Planetary Health Report Card (Medicine) 2026:

University of California, San Francisco

2025-2026 Contributing Team:

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Land acknowledgment: We would like to acknowledge the Ramaytush Ohlone people, who are the traditional custodians of this land. We pay our respects to the Ramaytush Ohlone people who call the land that UCSF sits upon their home. We thank them for their stewardship and look forward to strengthening our relationship of mutual respect and understanding.

Summary of Findings

Overall Grade	B+

Curriculum	B

At UCSF, environmental and planetary health knowledge are integrated throughout the curriculum and particularly center the experiences of people from low SES communities, marginalized communities, women, and Indigenous communities. The medical school has identified that environmental injustices affect many different dimensions of health. UCSF has a limited curriculum describing the impact of healthcare itself on climate change.

Recommendations: We recommend that UCSF include additional curriculum that clearly addresses healthcare's carbon footprint and includes strategies for students to reduce waste. We also recommend UCSF explore initiatives to improve integration of planetary health education into Foundations 2, which is the clinical phase of the medical school curriculum. Lastly, we recommend that UCSF designates a faculty curricular lead.

Interdisciplinary Research	A+

UCSF consistently meets and often exceeds metrics for interdisciplinary research in climate and environmental health. The institution has strength in the breadth and volume of research currently taking place, much of which is tailored to address issues unique to Bay Area communities.

Recommendations: Although these metrics have been met, we encourage UCSF to continue hosting yearly events to facilitate research dissemination and encourage collaboration. For example, the UC Center for Climate, Health, and Equity did not host the annual NorCal Symposium on Climate, Health, and Equity in 2025, which has taken place annually since 2020. Also, we encourage the UCSF Schools of Dentistry and Pharmacy to demonstrate their commitment to planetary health by becoming members of the Global Consortium on Climate and Health Education.

Community Outreach and Advocacy	B+

UCSF continues to sustain existing community-facing programs and partnerships, particularly through the UCSF EaRTH Center and the Division of Occupational, Environmental, and Climate Medicine. Individuals at UCSF and in the broader community may select from a modest range of planetary health outreach and advocacy activities at the University, such as policy change education and annual workshops that address salient planetary and human health issues. UCSF has an accessible and patient-friendly catalog of educational materials about the impacts of planetary harm on human health. While outreach and advocacy opportunities are publicized on individual university Center websites and their mailing lists, they are not publicized in general newsletters sent to students by the School of Medicine.

Recommendations: We recommend the integration of existing planetary health opportunities at the University into updates sent to students by the School of Medicine, to maximize student participation in planetary health outreach and advocacy efforts.

Support for Student-Led Initiatives	A-

UCSF has opportunities available for students to get involved in planetary health-related initiatives, but funding is UC wide and not medical school specific. Additionally, there are many faculty members involved in a variety of planetary health initiatives, in which more information is found on the EaRTH Center and the Center for Climate, Health, and Equity websites. There are student-led organizations in planetary health, but no student liaison currently.

Recommendations: We recommend that the EaRTH Center re-institutes the Environmental Scholars Program to increase engagement in sustainability initiatives. While information on which faculty members conduct planetary

health research is available online, we recommend updating the website to advertise which mentors are seeking students to support their projects. Additionally, we recommend the school reintroduces a position for a sustainability student liaison.

Campus Sustainability	**B**

UCSF demonstrates strong institutional sustainability leadership through its Office of Sustainability, robust green building standards, and high rates of sustainable commuting. However, meaningful gaps remain: for example, overall emissions have not significantly declined and on-site energy generation still relies heavily on natural gas. While UCSF exceeds many UC-wide targets, its progress has not kept pace with stated climate commitments.

Recommendations: UCSF should move beyond UC-wide minimum standards for food and beverage sustainability, for example through institution-wide plant-based initiatives such as Meatless Mondays, already piloted at SFGH. Sustainable trends, particularly in categories with declining performance, should be tracked transparently in the annual report, with concrete plans to reverse worsening metrics (ex: office furniture procurement). The forthcoming climate action plan represents a critical opportunity to set sustainability goals and to track progress.

Statement of Purpose

Planetary health is human health.

The Planetary Health Alliance describes planetary health as "a solutions-oriented, transdisciplinary field and social movement focused on analysing and addressing the impacts of human disruptions to Earth's natural systems on human health and all life on Earth." This definition is intentionally broad, intended to encompass the multitude of ways that the environment can affect health, including water scarcity, changing food systems, urbanisation, biodiversity shifts, natural disasters, climate change, changing land use and land cover, global pollution, and changing biogeochemical flows. The health of humanity is dependent on our environment, and our environment is changing rapidly and in disastrous ways. Although the World Health Organization has called climate change "the greatest threat to global health in the 21st century," many health professional 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 health professional training. It is imperative that we hold our institutions accountable for educating health professional students about the health impacts of climate change and other anthropogenic environmental changes, generating research to better understand health impacts and solutions, supporting related student initiatives, embracing sustainable practices as much as possible, and engaging with surrounding communities that are most affected by environmental threats. Because climate change and environmental threats disproportionately affect vulnerable populations (for example, communities of colour, older adults sensitive to health threats, and individuals in low-resource settings), these issues are inherently ones of equity and justice.

With the purpose of increasing planetary health awareness and accountability among health professional schools, we have created a Planetary Health Report Card that students internationally can use to grade and compare their institutions on an annual basis. This student-driven initiative aims to compare health professional 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, 4) community outreach centred on environmental health impacts, and 5) school campus sustainability.

Definitions & Other Considerations

Definitions:

- **Planetary Health:** is described by the Planetary Health Alliance as "the health of human civilisation and the state of the natural systems on which it depends." 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 health professional 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.

- **Sustainable Healthcare:** As defined by the Academy of Royal Colleges, sustainable healthcare involves ensuring the ability to provide good quality care for future generations by balancing the economic, environmental, and social constraints and demands within health care settings. A sustainable healthcare system maintains population health, reduces disease burden and minimises use of healthcare services.

- **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/Department vs. Institution:** When "Medical school" is specified in the report card, this only refers to curriculum and resources offered by the School/department of Medicine and does not include offerings from other parts of the university (e.g. undergraduate departments (USA), other related departments (e.g. Public Health, Population Health departments). In contrast, when "institution" is specified in the report card, we are referring to the university more broadly including all of its campuses. 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 (Curriculum Section):** This is a series of questions students 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 mould 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. Please be as specific as possible when providing evidence for this metric.

- **Elective:** The word "elective" refers to an optional course or lecture series that a 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.

- **Core Curriculum:** This refers to the taught material that is delivered to the entire cohort of students in one year.

- **Clerkship / Outreach:** 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, outreach or placements. This is a relatively short (approximately 4-8 weeks) period of study and patient-centred clinical experience that takes place as part of the undergraduate programme.

- **Clinical rotation:** This is a term used to refer to placements that students go on (e.g., ophthalmology, surgery, cardiology).

- **Physiotherapy vs Physical Therapy:** For the purposes of this report card these terms are considered interchangeable. However, physiotherapy will be used primarily.

- **Community organisations:** For most institutions, there are existing groups that are not directly affiliated with the university and exist as a product of what the community the institution exists in cares about or needs. These specific community organisations relevant to this report include those that are focused around some aspect of climate and health preservation. These community organisations can include but are not limited to local mutual aid initiatives, underserved-resource distribution groups, clean-up and nature conservation groups, community gardeners, and other environmental-related organisations. If your institution does not have access to local volunteerships with community groups, please report any community organisations your institution or school has collaborated with.

