

Planetary Health Report Card (Medicine): Loma Linda



LOMA LINDA UNIVERSITY

School of Medicine

2023-2024 Contributing Team:

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Summary of Findings

Overall	
Curriculum	
 The curriculum at Loma Linda University School of Medicine shows minimal integration of pla health or sustainable healthcare topics. There is a notable absence of longitudinal integration an are not exposed to these subjects throughout their education in a cohesive manner. Recommendations: Integrate planetary health topics longitudinally across all years of the medicurriculum to ensure comprehensive understanding and application. Develop specific modules of focused on the intersection of health and environmental sustainability. 	d students
Interdisciplinary Research	D+
 Although Loma Linda currently lacks dedicated planetary health or healthcare sustainability reswithin the medical school, existing environmental nutrition, public health, and earth and biologic research highlights a potential foundation upon which to build. Recommendations: Forge stronger connections between medical education and interdisciplina efforts to enrich the academic environment. Encourage and support medical students in engagin existing environmental nutrition research and in initiating their own projects by the establishme and the specific recommendations of an advising office. 	ical science ry research g with
Community Outreach and Advocacy	D
 Loma Linda University has initiatives aimed at community health and well-being, including the Salud community garden and the SHiNE program. These efforts suggest room for expansion in medical student involvement and in explicitly addressing planetary health challenges. Recommendations: Increase visibility and encourage active participation in existing community programs with a clear focus on planetary health. Develop new partnerships with community org specifically around environmental health and sustainability. 	direct ty outreach
Support for Student-Led Initiatives	В
 Student-led initiatives receive substantial support, exemplified by the Loma Linda University S Sustainable Future group. This area represents a strong point for the university, with active stud engagement and faculty mentorship driving forward the agenda on sustainability and environme Recommendations: Provide more structured opportunities for students to engage in sustainabil and advocacy. Create formal mechanisms for student ideas and initiatives to be incorporated int institutional sustainability strategy. 	ent ental health. lity research
Campus Sustainability D	
 While there are efforts toward sustainability, such as the Environmental Sustainability Committed participation in Practice Greenhealth, and the institution's commitment to serving an exclusive of menu, Loma Linda University needs a comprehensive strategy and specific goals for achieving campus-wide sustainability. Recommendations: Establish standardized sustainability criteria for procurement, food service planning to ensure consistency with environmental stewardship. Increase the use of renewable esources for campus buildings and promote sustainable transportation options. Develop and implicitear, ambitious plan for carbon neutrality, fossil fuel divestment, and overall environmental sustainability. 	vegetarian s, and event energy lement a

Statement of Purpose

Planetary health is human health.

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

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

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

Definitions & Other Considerations

Definitions:

- Planetary Health: is described by the Planetary Health Alliance as "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 medical school education. Throughout this report card, we use the term planetary health to refer to this broad swath of topics, but resources do not need to explicitly include the term "planetary health" to satisfy the metric.
- 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 minimizes 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 first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:
 - 1. Describe how the environment and human health interact at different levels.

2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.

3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.

• Medical School vs. Institution: When "medical school" is specified in the report card, this only refers to curriculum and resources offered by the School of Medicine and does not include offerings from other parts of the university (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. Any resource reasonably accessible by medical students, no matter where in the institution the resource comes from or if it is specifically targeted for medical students, can meet this metric.

- Environmental history (Metric #19 in Curriculum Section): This is a series of questions providers are taught to ask during medical encounters that elicits patients' exposures and environmental risk factors. Historically, this has included consideration of exposures like pesticides, asbestos, and lead, though in the modern era shaped by climate change, it can be expanded to include things like wildfire smoke exposure, air pollution and mold after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution.
- Elective: The word "elective" refers to an optional course or lecture series that a medical student can opt to take part in but is not a requirement in the core curriculum. Generally, these elective courses take place in the preclinical curriculum but vary by school.
- **Clerkship:** This is a term used in the USA to refer to placements that medical students go on e.g. Pediatrics, General medicine, Psychiatry. In the UK these are referred to as rotations or placements.

Other considerations:

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

Added to our resources in 2022, the Planetary Health Report Card <u>Literature Review</u> <u>by Metric</u> collates the evidence behind each of the metrics in the Planetary Health Report Card. It serves as a collection of references for further learning and a resource for those advocating for increased planetary health engagement at their institutions.

Planetary Health Curriculum

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

Curriculum: General

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

3	Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year.
2	Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year.
1	The medical school does not have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a lecture on planetary health.
0	No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year.
Score explanation: Loma Linda University School of Medicine offers elective courses to students during pre-clinical years for two-week "selective" periods. There are no planetary health electives or electives that include planetary health topics. In addition to developing standalone selectives to explore these topics, current selectives that have the potential to include planetary health topics in one or more lectures are: Transformative Healthcare and Lifestyle Medicine.	

