Planetary Health Report Card:

UC Berkeley-UCSF Joint Medical Program

Berkeley UCSF
Joint Medical Program

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Summary of Findings

Curriculum	C+

- There are many elective courses related to environmental health and climate available to JMP students, however, the inclusion of Planetary Health into the core curriculum is limited.
- At least four of the JMP problem-based learning cases integrate planetary health themes. However, there are still opportunities to expand the core curriculum's focus on Planetary Health, such as expanding climate justice content in cases and integrating environmental health assessments into the clinical skills courses.

Interdisciplinary Research	A-

- UC Berkeley has several departments and centers devoted to environmental science research. Most notable is the SPH Division of Environmental Health Sciences, in which most faculty members are conducting planetary health research. The primary research interests of a few faculty members of the JMP focus on planetary health, and oftentimes, at least one student in each cohort of JMP students conducts research on an environmental health topic for their Master's Thesis.
- While there are several projects focused on Community Based Participatory Research in climate justice, SPH could consider development of an institutionalized process through which community members share decision-making power in the climate + environmental research agenda of the university.

Community Outreach and Advocacy	A

- Although the JMP is not formally partnered with community organizations that promote planetary health, many faculty members and students are involved in meaningful partnerships. Developing formal partnerships with community organizations may help to facilitate research, advocacy, and mutual learning.
- The UC Berkeley School of Public Health and UCSF offers a variety of public-facing courses and events and CME courses, and affiliated hospitals provide resources for patients about environmental health exposures and climate change.

Support for Student-Led Initiatives	A+

- Both UC Berkeley and UCSF offer many resources to support student-led initiatives, including funding/grants and mentorship. These resources, especially the Environmental Scholars Program, should be highlighted more, especially to first-year students looking for thesis projects.

Sustainability	A

- UC Berkeley is a part of the UC's Carbon Neutrality Initiative and has pledged to be carbon neutral by 2025. It has an action plan, makes annual sustainability reports, and has entirely divested from fossil fuels.
- To meet these goals, UC Berkeley needs to accelerate the shift towards renewable energy, retrofit old buildings, improve sustainable practices in procurement, and further promote and incentivize sustainable event practices.
- The JMP, specifically, can help by engaging students in campus-wide sustainability efforts and promoting sustainable event practices.
- Furthermore, supporting telecommuting, telehealth, and online conferences will also reduce carbon emissions.

Statement of Purpose

Planetary health is human health.

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

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

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

Planetary Health Curriculum

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 change. Therefore, it is critical that medical students are trained to understand the health effects of climate change, as well as planetary health more broadly. Topics like the changing geography of vector-borne diseases, the health consequences of air pollution, environmental health inequities, and disaster response principles must be part of every medical school's core curriculum.*

Curriculum: General

1. Did your medical school offer elective courses to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?	
3*	**Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year.**
2	Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year.
1	The medical school does not have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a lecture on planetary health.
0	No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year.
The JMP does not generally provide elective courses for students to take. Students are highly encouraged to take at least one graduate course in any discipline at UC Berkeley per semester, and, on average, they take around 3-4 elective courses beyond the core requirements for graduation. The UC Berkeley School of Public Health offers at least one course related to environmental health sciences every semester, and JMP students are eligible to enroll. The UC Berkeley Sustainability website includes a list of 600 sustainability-related undergraduate and graduate courses offered from 2015-2018, and we recommend that the JMP should compile a list of popular planetary health courses available for students and make it accessible to students to facilitate enrollment in these courses.	

Curriculum: Health Effects of Climate Change

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

3	**This topic was explored in depth by the core curriculum.**
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
UC Berkeley offers courses, available for JMP students, that discuss heat-related illnesses along with several other health implications of climate change. Examples: GEOG 149B: Climate Impacts and Risk Analysis and PB HLTH C271G: Health Implications of Climate Change. Components of the Problem-Based Learning Curriculum do discuss this topic. Example: the patient case of Susana Warden.	

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.
UC Berkeley offers courses, available for JMP students, that discuss extreme weather events along with several other health implications of climate change. Examples: GEOG 149B: Climate Impacts and Risk Analysis and PB HLTH C271G: Health Implications of Climate Change.	

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.
UC Berkeley offers graduate courses, available for JMP students, related to environmental health and infectious disease. Example: PB HLTH 273: Environmental Determinants of Infectious Disease. Components of the Problem-Based Learning Curriculum do discuss this topic. Example: the patient	

case of Jerry Dietz. We recommend that the case makes it clear that the patient's diagnosis is directly linked to changes in environmental conditions and that this trend holds true for other infectious diseases.

5. Does your medical school curriculum address the cardiorespiratory health effects of climate change, including air pollution?	
3	This topic was explored in depth by the core curriculum.
2	**This topic was briefly covered in the core curriculum.**
1	This topic was covered in elective coursework.
0	This topic was not covered.