- **Climate justice:** The idea that certain population groups and geographical locations which are disproportionately more impacted by climate change are already economically and socially disadvantaged. This double vulnerability sits alongside pre-existing social justice concerns and should therefore shift policy and practice to mitigate the inequitable effects of the climate crisis.

- **Extractivism:** The removal of natural resources typically in large quantities. Within anthropology this term is often used in the context of colonialism to refer to the

historic seizing of natural resources, a practice which has developed business models tied to ecological degradation and loss of biodiversity.

- **Global South:** Nations that often have less economic and industrial development and are typically in the southern hemisphere. These nations have been found to be disproportionately impacted by the climate crisis.

- **Low socioeconomic status (SES):** An individual or geographical area that across a variety of socioeconomic factors (e.g., income, education, race/ethnicity) is considered vulnerable. This vulnerability has been correlated to more adverse health outcomes often as a consequence of encountering more barriers in accessing and receiving healthcare.

- **Low and Middle-Income Countries (LMIC):** Countries that have lower degrees of economic affluence.

- **Anthropogenic:** Created through human activity

- **Marginalized communities:** Groups excluded from mainstream economic, educational, social, and/or cultural experiences due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status (Sevelius et al., 2020).

Scoring Matrix

- Elective coursework (1 point): This score applies to material that is actively selected by the students such as a module choice, or additional lecture series. By implication, only a given proportion of the cohort will receive this taught material.
- Brief coverage in the core curriculum (2 points): This score applies where a topic is covered only briefly in a core curriculum session. This implies that the entire cohort receives the same material. At minimum brief inclusion would qualify as inclusion in a single lecture slide in a single year.
- In depth coverage in the core curriculum (3 points): This score applies where a topic is taught in significant detail or where a topic is repeatedly brought up in different years. This might look like several dedicated lecture slides, or inclusion of the same topic in different lectures and teaching formats.

Other considerations:

- If there are more than one “tracks” at your institution with two different curricula (for example, Harvard Medical School has a Pathways and HST curriculum track), you can choose to fill out a report card for each track, or fill out just one report card and average the scores received by each track in cases where the scores are different (see the 2021 Harvard or Oxford report cards as examples). Where possible please indicate the proportion of students that are on each track.

Updated in 2025, a complete literature review by metric is available for the 2024/25 Medicine Report Card Template. This largely translates across disciplines although we are hoping to expand this process across all of our covered disciplines. A link to the 2025 literature review by metric is available here.

Planetary Health Curriculum

Section Overview: ***This section evaluates the integration of relevant planetary health topics into the medical school curriculum.*** *Today's health professional students will be on the frontlines of tackling the health effects of climate and other environmental changes. Therefore, it is critical that 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

1.1. 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?	
Yes, the medical school has offered **more than one** elective whose primary focus is ESH/planetary health in the past year. (3 points)	
Yes, the medical school has offered **one** elective whose primary focus is ESH/planetary health in the past year. (2 points)	
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. (1 point)	
No, the medical school has **not** offered any electives on planetary health or electives that include ESH/planetary health topics in the past year. (0 points)	
Score Assigned:	3
Score explanation: In the winter, Foundations 1 students had the opportunity to choose from two two-week mini courses,"Climate Change and Health" and "Environmental Health and Advocacy," to satisfy their Inquiry Immersion requirement. In the spring, UCSF students have the opportunity to take a 10 session UC-wide course titled "Personal and Social Resilience in the Changing Climate" developed by the UC Center for Climate, Health, and Equity.	

Curriculum: Health Effects of Climate Change

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

Score explanation: Climate change and extreme heat in elder populations were addressed in the F1 Life Stages block during a small group on aging, which included a case on extreme heat and a testable learning objective to "Explain how aging physiology leads older adults to be more susceptible to the health effects of climate change induced extreme heat and how extreme heat is linked to postural hypotension" fostering a discussion on how extreme heat affects hemodynamic stability and how climate change affects aging physiology.

1.3. Does your medical school curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score explanation: During the Airways, Blood, and Circulation (ABC) 2 block of F1, students are responsible for learning objectives in the Obstructive and Restrictive Lung Diseases lecture that include"identify[ing] populations at disproportionate risk for morbidity and mortality from obstructive lung disease" and "understand[ing] the impact of climate change on the burden of respiratory disease." During this lecture, it is impressed upon learners that "Climate consequences mirror social inequities" and cause increased morbidity and mortality for individuals suffering with asthma and COPD. In the Justice and Advocacy in Medicine (JAM) 2 block, students partook in required learning sessions that included an Environmental Justice Panel and an Air Quality, Health Disparities, and Environmental Justice small group. These sessions asked learners to "describe interconnections among climate change, air quality, and health, with an emphasis on respiratory and cardiovascular health" and name how systemic inequities lead to differentials in air quality and ultimately, health disparity. Additionally, as a part of F1 Core Inquiry Curriculum, students participate in a case discussion about how climate-related disasters, such as flooding, contribute to antibiotic resistance.	

1.4. Does your medical school curriculum address the impact of climate change on the changing patterns of infectious diseases?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: In UCSF's Pathogen and Host Defense (PHD) 2 block, one in-person lecture titled "Emerging Infections" focused on how environmental changes have increased the incidence	

of infectious disease. Another in-person lecture during PHD2, titled, "Vector-Borne and Zoonotic Bacterial Infections", included slides on how shifts in the global climate have shifted the distribution of vector-borne diseases, such as Dengue virus and zoonotic diseases, such as Borrelia Burgdoferi. These slides made a clear connection between vector and zoonotic diseases and climate change. Additionally, the Core Inquiry Curriculum (CIC) lecture titled "Global Health: Challenges, Research, Practice & Impact" had multiple slides focusing on how climate change is changing the trajectory of global health and the importance of prioritizing climate change in addressing global health disparities.

1.5. Does your medical school curriculum address the respiratory health effects of climate change and air pollution?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: In ABC2 block, a testable learning objective to "understand the impact of climate change on the burden of respiratory disease" was included for the Obstructive and Restrictive lung disease lecture. Additionally, a CIC small group titled, "Air Quality, Health Disparities, and Environmental Justice", aimed to encourage students to understand the relationship between the neighborhood and air pollution and how this relationship affects respiratory and cardiovascular health. This small group also encourages students to practice communicating the impact of air pollution on cardiopulmonary health. During the "Hypersensitivity Reactions" Lecture in PHD2, a slide was included on describing the pathophysiology of how air pollution contributes to the risk of developing asthma.	

1.6. Does your medical school curriculum address the cardiovascular health effects of climate change, including increased heat?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score explanation: The relationship between climate change and cardiovascular health were addressed in the F1 Life Stages block during a small group on aging, which included a case on extreme heat and a testable learning objective to "Explain how aging physiology leads older adults to be more susceptible to the health effects of climate change induced extreme heat and how extreme heat is linked to postural hypotension" fostering a discussion on how extreme heat affects hemodynamic stability. Additionally, the CIC "Air Quality, Health Disparities, and Environmental	

Justice" small group encourages students to create a patient handout and/or presentation on how climate change affects cardiovascular health.

1.7. Does your medical school curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score explanation: For the "Anxiety" lecture in Brain, Mind, and Behavior (BMB) 1, supplemental reading on how climate change affects mental health was included. Additionally, a slide on how increasing climate-change related weather events increases the risk of developing PTSD was included during the PTSD lecture in BMB2.	