Curriculum: Health Effects of Climate Change

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

Score explanation: There are no sessions, workshops, or lectures in the medical school core or elective

Score explanation: There are no sessions, workshops, or lectures in the medical school core or elective curriculum that address the relationship between extreme heat, health risks, and climate change. Especially given that our medical school is located in San Bernardino County which regularly

experiences heat-waves and above-100 degree F days in the summers, this topic would lend itself to a relevant session or lecture in the patient-inquiry curriculum (PIQ) problems-based learning threads or Christian Physician Formation course that explores social determinants of health.

1.3. Does your <u>medical school</u> curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems?

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

Score explanation: The medical school curriculum does not address the impacts of extreme weather events on individual health and/or on the healthcare system. Besides extreme heat, other extreme weather events that affect the local San Bernardino area include heavy rains, flooding, and heavy snowfall in the mountains, which have all occurred in the past year.

1.4. Does your <u>medical school</u> curriculum address the impact of climate change on the changing patterns of infectious diseases?

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

Score explanation: Lectures in the microbiology thread of pre-clinical coursework touch on the changing geographic distribution of infectious diseases such as tick-borne and mosquito-borne diseases, although the connection to climate change is not explicitly made. One lecture on antifungals in the Application & Integration Block included a passing comment on the spread of coccidioidomycosis (Valley fever) in California due to climate change.

1.5. Does your <u>medical school</u> curriculum address the respiratory health effects of climate change and air pollution?

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

Score explanation: Respiratory disease lectures in the Pulmonary Block and Occupational Medicine and Toxicology lectures in the Application/Integration Block briefly describe air pollution as a risk factor for respiratory conditions such as asthma, but do not make links with climate change.

1.6. Does your <u>medical school</u> curriculum address the cardiovascular health effects of climate change, including increased heat?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
Score explanation: The medical school curriculum does not address the cardiovascular effects of	

climate change and increased heat.

1.7. Does your <u>medical school</u> curriculum address the mental health and neuropsychological effects of environmental degradation and climate change?

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
Scor	e explanation: The medical school curriculum does not address the mental health and

Score explanation: The medical school curriculum does not address the mental health and neuropsychological effects of environmental degradation and climate change.

1.8. Does your <u>medical school</u> curriculum address the relationships between health, individual patient food and water security, ecosystem health, and climate change?

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

Score explanation: A lecture in the Hematology & Immunology Bock titled "Immunologic Basis of Vaccination" mentions the importance of immunization due to the protection it offers to human populations from an expanding animal reservoir or arthropod habitats from climate change. Increased human travel, animal to human contact, deforestation and encroachment have all contributed to the rise of disease spread and mutation and these are the reasons, highlighted by this lecture, for the need

to have immunization. Lectures on antibiotics and antibiotic resistance in the Application & Integration Block briefly touched on the contribution of animal agriculture to antibiotic resistance.

1.9. Does your <u>medical school</u> curriculum address the outsized impact of climate change on marginalized populations such as those with low SES, women, communities of color, Indigenous communities, children, homeless populations, and older adults?

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

Score explanation: There is no significant information specific to the effect of climate change on marginalized populations, although a lot of focus is placed on the lack of healthcare quality access that these populations have.

1.10. Does your <u>medical school</u> curriculum address the unequal regional health impacts of climate change globally?

3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
Score explanation: The core and elective courses at Loma Linda University do not address the unequal	

health impacts of climate change on various regions of the world.

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

1.11. Does your <u>medical school</u> curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.
Score explanation: Although several lectures in the Pulmonary, Neuroscience, and	

Score explanation: Although several lectures in the Pulmonary, Neuroscience, and Application/Integration Block touch on environmental toxins as a culprit for community-acquired pneumonia, asthma, neurodegenerative disorders, and poisoning such as organophosphates and lead exposures, there was no specific mention of effects of industry-related environmental toxins on reproductive health.

1.12. Does your <u>medical school</u> curriculum address important human-caused environmental threats that are relevant to the university's surrounding community?

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

Score explanation: Although we have been provided many hypothetical case studies in problem-based and team-based learning sessions that might have mentioned the San Bernardino area, there has been no mention of human-caused environmental threats in this local area.

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

- 3 Indigenous knowledge and value systems are **integrated throughout** the medical school's planetary health education
- 2 Indigenous knowledge and value systems as essential components of planetary health solutions are included **briefly** in the core curriculum.
- 1 Indigenous knowledge and value systems as essential components of planetary health solutions are included in **elective** coursework.

0 This topic was **not** covered.

Score explanation: The importance of psychedelics for medicinal use has been highlighted in team-based learning sessions with additional mentions of their cultural significance to indigenous people of the Americas, particularly those of the Mayan and Aztec culture. However, there is no mention of their knowledge as foundational for planetary health solutions.

