



Planetary Health Report Card (Medicine): *Rosalind Franklin University*



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Summary of Findings

Overall	C
<u>Curriculum</u>	C+
<ul style="list-style-type: none"> • Chicago Medical School (CMS) has made strong efforts to include information on pollution and environmental risk factors. Environmental racism was thoroughly discussed through longitudinal core coursework.. • Recommendations: While several social determinants of health are discussed, core courses do not directly link these determinants to planetary health. Overall, the curriculum should have a greater focus on marginalized populations and emphasize Indigenous knowledge of environmental practices. 	
<u>Interdisciplinary Research</u>	C
<ul style="list-style-type: none"> • Rosalind Franklin University’s symposium regarding Women’s Health and Climate change was directly related to planetary health, although it was a university-wide event not limited to medical students. • Recommendations: CMS could also partner with many of the local organizations in Waukegan working to solve pressing environment problems such as the Brushwood Center. 	
<u>Community Outreach and Advocacy</u>	C
<ul style="list-style-type: none"> • CMS has some coverage of issues relating to planetary health but does not have community partnerships dedicated to promoting planetary health. • Recommendations: CMS should establish educational materials about environmental health exposures and climate change for patients at the interprofessional community clinic or as an online resource. A climate-specific newsletter can be sent out to all medical students. 	
<u>Support for Student-Led Initiatives</u>	B-
<ul style="list-style-type: none"> • CMS demonstrates some support for student-led initiatives in planetary health, including student groups and co-curricular programs. However, much of the support originates from broader university initiatives rather than specific support from the medical school itself. • Recommendations: CMS should enhance its support for student-led initiatives by providing dedicated funding opportunities for sustainability projects and research in planetary health. Establishing a centralized resource hub on the CMS website would facilitate easier access to mentors, ongoing projects, and opportunities related to planetary health and sustainable healthcare. 	
<u>Campus Sustainability</u>	D
<ul style="list-style-type: none"> • CMS has an Office of Sustainability made up of volunteer faculty members. The university utilizes sustainable building practices for new buildings. Environmentally friendly transportation methods are provided, recycling bins are available, and there is a variety of plant-based food options for students.. • Recommendations: Rosalind Franklin University should begin to reinvest its funds into greener sources of energy and divest from fossil fuels. The university should develop and implement stronger sustainability guidelines for lab spaces, hosted events, supply procurement, food options and packaging and when retrofitting older buildings to be more sustainable. A composting program should be initiated. The university should also develop an office of sustainability with a full-time salaried staff to serve the entire campus's sustainability effort. 	

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 civilization 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 Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:
 1. Describe how the environment and human health interact at different levels.
 2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
 3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.
- **Medical School vs. Institution:** When “medical school” is specified in the report card, this only refers to curriculum and resources offered by the School of Medicine and does not include offerings from other parts of the university (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 [Literature Review by Metric](#) collates the evidence behind each of the metrics in the Planetary Health Report Card. It serves as a collection of references for further learning and a resource for those advocating for increased planetary health engagement at their institutions.

Planetary Health Curriculum

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 medical school offer elective courses (student selected modules) to engage students in Education for Sustainable Healthcare or Planetary Health in the last year?	
3	Yes, the medical school has offered more than one elective whose primary focus is ESH/planetary health in the past year.
2	Yes, the medical school has offered one elective whose primary focus is ESH/planetary health in the past year.
1	The medical school does not have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a lecture on planetary health.
0	No, the medical school has not offered any electives on planetary health or electives that include ESH/planetary health topics in the past year.
<p><i>Score explanation:</i> Chicago Medical School does not offer any elective courses specific to planetary health or environmental impact. Several electives offered to students, such as the “Stories of Health Disparities” elective offered to fourth-year students, include readings and lectures pertaining to environmental impacts on health outcomes, but do not solely focus on education for sustainable healthcare.</p> <p>A Global Health elective offered to fourth-year students is partnered with Child Family Health International (CFHI). Depending on the specific CFHI site, there is the opportunity for students to learn about the impact on climate change on health in a particular environment as planetary health is a focus of many CFHI programs; however, it is not a required focus for students.</p>	