UC Berkeley offers undergraduate and graduate courses, available for JMP students, related to the respiratory and cardiovascular health effects of air pollution. Example: PB HLTH 290: Global Air Quality and Health. Components of the Problem-Based Learning Curriculum do discuss this topic. Example: the patient case of Marcela Dominguez--a resident of the Iron Triangle in Richmond--who is diagnosed with a respiratory condition. We recommend that the JMP integrate air pollution exposure into a patient case of cardiovascular disease so that students also have the opportunity to explore the connection between pollution and heart disease.

6. Does your medical school curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?	
3	**This topic was explored in depth by the core curriculum.**
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

UC Berkeley offers courses, available for JMP students, that broadly focus on topics related to climate change, migration, refugees, and mental health. However, these are primarily courses for undergraduate students. Example: SOCIOL 137AC/ESPM 163AC: Environmental Justice: Race, Class, Equity, and the Environment. Components of the Problem-Based Learning Curriculum do discuss this topic. Example: the patient case of Carlos Sanders.

7. Does your medical school curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?

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

UC Berkeley offers many undergraduate and graduate courses, available for JMP students, related to the intersection of food security, food systems, and climate change. Examples: PB HLTH 206D: Food and Nutrition Programs and Policies in Developing Countries, GEOG 130: Food and the Environment, and ESPM 226: Interdisciplinary Food and Agriculture Studies. Components of the Problem-Based Learning Curriculum discuss food security but without direct connections to environmental factors. We recommend that the JMP integrate this topic in a Problem-Based Learning case and/or organize an enrichment session on this topic.

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

UC Berkeley offers courses, available for JMP students, that discuss environmental injustice and environmental determinants of health. Examples: ESPM 163AC/SOCIOL 137AC: Environmental Justice: Race, Class, Equity, and the Environment and PB HLTH C271G: Health Implications of Climate Change. Components of the Problem-Based Learning Curriculum allude to environmental determinants of health (example: Marcela Dominguez case).

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

UC Berkeley offers many undergraduate and graduate courses, available for JMP students, related to the global impacts of climate change. Examples: PB HLTH C271G: Health Implications of Climate Change, ESPM 259: Transnational Environmental Politics and Movements, ESPM 217: Political Economy of Climate Change, and PB HLTH W212: Foundations of Global Health. Components of the Problem-Based Learning Curriculum allude to global impacts of climate change through Infectious Disease cases, but do not address them directly. We recommend that the JMP integrate this topic in a Problem-Based Learning case and/or organize an enrichment session on this topic.

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

10. Does your medical school curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	**This topic was covered in elective coursework.**
0	This topic was not covered.
UC Berkeley offers graduate courses, available for JMP students, that discuss topics related to environmental exposures during pregnancy and are taught by faculty affiliated with the UC Berkeley Center of Excellence in Maternal, Child, and Adolescent Health. Examples: PB HLTH 212A: International Maternal and Child Health and PB HLTH 207A: Public Health Aspects of Maternal and Child Nutrition. There are only a few cases in the Problem-Based Learning Curriculum that cover maternal health and pregnancy, and they do not specifically include information on the dangers of environmental exposures. We recommend that the JMP integrate this topic in an existing Problem-Based Learning case.	

11. Does your medical school curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?	
3	This topic was explored in depth by the core curriculum.
2	**This topic was briefly covered in the core curriculum.**
1	This topic was covered in elective coursework.
0	This topic was not covered.
UC Berkeley offers courses, available for JMP students, about environmental threats specifically concerning California. Examples: ESPM C46: Climate Change and the Future of California and ENERES 171: California Water. Components of the Problem-Based Learning Curriculum do not directly address contemporary and future environmental threats for the surrounding community. The Marcela Dominguez case discusses the health effects of air pollution exposure, but there are no explicit	

references to ongoing and future environmental threats that students are encouraged to learn about. We recommend that the JMP integrate this topic in a Problem-Based Learning case and/or organize an enrichment session on this topic.

12. Does your medical school curriculum address the unique climate and environmental health challenges that have impacted and are impacting Indigenous communities?	
3	**This topic was explored in depth by the core curriculum.**
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

UC Berkeley offers many undergraduate and graduate courses, available for JMP students, related to the intersection of environmental health, climate, and indigenous communities. Examples: ESPM 235: Indigenous Environmental Studies and ESPM 262: Race, Identity, and the Environment. The Problem-Based Learning Curriculum and Clinical Skills Curriculum include weekly land and water acknowledgements that integrate information on impacts of industry on local tribes, and highlight tribal movements, such as water protection. We recommend that the JMP also integrate this topic in a Problem-Based Learning case and/or organize an enrichment session on this topic.

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

UC Berkeley offers courses, available for JMP students, that discuss environmental injustice and environmental determinants of health. Examples: ESPM 163AC/SOCIOL 137AC: Environmental Justice: Race, Class, Equity, and the Environment and PB HLTH C271G: Health Implications of Climate Change. Components of the Problem-Based Learning Curriculum allude to environmental determinants of health (example: Marcela Dominguez case); however, there is no explicit focus on the effects of anthropogenic environmental toxins and climate change on vulnerable populations. We recommend that the JMP encourage students to cover this topic in an existing Problem-Based Learning case by, for example, providing guidance for faculty tutors to bring it up during the case, or linking an article on this topic within the case.

