

Planetary Health Report Card: St George's, University of London



2021-2022 Contributing Team:

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Summary of Findings

Overall	D+
<u>Curriculum</u>	C-
 St George's, University of London (SGUL) has good coverage of planetary health topics in the curt these are mainly discussed in a few lectures clustered towards the end of the course. Recommendations: A greater focus on integrating planetary health themes longitudinally through curriculum, particularly on increasing coverage in earlier years. Where relevant, every lecture could least a slide on the environmental considerations of the area being taught. 	riculum, but out the d have at
Interdisciplinary Research	D
 SGUL has faculty members with a primary or secondary focus on planetary health, with research for primarily on outdoor air and noise pollution in London, Europe and Sub-Saharan Africa. Recommendations: SGUL could join an international planetary health organisation such as the Planetath Alliance and/or the Global Consortium on Climate and Health Education. The 'Environment Sustainability' webpage could be turned into a central hub for highlighting planetary health research 	ocused anetary t and h at SGUL.
Community Outreach and Advocacy	D-
 University updates on environmental issues are covered in staff and student communications, altho not regular. St George's Hospital Trust provides some post-graduate professional education related sustainable healthcare. Recommendations: To introduce a dedicated section of the student/staff newsletter to planetary he SGUL to run a public event to engage the community in local issues around sustainability and plan The university or hospital trust to develop accessible educational materials about planetary health i patients. 	ugh they are to ealth issues. etary health. ssues for
Support for Student-Led Initiatives	D
 SGUL has many active student groups; Ethical & Environmental Union Officers and societies such and Vegan Society. There is a staff/student environmental working group who meet every month. T student-led sustainability initiatives offered to students directly by SGUL, and they are not funded. Recommendations: SGUL could introduce the option of carrying out a sustainability QI project as curriculum, or offer funding for extracurricular student-led planetary health projects. 	a as EcoSoc There are few s part of the
<u>Campus Sustainability</u>	C-
 SGUL has made efforts to make the campus sustainable, with 2/3rds of buildings supplied with remenergy and with a joint sustainable procurement strategy with Kingston University. The hospital bid group has been effective at incentivising environmentally friendly transportation methods. Recommendations: Despite a pledge to reduce CO2 emissions, we would like the university to ful from fossil fuels. SGUL should focus on having 100% of buildings supplied by renewable energy a introduce sustainable guidelines for food and beverage suppliers on site. 	ewable cycle user lly divest and to

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.

Literature Review

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

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.
There are currently no student selected modules on planetary health and no planetary health topics offered by the University during the MBBS course. Students do have the freedom to choose such a topic for a student selected module should they find a supervisor with relevant expertise willing to take them on, but this requires students to be proactive, and we are not aware of any who have done this. The final year public health module offers students the opportunity to do a presentation on a topic of their choice relevant to public health, and a number have chosen to do this on topics relevant to sustainability and the environment, such as the carbon footprint of anaesthetic gases. However, this is a sub-component of a wider module and not in itself a student selected module.	
There are also intercalated BSc and Masters programmes outside of the MBBS course the	

Curriculum: Health Effects of Climate Change

environmental health components.

2. Does your medical school curriculum address the relationship between extreme heat, health risks, and climate change?

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

- 1 This topic was covered in elective coursework.
- 0 This topic was not covered.

There is an extended taught session on Environmental Health and Climate Change during the final year attachment in public health which specifically addresses the health hazards associated with climate change and extreme temperatures. It also addresses the unequal distribution of climate-associated risks in relation to deprived population groups. Additional learning opportunities through links to the Lancet Commission on Climate Change are provided.

In addition, UK Heatwave planning is mentioned in the Introduction to Health Protection session in the public health attachment, noting that the temperature at which excess deaths start to occur is modest in the UK.

Taught sessions on health inequalities in Year 1 and Year 3 are currently being adjusted to address the unequal distribution of heat exposure and climate risk, noting the increased impact on deprived population groups as defined in the PHRC.