1.8. Does your medical school curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
In JAM2, during the "Participatory Research & Community Engagement to Enhance Tribal Food Sovereignty and promote Indigenous Ecocultural Revitalization" lecture, the principle of food sovereignty conveys "native foods [as] central to restoring physical, cultural and overall health and wellbeing among AI/AN communities." Lecture material covering the restoration of native foodways cites the motivation of the Native American Food Sovereignty Alliance to "rebuild relationships with the land, water, plants, and animals that sustain us." While the interconnections between health, food and water security, and ecosystem health are touched upon here in the context of Native community health, this discussion does not extend to climate change or beyond JAM2 in the present curriculum.	

1.9. Does your medical school curriculum address the outsized impact of climate change on marginalised populations such as those with low SES, women, communities of colour, Indigenous communities, children, homeless populations, and older adults?
This topic was explored **in depth** by the **core** curriculum. (3 points)

This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: The "Air Quality, Health Disparities, and Environmental Justice" small group aimed to teach students to "explain how systemic inequities lead to differential exposure to air pollution and thus contribute to health disparities" by having students create a concept map that describes the relationship between structural determinants of health and air quality. Additionally, these students researched and presented strategies for health professionals in addressing environmental injustice.	

1.10. Does your medical school curriculum address the unequal regional health impacts of climate change globally?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score explanation: The Core Inquiry Curriculum (CIC) lecture titled "Global Health: Challenges, Research, Practice & Impact" had multiple slides focusing on how climate change is changing the trajectory of global health and the importance of prioritizing climate change in addressing global health disparities. However, there were no learning objectives associated with understanding the relationship between global health and climate change.	

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

1.11. Does your medical school curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides, microplastics)?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: During the Core Inquiry Curriculum, the lecture "Frontiers in Medicine: Impact of Environment on Reproductive Health" discussed typical environmental chemicals and	

how they impact reproductive health. Six learning objectives were associated with this lecture, including recognizing how environmental chemicals are an important contributor to disease and which environmental exposures are linked to prenatal and developmental outcomes. Additionally, the optional two-week Environmental Justice course in Inquiry Immersion explored the impact of environmental toxins such as phthalates, PFAs, PM2.5, and pesticides on reproductive health, incorporating both formal presentations and independent research.

1.12. Does your medical school curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: In Justice and Advocacy in Medicine (JAM) 2, a panel titled Frontiers in Medicine: Environmental Justice explored the adverse impacts of air pollution on community health in West Oakland, with emphasis on rates of asthma, cancer, respiratory diseases and cardiovascular diseases, as well as the interventions of an Oakland-based environmental justice organization. Students were asked to familiarize themselves with two particular projects of the environmental justice organization–a greening initiative in one of the most polluted areas in West Oakland, and the development of a community-centered pedestrian and bike path, each project aimed at minimizing air pollution exposure for West-Oakland residents. Additionally, in the Inquiry Immersion curriculum, students who elected to take the two-week Environmental Justice course investigated the impacts of environmental pollutants, particularly in the San Francisco Bayview-Hunters Point community. An elective offered in Fall 2025, titled "Immigrant and Farmworker Health" extensively focused on the occupational health hazards (such as extreme heat, pesticide exposures) of farmworkers, with a focus on the San Joaquin Valley.	

1.13. To what extent does your medical school emphasise the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score explanation: During the Justice and Advocacy in Medicine (JAM) 1 block, a lecture titled "Participatory Research & Community Engagement to Enhance Tribal Food Sovereignty and promote Indigenous Ecocultural Revitalization" described foundational principles for partnership between UC and Indigenous communities that centers Indigenous knowledge in the effort to	

mitigate the impact of ecosystem harm on the health of Native peoples. Lecture content focused on how institutional research can support community-centered food sovereignty initiatives in Native communities. During JAM 2, a panel titled "Native American Perspectives on Healthcare, Health, and Wellness" featured Indigenous community members and engaged students to explore ways that clinicians can support Native American patients and communities in achieving their desired health outcomes and addressing structural inequities. However, there was a limited focus on the relationship between the empowerment of indigenous leadership and planetary health.

1.14. Does your <u>medical school</u> curriculum address the outsized impact of anthropogenic environmental toxins on marginalised populations such as those with low SES, women, communities of colour, children, homeless populations, Indigenous populations, and older adults?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	3
Score explanation: As part of the Justice and Advocacy in Medicine (JAM) 1 & 2 curriculum, students explore how various systemic processes disproportionately harm marginalized populations, including individuals with low SES, houseless populations, Indigenous communities, migrant communities, incarcerated individuals, and communities of color. A key topic discussed is historic redlining and its lasting health consequences, for example placing marginalized communities in closer proximity to industrial zones that release toxic chemicals. In Ground School, the curriculum addressed the San Joaquin Valley's increased exposure to insecticides and pesticides, particularly among farmworkers, who face heightened occupational health risks. In the Life Stages 2 block, students had a testable learning objective to "understand environmental issues related to puberty and exogenous exposure to hormonally active compounds," prompting discussions on how industrial toxic chemicals impact health and well-being of adolescents. Additionally, in the optional Inquiry Immersion course, Environmental Justice, students engaged in an in-depth exploration of anthropogenic environmental toxins and their impact on the Bayview-Hunters Point community and the San Joaquin Valley.	

Curriculum: Sustainability

1.15. Does your <u>medical school</u> curriculum address the environmental and health co-benefits of a plant-based diet?
This topic was explored **in depth** by the **core** curriculum. (3 points)
This topic was **briefly** covered in the **core** curriculum. (2 points)
This topic was covered in **elective** coursework. (1 point)
This topic was **not** covered. (0 point)

Score Assigned:	1
Score explanation: Lectures on nutrition were included in our Renal, Endocrine, GI, and Nutrition (REGN) 1 block. While the health benefits of a plant based diet were discussed, they were not linked to the environmental health benefits. For example, the lecture does not mention sustainability or greenhouse gas emissions as a benefit of plant-based diets. An elective option, Food as Medicine, similarly emphasized the health benefits for students, but was not required in the core curriculum. The Inquiry Immersion elective course "Climate Change and Health" covered the impact of red meat on contributing to greenhouse gas emissions as well as air and water pollution.	

1.16. Does your medical school curriculum address the carbon footprint of healthcare systems?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score explanation: In the required Core Inquiry workshop "Air Quality, Health Disparities, and Environmental Justice," students have an opportunity to discuss healthcare's contribution to greenhouse gas emissions. However, because the sessions are student-led and this topic appears only in the facilitator guide released after the session, it is unlikely to be consistently addressed across groups. Making this content an explicit student learning objective would help ensure it is reliably included in the discussion.	

1.17. Does your medical school curriculum cover these components of sustainable clinical practice in the core curriculum? (points for each)	**Score**
The health **and** environmental **co-benefits** of **avoiding** over-medicalisation, over-investigation and/or over-treatment (2 points)	2
The environmental impact of **pharmaceuticals** and over-prescribing as a cause of climate health harm. Alternatively teaching on **deprescribing** where possible and its environmental and health co-benefits would fulfil this metric. (2 points) .	0
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. This is commonly known as social prescribing in the UK. (1 point)	0
Environmental impact of **surgical** healthcare on planetary health and the climate crisis, and how can it be mitigated. (1 point)	0
The impact of **anaesthetic** gases on the healthcare carbon footprint and ways to reduce anaesthesia's environmental impacts, such as total intravenous anaesthesia or choosing less	0

environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions. (1 point)	
The impact of **inhalers** on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers. (1 point)	0
Waste production within healthcare **clinics** and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting) (1 point)	1

Score explanation: There is a dedicated panel session titled "High Value Cancer Screening Panel" with a corresponding required small group, which discusses the health and cost harms of over-medicalization and over-treatment, but does not explicitly address the environmental co-benefit. Additionally, de-prescribing is discussed extensively during the Life Stages curriculum with a health focused lens, not including environmental benefits. UCSF continues to offer an elective titled "High-Value Care" where certain talks briefly touch on the additional environmental benefits of deprescribing; however, this remains outside the core curriculum.