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.
<p><i>Score explanation:</i> The Rosalind Franklin Chicago Medical School Clinical Foundations of Medicine (CFoM) first-year course includes a mandatory 4-hour EcoAmerica Ambassador climate health training and 3 hour interactive debrief session. The CFoM course also briefly mentions the increased risk of preterm delivery associated with heat and air pollution exposure in the “Preventative Care,” models of care lecture on a single slide.</p> <p>The Emerging Issues in Global Health elective included a symposium from the Women in Science and Healthcare on 09.14.23 which was titled “Re-thinking Women's Health in a Changing Climate” and discussed the effects of climate changes in developing countries on women’s health.</p>	

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.
<p><i>Score explanation:</i> Chicago Medical School’s core course Endocrinology and Reproduction goes into depth regarding the health implications of extreme weather events. This is explored in physiology, such as in a lecture on the glucocorticoid stress response and its role during environmental challenges, as well as in epidemiological terms regarding chronic pain syndromes. In a lecture titled “Meteorological Factors Effects”, the effects of extreme weather on chronic prostatitis, chronic pelvic pain, and bladder pain syndromes is explored. The burden of weather-related/induced health effects on the healthcare system is also discussed.</p> <p>In addition, The Rosalind Franklin Chicago Medical School Clinical Foundations of Medicine (CFoM) first-year course includes a mandatory 4-hour EcoAmerica Ambassador climate health training and 3 hour interactive debrief session, which discuss climate change and climate disasters on human health.</p>	

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.
<p><i>Score explanation:</i> Chicago Medical School’s curriculum does not address the impact of climate change on infectious diseases.</p>	

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

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

Score explanation: The Chicago Medical School Scientific Foundations of Medicine (SFoM) first-year course discusses anthracosis in individuals who live in urban environments in the lecture, “Pathology-Cellular Reaction to Injury: Intracellular Accumulations.” The SFoM course also briefly mentions the effects of air pollutants on CYP enzyme function and drug metabolism on one slide of the lecture “Pharmacokinetics, Clinical Applications of Pharmacokinetics, & Pharmacodynamics.”

Respiratory health effects in relation to air pollution are further mentioned in the first-year Pulmonology course when discussing the etiologies of chronic bronchitis, small airway disease, and centrilobular emphysema. Additionally, associations between asthma and urban air pollutants were examined.

Chicago Medical School’s Clinical Epidemiology course includes a lecture on health disparities, which examines how urban-dwelling individuals are disproportionately at risk for pollutant and aerosol exposure, negatively impacting their life expectancy. Students compared life expectancy of different areas near our medical school. A separate lecture titled “Epidemiology Concepts II” connects environmental exposures to air pollutants and toxins in drinking water to adverse health indicators and outcomes.

The first-year CFoM course connects air pollution and heat exposure with risk for preterm birth. In a mandatory 50 min lecture in CFoM, a guest speaker working in occupational and environmental health describes the impact of air pollution on disease risk and development. The lecture is titled “Health Impacts of Air Pollution: Medical Care’s Role in Creating The Burden & Ending It”.

1.6. Does your medical school curriculum address the cardiovascular health effects of climate change, including increased heat?

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

Score explanation: The first-year Cardiology course incorporates one slide on the effects of increased heat on the cardiovascular system in the “Cardiac Action Potential and Contraction” lecture. Pathologies are not related to climate change.

1.7. Does your medical school curriculum address the mental health and neuropsychological

effects of environmental degradation and climate change?	
3	This topic was explored in depth by the core curriculum.
2	This topic was briefly covered in the core curriculum.
1	This topic was covered in elective coursework.
0	This topic was not covered.

Score explanation: In a lecture about chronic pain, the Endocrinology and Reproduction core course discussed the effects of extreme weather on mood and chronic health issues (including mental health issues) across three slides, noting that climate change negatively impacted mental health and exacerbated physical illnesses.

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: At Chicago Medical School, the Endocrinology and Reproduction curriculum includes a lecture dedicated to Type II Diabetes Mellitus and related environmental risks. The lecture spends one slide listing environmental risk factors (arsenic, bisphenol A, organophosphates, chlorinated pesticides, air pollution), and then spends the next few slides discussing the role of global warming and wildfires in exacerbating diabetes. Climate change was discussed in relation to reduced pulmonary function and increased morbidity and mortality of patients with Type II Diabetes Mellitus.

In addition, the SFoM course briefly discusses the impacts of climate change on childhood malnutrition in the “Metabolism, Nutrition, and Energy” lecture. The relevant slide emphasizes the increase in childhood malnutrition as temperatures and droughts increase due to climate change.

The first-year course Foundations for Interprofessional Practice requires students to participate in a module titled “Social Determinants of Health”, which explores the relationships between general health and food choices, food security, water quality, housing, safety, and access to transit.