Curriculum: Sustainability

14. 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.
UC Berkeley offers courses, available for JMP students, related to nutrition that discuss the importance of a plant-based diet; however, this topic is not covered in the JMP core curriculum. Examples: NUSCTX 161A/B: Medical Nutrition Therapy I/II. Components of the Problem-Based Learning Curriculum cover nutrition but without discussing a plant-based diet, relationships between local food production, sustainability, and health, or interventions available to medical providers. We recommend that the JMP integrate this topic in a Problem-Based Learning case and/or organize an enrichment session on this topic.	

15. Does your medical school curriculum highlight the waste generated by the healthcare system and identify ways to advocate for and implement sustainable best practices in health care?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	**This topic was not covered.**
The JMP curriculum does not include specific reference to the roles of the healthcare sector in contributing to climate change and does not advocate for the implementation of sustainable practices, such as avoiding unnecessary operating room waste. We recommend that the JMP include a lesson on healthcare and sustainability before students transition to clerkships, which could be added to the Patient Care and Clinical Skills curriculum or presented as an enrichment session.	

Curriculum: Clinical Applications

16. In training for patient encounters, does your medical school's curriculum introduce strategies to have conversations with patients about the health effects of climate change?	
2	Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum.
1	Yes, there are strategies introduced for having conversations with patients about climate change in elective coursework.
0	**No, there are not strategies introduced for having conversations with patients about climate change**
The JMP and UCSF have not offered any education to medical students related to talking to patients who have been affected by climate change. This is a topic that can be integrated into the Master Clinician Working Group (MCWG) curriculum before students start clerkships. The JMP can coordinate with UCSF faculty and staff including Dr. Nick Iverson to ensure this topic is covered during F2 and/or Career Launch portions of the curriculum.	

17. In training for patient encounters, does your medical school's curriculum introduce strategies for taking an environmental history or exposure history?	
2	Yes, the core curriculum includes strategies for taking an environmental history.
1	Only elective coursework includes strategies for taking an environmental history.
0	**No, the curriculum does not include strategies for taking an environmental history.**
The significance of taking an occupational and environmental history is briefly discussed in some Problem-Based Learning cases and the H&P structure class during MCWG, but students are not introduced to strategies for taking an environmental history or exposure history. Specific strategies for environmental history taking should be incorporated into the MCWG course or be deliberately integrated into pre-clerkship preceptorship experiences.	

Curriculum: Administrative Support for Planetary Health

18. Is your medical school currently in the process of improving Education for Sustainable Healthcare (ESH)/planetary health education?	
4	Yes, the medical school is currently in the process of making major improvements to ESH/planetary health education.
2	**Yes, the medical school is currently in the process of making minor improvements to ESH/planetary health education.**

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

In this past year since the release of the 2020 PHRC, the JMP has done considerable work restructuring its curriculum. However, most of the restructuring efforts have been focused on antiracism efforts, and only tangentially on Planetary Health. Acknowledging the importance of this topic and the significant overlap between the two areas, the JMP was awarded a 2 out of 4 in this category. Future work is encouraged to include curricular Planetary Health improvements suggested in this report card, and beyond.

19. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the core curriculum?	
6	Planetary health/ESH topics are well integrated into the core medical school curriculum.
4	**Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum.**
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.

At least four of the UC Berkeley-UCSF Joint Medical Program problem based learning cases integrate planetary health themes, including the effect of climate change on infectious disease, mental health, and heat-related illness, and the health effects of air pollution. There are opportunities to expand the curricular focus on Planetary Health, for example by integrating environmental health/climate health in clinical skills courses, as well as focus on plant-based diets and waste in healthcare systems.

20. Bonus: Does your medical school have a program that offers incentives for faculty/departments to develop new planetary health/ESH courses and/or incorporate planetary health/ESH into existing courses?	
1*	Yes, the medical school has an incentive program.
0	**No, the medical school does not have an incentive program.**

To our knowledge, there are no specific faculty incentives at the JMP/UC Berkeley School of Public Health to develop new planetary health courses and/or incorporate planetary health into existing courses.

Section Total (34 out of 58)	**34**

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

Interdisciplinary Research

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 emphasized.*

1. Are there researchers engaged in planetary health research and healthcare sustainability research at your medical school?	
4	**Yes, there are faculty members at the School of Medicine who have a primary research focus in planetary health and healthcare sustainability.**
3	Yes, there are faculty members at the School of Medicine who have a primary research focus in a 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.