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.
This topic is briefly addressed during an extended taught session on Environmental Health and Climate Change during the final year attachment in public health which covers the health impacts of floods, heatwaves, drought and fires.	
The final year public health module also includes lectures called 'Introduction to Health Protection' and 'Public Health on the Front Line' (a global health session) which refer to the impact of flooding on health.	

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.
This tonic is briefly addressed during an extended taught session on Environmental Health and Climate	

This topic is briefly addressed during an extended taught session on Environmental Health and Climate Change during the final year attachment in public health which explicitly refers to the impact of changing climate on changes in the geographic distribution of specific infections. There is particular reference to vector-pathogen illnesses, how changes to the landscape (e.g. deforestation or urbanization or migration) affect infectious diseases, and interventions that could mitigate these changes. Additional learning opportunities through links to the Lancet Commission on Climate Change are provided.

Moreover, a teaching session on Pandemics during the final year attachment in public health covers factors such as climate change, environmental degradation and their contribution to emerging infectious diseases with pandemic potential.

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.

This topic is addressed over the course of several slides during an extended taught session on Environmental Health and Climate Change during the final year attachment in public health which specifically refers to the impact of a changing climate and air pollution on respiratory health. Teaching within this session highlights the effects of exposure to air pollution across the life course, especially with regards to respiratory health. Interventions to mitigate such effects are also explored during the session.

There is also a first year session called the 'Tooting Trail', designed to introduce students to the local area, in which the negative health effects of high levels of air pollution from traffic on the communities living around the University are briefly discussed.

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.
This tonic is briefly addressed during an extended taught session on Environmental Health and Climate	

This topic is briefly addressed during an extended taught session on Environmental Health and Climate Change during the final year attachment in public health which explicitly refers to the impact of a changing climate and air pollution on cardiovascular health.

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. This topic is briefly addressed during an extended taught session on Environmental Health and Climate Change during the final year attachment in public health which specifically addresses the mental health hazards associated with climate change, and the range of direct and ecosystem mediated pathways through which these adverse health effects can develop. The effects of extreme events leading

pathways through which these adverse health effects can develop. The effects of extreme events led to loss of livelihoods and psychiatric trauma, as well as the most vulnerable people affected, are highlighted. The key issue of climate anxiety is also mentioned.

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.

This topic is briefly addressed during an extended taught session on Environmental Health and Climate Change during the final year attachment in public health, which specifically refers to the issues of food and water security as important factors in the climate crisis and the associated health consequences.

Additional learning opportunities through links to the Lancet Commission on Climate Change are provided.

The links between ecosystem health, climate change and emerging infectious diseases are covered in a lecture on pandemics in the final year public health attachment, and students are invited to consider their own actions, for example in relation to consumption of non-sustainably produced palm oil.

The University is currently piloting opportunities for medical students to attend a BSc module on environmental health to gain additional knowledge of this subject.

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.

This topic is briefly addressed during an extended taught session on Environmental Health and Climate Change during the final year attachment in public health, which explicitly refers to the fact that the impacts of climate change are not experienced equally. All the groups mentioned in this above question are specifically referred to as experiencing greater climate risk and widening social disparities.

Taught sessions on health inequalities in the first year of the graduate MBBS4 course, and the third year of all MBBS courses, are currently being adjusted to emphasize the greater impact of climate change on disadvantaged population groups.

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.
This issue is briefly addressed in a first year teaching session on global health, which points out the widely different regional health impacts of the climate crisis

This topic is also touched upon during an extended taught session on Environmental Health and Climate Change during the final year attachment in public health, which specifically refers to the fact that the impacts of climate change are not experienced equally by different regions. Published material from a Lancet report on climate change is used to illustrate the regional differences in climate impact.

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

The health effects (including reproductive health effects) of industry-related environmental toxins is covered in the first part of an extended taught session on Environmental Health and Climate Change during the final year attachment in public health. Particular reference is made to chemical safety and its effects on neurodevelopment. The lecture also refers explicitly to the health hazards associated with air pollution over the lifetime.