Chicago Medical School’s Clinical Epidemiology course mentions the Traditional Triad of Disease (environmental factors, social interventions, and preventative services). This included discussion of climate, population density, social structures, housing quality, sanitation, and water; lead exposure and related developmental issues in Flint, Michigan was used as a case example to teach these relationships.

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?	
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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.
<p><i>Score explanation:</i> Chicago Medical School’s course P2H2 includes a mandatory session called “Climate change and environmental racism: Impact on Health.” This core curriculum course addresses Metric 1.9 in-depth.</p> <p>Chicago Medical School’s elective courses in Conversational Spanish and Advanced Conversational Spanish explore global and cultural competencies; learning about these highlights the racial disparities in and among climate change-related health outcomes. However, these are student-driven discussions. Still, the criteria of the elective states learners must discuss existing inequities for diverse (Latinx) patient populations.</p>	

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.
<p><i>Score explanation:</i> In the “Metabolism, Nutrition, and Energy” lecture in the first-year SFoM course, Chad, Eritrea, Sudan, South Sudan, Somalia, and Yemen are identified as being the most vulnerable to globally increasing droughts. There is mention of unequal health impacts varying across global regions, but this topic is not further investigated.</p>	

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.
<p><i>Score explanation:</i> At Chicago Medical School, the lectures titled, “Teratology and Epidemiology of Birth Defects” and “Pregnancy and Climate Change” discussed the effects of environmental toxins on birth outcomes/the infant as well as on the pregnant mother/pregnancy complications.</p>	

In addition to the above lectures, the Clinical Foundations of Medicine (CFoM) course for first year students requires a “scholarly project,” which includes a 4-hour EcoAmerica Ambassador Training program. This training focuses on effects of climate change on respiratory, cardiovascular, and reproductive health. The CFoM course also included a 3 hour debrief interactive session discussing planetary and human health.

In addition to EcoAmerica through the CFoM course, the Preventative Care models of care presentation mentions the increased risk of preterm delivery with heat and air pollution exposure.

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

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

Score explanation: Students at the Chicago Medical School are required to construct a Community Health Improvement Plan to address a specific Lake County public health issue as part of the first-year Clinical Epidemiology course. The project spans multiple sessions and culminates in a report/analysis and group oral presentation. A separate lecture in the Clinical Epidemiology course titled “Principles of Study Design” briefly mentions industrial pollution in Chicago and Lake County.

Students also have an opportunity to research environmental threats relevant to local communities during the first-year Foundations for Interprofessional Practice course. The course includes a module that requires students to analyze programs offered by the Lake County Health Department that address specific issues.

In addition, the fourth-year Principles of Professionalism, Healthcare, and Health Equity IV course includes a detailed session on climate change and environmental racism. Students hear from representatives of the Clean Power Lake County, which is a community-driven nonprofit organization committed to local action to secure environmental, economic, and racial justice. The manager of Brushwood Center's collective strategy for community art and nature programs also presents at this interaction session. Learning objectives for the session include “Reflect on the physician’s role in environmental advocacy”.

1.13. To what extent does your medical school 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.
<i>Score explanation:</i> The Chicago Medical School curriculum does not address the importance of Indigenous knowledge in 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.
<p><i>Score explanation:</i> The Clinical Epidemiology lecture titled, “Epidemiology in Practice” explores social determinants of health, some of which include toxin exposure and physical environment. The lecture relates these determinants directly to structural racism/racial inequities, socioeconomic status, ethnic background, and ultimately, health outcomes.</p> <p>In addition, the first-year Principles of Professionalism, Health Care and Health Equity I discusses how redlining has been associated with higher rates of air pollution and asthma. The course presents and adds context to statistics that describe race as the most significant predictor of a person living near contaminated air, water, or soil. Structural issues and opportunities for policy advocacy are identified; specifically, that people of color are significantly more likely to have their claims against polluters denied by the EPA.</p> <p>In the fourth-year core course of Principles of Professionalism, Health Care and Health Equity IV, a lecture is dedicated to environmental justice and examining disproportionate impacts of environmental toxins on marginalized populations.</p> <p>The Gastroenterology course lecture titled, “Absorption and Secretion” mentions increased risk of heavy metal (lead, cadmium, polonium) poisoning due to increased exposure of heavy metals—which act on intestinal divalent metal transporters—caused by modern mining. Furthermore, the Infection, Immunology, and Hematology course includes a lecture titled, “Pathology: Cell Injury 1”, which mentions radon exposure from uranium mining in the development of cancers. However, the course does not explicitly connect the exposure to mining toxins to marginalized populations.</p>	