1.14. Does your <u>medical school</u> curriculum address the outsized impact of anthropogenic environmental toxins on marginalized populations such as those with low SES, women, communities of color, children, homeless populations, Indigenous populations, and older adults?

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

Score explanation: The "Pathophysiology of Pneumonia" lecture in the Pulmonary block mentioned several lifestyle factors, such as residence in low income settings, exposure to environmental toxins and crowded living conditions as risk factors for pneumonia but did not allude to any connection between those factors themselves.

Curriculum: Sustainability

1.15. Does your <u>medical school</u> curriculum address the environmental and health co-benefits of a plant-based diet?

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

Score explanation: Loma Linda University, as an Adventist institution and the site of the Adventist Health studies, promotes plant-based diets for prevention and treatment of chronic diseases. The health benefits of plant-based diets are discussed in preventive and lifestyle medicine lectures, about 1-2 lectures per organ system block in the preclinical curriculum. Topics include whole-food plant-based diets for renal nutrition, cardiovascular health, and Lifestyle Medicine 1 and 2. The health benefits of a plant-based diet is explored in-depth in the core curriculum, but the environmental benefits and co-benefits only briefly explored in the curriculum and a two-week Lifestyle Medicine selective. More emphasis could be placed on the environmental and health co-benefits to receive an "in-depth" score, including references to the work of environmental nutrition researchers at LLU, such as Dr. Joan Sabate.

1.16. Does your <u>medical school</u> curriculum address the carbon footprint of healthcare systems?

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

Score explanation: This topic is not addressed in the medical school curriculum.

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

2 The health **and** environmental **co-benefits** of **avoiding** over-medicalisation, over-investigation and/or over-treatment

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 fulfill this metric.
1	The health and environmental co-benefits of non-pharmaceutical management of conditions where appropriate such as exercise or yoga classes for type 2 diabetes; social group activities such as gardening for mental health conditions; active transport such as bicycle schemes. This is commonly known as social prescribing in the UK.
1	Environmental impact of surgical healthcare on planetary health and the climate crisis, and how can it be mitigated
1	The impact of anesthetic gasses on the healthcare carbon footprint and ways to reduce anesthesia environmental impacts, such as total intravenous anesthesia or choosing less environmentally harmful anesthetic gas options with reduced greenhouse gas emissions
1	The impact of inhalers on the healthcare carbon footprint and the environmental benefit of dry powdered inhalers over metered dose inhalers.
1	Waste production within healthcare clinics and strategies for reducing waste in clinical activities (e.g. single use items in the inpatient or outpatient setting)
Score explanation: At Loma Linda University, the health benefits of lifestyle medicine are discussed in longitudinal lifestyle medicine lectures throughout the curriculum, such as with the lecture "Exercise is Medicine" taught in the Cardiovascular block and the physiology of cycling labs in the Pulmonary block. Community gardens and food insecurity are explored in Christian Physician Formation classes and service opportunities. However, the health and environmental co-benefits of these interventions are not discussed (such as the environmental benefits of cycling, walking, or gardening). None of the other components of sustainable clinical practice are covered in the medical school curriculum.	

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?

- 2 Yes, there are strategies introduced for having conversations with patients about climate change in the **core** curriculum.
- 1 Yes, there are strategies introduced for having conversations with patients about climate change in **elective** coursework.
- 0 No, there are **not** strategies introduced for having conversations with patients about climate change

Score explanation: The curriculum does not introduce strategies to have conversations with patients about the health effects of climate change.

1.19. In training for patient encounters, does your <u>medical school's</u> curriculum introduce strategies for taking an environmental history or exposure history?

Yes, the **core** curriculum includes strategies for taking an environmental history.

2

1 Only **elective** coursework includes strategies for taking an environmental history.

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

Score explanation: At Loma Linda University, the clinical skills curriculum in M1 year includes training on taking a social history. The documents used to teach history-taking includes a brief mention of "occupational exposure history," but this area is not formally mentioned or taught, and no other environmental history is included.

Curriculum: Administrative Support for Planetary Health

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

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

Score explanation: There are currently no active efforts to implement Education for Sustainable Healthcare or planetary health education. Student leaders in LLU Students for a Sustainable Future have had very early conversations with faculty members at LLU and AdventHealth Orlando regarding the need to incorporate planetary health in the curriculum.

1.21. How well are the aforementioned planetary health/Education for Sustainable Healthcare topics integrated longitudinally into the <u>core</u> curriculum?

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

Score explanation: There is no longitudinal integration of planetary health or sustainable healthcare topics in the core curriculum.

1.22. Does your <u>medical school</u> employ a member of faculty to specifically oversee and take responsibility for the incorporation of planetary health and sustainable healthcare as a theme throughout the course?