UC Berkeley has several departments and centers devoted to environmental science research (e.g., Environmental Science, Policy, and Management (ESPM), Energy and Research Group, Center for Law, Energy, and the Environment, CERCH, Center for Occupational and Environmental Health). The School of Public Health has a specific department--the Division of Environmental Health Sciences--and most faculty members affiliated with the department are focusing on conducting planetary health research. The primary research interests of a few faculty members of the JMP focus on planetary health, and oftentimes, at least one student in each cohort of JMP students conducts research on an environmental health topic for their Master's Thesis.
Faculty and graduate and undergraduate students at the School of Public Health have published impactful research on multiple aspects of planetary health, and their research has formed the basis of policy advocacy and decisions in the state of California and nationally. Rachel Morello-Frosch at the School of Public Health participated in a campus-wide working group to envision the future of UC Berkeley research on "Environmental Change, Sustainability and Justice" that produced this report. Many JMP students who conduct planetary health research for their Master's Thesis will go on to publish their findings and present them at national conferences. For example, Anthony Nardone's JMP thesis research demonstrated that higher diesel particulate emissions in redlined census tracts in

California are associated with increased Emergency Department visits for asthma. This research supports California's efforts to reduce environmental injustice in disadvantaged communities.

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.
The School of Public Health's Division of Environmental Health Sciences is a robust department of faculty members and students conducting multidisciplinary research. Areas of research include energy use, air/water pollution, climate change, occupational exposures, global health, epigenetics, environmental engineering, and a variety of other disciplines. The Environmental Change Research Network (ECRN) @ Berkeley is a hub for interdisciplinary research to address climate change.	

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.
Community Based Participatory Research (CBPR) has become a burgeoning priority in the School of Public Health and the JMP. Several projects, including the CHAMACOS Study and Richmond Youth Air Quality Initiative, prioritize the voices of impacted communities on research questions, methods, and analysis on matters of environmental health and exposures. Tenets of CBPR are integrated into the core research curriculum for JMP Students through HMED SCI 261: Research Seminar and PB HLTH 200L: Health and Social Behavior Breadth.	

4. Does your institution have a planetary health website, or a website centralizing various campus resources related to health and the environment?	
3	**There is an easy-to-use, adequately comprehensive website that centralizes various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities.**
2	There is a website that attempts to centralize various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive.
1	The institution has an Office of Sustainability website that includes some resources related to health and the environment.
0	There is no website.
Information on planetary health, research groups, recent publications, educational materials, and community organizations is available on several UC Berkeley-affiliated websites. Examples include sites for the School of Public Health Division of Environmental Health Sciences, Center for Environmental Research and Children's Health (CERCH), Center for Occupational and Environmental Health, and Berkeley Office of Sustainability.	

5. Has your institution recently hosted a conference or symposium on topics related to planetary health?	
4	Yes, the institution has hosted more than one conference or symposium on topics related to planetary health in the past year, including at least one on climate change.
3	**Yes, the institution has hosted one conference or symposium on topics related to planetary health in the past year.**
2	Yes, the institution has hosted a conference on topics related to planetary health in the past three years.
1	The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event.
0	No, the institution has not hosted a conference on topics related to planetary health in the past three years.
The UC Berkeley School of Public Health annually hosts the Environmental Health Sciences Symposium, which is a small event where students can showcase their research. However, there has been no large national-level conference related to planetary health that has been recently held by the UC Berkeley School of Public Health.	

6. Has your institution or medical school joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education?

2	Yes, the medical school has joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education.
1	**Yes, the institution has joined the Planetary Health Alliance and/or the Global Consortium on Climate and Health Education, but the medical school specifically has not.**
0	No, the institution has not joined the Planetary Health Alliance or the Global Consortium on Climate and Health Education.
The UC Berkeley School of Public Health and UCSF School of Medicine are both listed as members of the Global Consortium on Climate and Health Education.	

Section Total (16 out of 19)	**16**

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

Community Outreach and Advocacy

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 color. Institutions should partner with local communities affected by climate change and pollution to share information about environmental health threats, advocate together for change, and provide opportunities for students to be a part of this work.*

1. Does your medical school partner with community organizations to promote planetary and environmental health?	
3	**Yes, the medical school meaningfully partners with multiple community organizations to promote planetary and environmental health.**
2	Yes, the medical school meaningfully partners with one community organization to promote planetary and environmental health.
1	The institution partners with community organizations, but the medical school is not part of that partnership.
0	No, there is no such meaningful community partnership.
The School of Public Health has many professors who work on community-based participatory research projects in partnership with community organizations. Specifically, Rachel Morello-Frosch is	

working with the Asian Pacific Environmental Network (APEN) on a research project investigating the projected impact of rising sea levels on local communities. Kim Harley is leading a youth-driven research and advocacy project with high school students in Salinas, investigating resident exposure to pesticides and chemicals in cleaning products. JMP faculty member Janet Perlman is involved with the Medical Society Consortium on Climate and Health, Physicians for Social Responsibility, and the American Academy of Pediatrics on climate change issues. JMP students and alumni are also engaged with community organizations, including Christina Chen (Global Health subchair for Medical Students for a Sustainable Future (MS4SF), co-founder of Health Students for Climate Action (HEALS-CA)), Tommaso Bulfone (co-founder of HEALS-CA), Raj Fadadu (Founder/Director of the Environmental Health Working Group of the Berkeley Climate Action Coalition), and Sarah Schear (Advocacy Co-Chair of MS4SF, Co-Chair of the AAPCA1 Climate Change and Health Task Force, co-founder of Climate Health Now, incoming Student Board Member of Physicians for Social Responsibility - Bay Area, member of Sunrise Movement Bay Area).