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.
<p><i>Score explanation:</i> Chicago Medical School’s second-year electives “Nutrition throughout the Life Cycle” and “Nutrition in Chronic Disease” include considerations of the plant-based diets in context of health and chronic disease. The courses review the Mediterranean diet and DASH diet, although they do not explore the co-benefits of such diets to the environment.</p> <p>The Lifestyle Medicine elective also discusses the benefits of a plant-based diet on individual health.</p> <p>The Foundations for Interprofessional Practice course includes a mandatory module that introduces students to the “6 pillars of lifestyle medicine”, in which plant-based diets and other non-pharmacological interventions for positive health outcomes are discussed. This course is part of the core curriculum; however, it does not examine the benefits of a plant-based diet on the overall environment.</p>	

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.
<p><i>Score explanation:</i> The Chicago Medical School curriculum does not address the carbon footprint of the healthcare system.</p>	

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)
<p><i>Score explanation:</i> The Chicago Medical School includes an elective for Physical Medicine & Rehabilitation during the second year that mentions that the use of ethyl chloride as a pre-procedure anesthetic is not preferred due to environmental impact.</p> <p>Various courses mention the disadvantages of polypharmacy; however, they do not relate this issue to sustainable clinical practices.</p>	

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
<p><i>Score explanation:</i> The Chicago Medical School Clinical Foundations of Medicine (CFoM) course requires that students complete the EcoAmerica ambassador training, which involves a 3-hour debrief and interactive exercises where students model conversations about climate health in various settings. Strategies for raising awareness about climate change and health effects were the primary focus of this session; story-telling, presenting statistics, and demonstrating empathy were among the skills practiced. Medical students were asked to brainstorm opportunities where they might be able to engage others in conversations about climate health.</p>	

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?	
2	Yes, the core curriculum includes strategies for taking an environmental history.
1	Only elective coursework includes strategies for taking an environmental history.
0	No, the curriculum does not include strategies for taking an environmental history.
<p><i>Score explanation:</i> Chicago Medical School introduces second year students to the Structural Vulnerability Assessment Tool as part of a history-taking strategy and to screen for social and environmental risks. This tool is presented as part of a greater discussion on social determinants of health.</p>	

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?

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: The Chicago Medical School identified Climate Change as a major enhancement necessary for the medical curriculum during the Spring 2022 Curricular Retreat. During a meeting on 12.20.22, the Curriculum Sub-Committee associated Climate Change as part of an overall curriculum improvement to better meet 7.5 LCME Standards (Common Societal Problems). A task force was established, a literature review was conducted in order to identify rationale for curricular inclusion and/or enhancement (including societal costs, medical consequence, etc.), a cursory analysis of required resources was performed, and faculty champions and aligned courses were identified. Climate change was named a priority among 6 others in the University’s Strategic Plan of 2023.

Upon meeting with the course directors of M1-M2 schema cases (problem based learning sessions), students, faculty, and members of the CMS student chapter of the Medical Society Consortium on Climate and Health discussed ways to integrate climate health into these cases. This is currently being reviewed by course directors.

In other courses such as Clinical Foundations of Medicine and the Endocrinology block, new material related to carbon-footprint of the healthcare system, climate endocrine disruptors, and environmental health is planned for the next school year. Updates to curriculum include faculty education on climate related topics.

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

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

Score explanation: The Chicago Medical School has a Vertical and Horizontal Integration Sub-Committee, which is charged with providing recommendations directly to the Curriculum Committee on improving vertical and horizontal integration, content placement, and reducing gaps and redundancies throughout the four years of the curriculum. Planetary health and education for sustainable healthcare are incorporated into several core courses. However, they are addressed in each course to varying degrees, indicating the presence of gaps. Still, students are exposed to information directly about or relating to climate change and sustainable healthcare across all four years of their medical education.

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 <u>medical school</u> has a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare
0	No, the <u>medical school</u> does not have a specific faculty/staff member responsible for overseeing curricular integration of planetary health and sustainable healthcare.
<i>Score explanation:</i> Currently, there is no faculty role specifically responsible for overseeing curricular integration of planetary health curriculum at the Chicago Medical School.	

