

# Planetary Health Report Card (Medicine):

University of Fribourg



UNIVERSITÉ DE FRIBOURG UNIVERSITÄT FREIBURG

### 2023-2024 Contributing Team:

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### **Summary of Findings**

Overall	D+
Curriculum	C

- The Medical Faculty (MFac) of the University of Fribourg includes some global health concepts in its curriculum, but lacks longitudinal integration. There are only a few classes specifically dedicated to Planetary Health (PH), and only at the Master's level. A group is working on a longitudinal integration, but the process is slow; there has been almost no change since last year.
- Recommandations: The MFac could address more topics concerning regional environmental threats caused by humans; this could make the concept more tangible and illustrate their importance in the clinic. Their introduction in the bachelor level would initiate an early reflection. PH could be taught from the theoretical basics (e.g. planetary boundaries) to possibilities for transformative actions, or included in already existing lectures. Every teacher could easily include concepts into their lessons. The clinical aspect could be enhanced by introducing typical questions about environmental exposures in the medical history.

### **Interdisciplinary Research**

D

- The University of Fribourg hosted a few conferences on topics related to PH and the interdisciplinary research happening is a good start but there is no specific group or department on PH, as part of the MFac.
- **Recommendations**: The University could give incentive to professors to initiate or integrate research in PH, and to offer master/doctoral on the topic. The criteria for new employment at the University could include an interest in PH.

### **Community Outreach and Advocacy**

F

- The University of Fribourg has no community outreach or partnership concerning PH. The affiliate hospital offers very few educational materials accessible for patients and almost no postgraduate training.
- **Recommendations:** The University could initiate community outreach and education on the health impact of the climate crisis by making the already existing conferences more visible or understandable for a less educated audience. Community partnerships could be established by providing the public with accessible and informative ressources. The hospital should integrate postgraduate education on PH.

### **Support for Student-Led Initiatives**

**C** -

- The University of Fribourg offers general support to student-led initiatives and associations, with funds easily granted for projects. There is no student-led initiative in PH in the MFac.
- **Recommendations**: We recommend that the MFac offers increased support to students interested in sustainable initiatives (e.g. adding a website that advertises mentors or opportunities for students relating to PH or ESH) and prioritises grants for related research. A contact person for students could be appointed for the PH question. The students could also create a local group of the association Health for Future.

### Campus Sustainability

 $\mathbf{C}$ 

- The MFac has made good progress in becoming a more sustainable campus in collaboration with the whole university, to raise awareness of these issues, including initiatives that are accessible to students.
- **Recommendations**: There is still much room for improvement in terms of campus sustainability. Targets and plans are already in place at the MFac, particularly in the area of procurement and construction, but we also recommend focusing on laboratory space and improving sustainable guidelines for events and purchasing. The institution also needs a definitive zero carbon plan.

### **Statement of Purpose**

Planetary health is human health.

The Planetary Health Alliance describes planetary health as "a solutions-oriented, transdisciplinary field and social movement focused on analysing and addressing the impacts of human disruptions to Earth's natural systems on human health and all life on Earth." This definition is intentionally broad, intended to encompass the multitude of ways that the environment can affect health, including water scarcity, changing food systems, urbanisation, biodiversity shifts, natural disasters, climate change, changing land use and land cover, global pollution, and changing biogeochemical flows. The health of humanity is dependent on our environment, and our environment is changing rapidly and in disastrous ways. Although the World Health Organization has called climate change "the greatest threat to global health in the 21st century," many 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 colour, older adults sensitive to health threats, and individuals in low-resource settings), these issues are inherently ones of equity and justice.

With the purpose of increasing planetary health awareness and accountability among 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 centred 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 minimises use of healthcare services.
- Education for Sustainable Healthcare (ESH): is defined as the process of equipping current and future health professionals with the knowledge, attitudes, skills and capacity to provide environmentally sustainable services through health professional education, thus working to decrease the enormous environmental impact of the healthcare industry. Planetary Health Education is an integral part of this education rather than an end in itself. This is because knowledge on Planetary Health is required to be able to fully understand the necessity of sustainable healthcare as well as being part of the broader knowledge needed to fully protect and promote health. In summary, ESH is covered by the three Priority Learning Outcomes of the Centre of Sustainable Healthcare below, and Planetary Health Education is embraced in the first learning objective and is a fundamental requirement to achieve learning outcomes 2 and 3:
  - 1. Describe how the environment and human health interact at different levels.
  - 2. Demonstrate the knowledge and skills needed to improve the environmental sustainability of health systems.
  - 3. Discuss how the duty of a doctor to protect and promote health is shaped by the dependence of human health on the local and global environment.
- Medical School 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 mould after flooding. Key components include place of residence over the lifecourse, occupational history, food and water sources (e.g. meat from industrial feeding operations, regular fishing in contaminated water, access to clean drinking water), and exposure to air pollution.
- **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> by <u>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 <b>more than one</b> elective whose primary focus is ESH/planetary health in the past year.
2	Yes, the medical school has offered <b>one</b> elective whose primary focus is ESH/planetary health in the past year.
1	The medical school does <b>not</b> have any electives whose primary focus is ESH/planetary health, but there are one or more electives that include a <b>lecture</b> on planetary health.
0	No, the medical school has <b>not</b> offered any electives on planetary health or electives that include ESH/planetary health topics in the past year.
Score explanation: As far as we know, there are no elective courses on PH or ESH.	