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.

At UCSF, the Health Emergency of Climate Change lecture series serves as a community resource for members of the community interested in learning more about Climate Change and health. Furthermore, there is a 6-week Osher Mini-Medical School series offered named "Environmental Justice and Human Health: Creating Systemic Solutions."

The UC Berkeley School of Public Health offers many events open to the public, some of which include planetary health. However, many of these events are not publicized as being tailored for attendance of specific communities that are being impacted by the topics presented. JMP faculty have been involved in public-facing events in the past (as highlighted below). Outside of the School of Public Health, UC Berkeley offers a community-facing course called Edible Education 101, which covers topics in sustainable food systems, although this course did not occur in 2020-2021.

Select list of public-facing events offered by the School of Public Health in the 2020-2019 academic year:

1. *Seminars in Environmental Justice: Community/Policy Engaged Research to Advance Environmental Justice (February 26 @ 10:00 am PST)*
2. *Seminars in Environmental Justice: Target Marketing of Personal Care Products to People of Color (March 12 @ 10:00 am PST)*

3. *SPH Brown Bag: The hidden success of conspicuous laws: How California protects communities from exposure to toxics (April 20 @ 11:40am PDT)*

In the past, JMP faculty have been involved in public-facing events about planetary health:

1. *Climate Crisis, Designer Babies, Our Common Future. (October 18, 2019 @ 6:30 pm - 8:30 pm PDT), a panel discussion moderated by JMP faculty member Osagie Obasogie.*

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.**
Neither UCSF nor UC Berkeley (including School of Public Health, JMP) regularly update students on planetary health and sustainable efforts. This is an area of opportunity for both UCSF and UC Berkeley to better inform the community about efforts to achieve the carbon neutrality goal by 2025.	

4. Does the medical school offer continuing medical education (CME) courses that address planetary health and/or sustainable healthcare?	
2	**Yes, multiple in-person or online CME courses relating to planetary health and/or sustainable healthcare are offered, including at least one with a primary focus of planetary health.**
1	Yes, one in-person or online CME course related to planetary health and/or sustainable healthcare is offered.
0	There are no CME courses on planetary health or sustainable healthcare topics.
The UC Berkeley Center for Occupational and Environmental Health (COEH) offers a free online course, "Doctoring Climate Change: Air Quality, Heat-Related Illness, and Disparate Impact." COEH is accredited by the CMA to provide continuing medical education for physicians. The UCSF Division of Occupational & Environmental Medicine also offers an annual CME course. *While there have not been any in-person CME courses related to climate change at UCSF, in March of 2019, there was a "Vulnerable Workers and Communities at Environmental Risk and Updates in Occupational and Environmental Medicine" CME conference. On the continuing medical education website linked from the UCSF medical education page, there is an online module on "Clinician Climate and Health Training" that offers three 20-minute modules on the links between climate change*	

and health. This training module was developed by the San Francisco Department of Public Health's Climate Change and Health Program and is narrated by Jonathan Fuchs, MD, MPH, a clinical professor of medicine at UCSF. CME courses can be viewed here.

5. Do hospitals affiliated with your medical school have accessible educational materials for patients about environmental health exposures?	
2	**Yes, all affiliated hospitals have accessible educational materials for patients.**
1	Some affiliated hospitals have accessible educational materials for patients.
0	No affiliated medical centers have accessible educational materials for patients.
The Program on Reproductive Health and the Environment at UCSF works to provide educational materials for patients related to environmental health exposures at all UCSF affiliates including the San Francisco VA and ZSFGH. Furthermore, JMP faculty member Janet Perlman's office has handouts adapted from American Academy of Pediatrics resources about environmental health risks for children.	

6. Do hospitals affiliated with your medical school have accessible educational materials for patients about climate change and health impacts?	
2	**Yes, all affiliated hospitals have accessible educational materials for patients.**
1	Some affiliated hospitals have accessible educational materials for patients.
0	No affiliated hospitals have accessible educational materials for patients.
UCSF Health, ZSFGH, and the SF VA have educational materials related to climate change. San Francisco Climate and Health Profile (sfclimatehealth.org) 3.7 Greenhouse Gas Emissions and Climate Change (va.gov)	

Section Total (12 out of 14)	**12/14**

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

Support for Student-Led Planetary Health Initiatives

Section Overview: ***This section evaluates institutional support for student-led planetary health initiatives, such as funding, fellowships, programming, and student groups.*** *Planetary health is a young field and, as young people facing a future deeply shaped by climate change, students are often some of the first at an institution to engage with it. Institutions should provide support for students to engage in*

sustainability quality improvement (QI) initiatives, discover mentors in their area of interest, and receive funding for planetary health projects.