Section Total (x out of 72)	43
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Back to Summary Page [here](#)

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

Interdisciplinary Research

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

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 research 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.
<p><i>Score explanation:</i> Chicago Medical School at Rosalind Franklin currently has researchers investigating health issues related to planetary health, but none who have a primary research focus in planetary health or healthcare sustainability. Related to planetary health is a project investigating the health impacts of chemical exposure during wartime and this is conducted by a faculty member of Chicago Medical School. In addition, faculty of the university are investigating specific biological pathways in individuals living in communities of disadvantaged socioeconomic background, which focuses on populations that are disproportionately affected by climate change. A partner of Chicago Medical School, Sinai Urban Health Institute, conducts similar research on healthcare disparities and social determinants of health including environmental factors. Specifically, the Community Health Survey presents findings regarding the environment and health. The Sinai Urban Health Institute survey taskforce provides additional context for the community health project, which Chicago Medical School students participate in (phase II of the project).</p>	

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.
<p><i>Score explanation:</i> Chicago Medical School at Rosalind Franklin does not currently have a specific department or institute dedicated to planetary health research. The university does have an Environmental Health and Safety department which operates under OSHA to provide safety training specific to conducting research. Beyond this, the university has the Michael Reese Foundation Center for Health Equity Research, which investigates socio structural components of health in an effort to address health disparities, but does not focus on planetary health or climate change.</p>	

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.
<p><i>Score explanation:</i> Chicago Medical School at Rosalind Franklin does not currently have any members of communities disproportionately affected by climate change involved in determining the university's research agenda. Efforts have been made to identify changes from prior years, but at this time, there is no accessible information available. However, the Michael Reese Foundation Center for Health Equity Research at Rosalind Franklin does maintain relationships with the Lake County community on which they base their research agendas, though this institute's focus is on socio-structural determinants of health (which may include environmental factors).</p>	

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.
<p><i>Score explanation:</i> Chicago Medical School at Rosalind Franklin University has a website detailing the institution's mission to promote environmental sustainability by endorsing various local programs like establishing a GREEN website, gaining LEED certification, using sustainable products in the dining</p>	

hall (DNA Cafe). Current endeavors include electric vehicle charging stations, campus-wide recycling, tree planting, retrofitting with LED, restoration of natural habitats, hydration stations, and biodegradable utensils. The website also details the goal of conducting an independent energy audit to identify and change potential reductions. That said, there is no specific website at RFU specifically describing climate research or community resources.

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

4	Yes, the medical school has hosted at least one conference or symposium on topics related to planetary health in the past year.
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: This year Rosalind Franklin University hosted a free and virtual webinar through the Women in Science and Healthcare Symposium (WISH) titled “Cecilia Sorensen, MD - Re-Thinking Women's Health in a Changing Climate.” This event was led by Dr. Cecilia Sorensen who delineated the intersectional damage climate change wrecks on particularly the vulnerable due to socioeconomic, cultural, physiological, and gender-based factors. A call to action was made for the local and broader medical community about the evolution of climate change into a human rights, social justice, and gender issue as it affects food security, water quality, and extreme weather events most for women, children, and the elderly. This event was hosted not directly by Chicago Medical School but by RFU as an institution.

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

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

Score explanation: Rosalind Franklin University applied to be a part of the Global Consortium on Climate and Health Education in November 2022 and [is now an accepted member](#). RFU has established various sustainability goals like achieving LEED certification and promoting GREEN programs or conducting independent energy audits. Medical Students are all also called upon through their coursework to become Climate for Health Ambassadors through the namesake national training program. Medical students at Chicago Medical School have also started student groups on campus with national organizations such as the [Medical Society Consortium on Climate and Health \(MSCCH\)](#).

Section Total (x out of 17)	8
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Back to Summary Page [here](#)

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

Community Outreach and Advocacy

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

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.
<p><i>Score explanation:</i> Chicago Medical School partners with local community groups through the Michael Reese Foundation Center for Health Equity Research. Students can get involved with several ongoing projects that promote planetary and environmental health such as with the Brushwood Center at Ryerson Woods which works to improve health equity and access to nature in Lake County, Illinois, and the Chicago region. Another ongoing project includes building a database of measures of neighborhood-level social determinants of health including environmental toxicants, green space, and walkability measures.</p>	

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.
<p><i>Score explanation:</i> Chicago Medical School has not planned any community-facing events. However, the Interprofessional Clinic Initiative took part in the Mano a Mano Back to School Fair at Mundelein High School. Students addressed climate change's impact on health such as asthma, allergies, heart</p>	

health, and food. Students also promoted planetary health by distributing native seeds, energy-efficiency light bulbs and reusable produce bags and water bottles.