1 **Yes,** the **medical school** has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare

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

Score explanation: Loma Linda University School of Medicine does not employ a faculty member to oversee incorporation of planetary health and sustainable healthcare as a theme throughout the course. However, topics on sustainability may be suggested to the curriculum committee.

Section Total (6 out of 72)

8.33%

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

Interdisciplinary Research

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

2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your <u>medical school</u>?

- 3 Yes, there are faculty members at the **medical school** who have a **primary r**esearch focus in planetary health **or** healthcare sustainability.
- ² Yes, there are individual faculty members at the **medical school** who are conducting research **related** to planetary health or healthcare sustainability, but it is not their primary research focus.
- 1 There are planetary health and/or healthcare sustainability researchers at the **institution**, but none associated with the medical school.
- 0 No, there are **no** planetary health and/or healthcare sustainability researchers at the **institution** or **medical school** at this time.

Score explanation: Loma Linda University is a research institution with many active clinical and biomedical research studies and researchers. While there are no planetary health or healthcare sustainability researchers directly in the medical school, there is an <u>Environmental Nutrition</u> academic research group in the institution that is affiliated with the LLU School of Public Health. The focus of this group is to explore the interconnection of diet, environmental sustainability, and human health, and food systems solutions to these global challenges.

2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your <u>institution</u>?

3	There is at least one dedicated department or institute for interdisciplinary planetary health research.
2	There is not currently a department or institute for interdisciplinary planetary health research, but there are plans to open one in the next 3 years.
1	There is an Occupational and Environmental Health department , but no interdisciplinary department or institute for planetary health research.
0	There is no dedicated department or institute.
Score explanation: Loma Linda University has an <u>Office of Environmental Health and Safety</u> as well as an <u>Occupational and Environmental Medicine Residency</u> , but no interdisciplinary department or institute for planetary health research.	

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 <u>medical school</u>?

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

Score explanation: Loma Linda University Health's Community Benefit centralizes implementation and reporting of community benefit investments across the four hospitals in the health system (LLU Medical Center, LLU Children's Hospital, LLU Behavioral Medicine Center, and LLUMC-Murrieta). Community Benefit investments include patient care benefits, health professions education, research, and community health benefits. Priorities and goals are driven by the Community Health Needs Assessment, which is a process that is undertaken every three years in collaboration with community-based organizations in San Bernardino and Riverside Counties to identify unmet health needs and identify opportunities for promoting health equity. The Community Benefit website also includes a community feedback form.

A summary of the 2022 CHNA states that "The community identified the following factors as having the greatest potential for improving health outcomes in our region: workforce development, youth education, food security, access to healthcare, behavioral health support, safe and affordable housing, access to green spaces and community safety. LLUH's strategy focuses on improving these underlying social and environmental factors that contribute to health and well-being."

The <u>2023 Community Benefit report</u> highlights the institution's investments in the <u>Jardin de Salud</u> <u>community garden</u> in San Bernardino, weekly fresh produce distribution events, and 438 participants in the San Bernardino Healthy in Nature — Equity (<u>SHiNE</u>) Program outdoor education program offering environmental justice education and access to nature.

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

Score explanation: Loma Linda University does not have a website that centralizes ongoing and past research related to health and the environment.

2.5. Has your <u>institution</u> recently hosted a conference or symposium on topics related to planetary health?	
4	Yes, the medical school has hosted at least one conference or symposium on topics related to planetary health in the past year.
3	Yes, the institution has hosted at least one conference or symposium on topics related to planetary health in the past year.
2	Yes, the institution has hosted a conference on topics related to planetary health in the past three years.
1	The institution has not hosted any conferences directly, but they have provided financial support for a local planetary health event.
0	No, the institution has not hosted a conference on topics related to planetary health in the past three years.
Score explanation: Loma Linda University has not hosted a symposium or conference on planetary health. However, they provided financial support for a student-led event in 2023 on the Health Impacts of Warehouses.	

2.6. Is your <u>medical school</u> a member of a national or international planetary health or ESH organization?

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

Score explanation: Loma Linda University School of Medicine is a member of the international planetary health organization, <u>Practice Greenhealth</u>, as of late 2023.

Section Total (6 out of 17)

35.29%

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

Community Outreach and Advocacy

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

3.1. Does your <u>medical school</u> partner with community organizations to promote planetary and environmental health?

- 3 Yes, the **medical school** meaningfully partners with **multiple** community organizations to promote planetary and environmental health.
- 2 Yes, the **medical school** meaningfully partners with **one** community organization to promote planetary and environmental health.
- 1 The **institution** partners with community organizations, but the medical school is not part of that partnership.
- 0 No, there is **no** such meaningful community partnership.

Score explanation: The institution has various initiatives to improve and better serve the health and well-being of people across the community. The efforts that are planetary and environmental health related are conducted by the Department of Earth and Biological Sciences (EBS).