### Curriculum: Health Effects of Climate Change

1.2. Does your <u>medical school</u> 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 <b>briefly</b> covered in the <b>core</b> curriculum.
1	This topic was covered in <b>elective</b> coursework.
0	This topic was <b>not</b> covered.

### Score explanation:

As part of the 5th year of the curriculum in Fribourg, a lecture called "Climate and health" (1h) includes some slides on the heatwave of 2003 and its direct and indirect effect on health. The link between climate change, temperature rise and consequences on health (rise of cardiovascular and pulmonary morbidity) is also explained.

# 1.3. Does your medical school curriculum address the impacts of extreme weather events on individual health and/or on healthcare systems? This topic was explored in depth by the core curriculum. This topic was briefly covered in the core curriculum. This topic was covered in elective coursework.

### Score explanation:

This topic was **not** covered.

0

In the lecture "Climate and health" (1h, 5th year) individual risks of heatwaves are mentioned, and there is one slide about the number of deaths caused by the Great Smog (1952). Another slide from this course mentions the increase in extreme climatic events. Compared to last year, the "Health Climate Change Co-Benefits" course no longer exists as such. Its content has been incorporated into the "Climate and health" course, but in a summarised and less visual form, for example in the explanation of the increase in natural disasters.

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 <b>briefly</b> covered in the <b>core</b> curriculum.
1	This topic was covered in <b>elective</b> coursework.
0	This topic was <b>not</b> covered.

### Score explanation:

In the 3rd year of the bachelor curriculum, as part of the microbiology lecture, climate change is mentioned as a factor that favours emerging and re-emerging diseases.

As part of the 5th year of the curriculum, a slide in the lecture called "Climate and health" (1h, 5th year) mentions the extension zone of some infectious diseases due to global warming, deforestation, monoculture, and the multiplication of zoonoses. The presence of tropical diseases (dengue fever, Chikungunya, Zika) in Europa due to global warming is mentioned in two slides of the Community Health module, part of the 5th year of the curriculum as well.

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 <b>briefly</b> covered in the <b>core</b> curriculum.
1	This topic was covered in <b>elective</b> coursework.
0	This topic was <b>not</b> covered.

### Score explanation:

In the pneumology lecture in the 3rd year main curriculum, one line mentions "indoor and outdoor pollution" and "occupational dust and chemicals" as non-tobacco-related causes of COPD. In the pneumology's pathology lecture (also 3rd year), one line mentions fine particle air pollution as a rising factor of cardiopulmonary and lung carcinoma mortality.

In the 5th year curriculum, in the lecture "Climate and health" (1h, 5th year), one slide explains the link between air quality and health, mentioning the number of premature deaths due to air pollution and the type of illnesses related to it. Air pollution is depicted as a silent killer, causing lung cancer, COPD, acute respiratory disease and asthma. Two additional slides mention the results of studies inquiring mortality of SARS-CoV-2 and air pollution.

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

- 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 the lecture "Climate and health" (1h, 5th year), cardiovascular disease due to air pollution is mentioned. A study saying that air pollution could be a more important health risk than tobacco smoking is cited.

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

- 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 the "Climate and health" (1h, 5th year) course, a sentence assesses the pejoration of mental health due to ecoanxiety (life conditions, conflicts, migration).

### 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 <b>elective</b> coursework.
0	This topic was <b>not</b> covered.

### Score explanation:

In the lecture "Climate and health" (1h, 5th year), there is a sentence which mentions undernutrition due to climate change (e.g. reduced fishery and aquaculture productivity). Causes mentioned are raising temperatures, ocean acidification, extreme weather events and reduced physical work capacity. One slide in the module Community Health (5th year) mentions "environmental exposure" as a determinant of health. (assessing that it is unequal between people).