In the first year of the MBBS4 graduate course, and the second year of the MBBS5 course, there are lectures which very briefly mention the actions of steroids and potential endocrine disruptors in the environment, and how they relate to sexual differentiation and spermatogenesis.

In addition, intercalating students and students with a special interest in reproductive medicine are offered the opportunity for further study of the roles of environmental toxins (for example BPA and DES) 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.

This topic is addressed during an extended taught session on Environmental Health and Climate Change during the final year attachment in public health, which specifically refers to the impact of climate change on the UK population and to factors influencing climate impacts on different population groups. Particular reference is made to air pollution, water pollution, food control and housing standards in the context of the university's surrounding community. Students are tasked several times within this session with considering interventions that could alleviate some of the causes of these issues in the university's surrounding population. It therefore provides information directly relevant to local populations around the university.

There is also a first year session called the 'Tooting Trail', designed to introduce students to the local area, in which the negative health effects of high levels of air pollution from traffic on the communities living around the University are briefly discussed.

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

This	tania is used assumed in the MDBS assume
0	This topic was not covered.
1	Indigenous knowledge and value systems as essential components of planetary health solutions are included in elective coursework.
2	Indigenous knowledge and value systems as essential components of planetary health solutions are included briefly in the core curriculum.
3	Indigenous knowledge and value systems are integrated throughout the medical school's planetary health education

This topic is not covered in the MBBS course.

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?
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.
This topic is not covered in the MBBS course.

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.
In the final year public health attachment, the carbon footprint and environmental impacts of meat are	

In the final year public health attachment, the carbon footprint and environmental impacts of meat are mentioned in an environmental health lecture and a lecture on pandemics. However, these lectures do not go on to explicitly cover the benefits of a plant based diet.

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.
In the final way public health attachment, there is a lecture on 'NHS landscapes' which mentions	

In the final year public health attachment, there is a lecture on 'NHS landscapes', which mentions recent changes that have been made that have reduced the carbon footprint of the NHS. It mentions virtual wards, the trend towards more remote monitoring, and the shift of care that has been occurring out of hospitals and into communities. The lecture also mentions the NHS Long Term Plan and how it stresses the importance of improving sustainability in the system. It includes a link to the Green Hub for Allied Health Professionals, where students can find out more.

This topic is also addressed during an extended taught session on Environmental Health and Climate Change during the final year attachment in public health, which mentions the carbon footprint of the NHS and the fact that the NHS is trying to reach net zero by 2040.

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 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.
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
Thes	a topics are not addressed by the core curriculum Students in the final year public health firm

These topics are not addressed by the core curriculum. Students in the final year public health firm have the opportunity to choose a topic to give a presentation on, and these have covered topics from the environmental benefit of dry powdered over metered dose inhalers, to reducing waste in the hospital system, to the carbon footprint of anaesthetic gases. However, there is no guarantee that any one group of students will be taught about these topics - it depends on whether they or their peers should proactively take the initiative - so we cannot classify any of them as definitely covered by the core curriculum at this point.

One of the head lecturers on respiratory medicine has expressed willingness to ensure the topic of dry vs metered dose inhalers and their environmental lectures in future sessions.

Although the environmental impact of pharmaceuticals and over-prescribing is not currently covered, the head of pharmacology teaching has also expressed a willingness to mention this in future lectures

There is a lecture on Obesity in the MBBS course which mentions the fact that physical activity can be thought of as a pill, which is beneficial in reducing cardiovascular disease and managing mental health problems. The lecture includes discussions around how to improve physical activity that include social group activities like Park Run. However, environmental benefits are not discussed.

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?

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

1 i	Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework.
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0 No, there are not strategies introduced for having conversations with patients about climate change

The Clinical communication curriculum does not contain any specific content which focuses on how to have conversations about climate change and its health effects.

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.