According to the <u>2023 Community Benefit report</u>, the LLU Institute for Community Partnerships (ICP) oversees the Jardin de Salud community garden program in San Bernardino, which is a 1.8 acre garden with 52 garden plots for local families. Additionally, ICP supports the SHiNE program (San Bernardino Healthy in Nature – Equity) which provides free garden workshops, day trips, and overnight trips to families and youth providing access to nature (such as Joshua Tree excursions) and environmental justice education.

3.2. Does your <u>medical school</u> offer community-facing courses or events regarding planetary health?	
3	The medical school offers community-facing courses or events at least once every year.
2	The medical school offers courses or events open to the community at least once per year, but they are not primarily created for a community audience.
1	The institution has offered community-facing courses or events, but the medical school was not involved in planning those courses or events.
0	The institution/medical school have not offered such community-facing courses or events.

Score explanation: The institution/medical school does not offer community-facing courses or events regarding planetary health, but it does regularly offer community-facing courses or events on other topics such as diversity and inclusion, health policy, and various continuing education courses. Examples of such events include the <u>Spotlight on Health Policy</u> series developed by the Institute for Health Policy & Leadership.

3.3. Does your <u>medical school</u> have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications?	
2	Yes, all students regularly receive communication updates dedicated to planetary health and/or sustainable healthcare.
1	Yes, planetary health and/or sustainable healthcare topics are sometimes included in communication updates.
0	Students do not receive communications about planetary health or sustainable healthcare.
Score explanation: Campus Connections, University News, and Student Affairs email blast do not	

3.4. Does the <u>institution</u> or <u>main affiliated hospital trust</u> engage in professional education activities targeting individuals post graduation with the aim of ensuring their knowledge and skills in planetary health and sustainable healthcare remain up to date during their professional career?

- Yes, the **institution** or **main affiliated hospital trust** offers multiple in-person or online courses relating to planetary health and/or sustainable healthcare for post-graduate providers, including at least one with a primary focus of planetary health.
- 1 Yes, the **institution** or **main affiliated hospital trust** offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers
- 0 There are **no** such accessible courses for post-graduate providers

include communications about planetary health or sustainable healthcare.

Score explanation: Post-graduate courses do not include planetary health and sustainable healthcare modules.

3.5. Does your <u>medical school</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about environmental health exposures?	
2	Yes, the medical school or all affiliated hospitals have accessible educational materials for patients.
1	Some affiliated hospitals have accessible educational materials for patients.
0	No affiliated medical centres have accessible educational materials for patients.

Score explanation: Some of the clinics and hospitals have educational materials on environmental health exposures accessible to patients in the form of posters and pamphlets.

3.6. Does your <u>medical school</u> or its <u>affiliated teaching hospitals</u> have accessible educational materials for patients about the health impacts of climate change?	
2	Yes, the medical school or all affiliated hospitals have accessible educational materials for patients.
1	Some affiliated hospitals have accessible educational materials for patients.
0	No affiliated hospitals have accessible educational materials for patients.
Score explanation: There is no accessible material for patients about the health impacts of climate change.	

Section Total (4 out of 14)

28.57%

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

Support for Student-Led Planetary Health Initiatives

Section Overview: This section evaluates institutional support for student-led planetary health initiatives, such as funding, fellowships, programming, and student groups. Planetary health is a young field and, as young people facing a future deeply shaped by climate change, students are often some of the first at an institution to engage with it. Institutions should provide support for students to engage in sustainability quality improvement (QI) initiatives, discover mentors in their area of interest, and receive funding for planetary health projects.

4.1. Does your <u>medical school</u> or your <u>institution</u> offer support for medical students interested in enacting a sustainability initiative/QI project?

- 2 Yes, the **medical school** or **institution** *either* offers grants for students to enact sustainability initiatives/QI projects *or* sustainability QI projects are part of the core curriculum.
- The **medical school** or **institution** encourages sustainability QI projects (to fulfill clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, **but** there is no student funding available and there is no requirement to participate.
- 0 No, **neither** the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects.

Score explanation: There are no formal grants or funding for sustainability-related projects at LLU, but students may pursue sustainability-related research or independent projects to satisfy degree requirements. Examples include writing policy or issue briefs for the <u>Institute for Health Policy and</u> <u>Leadership</u> or conducting independent research projects for practicum or capstone requirements. These sustainability-related practicum or research projects are mainly self-directed. Past sustainability-related topics covered in IHPL policy or issue briefs have included: <u>Feb 2022 - Climate</u> <u>Change Provisions of the Infrastructure Investment and Jobs Act (H.R. 3684)</u>, <u>Dec 2023 - Indoor Air</u> <u>Pollution from Gas Appliances</u>, <u>Nov 2023 - Improving Bicycle Infrastructure for Injury Prevention</u>, and Feb 2023 - Warehouses and Air Ouality in the Inland Empire.