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

- This topic was explored **in depth** by the **core** curriculum.
- 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 the module Community Health (5th year), one slide shows the socio-economic status as a determinant of health, and notes that the environmental expositions (pollution, toxic and carcinogenic exposition) are not the same between low or high socio-economic classes. A second slide mentions "general socioeconomic, cultural and environmental conditions" as health and disease determinants. A third one mentions that air pollution and other pollution, consumption systems, chemical contamination and public green space are not equal for people with different socioeconomic conditions.

### 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:

In the module Community Health (5th year), one slide mentions the natural catastrophes as a cause of internal displacement of population and forced migrations.

In the lecture "Climate and health" (1h, 5th year), climate change is linked with migration, rise of poverty and pejoration of the health of inhabitants.

# 1.11. Does your medical school curriculum address the reproductive health effects of industry-related environmental toxins (e.g. air pollution, pesticides)? 3 This topic was explored in depth by the core curriculum. 2 This topic was briefly covered in the core curriculum. 1 This topic was covered in elective coursework. O This topic was not covered.

### Score explanation:

In the endocrinology module (3rd year), environmental factors (environmental hits and endocrine disrupting chemicals) are depicted as influencing the beginning of puberty and the incidence of gynecomastia. Details given about endocrine disrupting chemicals include some examples (phtalate, parabene, bisphenol A and S), source of consumption (air pollution, hygiene products, food containers, pesticides, medications, ...) and physiological action (oestrogen-like, anti-androgen).

# 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. O This topic was not covered.

### Score explanation:

No examples addressing environmental threats relevant to the university's surrounding community (Fribourg/Switzerland) that are of human origin. For example, in a radiology course at the Bachelor's level, the significant presence of radon in some regions of Switzerland is described, but it is not human-caused.

1.13. To what extent does your <u>medical school</u> emphasise the importance of Indigenous knowledge and value systems as essential components of planetary health solutions?	
3	Indigenous knowledge and value systems are <b>integrated throughout</b> the medical school's planetary health education
2	Indigenous knowledge and value systems as essential components of planetary health solutions are included <b>briefly</b> in the core curriculum.
1	Indigenous knowledge and value systems as essential components of planetary health solutions are included in <b>elective</b> coursework.
0	This topic was <b>not</b> covered.
Score explanation:	

To our knowledge, there is no teaching of indigenous knowledge and value systems as components of planetary health solutions.

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

- 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 the module Community Health, one slide shows the socio-economic status as a determinant of health, and notes that the environmental expositions (pollution, toxic and carcinogenic exposition) aren't the same between the low or the high socio-economic classes. There are courses on marginalized populations and the social determinants of health, but there is no explicit link between anthropogenic toxins and their direct impact on marginalized populations.

### Curriculum: Sustainability

# 1.15. Does your medical school curriculum address the environmental and health co-benefits of a plant-based diet? This topic was explored in depth by the core curriculum. 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:

During the bachelor's degree, the environmental and health interdependence of different diets is discussed several times.

During the course "Climate and health" (1h, 5th year), the concept of planetary health diet is introduced. However, it is not strictly a plant-based diet.

The vegan diet is discussed during the metabolism week (4th year), where the risks of deficiencies are mainly discussed, without any link to the environmental cause.

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

- 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 <b>elective</b> coursework.
0	This topic was <b>not</b> covered.

### Score explanation:

During the course "Climate and health" (1h, 5th year), the impact of the health care sector - particularly in Switzerland - on the environment is discussed and broken down into different sub-sectors. This is followed by a brief presentation of possible improvements in form of a list.

	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 <b>and</b> environmental <b>co-benefits</b> of <b>avoiding</b> over-medicalisation, over-investigation and/or over-treatment	
2	The environmental impact of <b>pharmaceuticals</b> and over-prescribing as a cause of climate health harm. Alternatively teaching on <b>deprescribing</b> where possible and its environmental and health co-benefits would fulfil this metric.	
1	The health <b>and</b> environmental <b>co-benefits</b> of <b>non-pharmaceutical management</b> 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 <b>surgical</b> healthcare on planetary health and the climate crisis, and how can it be mitigated	
1	The impact of <b>anaesthetic</b> gases on the healthcare carbon footprint and ways to reduce anaestheisa's environmental impacts, such as total intravenous anaesthesia or choosing less environmentally harmful anaesthetic gas options with reduced greenhouse gas emissions	
1	The impact of <b>inhalers</b> 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)	
	<ol> <li>Score explanation:         <ol> <li>The concepts of "choosing wisely" and "smarter medicine" are mentioned several times in particular by family physicians (4th year) but without any real explicit link to the environment. In general, during the course, students are encouraged to think about the indications for investigations or treatment so as not to overload the health care system.</li> <li>In the course "Environment and Health" (1h, 5th year), the impact of drugs on the environment is illustrated with the example of Diclofenac. Pharmaceutical and non-pharmaceutical alternatives are proposed. There is also a course on deprescribing in the elderly patient "integrative geriatric medicine" (1h, 4th year).</li> <li>In the course "Environment and Health" (1h, 5th year), one of the take home messages is to make people aware of the impact of pharmaceuticals and to choose therapeutic alternatives where possible. The example of physical activity is cited as a co-benefit in the course "Climate and health" (1h, 5th year). In the complementary medicine elective, many alternatives to pharmaceutical treatments are discussed (e.g. acupuncture and yoga).</li> </ol> </li> <li>As far as we know, this topic is not covered in the curriculum.</li> </ol>	