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

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

Score explanation: Rosalind Franklin University has some coverage of issues related to planetary health and sustainable healthcare. Many emails were sent out regarding the Mother/Earth Under the Microscope: Climate Change and Women's Health” 2023 Annual Women in Healthcare & Science Symposium.

Additionally, Environmental Health is one of the topics covered in the Year in Review annual report which is sent out to all students; in 2023, this section described how the university is taking actions to reduce its environmental impact and educate students, faculty and staff across subjects and disciplines about climate change and its threat to the health of humanity.

The Chicago Medical School quarterly newsletter is also emailed automatically to all enrolled students and covers updates specific to the medical school. In its most recent issue ([Issue 31, Winter 2024](#)), climate change and an increased focus on sustainable healthcare was mentioned. This newsletter comes out every season.

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?

2	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

Score explanation: Rosalind Franklin University has limited engagement in professional education activities targeting individuals post graduation. The 2023 8th Annual Women in Science and Healthcare (WiSH) Symposium focused on climate change and women’s health and the target audience included Physicians, Clinicians, Residents, Administrators, Students, Basic Science Faculty, Researchers and Allied Health Care Professionals.

3.5. Does your medical school or its affiliated teaching hospitals 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 centers have accessible educational materials for patients.

Score explanation: Rosalind Franklin University does not have formal accessible education materials for patients about environmental health exposures. Students at Rosalind Franklin University rotate through 21 affiliated teaching hospitals, of which 7 had patient-facing educational materials. As such, some, but not all, affiliated clinical rotation sites have patient educational materials in both English and Spanish regarding environmental exposures to pollution and respiratory health. For example, the [Advocate Health Care](#) clinical sites offer patient facing articles that provide information about environmental health exposures such as air quality, pollen, rising temperatures, insect borne infections, and much more to keep patients up to date and informed. Similarly, the [John H. Stroger, Jr. Hospital of Cook County](#) offers information about factors affecting childhood asthma. McHenry Hospital under Northwestern Medicine has a patient-facing online [encyclopedia](#) which includes a section on environmental diseases.

3.6. Does your medical school or its affiliated teaching hospitals 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: Rosalind Franklin University does not have formal accessible education materials for patients regarding climate change and health impacts. Some, but not all, affiliated clinical rotation sites such as the [Advocate Health Care](#) clinical sites offer several patient-facing articles about how the climate crisis will continue to impact health, such as [allergies](#), [mental health](#), and [infectious diseases](#). There is also information for patients on how to reduce their carbon [footprint](#).

Section Total (x out of 14)

7

Back to Summary Page [here](#)

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 medical school or your institution offer support for medical students interested in enacting a sustainability initiative/QI project?	
2	Yes, the medical school or institution <i>either</i> offers grants for students to enact sustainability initiatives/QI projects <i>or</i> sustainability QI projects are part of the core curriculum.
1	The medical school 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.
<p><i>Score explanation:</i> The Chicago Medical School does allow students to pursue their own research projects and receive support from the institution in the form of mentorship. Though, there is no indication that there is funding or encouragement for sustainability-specific QI projects.</p>	

4.2. Does your institution offer opportunities for medical students to do research related to planetary health and/or sustainable healthcare?	
2	The institution has a specific research program or fellowship for students interested in doing planetary health/sustainable healthcare research.
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 research.
<p><i>Score explanation:</i> There are opportunities for students to engage in planetary health/sustainable healthcare research. For example, in the required course “Principles of Professionalism, Health Care, and Health Equity,” medical students learn about different societal factors that may impact different aspects of their career path. Yet, this class is unique in that the course director is always encouraging and willing to work with students to improve the course if students have a specific interest. The dynamicity of the course’s curriculum can garnered towards student’s interest, allowing opportunities for students to engage in planetary health/sustainable healthcare research. In addition, there have been opportunities in the past for students to work with faculty on research that interests them, and a QI project involving planetary health/sustainable healthcare has been undertaken in the past year. Student</p>	

initiative is required for any planetary health/sustainable healthcare related projects to occur. There is no internal funding for students who pursue research in this subject.

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

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

Score explanation: There is a [webpage](#) regarding Rosalind Franklin University's current efforts towards sustainability and their [mission](#) for environmental sustainability. Though, there is no specific site for efforts made by the Chicago Medical School specifically. In addition, there is no specific site for locating planetary health or sustainable healthcare projects and mentors.