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

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

Score explanation: There are opportunities for medical students to perform research related to planetary health topics through the <u>School of Public Health</u>; <u>Department of Earth and Biological</u> <u>Sciences</u>, <u>Basic Sciences</u>; <u>MacPherson Society Summer Research</u>; <u>Institute for Health Policy & Leadership</u>; <u>Policy, Advocacy, Leadership</u>, and <u>Service Certificate track capstone project</u>, and individual mentors. However, there is not a specific research or fellowship program for medical

students at this time dedicated to planetary health or sustainable healthcare research. Opportunities have to be sought out or self-directed by students.

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

The **medical school** has a webpage with specific information related to planetary health or sustainable healthcare that includes up-to-date information on relevant initiatives and contact information of potential mentors.

There is a **medical school** webpage that features some information on projects and mentors within planetary health and sustainable healthcare within the medical school, but it lacks key information.

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

Score explanation: There is a <u>medical school webpage</u> for the <u>Department of Earth and Biological</u> <u>Sciences</u> and <u>summer research programs</u> which features some information on projects and faculty who may be involved in planetary health research, but it lacks key details like specific initiatives. However, <u>contact information for faculty and their research interests</u> are provided. There is no website for any Office of Sustainability or list of specific research projects.

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

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

Score explanation: Loma Linda University Students for a Sustainable Future (LLUS4SF) is an interdisciplinary student group aimed at (a) fostering a broad student interest in environmental sustainability, especially as it relates to the health of the planet and patients, and (b) providing leadership, programs, and service opportunities to assist students in developing skills to make a difference in the institution and community through advocacy, curriculum reform, research, and climate-smart health care. The group receives annual funds through the School of Medicine Student Association Senate and is supported by faculty mentors in the School of Medicine.

4.5. Is there a student liaison representing sustainability interests who serves on a <u>medical school</u> or <u>institutional</u> decision-making council to advocate for curriculum reform and/or sustainability

1	Yes, there is a student representative that serves on a medical school or institutional decision-making council/committee.	
0	No, there is no such student representative.	
Score explanation: Loma Linda University School of Medicine has a medical student representative from LLU Students for a Sustainable Future that is involved in the LLUH Environmental Sustainability Committee. The ESC is a new cross-disciplinary initiative among hospital and university stakeholders		

best practices?

Committee. The ESC is a new cross-disciplinary initiative among hospital and university stakeholders with the goal of championing climate health and environmental stewardship at Loma Linda University Hospital. This committee is responsible for developing strategies, action plans, measuring the impact, and enacting change.

The Environmental Sustainability Committee was launched late 2023, and was <u>described in the 2023</u> <u><i>Community Benefit report</u> as follows:

"This cross-disciplinary team, comprised of leaders from across healthcare and education, along with engaged students and residents, will actively develop a coordinated strategy to identify and address environmental challenges.

Recognizing the crucial link between hospitals' environmental impact and health equity, LLUH's current Strategic Plan commits to reducing its carbon footprint and adopting strategies to safeguard the natural environment. During FY 2024, LLUH will initiate a comprehensive assessment of its systemwide environmental impact, laying the foundation for a roadmap focused on reducing the institution's environmental footprint. Additionally, LLUH plans to introduce actionable ways for all LLUH employees and students to actively participate in sustainability solutions."

4.6. In the past year, has the <u>institution</u> had one or more co-curricular planetary health programs or initiatives in the following categories? (1 point each)	
1	Projects where students are able to gain experience in organic agriculture and sustainable food systems, such as gardens, farms, community supported agriculture (CSA), fishery programs, or urban agriculture projects.
1	Panels, speaker series, or similar events related to planetary health that have students as an intended audience.
1	Events in which students learn directly from members of a local environmental justice community about the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.
1	Cultural arts events, installations or performances related to planetary health that have students as an intended audience.
1	Local volunteer opportunities related to building community resilience to anthropogenic environmental impacts.
1	Wilderness or outdoors programs (e.g., that organize hiking, backpacking, kayaking, or other outings for students)
Score explanation: 1. There is a student-run Gardening Club at the university where students can gain experience	

with organic gardening. The Jardín de la Salud is a Community Garden initiative of Loma

Linda University Community-Academic Partners in Service provides wholesome produce and safe outdoor green spaces to the local San Bernardino community. Students can volunteer and help maintain the garden. The university also organizes opportunities to volunteer for fresh produce distribution in the community, assist the Helping Hands Pantry, and package food boxes at Community Action Partnership of San Bernardino County Food Bank.