- 5. In the course "Climate and health" (1h, 5th year), it is mentioned that the gases used in anaesthesia make a major contribution to the health system's carbon footprint, but no alternative is proposed.
- 6. In the course "Environment and Health", it is mentioned that inhalers are polluting, but no alternative is proposed (such as dry powders, for example).
- 7. In the course "Environment and Health" (1h, 5th year), a few concrete actions are proposed to build a more environmentally friendly practice, for example by favoring sterilization over single use, or by using recycled materials. But compared with last year, there is no longer a slide on the different sectors responsible for greenhouse gas emissions and waste, and how to minimise this impact.

### Curriculum: Clinical Applications

# 1.18. In training for patient encounters, does your medical school's curriculum introduce strategies to have conversations with patients about the health effects of climate change? 2 Yes, there are strategies introduced for having conversations with patients about climate change in the core curriculum. 1 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 change Score explanation: As far as we know, this topic is not covered in the curriculum.

# 1.19. In training for patient encounters, does your medical school's curriculum introduce strategies for taking an environmental history or exposure history? Yes, the core curriculum includes strategies for taking an environmental history. Only elective coursework includes strategies for taking an environmental history. No, the curriculum does not include strategies for taking an environmental history.

#### Score explanation:

During the course "Environment and Health" (1h, 5th year), several clinical cases are presented and one of the take-home messages is "extending the history to the influence of the environment". But there are no practical strategies for the encounter with a patient that are taught.

### 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?

Yes, the medical school is currently in the process of making **major** improvements to ESH/planetary health education.

Yes, the medical school is currently in the process of making **minor** improvements to ESH/planetary health education.

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

#### Score explanation:

There is a group (including Prof. Rodondi, head of family medicine institute, and Prof. Chiolero, head of public health) who is working on a longitudinal course on this subject, but the process is slow with no concrete changes to the curriculum as yet.

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

### Score explanation:

The subject is very little covered during the bachelor's degree with no course specifically dedicated to planetary health. At Master's level, there is a week-long course on community health, with 3-4 periods dedicated to global health. Certain concepts are found throughout the curriculum, integrated in different courses: diets, deprescription, as well as non-drug therapeutic options.

### 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?

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

The medical school does not have a specific faculty member responsible for this.

Section Total (35 out of 72) 48,61%
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Are there additional curriculum resources offered at your medical school or instrated that you would like to describe? If so, please do so below.	itution not yet asked

### **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 emphasised.

# 2.1. Are there researchers engaged in planetary health research and healthcare sustainability research at your medical school? Yes, there are faculty members at the medical school who have a primary research focus in planetary health or healthcare sustainability. 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. There are planetary health and/or healthcare sustainability researchers at the institution, but none associated with the medical school. No, there are no planetary health and/or healthcare sustainability researchers at the institution or medical school at this time.

Score explanation: The medical school does not have a research group with focus on Planetary Health. There is fundamental medical research ( Prof. Jens Stein:

<u>https://www.unifr.ch/med/de/research/groups/stein/</u> adaptive immunity against intracellular microbes in mouse models, - related to vector-borne diseases), without specifically aiming to link environment and health.

Moreover, a professor from the Institute for Family Medicine published a paper on Planetary Health in collaboration with a research group from the University of Lausanne. Since it is not his field of research, we did not attribute the point for the medical school.

https://www.mdpi.com/1660-4601/19/8/4901

At the institution level, there are research groups focusing on environmental topics and their impact on humanity, therefore we score 1 point. (Prof. Ivo Wallimann-Helmer:

https://www.unifr.ch/geo/humangeography/en/research/gec-en/people/200532/40c4c)

The medical school facilitated one master thesis on planetary health, but the research was initiated and conducted by a student and supported by a research group. See question 2 in the Support for Student-Led Planetary Health Initiatives section.

# 2.2. Is there a dedicated department or institute for interdisciplinary planetary health research at your institution? There is at least one dedicated department or institute for interdisciplinary planetary health research. 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.

- There is an **Occupational and Environmental Health department**, but no interdisciplinary department or institute for planetary health research.
- There is **no** dedicated department or institute.