The core curriculum discusses the weight-management and mental health impacts of non-pharmaceutical approaches to healthcare, such as exercise, but does not connect these to their environmental co-benefits.

White UCSF is a leader in anesthetic sustainability, the core curriculum does not address the impact of anesthetic waste on sustainability. A small group of medical students conduct a quality improvement project on reducing anesthetic gas waste as a part of their Clinical Microsystem Clerkship, but this is a randomly selected group and not a core requirement for all students. There have been opportunities to attend sustainability events highlighting this topic, which are optional for both students and faculty. Similarly, although there are many campus projects on surgical waste students can become involved in, there is no formal teaching on surgical waste and sustainability within the core curriculum.

There remains no discussion in the core curriculum of the environmental impact of metered-dose inhalers compared to dry powder inhalers.

The "Air Quality, Health Disparities, and Environmental Justice Workshop" within the Core Inquiry Curriculum provides an opportunity for students to discuss strategies to reduce waste in healthcare settings, though this is not discretely outlined in the student guide.

Curriculum: Clinical Applications

1.18. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies to have conversations with patients about the health effects of climate change?	
Yes, there are strategies introduced for having conversations with patients about climate change in the **core** curriculum. (2 points)	
Yes, there are strategies introduced for having conversations with patients about climate change in **elective** coursework. (1 point)	
No, there are **not** strategies introduced for having conversations with patients about climate change. (0 points)	
Score Assigned:	2

Score explanation: The "Air Quality, Health Disparities, and Environmental Justice Workshop" within the Core Inquiry Curriculum includes a learning objective around advocating for environmental justice in patient care. A portion of this small group session involves role-playing a provider-patient encounter in which a patient expresses concern about the effects of poor air quality on their family's health, giving students the opportunity to practice navigating climate-related health conversations and explore harm-reduction strategies. The session also incorporates reflection prompts on communication challenges and best practices. One limitation of this workshop is that the group is split, with only half of students participating in the role-play exercise, while the other half focuses on developing climate health advocacy ideas. Ensuring all students have access to the role-play component would strengthen this learning experience.

Additionally, optional Inquiry Immersion courses have given students space to grapple with the real challenges of communicating about climate change and the environmental impacts of industry, including the psychological weight of outcomes that can feel discouraging or difficult to convey with hope and clarity.

During Life Stages 1, the lecture "Frontiers in Medicine: Impact of Environment and Reproductive Health" addresses clinical strategies for discussing environmental exposures with patients, providing another touchpoint for this skill set within the core curriculum.

1.19. In training for patient encounters, does your medical school's curriculum introduce strategies for taking an environmental history or exposure history?	
Yes, the **core** curriculum includes strategies for taking an environmental history. (2 points)	
Only **elective** coursework includes strategies for taking an environmental history. (1 point)	
No, the curriculum does **not** include strategies for taking an environmental history. (0 points)	
Score Assigned:	2

Score explanation: The UCSF curriculum places a foundational emphasis on obtaining a thorough social history and understanding each patient's unique risk factors, a lens woven throughout all blocks and reinforced during patient encounters.

Environmental history-taking is addressed in several areas. In ABC2, the pharmacology lecture "Obstructive and Restrictive Lung Diseases: Clinical Approach" includes a learning objective on eliciting environmental exposure histories in interstitial lung disease, complemented by a hypersensitivity pneumonitis case in the "Pulmonary Integration Cases" small group that prompts students to explore occupational and environmental exposures. In Life Stages 1, the lecture "Prenatal Care Through an Equity Lens" addresses environmental and exposure history in prenatal care, with the accompanying reader expanding on this for pregnant and pediatric patients.

Curriculum: Administrative Support for Planetary Health

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

Yes, the medical school is currently in the process of making **minor** improvements to ESH/planetary health education. (2 points)
No, there are **no** improvements to planetary health education in progress. (0 points)

Score Assigned:	2

Score explanation: UCSF's core curriculum continues to evolve through active collaboration between students and faculty. This year included minor updates to the core curriculum, as well as new lectures developed by students in the SJV PRIME and PRIME US programs that highlight regionally and socioeconomically driven health risks, including some discussion of environmental risk factors. Optional electives and visiting professor lectures have also expanded opportunities for students with a particular interest in planetary health.

As UCSF continues to develop its curriculum, greater emphasis should be placed on integrating planetary health content within the Life Stages block and other relevant courses.

1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> curriculum?
Planetary health/ESH topics are **well integrated** into the core medical school curriculum. (6 points)
Some planetary health/ESH topics are appropriately integrated into the core medical student curriculum. (4 points)
Planetary health/ESH is not integrated and is primarily addressed in **(a) standalone lecture(s).** (2 points)
There is **minimal/no** education for sustainable healthcare. (0 points)

Score Assigned:	4

Score explanation: Planetary health topics are meaningfully integrated throughout UCSF's preclinical curriculum, with content appearing across multiple blocks in the first and second years. After second year, continued Planetary Health education is limited by clerkship location, student, and preceptor interests.

The Justice and Advocacy in Medicine block provides dedicated space for a deeper dive into climate and health topics. While this is integral to students' understanding of planetary health, increased integration into other blocks would support UCSF's goal of spiral learning for students.

The pulmonary unit in ABC2 addresses air pollution, environmental exposures, and their relationship to respiratory disease. Life Stages 1 explores the role of environmental exposures on pregnancy and reproductive development, while Life Stages 2 addresses the heightened climate vulnerability of older adults. In Pathogens and Host Defenses 2, students learn how climate change is driving the emergence and spread of infectious diseases. Brain, Mind, and Behavior addresses climate change as a social determinant of mental health, including climate anxiety. First-year students also have the opportunity to engage more deeply through the Inquiry Immersion block, which offers elective mini-courses in Climate Change and Health and Environmental Health and Advocacy. While UCSF's integration of planetary health is notable, there remains room to expand coverage across additional blocks. For example, surgical waste, anaesthetic waste, and

environmental impacts of various therapies would be beneficial for students to engage with throughout their curriculum.

1.22. Does your medical school employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?	
Yes, the **medical school** has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (1 point)	
No, the **medical school** does **not** have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare. (0 points)	
Score Assigned:	1
Score explanation: The medical school has an Education Ambassador Lead, who is a UCSF faculty member currently overseeing and taking responsibility for the incorporation of planetary health and sustainable healthcare.	

1.23. Does your health professional curriculum include teaching on civic engagement/advocacy to address the environmental and structural determinants of health?	
This topic was explored **in depth** by the **core** curriculum. (3 points)	
This topic was **briefly** covered in the **core** curriculum. (2 points)	
This topic was covered in **elective** coursework. (1 point)	
This topic was **not** covered. (0 points)	
Score Assigned:	2
Score explanation: Civic engagement to address the structural determinants of health are integrated throughout the Justice and Advocacy in Medicine Curriculum through a longitudinal series of required advocacy workshops throughout Foundations 1. These workshops teach students how to apply key advocacy strategies and engage students to develop a fully-formed advocacy campaign for a topic that addresses the structural determinants of health. However, there is no explicit focus on the environmental determinants of health. During the Core Inquiry Curriculum small group titled "Air Quality, Health Disparities, and Environmental Justice", students strategize "specific ways health providers can advocate for environmental justice at both the interpersonal and systemic level".	