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

The St George's Clinical Communication curriculum is predominantly skills-based rather than about teaching content, however it does highlight to students that a personal and social history includes factors in a patient's lifestyle and environment which can put them at risk of illness or have a bearing on an established disease. It teaches that the social history should include exploring occupation (exposure to chemicals, hazardous materials, allergens, etc), living situation (damp, mould, temperature, etc), previous travel or having lived in other countries/cultures, and how all these factors relating to their environment could influence their health. Students are taught to think about these factors in a structured way, exploring how they might act as predisposing, precipitating, or perpetuating factors in someone's ill health. So, while there is no specific session centred solely around taking an environmental or exposure history, these topics are covered within wider sessions on taking a social history.

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

Module leads for the third, fourth and final years have been asked by the University leadership to increase the planetary health content of their modules (as of early 2022).

Additionally, several individual lecturers with whom we have been in contact say they plan to increase their coverage of environmental health and sustainability topics on the curriculum.

However, there are no firm commitments, goals or major plans in place to ensure changes will be major.

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

The majority of points in this section have been scored as a result of one lecture delivered in the final year public health attachment. Besides this, there are brief mentions of sustainable healthcare and the environment in a handful of other lectures. There is almost no exposure to these topics in the earlier years of the MBBS course.

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?

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

Such a role does not currently exist in our medical school.

Section Total (30 out of 69)

30

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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?		
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.	
There are many researchers involved in planetary health and healthcare sustainability at St George's, University of London. These include members of three of the four SGUL Institutes.		
Within the <u>Institute of Infection and Immunity</u> there is a <u>Centre for Global Health Research</u> , working on strategies for infection management and control in low-income countries; a second <u>Centre for</u> <u>Diagnostics and Antimicrobial Resistance</u> is investigating antimicrobial resistance, a major global health challenge, partly caused by agricultural use of antimicrobials and their subsequent contamination of waterways and soil.		
There is also a major research initiative on migration and health. Researchers in the <u>Population Health</u> <u>Research Institute</u> cover the research theme of <u>Healthy Lifestyles and Environments</u> , studying the effects of diet, physical activity and air pollution on health (three health determinants with major global importance) and the effectiveness of different approaches to reducing exposure.		
Mem contr ethic viole	Members of the <u>Institute of Biomedical Education</u> , who have research interests in the prevention and control of environmental hazards affecting health, such as arsenic contamination of water supplies, and ethical aspects of global health challenges, including the health impacts of war and conflict and violence against women.	

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

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

Though there is no dedicated department or institute for interdisciplinary planetary health, interdisciplinary research on planetary health is carried out in almost all major SGUL Departments, including the Institute for Infection and Immunity (particularly the Centres for Global Health and the Centre for Global Health Research), the Population Health Research Institute and the Institute for Biomedical Education.

Where appropriate, the research involves collaboration between departments – for example, studies of the impact of social and environmental conditions on asthma incidence in South America involve collaborations between the Institute of Infection and Immunity and the Population Health Research Institute.

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?

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

There are no explicit criteria that involve the communities disproportionately impacted by climate change and environmental change in decision-making for the research projects at St George's, University of London.

However, many researchers in both the Institute of Infection and Immunity and the Population Health Research Institute consult local communities (in the former case, mostly in countries in Sub-Saharan

Africa, a region with severe climate impacts) in their research prioritization and decision-making. The results of this consultation process are fed into research funding agencies (which influence the research actually funded) by researchers representing St George's, University of London on funding agency committees.

Future research projects could include stakeholder engagements or interviews with experts, clinicians and community members, either as individuals or focus groups, to involve community members impacted by climate and environmental injustice.

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.
- ² There is a website that attempts to centralize various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive.
- 1 The institution has an Office of Sustainability website that includes some resources related to health and the environment.
- 0 There is no website.

The SGUL Departments which carry out research on global health issues, including the <u>Institute for</u> <u>Infection and Immunity</u> (particularly the <u>Centres for Global Health</u> and the Centre for Global Health Research), the <u>Population Health Research Institute</u> and the <u>Institute for Biomedical Education</u> all have sections on the SGUL website describing their research activities.