- 2. The Loma Linda University Students for a Sustainable Future student organization and the Social Determinants of Health Committee offered a planetary health event in April 2023 for students on the Health Impacts of Warehouses in the Inland Empire.
- 3. The aforementioned event featured panel speakers who are local environmental justice leaders (the Center for Community Action and Environmental Justice & the Chicano Indigenous Community for Culturally Conscious Advocacy and Action), public health professors, local government representatives, and health care professionals. They educated on the climate and environmental challenges they face, and how health professionals can partner with their community to address these exposures and impacts.
- 4. The Wilderness Medicine Interest Group, Hulda Hikers, and Running Club organize outdoor outings for students (hiking, running, bouldering events). The University also hosts a yearly retreat at Pine Springs Ranch in Mountain Center with hiking activities.

Section Total (10 out of 15)

66.67%

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

Campus Sustainability

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

5.1.	5.1. Does your medical school and/or institution have an Office of Sustainability?	
3	Yes, there is an Office of Sustainability with multiple full-time staff dedicated to campus sustainability. If the Office of Sustainability serves the entire campus, there is at least one designated staff member for sustainability at the hospital and/or medical school.	
2	There is an Office of Sustainability with one or more full-time staff dedicated to campus sustainability, but no specific staff member in charge of medical school and/or hospital sustainability.	
1	There are no salaried sustainability staff , but there is a sustainability task force or committee	
0	There are no staff members or task force responsible for overseeing campus sustainability	
Score explanation: Loma Linda University does not have an Office of Sustainability but there is an LLUH Environmental Sustainability Committee with the involvement of salaried staff employed by the Institute for Community Partnerships-Community Benefit and Environmental Health & Safety.		

5.2. How ambitious is your <u>institution/medical school</u> plan to reduce its own carbon footprint?		
5	The institution/medical school has a written and approved plan to achieve carbon neutrality by 2030	
3	The institution/medical school has a written and approved plan to achieve carbon neutrality by 2040	
1	The institution/medical school has a stated goal of carbon neutrality by 2040 but has not created a plan to reach that goal or the plan is inadequate	
0	The institution/medical school does not meet any of the requirements listed above	
	Score explanation: Loma Linda University does not have any explicitly stated carbon neutrality goals or plans. Loma Linda University Health recently joined <u>Practice Greenhealth</u> , which offers a broad variety of practical tools, data, resources, and expert technical support on sustainability initiatives that help member organizations meet their goals.	

The aforementioned LLUH Environmental Sustainability Committee will be identifying a roadmap and collecting baseline and ongoing data to reduce the institution's environmental footprint, but the plan and goal has not yet been developed.

5.3. Do buildings/infrastructure used by the <u>medical school</u> for teaching (not including the hospital) utilize renewable energy?		
3	Yes medical school buildings are 100% powered by renewable energy	
2	Medical school buildings source >80% of energy needs from off-site and/or on-site renewable energy.	
1	Medical school buildings source >20% of energy needs from off-site and/or on-site renewable energy.	
0	Medical school buildings source <20% of energy needs from off-site and/or on-site renewable energy.	
Score explanation: Loma Linda University's Medical School buildings utilize the University's Central Utilities Plant for energy needs which runs on natural gas. Their thermal energy storage tank facility also allows the power plant to create chilled or heated water during the hours when electricity is least		

Score explanation: Loma Linda University's Medical School buildings utilize the University's Central Utilities Plant for energy needs which runs on natural gas. Their thermal energy storage tank facility also allows the power plant to create chilled or heated water during the hours when electricity is least expensive to store for use during the day. One building in the health system, the LLUH/SACHS San Bernardino Campus building (community clinic with a gateway college) is LEED Silver certified.

5.4. Are sustainable building practices utilized for new and old buildings on the <u>medical school</u> campus, with design and construction of new buildings and remodeling of old buildings conforming to a published sustainability rating system or building code/guideline?

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

Score explanation: Loma Linda University does not currently follow LEED, Green Globes, and the National Green Building Standard in building decisions. However, there are some environmental efforts taking place for buildings, including the consideration of sustainable practices for recent new construction as well as some retrofitting efforts.

5.5. Has the <u>medical school</u> or <u>institution</u> implemented strategies to encourage and provide environmentally-friendly transportation options for students and reduce the environmental impact of commuting?

² Yes, the medical school or 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-utilized by students. Alternatively, the campus location is not amenable to unsustainable forms of transportation by default.

The medical school or institution has implemented **some** strategies to provide environmentally-friendly transportation options, but the options are **unsatisfactorily** accessible or advertised.

0 The medical school or institution has **not** implemented strategies to encourage and provide environmentally-friendly transportation options.

Score explanation: The <u>LLU Transportation Department</u> manages shuttle services throughout the campuses and facilitates carpooling and bike parking programs, but these resources are not marketed widely and there are opportunities for improvement such as implementing car share and bike share programs and incentivizing carpooling and biking to work/school.

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

2	Yes, the medical school has both compost and recycling programs accessible to students and faculty.
1	The medical school has either recycling or compost programs accessible to students and faculty, but not both.