Section Total (55 out of 75)	**73%**

Back to Summary Page here

Interdisciplinary Research

Section Overview: ***This section evaluates the quality and quantity of interdisciplinary planetary health research at the 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, institutions should fund research studying the health effects of climate change and anthropogenic environmental toxins. This obligation is particularly strong because the public and policymakers are more attentive to climate change when its implications for human health are emphasised.*

2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your institution?	
Yes, there are faculty members at the **institution** who have a **primary** research focus in planetary health **or** sustainable healthcare/vetcare. (3 points)	
Yes, there are individual faculty members at the **institution** who are conducting research **related** to planetary health or healthcare sustainability, OR are part of a national/international sustainability working group, but it is not their primary research focus. (2 points)	
There are sustainability researchers at the **institution**, but not specifically associated with healthcare/vetcare. (1 point)	
No, there are **no** planetary health and/or sustainability researchers at the **institution** at this time. (0 points)	
Score Assigned:	3
Score explanation: The UCSF community has many researchers and multiple initiatives dedicated to planetary health and promoting sustainability in healthcare. Dr. Sheri Weiser and Dr. Arianne Teherani are the Founding Co-Directors of the UC Center for Climate, Health and Equity, which drives research on the health impacts of climate change. The Center hosts numerous clinical, translational, and basic science research faculty members, as well as postdoctoral fellows, dedicated to planetary health research.	

2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your institution?	
There is **at least one** dedicated department or institute for interdisciplinary planetary health research. (3 points)	
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. (2 points)	
There is an **Occupational and Environmental Health department**, but no interdisciplinary department or institute for planetary health research. (1 point)	
There is **no** dedicated department or institute. (0 points)	
Score Assigned:	3

Score explanation: UCSF's Environmental Research and Translation for Health (EaRTH) Center aims "to solve the growing burden of chronic disease by accelerating the pace of identifying and preventing harmful environmental exposures that undermine health, reproduction, and human development." The UC Center for Climate, Health and Equity, which is based at UCSF, focuses on climate change and health equity research across multiple University of California campuses and engages interdisciplinary teams on climate-health connections. This past year, the Center received one of 20 NIH P20 grants nationwide to expand this work. The $4.2 million grant has been dedicated to funding a new initiative called UC Equity and Climate Opportunities for Health (ECO-Health) in collaboration with UC Berkeley and UC San Diego. The core objectives of ECO-Health include "developing a cadre of researchers trained to identify inequitable health impacts of climate change and partnering with those communities to take action." Additionally, the UCSF Program on Reproductive Health and the Environment conducts multidisciplinary research into how environmental contaminants affect fertility, pregnancy, and fetal and child development.

2.3. 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 institution?	
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. (3 points)	
Yes, there is a process in which community members impacted by climate and environmental injustice **advise** the climate + environmental research agenda. (2 points)	
No, but there are **current efforts** to establish a process for community members to advise or make decisions on the research agenda. (1 point)	
There is **no** process, and **no** efforts to create such a process. (0 points)	
Score Assigned:	3

Score explanation: The UCSF EaRTH Center collaborates with the Community Engagement Core Stakeholder Advisory Board to lead their research aims. The SAB consists of practicing health professionals and community members working at the intersection of environment and health, including those directly affected by environmental injustice in their communities. Together, they identify research needs, review projects and pilot grants, and disseminate research findings to accelerate their implementation. Additionally, the Center partners with the Bayview Hunters Point Community Advocates for environmental health education, outreach, and decision-making. This grassroots organization is led by Bayview Hunters Point residents to advocate for change in their neighborhood, which has been burdened by industrial pollution and environmental injustice.

2.4. Does your institution have a planetary health website that centralises ongoing and past research related to health and the environment?
There is an **easy-to-use, adequately comprehensive** website that **centralises** various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities. (3 points)

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

Score Assigned:	3

Score explanation: UCSF maintains multiple active websites that centralize ongoing and past research related to health and the environment. For example, the UCSF Environmental Research and Translation for Health (EaRTH) Center site highlights multidisciplinary environmental health research, pilot projects, funding opportunities, and community engagement resources. Ongoing and completed studies are easily accessible under categories including Cancer, Air Pollution, PFAS, Reproductive and Child Health, and Wildfires. The UC Center for Climate, Health and Equity site also houses information on climate health investigation through their Research pillar.

2.5. Has your institution recently hosted a conference or symposium on topics related to planetary health?
Yes, the **institution** has hosted at least one conference or symposium on topics related to planetary health in the past year. (4 points)
Yes, the **institution** has hosted at least one conference or symposium on topics related to sustainable healthcare/vetcare in the past year. (3 points)
Yes, the **institution** has hosted a conference on topics related to planetary health / sustainable healthcare/vetcare in the past three years. (2 points)
The **institution** has not hosted any conferences directly, but they have provided financial support for a local planetary health event. (1 point)
No, the **institution** has not hosted a conference on topics related to planetary health in the past three years. (0 points)

Score Assigned:	4

Score explanation: In February 2025, the EaRTH Center held its 4th Annual Research and Translation Forum, an in-person meeting focused on environmental health science and cutting-edge methods for understanding chemical impacts on human health. In March 2025, the UCSF Division of Occupational, Environmental, and Climate Medicine hosted the Health, Occupation and the Environment: Global Issues and Local Action and Updates in Occupational, Environmental and Climate Medicine, which included a scientific poster session.

2.6. Is your institution a member of a national or international planetary health or ESH/ESV organisation?
Yes, the institution is a member of a national or international planetary health **or** ESH/ESV organisation. (1 point)

No, the institution is **not** a member of such an organisation. (0 points)	
Score Assigned:	1
*Score explanation: The UCSF Institute for Global Health Sciences is a member of the Planetary Health Alliance. The UCSF School of Medicine and School of Nursing are members of the Global Consortium on Climate and Health Education. The UCSF Schools of Dentistry and Pharmacy are **not** members of the Global Consortium.*	

Section Total (17 out of 17)	**100%**

Back to Summary Page here

Community Outreach and Advocacy

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

3.1. Does your institution partner with community organisations to promote planetary and health?	
Yes, the **institution** meaningfully partners with **multiple** community organisations to promote planetary and environmental health. (3 points)	
Yes, the **institution** meaningfully partners with **one** community organisation to promote planetary and environmental health. (2 points)	
The **institution** does not partner with community organisations, but participates in community focused events relating to planetary health. (1 point)	
No, there is **no** such meaningful community partnership. (0 points)	
Score Assigned:	3
Score explanation: UCSF's Environmental Research and Translation Center (EaRTH) continues to facilitate community engagement via its Community Engagement Core (CEC). One such initiative of the CEC provides an interdisciplinary cohort with tools to advance science-based change in local and state environmental health policy. UCSF also engages with local community partners through its Community Relations program, aiming to build relationships and incorporate community input into UCSF's activities and initiatives. Through the Community Relations program this year, UCSF dental students participated in an event at a local college to discuss ties between climate change and the health profession with a focus on the roles of dentists.	

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

Score explanation: The UCSF EaRTH Center is a collaborating partner in UCSF's annual Environmental Health Grand Rounds, which the public may attend. The UC Center for Climate, Health, and Equity features on its website a six-part, public-facing webinar series titled "Urban Wildfire Response and Recovery,"which addresses the adverse health impact of wildfires and wildfires as a consequence of environmental justice issues. The EaRTH Center website serves as a centralized hub for visitors to learn about upcoming webinars hosted by the Center itself and other climate and health partners across the university.