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

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

Score explanation: Chicago Medical School does have a student organization dedicated to planetary health. The PHRC is now a recurrent organization, following its start last year. Beyond this, the students who were involved in the inaugural PHRC report have also received support to present about the PHRC at CMS at the National Collaborative for Education to Address the Social Determinants of Health (NCEAS). In addition, students are also in process of creating a student chapter (which will be state-wide) of the Illinois Clinicians for Climate Action (ICCA). The goal of the ICCA is to raise more awareness about health effects due to climate change and engage healthcare professionals in more sustainable practices for their communities. Though, it may be important to note that a sustainability curriculum committee (which involves faculty, staff, and students) is currently stated as one of three goals of RFUMS' sustainability mission.

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

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

Score explanation: While there is no specific student liaison representing sustainability efforts, student members of the curriculum committee and its sub-committees do hold voting rights that can be used for curriculum reform and/or sustainability best practices. In addition, the ICCA chapter at CMS is whose responsibilities may be to advocate for curriculum reform and/or sustainability practices, in addition to the goals mentioned earlier. Despite student groups that can advocate for reforms and practices, there is no formal student liaison that serves on a decision-making council for these issues.

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)

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: The Wilderness Medical Group is a student organization at Chicago Medical School for medical students with an interest in nature. Not only does the group participate in nature related outings, but they also invite speakers to speak about wilderness medicine (and the careers available here), in addition to holding skill sessions.

Medical students can give back to the local community by volunteering with [Lamb's Farm](#), which has partnered with the institution before. Lamb's Farm focuses on helping people with developmental disabilities through different activities and jobs on the farm. Medical students not only work with these individuals, but also contribute to different tasks needed to upkeep the farm.

Section Total (x out of 15)	9
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Back to Summary Page [here](#)

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. 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
<p><i>Score explanation:</i> While there is an Office of Sustainability at Rosalind Franklin, it is made up of students, staff and faculty, with no salaried staff designated solely to sustainability. For this reason, Rosalind Franklin University will receive a “1” rating.</p>	

5.2. How ambitious is your institution/medical school 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
<p><i>Score explanation:</i> Rosalind Franklin University does not have a stated goal of carbon neutrality, although the university has taken steps to reduce its carbon footprint. Rosalind Franklin has a campus-wide recycling system which diverts over 50% of its waste products from landfills. There are hydration stations located all over campus, biodegradable trays and utensils in the school’s cafe and electric vehicle charging stations. LED lighting will also be used in campus facilities as well, with all</p>	

locations being controlled with a software program that will help the institution monitor and strategically reduce energy use. Finally, there is a tree planting program and the institution's landscaping carbon footprint is being reduced. However, there is no specifically stated goal of carbon neutrality.

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

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

Score explanation: According to Bob Jackson, Associate VP of Facilities, the university's current contract for power supply does not include renewable energy. Therefore, Rosalind Franklin University will receive a "0" rating.

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

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

Score explanation: Under [the University's sustainability mission statement](#), it states there are goals for LEED certification. The Chicago Medical School expects to achieve these goals by endorsing sustainability sites in new building construction. Sustainability sites would consider sustainable practices regarding water efficiency, energy, atmosphere, materials, resources and innovation through new building construction. However, the university has not met the requirement of retrofitting old buildings. Rosalind Franklin University will receive a "2" for this reason.

5.5. Has the medical school or institution 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.
1	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.
<p><i>Score explanation:</i> Rosalind Franklin University will receive a “1” for their strategies in providing environmentally-friendly transportation options. Due to geographic location and lack of a teaching hospital, most students are forced to commute to campus or to clinical sites. Rosalind Franklin combats this with walkable on campus housing, a shuttle connecting public transportation to campus, and electric vehicle charging stations.</p>	

5.6. Does your medical school have an organics recycling program (compost) and a conventional recycling program (aluminum/paper/plastic/glass)?	
2	Yes, the medical school has both compost and recycling programs accessible to students and faculty.
1	The medical school has either recycling or compost programs accessible to students and faculty, but not both.
0	There is no compost or recycling program at the medical school.
<p><i>Score explanation:</i> Rosalind Franklin University is partnered with the company Waste Management and has a composed-wide recycling program that diverts 50% of its waste from landfills. Recycling bins are placed all over campus and accept mixed recycling that is sorted after collecting. Items that are encouraged to be recycled fall into 3 categories: Paper Products, Metal Products, and Plastic or Glass Products. There is no composting program established.</p>	

5.7. Does the medical school apply sustainability criteria when making decisions about the campus food and beverage selections (e.g. local sourcing, reduced meat, decreased plastic packaging)?	
3	Yes, the medical school has adequate sustainability requirements for food and beverages, including meat-free days or no red-meat, and is engaged in efforts to increase food and beverage sustainability.
2	There are sustainability guidelines for food and beverages, but they are insufficient or optional . The medical school is engaged in efforts to increase food and beverage sustainability.