1. Does your institution offer support for medical students interested in enacting a sustainability initiative?	
2	**Yes, the institution offers grants available to medical students for students to enact sustainability initiatives.**
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.
0	No, the institution does not offer opportunities or support for sustainability initiatives.
UC Berkeley students can apply for funding for planetary health initiatives through The Green Initiative Fund (TGIF) . TGIF "provides funding, via grants, for projects that improve and support UC Berkeley's campus sustainability efforts. TGIF allocates funds to projects that promote sustainable modes of transportation, increase energy and water efficiency, restore habitat, promote environmental and food justice, and reduce the amount of waste created by UC Berkeley." Furthermore, the University of California's Carbon Neutrality Initiative offers year-long paid fellowships to which all UC students, including JMP students, can apply. These include the Carbon Neutrality Initiative Fellowships and the Global Food Initiative Fellowships. These opportunities should be publicized to JMP students, as most of us did not previously know about these grants, which can provide financial support for new planetary health initiatives. *Furthermore, UCSF has an **Environmental Scholars Program,** which is a funded ($10,000 stipend), 3-year community-based clinical and research program in environmental health. Each year, the ESP will provide two 1st year medical or nursing students at UCSF with a summer internship experience to learn about factors in the environment that determine health outcomes, placing students in a community clinic or community health organization to work on projects that investigate environmental exposures such as community health and safety concerns, often for underserved communities with multiple potential environmental chemical exposures. The UC President's Bonnie Reiss **Carbon Neutrality Student Fellowship Program** funds student-generated projects that support the UC system's goal to produce zero-net greenhouse gas emissions by 2025.*	

2. Does your institution offer opportunities for medical students to do research related to planetary health and/or sustainable healthcare?	
3*	**The institution offers an explicit paid fellowship for medical students to do research related to planetary health and/or sustainable healthcare.**
2	The institution offers paid research opportunities for students and planetary health/sustainable healthcare projects would be considered eligible.
1	There are unfunded research opportunities for students to perform research related to planetary health/sustainable healthcare.

0	There are no opportunities for students to receive funding for planetary health/sustainable healthcare research.

The JMP offers a $2500 JMP thesis grant to all students in the program - projects related to planetary health/sustainable health projects would be considered eligible. Also, the Berkeley Food Initiative offers a year-long Graduate Research and Leadership Fellowship for community-based research projects and a summer Graduate Student Research Fellowship.

*Bonus point: UCSF has an **Environmental Scholars Program,** which is a funded ($10,000 stipend), 3-year community-based clinical and research program in environmental health. Each year, the ESP will provide two 1st year medical or nursing students at UCSF with a summer internship experience to learn about factors in the environment that determine health outcomes, placing students in a community clinic or community health organization to work on projects that investigate environmental exposures such as community health and safety concerns, often for underserved communities with multiple potential environmental chemical exposures.*

3. Does the medical school have a webpage where medical students can find specific information related to planetary health and/or sustainable healthcare activities and mentors within the medical school? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.

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

Yes. At UCSF, the EaRTH Center is an interdisciplinary group that aims to focus on the impacts of harmful environmental pollutants on health and human development. Their website has specific information about mentors, projects achieved and underway, funding opportunities, and contact information. At UC Berkeley, the Environmental Change Research Network (ECRN) has a web page that highlights research done across multiple disciplines, centers, and institutes related to climate change, and provides opportunities for students to find mentors and research opportunities.

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

2	**Yes, there is a funded student organization with faculty support at my medical school dedicated to planetary health or sustainability in healthcare.**

1	Yes, there is a student organization at my medical school dedicated to planetary health or sustainability in healthcare but it lacks faculty support and/or funding.
0	No, there is not a student organization at my institution dedicated to planetary health or sustainability in healthcare.
Health Students for Climate Action (HEALS-CA) is a graduate student group at UC Berkeley School of Public Health that aims to take collective action on the urgent health issue of climate change through advocacy, research, and educational reform. It was founded by 3 JMP students, but is open to all health students, and received funding for its activities from the Graduate Assembly's Graduate Meetings, Events, and Resources (GMER) fund. Although we do not have a formal faculty advisor, we work closely with several faculty members.	

5. Is there a student liaison representing sustainability interests who serves on a medical school or institutional decision-making council to advocate for sustainability best practices?	
1	Yes, there is a student representative that serves on a medical school or institutional decision-making council.
0	**No, there is no such student representative.**
The JMP has a student representative body--the JMP Educational Experience Committee (JEdX)--which represents student interests and gives feedback to administrative leadership. Although there is no current student representative specifically dedicated to representing sustainability interests, JEdX representatives regularly have meetings with the entire student body of the class year they are representing, during which any issues may be brought up.	