In addition, a page on the SGUL main website on '<u>Environment and Sustainability</u>' provides a brief overview of the relevant policies, procedures, guidance and forms in relation to environment and sustainability at St George's. This will be updated to take account of new developments in sustainability at SGUL. The current page contains some outdated information with statistics from over 10 years ago. This page could be improved further not only by updating the key statistics, but also become a centralized hub for new developments and highlight recent research undertaken within the various research institutes at SGUL. It may even be possible to link information regarding the University's EcoSociety, the Student Union Environment and Ethics Representatives and links to the university joining 'Health Declares' Climate Emergency Declaration.

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.

0	No, the institution has not 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.
2	Yes, the institution has hosted a conference on topics related to planetary health in the past three years.
3	Yes, the institution has hosted at least one conference or symposium on topics related to planetary health in the past year.

Each year since 2020, SGUL has hosted annual meetings including international guest speakers on COVID-19 pandemic control. However St George's has not hosted a conference on topics directly related to planetary health.

SGUL hosts other meetings on global infectious disease control, including the International Consortium for Trials of Chemotherapeutic Agents in Tuberculosis (INTERTB); an annual symposium on tuberculosis in global health with researchers from all over the world. Organised by Dr Amani Jindani, INTERTB aims to help design and conduct randomized controlled clinical trials to shorten and simplify treatment of tuberculosis (TB) as well as developing a network of clinical trial centres across the world. Results of this research focus include the recent efforts from Dr Ken Laing and Dr Adam Witney of the Infection and Immunity Institute's Pathogen 15 Genomics and Bioinformatics Group, addressing the World Health Organisations (WHO) call to develop a novel diagnostic test for TB, which poses a momentous threat to global health in its controlled transmission and spread.

6. Is your medical school a member of a national or international planetary health or ESH organization?

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

In November 2021, St George's, University of London or St George's Hospital Medical School announced that it has joined with other UK Medical Schools in the <u>Health Declares</u>' <u>Climate</u> <u>Emergency Declaration</u> and as a member of <u>Universities UK</u> will seek to meet the Universities UK <u>climate goals</u>.

St George's NHS Hospital Trust is only the second NHS Hospital Trust to achieve the Planet Mark sustainability accreditation, achieving at least 2.5% reduction in carbon emissions in one year.

To further improve, St George's could look to join an international planetary health organisation such as the Planetary Health Alliance, UK Health Alliance on Climate Change or the Global Consortium on Climate Change and Health Education.

Section Total (5 out of 17)

5

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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?	
3	Yes, the medical school meaningfully partners with multiple community organizations to promote planetary and environmental health.
2	Yes, the medical school meaningfully partners with one community organization to promote planetary and environmental health.
1	The institution partners with community organizations, but the medical school is not part of that partnership.
0	No, there is no such meaningful community partnership.
There are currently no partnerships within the St George's University of London Outreach or Public engagement teams with any groups that promote planetary or environmental health.	

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.
There are currently no specific community-facing courses or events regarding planetary health. However, the Open Spaces initiative hosts a growing programme of interdisciplinary workshops,	

events, sessions and extracurricular modules that aim to bring medicine and science in dialogue with arts, humanities and business. It aims to encourage interdisciplinary encounters between staff and students; students on different programmes; and between the University and the local community. However, the newly formed University Eco Society is putting on an event titled 'Can a medical student help the NHS to achieve Net Zero?', however this event is aimed more at students rather than the community.

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

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

There is some coverage of issues related to planetary health and/or sustainable healthcare in the staff and student newsletters, as St George's Communications team has a link with the Environmental Working Group who highlight environmental and sustainability initiatives when they are alerted to them. They also cover these issues as often as the team are sent stories from the community.

The most recent coverage was in November 2021 in an article titled <u>'St George's joins "Health</u> <u>Declares" Climate Emergency Declaration</u>', it discusses how Professor Whincup and the Environmental Working Group at St George's with the support of Principal, Professor Jenny Highman signed the declaration in advance of the COP26 conference. The article can be found on the News page of the St George's University of London website. Despite there not being a specific Planetary Health/ Sustainable Healthcare News section on this website, there is a page titled <u>'Environment and</u> <u>Sustainability'</u> on the St George's University of London website. It includes procedures and guidance in relation to radioactive waste disposal as well as tips for being 'green' at George's and encourages cycling to work/university. However, as mentioned in last year's report the data used on the website page is from 2006/07, so around 15 years outdated suggesting the page hasn't been updated recently.