Score explanation: Within the institution there is no department or institute for interdisciplinary planetary health research, nor a department for occupational and environmental health, or plans to create one.

There are interdisciplinary institutes or departments focusing on environment, climate and sustainability, but there is no focus on health or healthcare. (eg.: <a href="https://www.unifr.ch/geo/humangeography/en/research/gec-en/">https://www.unifr.ch/geo/humangeography/en/research/gec-en/</a>)

### 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</u> school?

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

Score explanation: Since our medical school does not have a research agenda about planetary health, there is no opportunity for the community members to contribute.

### 2.4. Does your <u>institution</u> have a planetary health website that centralises ongoing and past research related to health and the environment?

- There is an **easy-to-use**, **adequately comprehensive** website that **centralises** various campus resources related to health and the environment including all of the following: upcoming events, leaders in planetary health at your institution, and relevant funding opportunities.
- There is a website that **attempts to centralise** various campus resources related to health and the environment, but it is hard-to-use, not updated, or not adequately comprehensive.
- 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: Our institution has an easy-to-use website on sustainability (https://www.unifr.ch/durabilite/fr/), however, there are no projects or sources related to health.

### 2.5. Has your <u>institution</u> recently hosted a conference or symposium on topics related to

planetary health?	
4	Yes, the <b>medical school</b> has hosted at least one conference or symposium on topics related to planetary health in the past year.
3	Yes, the <b>institution</b> has hosted at least one conference or symposium on topics related to planetary health in the past year.
2	Yes, the <b>institution</b> has hosted a conference on topics related to planetary health in the past three years.
1	The <b>institution</b> has not hosted any conferences directly, but they have provided financial support for a local planetary health event.
0	No, the <b>institution</b> has not hosted a conference on topics related to planetary health in the past three years.

### Score explanation:

In the past year, our institution hosted a few events on sustainability, environment, climate change and humanity. But they were single events and not specifically announced as "planetary health" or "environmental health" conferences. There were three lunch-meetings on environmental humanities, two public lectures about climate change, and one workshop about Ethics of Climate Loss and Damage. As a next step, the hosting of a series of "planetary health conferences" might be helpful in order to link the different topics to the bigger picture.

*Here is a selection of conferences that have taken place:* 

- 15. May 2023: Workshop: The Ethics of Climate Loss and Damage, <a href="https://agenda.unifr.ch/e/fr/13283/">https://agenda.unifr.ch/e/fr/13283/</a>

Vulnerable communities are particularly affected by these changes and can no longer maintain their traditional way of life. Climate-related losses and damage are occurring or have already occurred. Dealing with these losses and damages raises important ethical questions: Who should pay for the damage suffered? What is appropriate compensation for the loss of livelihoods?

- 7. March 2023: Leonardo Math Lecture: Structural instability of ecosystems and global warming, https://agenda.unifr.ch/e/fr/12846/

With the help of mathematical models it will be illustrated how increasing temperature, which is involved in the forces of trophic interaction between species in an ecosystem, generates persistent oscillations in biomass that can lead to mass extinctions.

- 21. Jan 2022: Pesticides - May pure water flood our fields, <a href="https://agenda.unifr.ch/e/fr/9942/">https://agenda.unifr.ch/e/fr/9942/</a> While everyone agrees on the need to develop a more sustainable agriculture, the solutions to achieve this goal are not uniform. What does science say? What is the experience of farmers? What does medicine predict?

# 2.6. Is your medical school a member of a national or international planetary health or ESH organisation? 1 Yes, the medical school is a member of a national or international planetary health or ESH organisation No, the medical school is not a member of such an organisation

Score explanation: The medical school has no such membership.

### Back to Summary Page <u>here</u>

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

3.1. Does your <u>medical school</u> partner with community organisations to promote planetary and environmental health?		
3	Yes, the <b>medical school</b> meaningfully partners with <b>multiple</b> community organisations to promote planetary and environmental health.	
2	Yes, the <b>medical school</b> meaningfully partners with <b>one</b> community organisation to promote planetary and environmental health.	
1	The <b>institution</b> partners with community organisations, but the medical school is not part of that partnership.	
0	No, there is <b>no</b> such meaningful community partnership.	
Score explanation: Neither research groups, professors nor student groups currently partner with		

3.2. Does your <u>medical school</u> offer community-facing courses or events regarding planetary health?		
3	The <b>medical school</b> offers community-facing courses or events at least once every year.	
2	The <b>medical school</b> 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 <b>institution</b> has offered community-facing courses or events, but the <b>medical school</b> 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 organizes "scientific Cafes" that may concern Planetary Health. In 2023, one of them adressed the Anthropocene concept in collaboration with an exhibition at the Natural History Museum

https://events.unifr.ch/cafes-scientifiques/fr/programme/2023-2024/planete.html

community organizations to promote planetary health.