6. In the past year, has the institution had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	
1	**Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.**
1	**Panels, speaker series, or similar events related to planetary health that have students as an intended audience.**
1	**Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.**
1	**Cultural arts events, installations or performances related to planetary health that have students as an intended audience.**
1	**Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.**

1	**Wilderness or outdoors programs (e.g., that organize hiking, backpacking, kayaking, or other outings for students) that follow Leave No Trace principles.**

- ***Garden****: In the past year, several JMP students have been involved in a youth urban garden clinic initiative with the Dream Youth Clinic, Dreamcatcher Youth Services, and Planting Justice. Furthermore, UC Berkeley offers many opportunities to learn about and engage in sustainable food systems. These include volunteering in one of many on-campus gardens and working on food recovery after events.*
- ***Panels, speaker series, or similar events:*** *The School of Public Health Brown Bag series described in 3.2 is also student-facing and has included multiple sessions on planetary health topics.*
- ***Events in which students learn directly from members of a local environmental justice community:*** *This past year, the JMP intentionally made student attendance at the NorCal Symposium on Climate and Pandemic Resilience in Health Care part of its curriculum, and students were given the opportunity to attend a panel focused on learning from local community members who were part of environmental justice efforts. The Student Environmental Resource Center at UC Berkeley also hosted an Earth Justice Month with speakers from the community.*
- ***Cultural arts events, installations, or performances:*** *HEALS-CA hosted an Art Communication initiative, which highlighted student artworks with an environmental justice theme.*
- ***Local volunteer opportunities related to community resilience:*** *The youth urban garden highlighted above is an example in which students have volunteered in efforts to build community resilience.*
- ***Wilderness or outdoor programs:*** *Outdoor programs are offered through the Cal Hiking and Outdoor Society (CHAOS), and its Constitution includes having "minimal human impact on the environment" in its Statement of Purpose. UC Berkeley Recreational Sports also offers trips through Cal Adventures, which include "appreciation of the natural environment" in their benefits but do not explicitly mention Leave No Trace principles.*

Section Total (15 out of 15)	**15**

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

Campus Sustainability

Section Overview: ***This section evaluates the support and engagement in sustainability initiatives by the medical school and/or institution.*** *The healthcare industry is a major contributor to greenhouse gas emissions as well as pollution that harms local, regional, and global ecosystems. While healthcare is, by nature, a resource-intensive endeavor, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinizing every aspect of how our systems operate, from where we source our energy, to how we build our infrastructure, to what companies we invest in. Our medical*

schools, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimizing environmental impact.

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 UC Berkeley Office of Sustainability has multiple full-time staff.	

2. Does your medical school and/or institution have a stated goal of carbon neutrality by 2050?	
4*	The medical school is already carbon neutral.
3	**Yes, there is a stated carbon neutrality goal and the medical school has a well-defined and adequate plan in place to achieve this goal.**
2	Yes, there is a stated carbon neutrality goal, but the medical school has not created a plan to reach that goal or the plan is inadequate.
1	There is a CO2 emission reduction goal, but it is not one of carbon neutrality.
0	There is no stated goal for reduction of CO2 emissions.
The UC system announced the Carbon Neutrality Initiative (CNI) in 2013, in which they pledged to be carbon neutral by 2025 from scope 1 and 2 carbon emission sources (i.e. direct emissions from UC-owned or controlled sources and indirect emissions from purchased energy), and carbon neutral by 2050 from scope 3 emissions (i.e. campus commute, business air travel, waste, water). UC Berkeley published the 2025 Carbon Neutrality Planning Framework in 2016.	

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.
At UC Berkeley, energy intensity per square foot has been reduced by 15% since 1990, while actual building space has grown 27%. On-site solar power is located at six campus locations and more on-site solar installations are in planning. Its goal is to replace 40% of natural gas with biogas by 2025. Although an exact percentage is not available, it seems the UC Berkeley is currently performing poorly in this category: In its STARS performance review, the campus won 23 percent of available points in the energy category, compared to 39 percent of points won by all research and doctoral institutions, and scored in the bottom quartile for renewable energy and building energy consumption. More details available here: https://sustainability.berkeley.edu/our-performance/energy	

4. Are sustainable building practices utilized for new and old buildings on the medical school campus, with design and construction of new buildings and remodeling of old buildings conforming to a published rating system or sustainable building code/guideline?	
3	Yes, sustainable building practices are utilized for new buildings on the medical school campus and the majority of old buildings have been retrofitted to be more sustainable.
2	**Sustainable building practices are utilized for new buildings on the medical school campus, but most old buildings have not been retrofitted.**
1	Sustainable building practices are inadequately or incompletely implemented for new buildings.
0	Sustainability is not considered in the construction of new buildings.
The UC Berkeley campus currently has 20 U.S. Green Building Council Leadership in Energy and Environmental Design (LEED™) certified building projects, representing over 12% of total square footage. New building and major renovation projects outperform energy codes by at least 20% or meet energy intensity performance targets. Although it is unclear what percentage of buildings have been retrofitted, some retrofitting work is being done, and UC Berkeley ranks among the top quartile in the STARS Buildings category compared to all participating universities and colleges. More details are available at https://sustainability.berkeley.edu/our-performance/built-environment.	