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. **1** Yes, the institution or main affiliated hospital trust offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers

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

St George's Hospital Trust engages in some professional educational 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. St George's Hospital Trust has consultant staff with special expertise in sustainability in health care. They provide post-graduation professional education on this subject, particularly for trainees in the specialties of surgery and anaesthetics.

St George's University of London does not have a major focus on post-graduate medical education, the University does however run formal BSc and MSc courses and modules on Global Health, which have a strong emphasis on many element of planetary health; these are being strengthened by the addition of a new module titled Environmental Influences on Health which will be implemented during the current academic year.

Currently, the Professional Education department for Short Courses does not have anything in its portfolio that concentrates on this particular area.

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 centers have accessible educational materials for patients.

St George's University Hospital has a very limited selection of accessible educational materials for patients related to environmental health exposures. On the St George's University Hospital website, there is a page specifically for Patient Information Leaflets for the public. The only one listed relevant to environmental health exposures is <u>Smoking and Orthopaedic Surgery</u>, however it is only available upon request. It discusses the toxic chemicals found in cigarettes and cigarette smoke and the harmful effect they can have on your health.

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.

There are currently no accessible educational materials offered by St George's University Hospital about climate change and health impacts.

Section Total (3 out of 14)

3

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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.

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 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.
SGU are c	<i>Ut does not offer specific support for students interested in a sustainability initiative, however there pportunities for students to do this at the university.</i>

SGUL offers a student-staff partnership grant to all students at the university. Students apply for this grant and are assessed by a panel of staff members who vote on whether the project should be given financial support. This grant, although not specific for sustainability initiatives, can be used in this way. Recently, two students applied for this grant and used the money to replace plastic straws at the student's union bar with paper alternatives. In this way, the grant provides a platform for students with ideas about sustainability projects to run their own initiative, and the beauty of this scheme is that it is student and staff led. This means that staff are able to help students with their project, opening more opportunities for bigger sustainability changes at the university.

As well as this, recently an Eco Society has been approved by the student's union at SGUL, for both staff and students. The society provides an opportunity for sustainability initiatives to take place and be led by staff and students. Although the Eco Society at the university is new, there are good links with the SU for future projects, which the student's union has offered support for.

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

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

In years 2, 3 and 5 of the MBBS course, students must complete a Student Selected Component as part of their degree. Students are given a wide range of topics to choose from, including sustainability in healthcare and planetary health. This provides students with an opportunity to research into these areas, however they are limited to healthcare related sustainability topics.

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.
- 0 There is no medical-school specific webpage for locating planetary health and/or sustainable healthcare projects or mentors.

SGUL does not have a webpage dedicated to planetary health or sustainable healthcare activities, however there are various other university platforms with sustainability information.

Firstly, the Eco Society has a student run Instagram page which acts as a space for sustainability project promotion. As well as this, the Instagram page makes posts about small changes that students can make in their everyday lives to increase their sustainability. The page also provides a platform for students to enquire about sustainability projects to the Eco Society committee.

The university sends out information regarding student-staff partnership grant projects. As mentioned previously, these projects are not limited to sustainability, however can be utilised in this way. The university sends out emails, and has a web page with information about previous projects, and the recent sustainability project features on this.

At the university there are a group of staff members whose role is to promote sustainable changes to staff and students. One of these staff members has recently led a student-staff partnership grant project on sustainability and is keen to help out with more projects.

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?

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

SGUL does not provide funding for any student groups promoting sustainable healthcare. However, the university does have multiple student groups, some supported by staff, that promote sustainability.

The Eco Society at the university is student led, and non-funded. However, the Eco Society is in the process of organising sustainable healthcare talks led by clinicians interested in sustainability. These talks will be aimed at both students and staff at SGUL.

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.