The aforementioned (Interdisciplinary research Q 2.5) conferences are mostly open to the public.

# 3.3. Does your medical school have regular coverage of issues related to planetary health and/or sustainable healthcare in university update communications? Yes, all students regularly receive communication updates dedicated to planetary health and/or sustainable healthcare. Yes, planetary health and/or sustainable healthcare topics are sometimes included in communication updates. Students do not receive communications about planetary health or sustainable healthcare.

Score explanation: In our medical school there is no such communication. Possibly due to the small size of our medical school, we receive newsletters from the institution instead. Until now they did not contain any information about planetary health or sustainable healthcare.

## 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.
- Yes, the **institution** or **main affiliated hospital trust** offers one course relating to planetary health and/or sustainable healthcare for post-graduate providers
- There are **no** such accessible courses for post-graduate providers

Score explanation: In Switzerland, the Medical Schools and Universities are usually not involved in postgraduate training. The affiliated hospital HFR stated that up until now topics of global health and sustainable health care were not included in postgraduate training. Sporadically and due to personal motivation it might be included. We found one example: a one-time course about the impact of pollution in anesthesia, within the anestesiology postgrad training:

https://www.h-fr.ch/actualites-agenda/agenda-evenements/formation-postgraduee-et-continue-specifique-en-anesthesiologie-110

For 2023-2024, we did not receive any answer from the affiliated hospital, therefore we kept the same result as the year prior.

### 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?

- Yes, the **medical school** or **all affiliated hospitals** have accessible educational materials for patients.
- 1 **Some** affiliated hospitals have accessible educational materials for patients.
- **No** affiliated medical centres have accessible educational materials for patients.

Score explanation: There is only one affiliated hospital, HFR. They have no information material

specifically about environmental health impacts for patients. However they had a campaign, targeted at the employees of the hospital, about a healthy and sustainable meat-free diet.

- -https://www.h-fr.ch/sites/default/files/2021-09/Ausgewogen%20und%20%C3%B6kologisch%20einkaufen.pdf
- -https://www.h-fr.ch/sites/default/files/2021-09/Welche%20Eiweissquellen%20tun%20mir%20und%20der%20Umwelt%20gut.pdf

The medical school has no educational material for patients.

### 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?

- 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: The only affiliated hospital does not have any information material available for patients on the effects of climate change on health either.

The medical school has no educational material for patients.

### Section Total (1 out of 14) 7.143%

### 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**

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

# 4.1. Does your medical school or your institution offer support for medical students interested in enacting a sustainability initiative/QI project? 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 fulfil clerkship or longitudinal requirements) and offers resources to help students succeed in these projects, but there is no student funding available and there is no requirement to participate. No, neither the medical school or the institution offer opportunities or support for sustainability initiatives or QI projects.

Score explanation: Currently, there is not any active support from the medical school nor the institution.

However, if students start their own projects they are generally well received and there are general funds for student projects that can be requested and are usually granted. We score one point, even if initiatives are rather funded than encouraged.

### $\textbf{4.2. Does your } \underline{\textbf{institution}} \ \textbf{offer opportunities for medical students to do research related to} \\ \textbf{planetary health and/or sustainable healthcare?}$

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

Score explanation: The Medical School is open to the idea of research about planetary health, a master thesis concerning that subject was proposed by a student and could be conducted with the support of one research group (more specifically the family medicine institute).

(Cottet, P. et al. Scoping review: Environmental Health and health effects of climate change in primary care, 2021. non-published)

### 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.

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.

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

Score explanation: There is currently no such webpage.

## 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?

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

Score explanation: There is nothing specific to planetary health, but there are student-led sustainability associations at our institution (Myosotis, Sustainability week, <a href="https://student.unifr.ch/myosotis/fr/">https://student.unifr.ch/myosotis/fr/</a>). On a national level, the Swiss Medical Students Association (SWIMSA) to which the medical student association from our university is affiliated, has a working group dedicated to planetary health: <a href="https://swimsa.ch/engagement/planetary-health/">https://swimsa.ch/engagement/planetary-health/</a>.