3.3. Does your institution have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?	
Yes, all students **regularly** receive communication updates dedicated to planetary health and/or sustainable healthcare. (2 points)	
Yes, planetary health and/or sustainable healthcare topics are regularly included in communication updates to **some courses**. (1 point)	
Students **do not** receive communications about planetary health or sustainable healthcare. (0 points)	
Score Assigned:	1
Score explanation: Students do not receive communications about planetary health or sustainable healthcare in general newsletters sent by the School of Medicine, but may subscribe individually to the mailing lists of UCSF climate and health partners, such as the UCSF EaRTH Center and the UC Center for Climate, Health, and Equity.	

3.4. 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. (2 points)	
Yes, the **institution** or **main affiliated hospital trust** offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers. (1 point)	
There are **no** such accessible courses for post-graduate providers. (0 points)	
Score Assigned:	2
Score explanation: The UCSF Division of Occupational, Environmental, and Climate Medicine continues to host an annual two-day continuing medical education program dedicated to salient issues in planetary and human health. This year's Spring program is dedicated to promoting interdisciplinary collaboration that effectively protects workers experiencing diverse climate impacts and nurturing resilience in the face of tumultuous policy change. The EaRTH Center also offers longitudinal continuing education experiences in environmental health for post-graduate	

learners, such as the Reach the Decisionmakers Program and the Postdoc Accelerator Program in Environmental Health.

3.5. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about environmental health exposures?	
Yes, the **institution** or **all affiliated hospitals** have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated medical centres have accessible educational materials for patients. (0 points)	
Score Assigned:	2
Score explanation: The Environmental Health and Research Translation (EaRTH) Center offers a variety of patient-friendly resources, including printable guides on reducing exposure to toxic substances, protecting against extreme heat, and avoiding harmful chemicals, in multiple languages. These materials are designed to help individuals and families understand and reduce everyday environmental health risks. Additionally, the Western States Pediatric Environmental Health Specialty Unit (WS PEHSU) at UCSF provides the Pediatric Environmental Health Toolkit and Prescriptions for Prevention handouts for caregivers and educators that explain common environmental exposures and prevention strategies. Furthermore, the UCSF-based Wildfires & Health Education Hub shares evidence-based infographics on protecting health during wildfire smoke events that can be distributed to patients.	

3.6. Does your institution or its affiliated teaching hospitals have accessible educational materials for patients about the health impacts of climate change?	
Yes, the **institution** or **all affiliated hospitals** have accessible educational materials for patients. (2 points)	
Some affiliated hospitals have accessible educational materials for patients. (1 point)	
No affiliated hospitals have accessible educational materials for patients. (0 points)	
Score Assigned:	2
The Wildfires & Health Education Hub offers a series of publicly available infographics explaining how wildfire smoke affects physical and mental health and what people can do to protect themselves, which healthcare providers are encouraged to share with patients. Additionally, UCSF's EaRTH Center and Program on Reproductive Health and the Environment host educational materials addressing climate-related exposures such as extreme heat and other environmental health risks, including patient handouts and multilingual resources on how climate impacts health and practical protection strategies.	

Section Total (11 out of 14)	**79%**

Back to Summary Page here

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.*

4.1. Does your institution offer support for students interested in enacting a sustainability initiative/QI project?	
Yes, the **institution** *either* offers grants for students to enact sustainability initiatives/QI projects *or* sustainability QI projects are part of the core curriculum. (2 points)	
The **institution** encourages sustainability QI projects (to fulfil clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, **but** there is no student funding available and there is no requirement to participate. (1 point)	
No, the institution does not offer opportunities or support for sustainability initiatives or QI projects. (0 points)	
Score Assigned:	2
Score explanation: The UC President's Bonnie Reiss Climate Action Fellowship funds $5000 for student-led projects across the UC system to achieve 90% decarbonization by 2045. 5 fellowship options are available to UCSF students, with ⅗ filled in in health engagement and campus engagement. Additionally, within the Clinical Microsystems Clerkship where students create a QI project dedicated to improving health systems, students are encouraged to create a sustainability focused QI project. In 2025, one CMC group completed a QI project titled "Reducing nitrous oxide and sevoflurane emissions in the pediatric operating room environment".	

4.2. Does your institution offer opportunities for students to do research related to planetary health and/or sustainable healthcare/vetcare?	
The **institution** has a **specific** research program or fellowship for students interested in doing planetary health/sustainable healthcare/vetcare research. (2 points)	
There are research opportunities for students to perform research related to planetary health/sustainable healthcare, but these **require student initiative** to seek them out and carry them out in their spare time. (1 point)	
There are **no opportunities** for students to engage in planetary health/sustainable healthcare research. (0 points)	
Score Assigned:	1
Score explanation: The UC President's Bonnie Reiss Climate Action Fellowship funds $5000 for student-led projects across the UC system to achieve 90% decarbonization by 2045 and are available to UCSF students. However, this is a UC wide initiative and is not school specific. While	

UCSF typically offers an Environmental Scholars Research Program, the program was discontinued for the 2025-2026 year. Students are welcome to reach out to researchers who work in planetary health in UCSF, but there is no specific program or fellowship currently at UCSF.

4.3. Does the institution have a webpage where students can find specific information related to planetary health and/or sustainable healthcare/vetcare activities and mentors within the institution? For example, projects achieved, current initiatives underway at the medical school and/or contact of information of potential mentors.	
The institution has a webpage with specific information related to planetary health or sustainable healthcare/vetcare that includes up-to-date information on relevant initiatives and contact information of potential mentors. (2 points)	
There is an institution webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the institution, but it lacks key information. (1 point)	
There is **no institution** specific webpage for locating planetary health and/or sustainable healthcare projects or mentors. (0 points)	
Score Assigned:	2
Score explanation: The UCSF EaRTH Center is an interdisciplinary group that aims to focus on the impacts of harmful environmental pollutants on health and human development and the UC Center for Climate, Health, and Equity (CCHE) is focused on the health effects of climate change. Both of these websites feature an extensive list of mentors, projects, initiatives, and contact information. Additional student initiatives, such as the American Medical Association (AMA) and Wildfires and Health Education Hub are also available online.	

4.4. Does your institution have registered student groups dedicated towards fostering a culture of planetary health engagement, scholarship, and advocacy on campus, supported by faculty advisors?	
Yes, there is a student organisation **with faculty support** at my institution dedicated to planetary health or sustainability in healthcare. (2 points)	
Yes, there is a student organisation at my institution dedicated to planetary health or sustainability in healthcare but it **lacks faculty support.** (1 point)	
No, there is **not** a student organisation at my institution dedicated to planetary health or sustainability in healthcare. (0 points)	
Score Assigned:	2
Score explanation: A UCSF SOM group called Community Organizing and Environmental Justice is available for any SOM student to join. The group is dedicated to improving planetary health efforts in medicine, such as engagement in the Planetary Health Report Card, student-faculty mixers, and hosting educational lunch talks with key leaders in planetary health.	

4.5. Is there a student liaison representing sustainability interests who serves on a department or institutional decision-making council to advocate for curriculum reform and/or sustainability best practices?	
Yes, there is a student representative who serves on a department or institutional decision-making council/committee. (1 point)	
No, there is no such student representative. (0 points)	
Score Assigned:	0
Score explanation: There is currently no student liaison representing sustainability interests at UCSF to advocate for curricular reform and/or sustainability best practices.	