0 There is **no** compost or recycling program at the medical school.

Score explanation: There are recycle bins around campus but there are no composting programs accessible to students and faculty. Landscaping waste is composted, but organic waste generated from hospital and university food services is not yet composted. The university is aware of California law (SB 1383) which mandates organics waste recycling and will be developing a plan to comply with this.

5.7. Does the <u>medical school</u> apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?

3	Yes, the medical school has 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.	
2	There are sustainability guidelines for food and beverages, but they are insufficient or optional . The medical school is engaged in efforts to increase food and beverage sustainability.	
1	There are sustainability guidelines for food and beverages, but they are insufficient or optional. The medical school is not engaged in efforts to increase food and beverage sustainability.	
0	There are no sustainability guidelines for food and beverages.	
Score explanation: Loma Linda University serves an exclusive vegetarian diet throughout their dining areas on campus and at the hospital, and a vegetarian-by-default diet for patients in the hospital: The on-campus <u>cafeterias serve exclusively lacto-ovo-vegetarian menus</u> (no meat) and include the Councilors Student Pavilion, the Faculty Dining Room, Cafe 197, and Farmacy Fresh Cafe. <u>University catering</u> serves an exclusively		

vegetarian menu. All on-campus events that serve food are required to serve vegetarian or vegan food only. The <u>hospital cafeterias</u> at LLUMC, East Campus Hospital, Surgical Hospital, Behavioral Medical Center, and Faculty Medical Offices, serve entirely vegetarian cuisine. LLU Dining Services states: "As a Seventh-day Adventist institution, Loma Linda University Health has promoted a vegetarian diet for over a century. During this time numerous scientific findings have confirmed a vegetarian diet lowers the risk of many chronic conditions and can improve your health. Therefore, we promote a lacto-ovo vegetarian (vegetable, eggs, dairy and no meat) diet in our dining areas and catering department. We believe healthy nutrition is foundational to our overall health."

The LLUMC hospital cafeteria has recently begun sourcing more locally-sourced items on the menu, and highlights these items with signs in the cafeteria. Patients in the hospital are served <u>vegetarian meals by-default</u> upon admission, but patients can opt for meat items if they choose. The medical center is also rolling out an inpatient therapeutic meals program that features a fully plant-based menu for patients. Aside from vegetarian and plant-based menus, there are no formal sustainability requirements for menus and food sourcing. However, the commitment to serving vegetarian menus and promoting a plant-based diet across the institution is a long-standing commitment to promoting health through nutrition and has sustainability benefits.

5.8. Does the <u>medical school</u> or <u>institution</u> apply sustainability criteria when making decisions about supply procurement?

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

Score explanation: Loma Linda University currently has no sustainability guidelines for supply procurement.

5.9. Are there sustainability requirements or guidelines for events hosted at the medical school?			
2	Every event hosted at the medical school must abide by sustainability criteria.		
1	The medical school strongly recommends or incentivizes sustainability measures, but they are not required.		
0	There are no sustainability guidelines for medical school events.		
	Score explanation: Loma Linda University currently has no sustainability guidelines for medical school events.		

5.10. Does your <u>medical school</u> have programs and initiatives to assist with making lab spaces more environmentally sustainable?

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

Score explanation: Loma Linda University SOM faculty have started the nonprofit organization, <u>My Green</u> <u>Lab</u>, which includes initiatives to assist with making lab spaces more environmentally sustainable on campus.

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 4 **divested funds** into renewable energy companies or renewable energy campus initiatives. 3 The institution is entirely divested from fossil fuels. The institution has **partially divested** from fossil fuel companies or has made a **commitment to** 2 fully divest, but currently still has fossil fuel investments. The institution has **not divested** from fossil-fuel companies, but faculty and/or students are 1 conducting organized advocacy for divestment. Yes, the institution has investments with fossil-fuel companies and there have been **no efforts** to 0 change that. Score explanation: Loma Linda University's Investment Policy Statement does not exclude investments in fossil fuel. There have been no organized efforts to change this.

Section Total (9 out of 32)

28.13%

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

Grading

Section Overview

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

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

Planetary Health Grades for the Loma Linda School of Medicine

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(6/72) \ge 100 = 8.33\%$	F
Interdisciplinary Research (17.5%)	(6/17) x 100 = 35.29%	D+
Community Outreach and Advocacy (17.5%)	(4/14) x 100 = 28.57%	D
Support for Student-led Planetary Health Initiatives (17.5%)	(10/15) x 100= 66.67%	В
Campus Sustainability (17.5%)	(9/32) x 100 = 28.13%	D
Institutional Grade	(Ax0.3 + Bx0.175 + Cx0.175 + Dx0.175 + Ex0.175) = 30.27%	D

Report Card Trends

Section Overview

This is Loma Linda University SOM's first year participating in the Planetary Health Report Card initiative.