1	There are sustainability guidelines for food and beverages, but they are insufficient or optional . The medical school is not engaged in efforts to increase food and beverage sustainability.
0	There are no sustainability guidelines for food and beverages.

Score explanation: Rosalind Franklin University uses “Food For Thought” for on campus food and beverages for students of the Chicago Medical School. “Food For Thought” caters all events hosted by the Chicago Medical School that take place on campus. “Food For Thought” sources items locally through “Gordon Food Service” and other produce companies near the institution. In addition, the ‘To-Go’ boxes, cutlery, and plates used are all eco-friendly. Food for thought does offer plant-based foods such as vegan sausage and tofu. There are no specific mandatory guidelines related to food and beverage sustainability.

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

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

Score explanation: According to the Executive VP for Finance and Administration, Rosalind Franklin University prioritizes using local businesses for supply procurement when possible. For facility and building improvement, the institution follows relevant municipal codes, which include sustainability criteria. In terms of landscaping for the campus, the University works with their service provider to emphasize and prioritize sustainability. For example, all lawn mowings and grass clippings are composted offsite and certain locations of the campus are reserved as “natural growth areas” (which has reduced mowing by 35%). Finally, the University reviews opportunities for more environmental initiatives across all their vendors on an annual basis to incorporate them into their contracts and make an effort to discuss sustainability with new vendors for projects when possible.

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: There are no mentioned sustainability requirements or guidelines for events hosted by students or by faculty at the Chicago Medical School.

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.
<i>Score explanation:</i> The Chicago Medical School has not indicated any efforts to make lab spaces more environmentally sustainable.	

5.11. Does your <u>institution's</u> endowment portfolio investments include fossil-fuel companies?	
4	The institution is entirely divested from fossil fuels and has made a commitment to reinvest divested funds into renewable energy companies or renewable energy campus initiatives.
3	The institution is entirely divested from fossil fuels.
2	The institution has partially divested from fossil fuel companies or has made a commitment to fully divest , but currently still has fossil fuel investments.
1	The institution has not divested from fossil-fuel companies, but faculty and/or students are conducting organized advocacy for divestment.
0	Yes, the institution has investments with fossil-fuel companies and there have been no efforts to change that.
<i>Score explanation:</i> Rosalind Franklin University's endowment does not have direct investments in fossil fuel companies. However, the university has investments in various mutual and index funds, some of which do include investments in fossil fuel companies. The University adheres to the guidelines and philosophy of Environmental, Social, and Governance (ESG) Investing when making investments. The Institution does acknowledge that responsible investing is necessary for satisfying the school's mission and vision, but the Finance Committee's primary fiduciary responsibility is to maximize the return on their investment portfolio. The University states that their policy works to achieve both of these priorities.	

Section Total (x out of 32)	10
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Back to Summary Page [here](#)

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

Grading

Section Overview

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

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

**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 Rosalind Franklin University Chicago Medical School

The following table presents the individual section grades and overall institutional grade for the Rosalind Franklin University Chicago Medical School on this medical-school-specific Planetary Health Report Card.

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(43/72) \times 100 = 59.72\%$	C+
Interdisciplinary Research (17.5%)	$(8/17) \times 100 = 47.06\%$	C
Community Outreach and Advocacy (17.5%)	$(7/14) \times 100 = 50.00\%$	C
Support for Student-led Planetary Health Initiatives (17.5%)	$(9/15) \times 100 = 60.00\%$	B-
Campus Sustainability (17.5%)	$(10/32) \times 100 = 31.25\%$	D
Institutional Grade	$(A \times 0.3 + B \times 0.175 + C \times 0.175 + D \times 0.175 + E \times 0.175) = 50.87\%$	C

Report Card Trends

Section Overview

This graph demonstrates trends in overall and section grades for the years in which **Chicago Medical School** has participated in the Planetary Health Report Card initiative.

Planetary Health Report Card Trends for Chicago Medical School