4.6. 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)	**Score**
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.	0
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 organise hiking, backpacking, kayaking, or other outings for students)	1
Score explanation: *A lunchtime elective in Fall 2025 titled "Immigrant and Farmworker Health" extensively focused on the occupational health hazards (such as extreme heat, pesticide exposures) of farmworkers, with a focus on the San Joaquin Valley.* *In Spring 2025, another lunchtime elective was offered to all UCSF students, titled "Climate Resilience: Personal & Community Resilience in the Changing Climate" and focused on developing and promoting climate resilience education and resources to the UC community.* *Many events to reduce waste were offered by the UCSF Office of Sustainability, such as networking & research events on Reducing Clinical Waste at UCSF in November 2025. Additionally a "Waste to Art" event is held annually at UCSF to encourage the UCSF community to get creative with their waste.*	

A recreation pass is available to UCSF students, in which students are able to participate in organized hiking, backpacking and camping trips. *There is also a "Wilderness Medicine" clinical elective (EM 140.31) in Fresno offered to fourth-year medical students to learn and practice essential skills, such as basic preparedness, search and rescue, and wilderness improvisation, through an immersive experience in the Sierra Nevadas.*

Section Total (12 out of 15)	**80%**

Back to Summary Page here

Campus Sustainability

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

5.1. Does your institution have an Office of Sustainability?	
Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is **at least one designated staff member** for sustainability at the hospital. (3 points)	
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 hospital sustainability. (2 points)	
There are **no salaried sustainability staff,** but there is a sustainability task force or committee. (1 point)	
There are **no** staff members **or** task force responsible for overseeing campus sustainability. (0 points)	
Score Assigned:	3
Score explanation: UCSF has an Office of Sustainability that is committed to protect the health and safety of students, staff, and the greater community. UCSF has a team including a Chief Sustainability Officer, Executive Director, and Sustainability Officers. The Advisory Committee on Sustainability includes campus representation from each professional school. UCSF has partnerships with the EaRTH Center, Center for Climate, Health and Equity, Climate Change and Mental Health Task Force, and Green Teeth. Additionally, the UCSF Academic Senate Committee on Sustainability includes representation from each professional school and advances environmental sustainability across education and campus operations. The committee supports these efforts through engagement with the UC Systemwide Carbon Neutrality Initiative, the UCSF Green Challenge, campus-specific waste-reduction initiatives, and the Systemwide Divestment from Fossil Fuels Initiative.	

5.2. How ambitious is your institution's plan to reduce its own carbon footprint?
The institution has a **written and approved plan** to achieve carbon neutrality by **2030** (5 points)
The institution has a **written and approved plan** to achieve carbon neutrality by **2040** (3 points)
The institution has a stated goal of carbon neutrality by **2040** but has **not created a plan** to reach that goal or the **plan is inadequate** (1 point)
The institution does **not** meet any of the requirements listed above (0 points)

Score Assigned:	1
Score explanation: UCSF's Sustainable Practices Policy outlines a goal of 90% reduction in total emissions (Scope 1, 2, and 3) by 2045 using a 2019 baseline, with residual emissions addressed through carbon removal. While UCSF has produced a building energy decarbonization roadmap and prioritized key projects in its 10-year capital financial plan, updated climate action plans are still being drafted. The 2025 Annual Report on Sustainable Practices notes that Scope 1 emissions rose approximately 3% in 2024, driven by newly acquired hospitals and expanded shuttle service. The UC Health White House Climate Pledge commits to a 50% emissions reduction by 2030 and net zero by 2050. More information on UCSF's sustainability commitments can be found here.	

5.3. Do buildings/infrastructure used by the institution for teaching (not including the hospital) utilize renewable energy?	
Yes, institution buildings are **100%** powered by renewable energy. (3 points)	
Institution buildings source **>80%** of energy needs from off-site and/or on-site renewable energy. (2 points)	
Institution buildings source **>20%** of energy needs from off-site and/or on-site renewable energy. (1 point)	
Institution buildings source **<20%** of energy needs from off-site and/or on-site renewable energy. (0 points)	
Score Assigned:	1
Score explanation: 100% of electricity purchased by UCSF has been from clean-energy sources since 2019, primarily via solar and hydroelectric. The 2025 Annual Sustainability Report confirms that purchased electricity emissions remain at zero. However, a substantial portion of total energy consumption is generated on-site by a gas powered cogeneration plant at Parnassus campus. UCSF has expanded on-site renewable energy generation through solar power installations across several teaching and research sites when it is cost-effective or aligned with the site's Climate Action plan, however this contributes only marginally to overall energy supply. More information on UCSF's energy use and sustainability can be found on the sustainability website and here.	

5.4. Are sustainable building practices utilised for new and old buildings on the institution's campus, with design and construction of new buildings and remodelling of old buildings conforming to a published sustainability rating system or building code/guideline?
Yes, sustainable building practices are utilised for new buildings on the institution's campus and the **majority** of old buildings **have been retrofitted** to be more sustainable. (3 points)
Sustainable building practices are utilised for new buildings on the institution's campus, but most old buildings have **not been retrofitted.** (2 points)
Sustainable building practices are **inadequately or incompletely** implemented for new buildings. (1 point)
Sustainability is **not considered** in the construction of new buildings. (0 points)

Score Assigned:	2

Score explanation: UCSF requires all new buildings and major renovations to conform to Leadership in Energy and Efficiency Design (LEED) certification standards, and as of the 2025 Annual Sustainability Report, holds 27 total LEED certifications across its campus, 16 Gold, 6 Silver, and 5 Certified, with one new LEED Gold certification achieved in the most recent reporting year. UC policy prohibits on-site combustion of fossil fuels for space and water heating in all new buildings or major renovations except under special circumstances. UCSF has also produced a building energy decarbonization roadmap that prioritizes electrification of heating and cooling systems across its major sites, with key projects incorporated into its 10-year capital financial plan. However, the majority of existing older buildings have not yet been retrofitted to meet these standards, and the decarbonization roadmap represents a forward-looking plan rather than completed work. More information on UCSF's green building practices can be found here.

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

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

The institution has implemented **some** strategies to provide environmentally-friendly transportation options, but the options are **unsatisfactorily** accessible or advertised. (1 point)

The institution has **not** implemented strategies to encourage and provide environmentally-friendly transportation options. (0 points)

Score Assigned:	2

Score explanation: UCSF has implemented a broad range of sustainable transportation programs that are well-utilized by its student community. A student-passed referendum now funds a mandatory Student Transit Pass, providing all enrolled students with unlimited access to all 24 Bay Area transit agencies via the Clipper BayPass. To meet a surge in demand for sustainable commute options, UCSF introduced new shuttle routes, added park-and-ride lots, launched a commuter bus program, and expanded vanpool and free bus pass offerings. These efforts are reflected in commute outcomes: 75% of students, staff, and faculty used sustainable commute modes, with public transit, shuttle, and walking rates all increasing. UCSF was also recognized as a Best Workplace for Commuters by the Center for Urban Transportation Research. Additionally, UCSF's urban San Francisco location, well-served by public transportation, naturally reduces reliance on single-occupancy vehicles. More information on UCSF's transportation programs can be found here.

5.6. Does your institution have an organics recycling program (compost) and a conventional recycling program (aluminium/paper/plastic/glass)?

Yes, the institution has **both** compost **and** recycling programs accessible to students and faculty. (2 points)

The institution has **either** recycling **or** compost programs accessible to students and faculty, but not both. (1 point)
There is **no** compost or recycling program at the institution. (0 points)

Score Assigned:	2

Score explanation: The UCSF Recycling and Waste Reduction Program provides accessible recycling and composting across the UCSF campus and facilities. UCSF's buildings all have multiple waste bins for trash, recycling, and composting. These buildings are accessed by students and faculty, and the 3-in-1 waste bins are placed near dining tables, in hallways outside of labs, and near main entrances to the buildings. In 2025, UCSF installed Oscar Sort, a robot that ensures proper disposal in the City's three bin system.