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.

At UC Berkeley, more than 90 percent of students use bicycles, buses and other sustainable options as their primary mode of transportation to campus. This is made accessible by the Class Pass system, which allows all Berkeley students to use AC Transit. However, Berkeley has a number of flex-fuel gasoline/E85 vehicles, which are not considered green vehicles by STARS standards. Additionally, the campus owns several vehicles that are partial zero-emission vehicles and electric carts that are used on campus that are not included in STARS standards. More details are available at https://sustainability.berkeley.edu/our-performance/transportation.

Furthermore, JMP students are based at UC Berkeley for the first 2.5 years of the 5-year program, and often need to go to UCSF for anatomy lab or to off-site preceptorships, mainly located in the East Bay. JMP students frequently use the BART and MUNI or carpool to UCSF, although traveling to preceptorships often require the use of a single-occupancy vehicle.

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.

Compost and recycling are available in the medical school buildings of the UCB SPH. 54% of all waste generated by UC Berkeley is diverted from landfills through recycling, composting, donating or re-selling. More details here: https://sustainability.berkeley.edu/our-performance/waste

7. Does the medical school apply sustainability criteria when making decisions about the campus food and beverage selections?	
3	**Yes, the medical school has adequate sustainability requirements for food and beverages and is engaged in efforts to increase food and beverage sustainability.**
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.

At UC Berkeley, vendors continue to increase the percentage of their purchases of sustainable food, reaching over 20%. Criteria for determining sustainability of food include locally grown (within 250 miles of campus), organic, fair trade or humane. Led by the Berkeley Food Institute, the campus launched the UC Berkeley Foodscape Map, which offers extensive data on the structural factors affecting the UC Berkeley food system. UC Berkeley also has a practice of using only animal products that have been certified both as humanely produced and sourced from local farms. More information is available here: https://sustainability.berkeley.edu/our-performance/food.

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.

The UC system has a Sustainability Practices policy with a section on procurement and resources for suppliers. At UC Berkeley, the Supply Chain Management team strives to comply with these practices. Currently, 80% percentage of expenditures on electronic products are EPEAT Gold registered, 80% percentage of expenditures on electronic products are EPEAT Gold registered, 62% percentage of expenditures on office paper are 90-100 percent post-consumer recycled and/or agricultural residue content and/or FSC Recycled label, and 10% percentage of expenditures on cleaning and janitorial products are third party certified to meet recognized sustainability standards. Its goal of "25 percent green spend and 25 percent economically and socially responsible spend in specific product categories" is "in progress." More information is available here: https://sustainability.berkeley.edu/sustainability-performance/procurement

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

At UC Berkeley, green event certification helps event planners reduce their impact in a range of areas, including catering and food, venues, and waste reduction, but this is not required.

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.
In May 2020, UC Berkeley produced its first Green Labs Action Plan. The Plan identifies short and longer-term initiatives to improve sustainable practices - such as water reduction, waste elimination, energy saving technology, engagement and procurement strategies - in campus lab and research spaces. The Green Labs Certification Program recognizes laboratories for their implementation of sustainability and efficiency practices.	

11. Does your institution's endowment portfolio investments include fossil-fuel companies?	
4	**The institution is entirely divested from fossil fuels and has made a commitment to reinvest divested funds into renewable energy companies or renewable energy campus initiatives.**
3	No, the institution is entirely divested from fossil fuels.
2	The institution has partially divested from fossil-fuel companies.
1	The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organized advocacy for divestment.
0	Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that.
On May 19, 2020, the University of California system announced that it had "capped a five-year effort to move the public research university system's $126-billion portfolio into more environmentally sustainable investments, such as wind and solar energy." The companies it pledged to divest from included but were not limited to the top 200 publicly-traded fossil fuel companies. "UC has sold more than $1 billion in fossil fuel assets from its pension, endowment and working capital pools and surpassed its five-year goal of investing $1 billion in clean energy projects" - "UC becomes nation's largest university to divest fully from fossil fuels." Los Angeles Times.	

Section Total (25 out of 29)	25

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

Grading

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

Letter Grade	Percentage
A	80% - 100%
B	60% - 79%
C	40% - 59%
D	20% - 39%
F	0% - 19%

Planetary Health Grades for the UC Berkeley/UCSF Joint Medical Program
The following table presents the individual section grades and overall institutional grade for the **UC Berkeley/UCSF Joint Medical Program** on this medical-school-specific Planetary Health Report Card.

Section	Raw Score	Grade
Planetary Health Curriculum (30%)	34 / 58 = 57%	C+
Interdisciplinary Research (17.5%)	16 / 19 = 84%	A-
Community Outreach and Advocacy (17.5%)	12 / 14 = 86%	A
Support for Student-led Planetary Health Initiatives (17.5%)	15 / 15 = 107%	A+

Campus Sustainability (17.5%)	25 / 29 = 86%	A
Institutional Grade	**80%**	**A-**