## 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 best practices?

- 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: There is a student representative in the Green Faculty Commission (<a href="https://www.unifr.ch/scimed/fr/faculty/profile/greenfaculty">https://www.unifr.ch/scimed/fr/faculty/profile/greenfaculty</a>). However the Commission does not have decision-making power over curriculum reforms, they rather advocate for sustainability best practices. Moreover, the commission is taking a break due to lack of time officially dedicated to its project for its members (all voluntarily in the commission, none of them attributed to it as their duty)

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 organise hiking, backpacking, kayaking, or other outings for students)		

### Score explanation:

1. Urban Gardening Perolles: <a href="https://student.unifr.ch/myosotis/de/aktionen/urbangarden.html">https://student.unifr.ch/myosotis/de/aktionen/urbangarden.html</a>
Permaculture Garden:

https://student.unifr.ch/myosotis/de/arbeitsgruppen/permakultur-garten.html

2. Sustainability week by Myosotis, with, in 2023, conferences on Ecoanxiety and benefits of a plant-based diet. <a href="https://agenda.unifr.ch/e/fr/13001/">https://agenda.unifr.ch/e/fr/13001/</a>

https://agenda.unifr.ch/e/fr/13014/

https://student.unifr.ch/myosotis/fr/evenements/sustainabilityweek/

- 3. Nothing more than the conferences mentioned in question 5 in the Interdisciplinary Research section.
- 4. <u>https://agenda.unifr.ch/e/fr/12029/</u> Creation of a mural showing various factors and consequences of Climate Change.

*5*. –

6. There are many snow, mountain and watersports outings proposed for students: <a href="https://www.unifr.ch/sportuni/de/sportangebot/angebot-nach-aktivitaet.html">https://www.unifr.ch/sportuni/de/sportangebot/angebot-nach-aktivitaet.html</a>

### Section Total (6 out of 15)

40%

### 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 endeavour, the healthcare sector is well poised to lead the world to a more sustainable future. This will involve scrutinising every aspect of how our systems operate, from where we source our energy, to how we build our infrastructure, to what companies we invest in. Our medical schools, clinics, and hospitals must set the standard for sustainable practices, and show other sectors what is possible when it comes to minimising environmental impact.

5.1. Does your 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 <b>at least one designated staff member</b> 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 <b>no specific staff member</b> in charge of medical school and/or hospital sustainability.		
1	There are <b>no salaried sustainability staff</b> , but there is a sustainability task force or committee		
0	There are <b>no</b> staff members <b>or</b> task force responsible for overseeing campus sustainability		

Score explanation: The University of Fribourg has hired on August 1, 2022 a 50% employee dedicated to sustainability, as of February 1st. 2023 the percentage was majored to 90%. This person is attached to the Infrastructures domain of the administrative management of the University and covers the whole institution. There is no decentralized sustainability office for each faculty, and therefore not for the Medical School either. The Commission for Sustainability is the body of the Rectorate for all questions related to sustainability.

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 <b>written and approved plan</b> to achieve carbon neutrality by <b>2030</b>	
3	The institution/medical school has a <b>written and approved plan</b> to achieve carbon neutrality by <b>2040</b>	
1	The institution/medical school has a stated goal of carbon neutrality by <b>2040</b> but has <b>not created a plan</b> to reach that goal or the <b>plan is inadequate</b>	
0	The institution/medical school does <b>not</b> meet any of the requirements listed above	
	Score explanation: A CO2 assessment for the year 2022 was carried out and data is being collected for 2023. The data available is increasing. There is no deadline set for carbon	

neutrality at this stage, as crucial data is still lacking, for example in relation to mobility. The Swiss government announced a carbon neutrality goal for 2050.

Various projects/monitoring systems starting in 2023 will enable the development of the scope of analysis.

https://www.unifr.ch/durabilite/fr/strategie-2/bilan-co2.html

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: The Medical School of the University of Fribourg is distributed between many different buildings: <a href="https://www.unifr.ch/map/fr/plans/perolles.html">https://www.unifr.ch/map/fr/plans/perolles.html</a>

The Pérolles 17 building (medical pavilion) is partly supplied with 45,000 kWh per year by solar energy produced in Givisiez.

All the buildings of the Faculty of Science and Medicine are supplied by the district heating network of the city of Fribourg. The latter is not yet supplied by renewable energies, but this situation should change in the short to medium term. At present, it is a natural gas-fired heating plant. The electricity of all the buildings of the Faculty of Science and Medicine is made up of a little more than a third of renewable energy (mainly hydraulic) and up to 80% for some buildings.

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

- Yes, sustainable building practices are utilised for new buildings on the medical school campus and the **majority** of old buildings **have been retrofitted** to be more sustainable.
- Sustainable building practices are utilised 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.
- O Sustainability is **not considered** in the construction of new buildings.

### Score explanation:

The existing buildings of the Science and Medicine Faculty are relatively old and have not been built according to sustainability standards.

Some specific renovations (lights, waterproofing) took place in 2023.

The Canton of Fribourg has established a directive for sustainability, which came into force on 1 January 2023. According to this directive, all renovation or construction projects with an investment of more than CHF 500,000 must apply the SNBS (sustainable construction standard) and Minergie

A/P-ECO standards. In addition, depending on the use of the building, it must be SNBS certified. Environmental and social criteria will therefore be taken into account in building renovation projects. The Chemistry building (partly used for the medical curriculum) will be completely renovated according to these directives in the near future.