5.7. Does the institution apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?
Yes, the institution has a**dequate s**ustainability requirements for food and beverages, including meat-free days or no red-meat, and **is engaged** in efforts to increase food and beverage sustainability. (3 points)
There are sustainability guidelines for food and beverages, but they are **insufficient or optional**. The institution **is engaged** in efforts to increase food and beverage sustainability. (2 points)
There are sustainability guidelines for food and beverages, but they are **insufficient or optional.** The institution is **not** engaged in efforts to increase food and beverage sustainability. (1 point)
There are **no** sustainability guidelines for food and beverages. (0 points)

Score Assigned:	2

Score explanation: UCSF follows the University of California Sustainable Procurement Guidelines which include the Green Spend Criteria for food and beverage expenditures. The Green Spend Criteria requires 25% of food and beverage purchases, at minimum, to meet the AASHE STARS ® 2.2 Technical Manual Food and Beverage "sustainably or ethically produced" criteria (OP-07 p. 1-8). According to the University of California Sustainability Annual Report 2025, 57% of food and beverage purchases met sustainability criteria in 2025, up from 51% in 2024. 35% of food and beverage purchases in 2025 were plant-based, down from 44% in 2024.
While both metrics exceed UC's goal of 25%, when scored by the AASHE STARS criteria directly, UCSF earned 4.47 out of 6 possible points for sustainable food and beverage purchasing in 2025. Although the institution meets the criteria set by UC, this score indicates room for improvement. Additionally, UCSF has yet to implement any restrictions on the amount of meat consumed, such as meat-free days, which is a missed opportunity for sizable impact on the institution's carbon footprint.

5.8. Does the institution apply sustainability criteria when making decisions about supply procurement?
Yes, the institution has **adequate** sustainability requirements for supply procurement **and** is **engaged** in efforts to increase sustainability of procurement. (3 points)

There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The institution is **engaged** in efforts to increase sustainability of procurement. (2 points)
There are sustainability guidelines for supply procurement, but they are **insufficient or optional.** The institution is **not engaged** in efforts to increase sustainability of procurement. (1 point)
There are **no** sustainability guidelines for supply procurement. (0 points)

Score Assigned:	3

Score explanation: UCSF follows the University of California Sustainable Procurement Guidelines, which include the Green Spend Criteria for electronics, office furniture, cleaning supplies, and office supplies. These Criteria define recommended (minimum) and preferred levels of sustainability requirements for each category. According to the University of California Sustainability Annual Report 2025, the following percentages of procurement met minimum or preferred Green Spend Criteria in 2025:

- *Electronics: 55% (down from 76% in 2024)*
- *Office furniture: 65% (down from 68% in 2024)*
- *Cleaning supplies: 56% (up from 45% in 2024)*
- *Office supplies: 30% (up from 27% in 2024)*

The policies are not optional and are actively incorporated into UCSF's procurement practices, with measurable goals such as achieving 100% compliance with Level Green Spend within three fiscal years.

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

Score Assigned:	1

Score explanation: The UCSF Office of Sustainability offers Sustainability Certifications, including the Green Event Planner Certification to guide green practices at UCSF events and meetings. Individuals can earn certification at Bronze, Silver, Gold and Platinum levels by evaluating their event across the categories of Decarbonization, Zero Waste, and Sustainable Food. This certification is not required by the institution but recommended.

5.10. Does your institution have programs and initiatives to assist with making lab spaces more environmentally sustainable?
Yes, the institution has **programs** and **initiatives** to assist with making lab spaces more environmentally sustainable. (2 points)
There are **guidelines** on how to make lab spaces more environmentally sustainable, but not programs or initiatives. (1 point)

There are **no** efforts at the institution to make lab spaces more sustainable. (0 points)	
Score Assigned:	2
Score explanation: The UCSF Office of Sustainability offers Sustainability Certifications, including the Green Labs Assessment to promote green practices in UCSF lab spaces. Certifications are granted to labs that score highly across categories of Zero Waste, Culture Shift, Decarbonization, Water Conservation, and Toxics Reduction. According to the University of California Sustainability Annual Report 2025, 40 labs are currently certified, one of which was assessed and certified in 2025. Furthermore, UCSF engaged 112 labs in the ultra-low-temperature freezer rebate program to replace non-Energy Star -80°C freezers with new Energy Star freezers, in alignment with UCSF's energy conservation policy. *In addition, there is a there is a LivingGreen program where a team of experts will meet with your lab on-site and provide recommendations to reduce the lab's environmental impact and get co-workers engaged, with follow-up visits and a multi-tiered certification awarded.* *The office of sustainability is offering to switch out flame bunsen burners for electric ones in an effort to meet carbon neutrality by 2025 policy.*	

5.11. Does your institution's endowment portfolio investments include fossil-fuel companies?	
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. (4 points)	
The institution is **entirely divested** from fossil fuels. (3 points)	
The institution has **partially divested** from fossil fuel companies **or** has made a **commitment to fully divest**, but **currently** still has fossil fuel investments. (2 points)	
The institution has **not divested** from fossil-fuel companies, but faculty and/or students are **conducting organised advocacy** for divestment. (1 point)	
Yes, the institution has investments with fossil-fuel companies and there have been **no efforts** to change that. (0 points)	
Score Assigned:	2
Score explanation: In 2019, the UCSF Senate passed a Memorial with 79% approval urging the University of California Regents to divest from the 200 publicly traded fossil fuel companies with the largest carbon reserves. In May 2020, the University announced full divestment of the $13.4 billion endowment fund and $70 billion pension fund from fossil fuels along with simultaneous clean energy investment of $1 billion. Thus, the University of California as a whole is classified as "Full Divestment" by the Global Fossil Fuel Divestment Commitments Database. *Despite claims of full divestment, the UC invests millions into many of the largest private equity firms identified by the Private Equity Climate Risks Project to have direct ownership of fossil fuel industry assets. The UC endowment and retirement funds have holdings in firms considered among the worst offenders, including Blackstone, KKR, Apollo, EnCap, BlackRock, Stonepeak, and Brookfield. While the UC does not directly invest in fossil fuel companies, these investments demonstrate financing of a number of extractive industries and oil pipelines that will continue to accelerate climate change.*	

In June 2022, the UC Retirement Savings Program removed all companies owning fossil fuel reserves from its fund offerings, aligning with the system's broader divestment strategy.

Section Total (21 out of 32)	**66%**

Back to Summary Page here

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%

**Within each grade bracket, a score in the top 5% (_5 to_9%), receives a "+", and a score in the bottom 5% (_0-_4%) receives a "--". For example, a percentage score of 78% would be a B+.*

Planetary Health Grades for the University of California, San Francisco School of Medicine.
The following table presents the individual section grades and overall institutional grade for the UCSF School of Medicine on this Planetary Health Report Card.

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	(55/75) x 100 = 73.33%	B
Interdisciplinary Research (17.5%)	(17/17) x 100 = 100.00%	A+
Community Outreach and Advocacy (17.5%)	(11/14) x 100 = 78.57%	B+
Support for Student-led Planetary Health Initiatives (17.5%)	(12/15) x 100 = 80.00%	A-
Campus Sustainability (17.5%)	(21/32) x 100 = 65.63%	B
Institutional Grade	**(Ax0.3 + Bx0.175 + Cx0.175 + Dx0.175 + Ex0.175) = 78.73%**	**B+**

Report Card Trends

Section Overview
This graph demonstrates trends in overall and section grades for the years in which UCSF has participated in the Planetary Health Report Card initiative.