0 No, there is no such student representative.

At SGUL the student's union has two environmental and ethics (E&E) officers that ensure that the Union is constantly aware of its environmental impact, and is working to improve its sustainability and ecological profile. They are also responsible for promoting sustainable living to the student body and making sure that Union Members are aware of their impact on the planet and the people around them. The E&E officers are primarily responsible for representing and promoting environmental and ethical issues within the Union, University and to the student body.

In the last 6 months, the E&E officers' priority has been building up the allotment on the university property, after encountering unforeseen issues with the allotment on the Trust site. Having started from almost nothing, they are hoping for it to become an integral part of the George's community and somewhere that both staff and students are able to use and enjoy. Right now, they are focusing on

supplying the materials to build it up with the aim of having the first bulbs planted in spring. They hope to be able to host weekly events as well as build up a community that can use the allotment to its fullest potential.

They hope to eventually turn a profit by selling anything grown to students and staff, putting the money back into the allotment so they can expand it and work towards the allotment becoming self-sustaining one day.

By using a social media account, they try to promote simple swaps to make students aware of how to live a more environmentally friendly lifestyle. From tips such as sustainable food swaps to resources and other social media accounts where students can learn from.

They are in the process of suggesting a list of actions collated from the previous PHRC, as well as recommendations from students to the University with the hope of encouraging sustainable changes on a university-wide level.

6. In the past year, has the institution had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	
1	Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.
1	Panels, speaker series, or similar events related to planetary health that have students as an intended audience.
1	Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.
1	Cultural arts events, installations or performances related to planetary health that have students as an intended audience.
1	Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.
1	Wilderness or outdoors programs (e.g., that organize hiking, backpacking, kayaking, or other outings for students)
In the	e past year SGUL has not offered any of the above projects to students.

Section Total (4 out of 15)

30

4

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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?	
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
The university has a 'St Georges Environmental Working Group' with a designated senior academic lead and a senior Estates representative. It seeks to identify opportunities to make improvements in environmental sustainability across campus and stimulate wider discussion on ownership of environmental issues. This 20-member group comprises both staff and students working together to make SGUL more environmentally friendly. In addition, the St George's University Hospital Trust has a Green Plan and is establishing a Sustainability Team.	

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.	

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.

1

SGUL policies are seeking to reduce CO_2 emissions and are currently in line with the 'University UK' targets to reduce carbon emissions by 78% by 2035 and achieve net zero by 2050. The university has also joined the 'Health Declares' Climate Emergency which emphasizes the need for accelerated transition away from fossil fuels and towards renewable energy use.

3. Do buildings/infrastructure used by the medical school for teaching (not including the hospital) utilize renewable energy?

- 3 Yes medical school buildings are 100% powered by renewable energy
- 2 Medical school buildings source >80% of energy needs from off-site and/or on-site renewable energy.
- 1 Medical school buildings source >20% of energy needs from off-site and/or on-site renewable energy.
- 0 Medical school buildings source <20% of energy needs from off-site and/or on-site renewable energy.

St George's, University of London main buildings receive energy through its associated Hospital Trust. Two-thirds of electricity is generated through a gas-fueled combined heat and power system and one-third is provided through the electricity grid. The electricity grid supply is now 97% renewable, and the Halls of Residence (on a separate site) receive 100% renewable electricity.

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?

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

New buildings within St George's hospital must be Building Research Establishment Environmental Assessment Method (BREEAM) compliant. Existing buildings have not been retrofitted. However, all

existing buildings lighting fixtures are being replaced with low energy use bulbs which will reduce energy usage by 80%.

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

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

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

The St George's Hospital Bicycle User Group (SGH BUG) works to increase cycling accessibility to St George's Staff via measures such as providing bike sheds and authorising cycle access through various campus entrances. Through combined efforts, there has been an 8% increase in staff cycling to work since 2019. They aim for ½ of staff to cycle to work and have set steps of how they will achieve this. These include introducing staff recycling bike schemes and contraflow cycling lanes around the site.

