Partnership (under the 2015 EU Procurement Directives). Sustainable procurement is one of the 5 key themes mentioned in the strategy.

Links

https://intranet.birmingham.ac.uk/finance/documents/public/Supplier-Sustainability-Impact-Report.pdf https://intranet.birmingham.ac.uk/finance/documents/public/Procurement-Strategy.pdf

9. Are there sustainability requirements or guidelines for events hosted at the medical school? Every event hosted at the medical school must abide by sustainability criteria. The medical school strongly recommends or incentivizes sustainability measures, but they are not required. There are no sustainability guidelines for medical school events.

Score explanation:

Currently there are no requirements or guidelines at the University or Birmingham Medical School. There is a lot of discussion currently that the Commonwealth Games will be subject to quite strict sustainability requirements, and a lot of participants will be housed at UoB.

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.

Score explanation:

The Medical School has a Green Labs Toolkit introduced in 2018 that was rolled out campus-wide in 2020. The initiative has 3 levels (Bronze, Silver and Gold) that labs around the campus aim to complete

all the relevant tasks in the toolkit to achieve. The areas of focus include: chemicals, cold storage, circular economy, sustainable procurement, lighting, plastics, water, spreading the word, lab health and wellbeing, lab waste, lab equipment and single use lab plastics. Evidence must be submitted for each of the parameters above for the labs to be awarded each level. Since 2017 the Sustainable Labs Manager has been working with the Medical School to help make labs more sustainable

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

Score explanation:

December 2019 - The university became a signatory to the UNPRI (United nations principles for reasonable investment)

Link:

https://www.birmingham.ac.uk/documents/environment/uob-responsible-investment-policy.pdf?_ga=2.31705790.1047094320.1605797905-1568588070.1605797905

- Principle 1: We will incorporate Environmental, Social and corporate Governance (ESG) issues into investment analysis and decision making processes.
- Principle 2: We will be active owners and incorporate ESG issues into our ownership policies and practices.
- Principle 3: We will seek appropriate disclosure on ESG issues by the entities in which we invest.
- Principle 4: We will promote acceptance and implementation of the Principles within the investment industry.
- Principle 5: We will work together to enhance our effectiveness in implementing the Principles.
- Principle 6: We will each report on our activities and progress towards implementing the Principles.

The University has transitioned from a 10% investment into fossil fuel organisations to now less than 2% with further plans to reduce this to less than 1%

Student led campaigns by multiple student groups for divestment: 'Fossil free UOB', 'Climate Action society', 'XR' - Extinction rebellion and the "UoB climate justice movement".

'Fossil Free UoB" are running a divestment campaign with specific goals:

https://campaigns.gofossilfree.org/petitions/fossil-free-uob

The Guild (Student Union) has recently brought these groups together, so that they can work together on this campaign.

Section Total (22 out of 31)	В

Back to summary page <u>here</u>

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%	

^{*}Within each grade bracket, a score in the top 5% (_5 to_9%), receives a "+", and a score in the bottom 5% (_0-4%) receives a "--". For example, a percentage score of 78% would be a B+.

Planetary Health Grades for the University of Birmingham School of Medicine

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

Section	Raw Score	Letter Grade
Planetary Health Curriculum (30%)	$(17/69) \times 100 = 24.6\%$	D-
Interdisciplinary Research (17.5%)	$(11/18) \times 100 = 61.1\%$	В-
Community Outreach and Advocacy (17.5%)	$(2/14) \times 100 = 14.3\%$	F
Support for Student-led Planetary Health Initiatives (17.5%)	(8 / 15) x 100= 53.3%	С
Campus Sustainability (17.5%)	$(22/31) \times 100 = 71.0\%$	В
Institutional Grade	42.3%	C-

Report Card Trends

Section Overview

This graph demonstrates trends in overall and section grades for the years in which University of Birmingham has participated in the Planetary Health Report Card initiative. It is important to note that new categories were introduced in 2022 by PHRC.

PHRC Trends for University of Birmingham Medical School