Furthermore, SGUL Halls of residence has been built locally, a short 15-minute walk from campus, facilitating the use of active transport modes such as walking and cycling.

6. Does your medical school have an organics recycling program (compost) and a conventional recycling program (aluminum/paper/plastic/glass)?		
2	Yes, the medical school has both compost and recycling programs accessible to students and faculty.	
1	The medical school has either recycling or compost programs accessible to students and faculty, but not both.	
0	There is no compost or recycling program at the medical school.	
St Georges medical school has 3-in-1 waste bins placed in common eating areas, teaching areas and at main entrances. Additionally, the <u>SGUL 'Waste Management' webpage</u> outlines methods of recycling used by the university. However, there are no compost facilities accessible to students.		

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.

The university houses 'Pret a Manger' and 'Peabody's'. 'Pret's Plastic Pledge' includes the elimination of unnecessary single use plastics by 2025. Peabody's has made all packaging fully recyclable with all hot drinks ethically sourced.

Additionally, the Student Union shop offers a wide range of vegetarian and vegan options at affordable prices. The SGUL <u>website page on environment and sustainability</u> encourages visitors and members of St George's to use reusable cups instead of a non-biodegradable equivalent.

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.	
St George's has a joint procurement strategy with Kingston university. A 'sustainable procurement policy statement' is embedded within the procurement policy. This statement aims to commit to long term social, ethical, environmental and economic sustainability and includes a checklist of actions outlining how they are committed to achieve this.		

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

Ther	e are no explicit guidelines surrounding sustainability practices surrounding events held on St	
0	There are no sustainability guidelines for medical school events.	
1	The medical school strongly recommends or incentivizes sustainability measures, but they are no required.	
2	Every event hosted at the medical school must abide by sustainability criteria.	

There are no explicit guidelines surrounding sustainability practices surrounding events held on St George's campus, as most events are of a small scale. However, the St George's 'Environment and Sustainability' webpage provides 'Green tips' such as turning off unnecessary lighting and computers whilst on campus.

10. Does your medical school have programs and initiatives to assist with making lab spaces more environmentally sustainable?		
2	Yes, the medical school has programs and initiatives to assist with making lab spaces more environmentally sustainable.	
1	There are guidelines on how to make lab spaces more environmentally sustainable, but not programs or initiatives.	
0	There are no efforts at the medical school to make lab spaces more sustainable.	
There is currently no specific environmentally friendly policy in place. However, there are efforts to engage with suppliers who reduce plastic waste. Furthermore, the lab uses software which allows St George's staff to procure equipment which can be shared rather than bought individually which reduces unnecessary waste. This is looking to be extended to sharing chemicals.		

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 organized advocacy for divestment.	
0	Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that.	

St George's, University of London is currently reviewing its investment policy with a view to disinvesting in fossil fuels and implementing a responsible and sustainable investment policy.

The SGUL Environmental Working Group has requested that the university should disinvest from fossil fuels and the proposal is receiving active consideration.

Section Total (13 out of 31)

13

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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
А	80% - 100%
В	60% - 79%
С	40% - 59%
D	20% - 39%
F	0% - 19%

Planetary Health Grades for St George's, University of London

The following table presents the individual section grades and overall institutional grade for the St George's, University of London on this medical-school-specific Planetary Health Report Card.

Section	Raw Score	Letter Grade
Planetary Health Curriculum (30%)	$(30 / 69) \ge 100 = 43.5\%$	C-
Interdisciplinary Research (17.5%)	(5 / 17) x 100 = 29.4%	D
Community Outreach and Advocacy (17.5%)	(3 / 14) x 100 = 21.4%	D-
Support for Student-led Planetary Health Initiatives (17.5%)	(4 / 15) x 100 = 26.7%	D
Campus Sustainability (17.5%)	(13 / 31) x 100 = 41.9%	C-
Institutional Grade	35.1%	D+

Report Card Trends

Section Overview

This graph demonstrates trends in overall and section grades for the years in which St George's, University of London has participated in the Planetary Health Report Card initiative.



Planetary Health Report Card Trends for St Georges, University of

Year