## 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?

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

Score explanation: The University of Fribourg has several possibilities in terms of sustainable transports such as: a public bike, a car renting and a car sharing system. The campus is also integrated in the city and therefore easily accessible by public transportation.

- The partnership between the AGEF (General Association of Students of Fribourg) and the rectorate has made it possible for a PubliBike self-service bicycle station to be put into service at the end of 2020 in the city of Fribourg. Anyone registered at the UNIFR can take out an annual subscription at a preferential rate.
- Thanks to the partnership between the University of Fribourg and Mobility Carsharing, students and employees benefit from a "Mobility" (system of car renting) subscription at preferential rates.
- Frimobility is a system that allows people to optimize their car journeys by taking other passengers with them.
- The ticketing application for public transport "FAIRTIQ" can be used for journeys throughout Switzerland. The application allows you to buy your ticket in just two clicks. All these offers are well exposed on the website of the University: https://www.unifr.ch/durabilite/fr/domaines/mobilite.html

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

- Yes, the medical school has **both** compost **and** recycling programs accessible to students and faculty.
- The medical school has **either** recycling **or** compost programs accessible to students and faculty, but not both.
- There is **no** compost or recycling program at the medical school.

Score explanation: The faculty has both composting and recycling possibilities that are easily accessible for students and professors. Recycling containers (for paper, aluminum, PET and trash) are

found everywhere around campus and well known by the students. The botanical garden offers access to compost.

The University requested to be able to recycle glass, but this was refused by the city council.

## 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)?

- 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.
- 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.
- 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.
- There are **no** sustainability guidelines for food and beverages.

### Score explanation:

With the reCIRCLE project, the mensas of the University of Fribourg integrate a vast network of partners who make reBOXes available to their clients. When you buy a take-away meal, you make a CHF 10.- deposit. The reBOX can then be returned, rinsed, to any of the partners. You can then exchange it for another ReBox for a new meal or return it permanently and get your deposit back. The Beelong indicator assesses the environmental impact of food products on a scale of A to E. Its purpose is to provide restaurant owners and buyers with environmental information about food products, and to give them an additional criterion for making informed purchases. The mensas in Fribourg are Beelong certified.

#### https://www.unifr.ch/mensa/fr/prestations/durabilite.html

Moreover, an inventory of Mensa's sustainability practices (focusing on energy, waste and plate content) was carried out by a group of students in 2023. Several recommendations were made, and it will now be a matter of assessing which of these can and will be implemented.

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

- Yes, the medical school has **adequate** sustainability requirements for supply procurement **and** is **engaged** in efforts to increase sustainability of procurement.
- 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.
- 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.
- There are **no** sustainability guidelines for supply procurement.

Score explanation: At the campus level, the equipment and logistics department is sensitive to sustainability in the purchase of equipment and various supplies. It gives preference to Swiss suppliers

and works in particular with partners for the renovation of equipment, which makes it possible to extend its lifespan and avoid the production of waste. Specifically for the Medical School, suppliers are chosen, where possible, according to their sustainability policy.

In 2023, there was a switch to 100% recycled paper at the University level.

The office equipment list will be reviewed with the aim of finding more responsible alternatives for certain items and providing best practices to help decision-making.

### 5.9. Are there sustainability requirements or guidelines for events hosted at the <u>medical school</u>?

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

Score explanation: Even if the bigger national organizations like SWIMSA (swiss medical students association) make a big effort in terms of sustainability, the Medical School itself does not have any clear recommendation for this.

Nevertheless, the students that are responsible for organizing events still try to be environmentally friendly (for example by limiting the use of single-use plastic). In conclusion, we would say that there is much room for improvement in this area.

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

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

Score explanation: We were told that a number of research groups have taken the initiative to take part of the GreenLab label (My Green Lab Certification <a href="https://www.mygreenlab.org/">https://www.mygreenlab.org/</a>), but there are no medical school guidelines.

### 5.11. Does your <u>institution's</u> endowment portfolio investments include fossil-fuel companies?

- The institution is **entirely divested** from fossil fuels **and** has made a **commitment to reinvest divested funds** into renewable energy companies or renewable energy campus initiatives.
- 3 The institution is **entirely divested** from fossil fuels.
- The institution has **partially divested** from fossil fuel companies **or** has made a **commitment to fully divest**, but **currently** still has fossil fuel investments.

- The institution has **not divested** from fossil-fuel companies, but faculty and/or students are **conducting organised advocacy** for divestment.
- Yes, the institution has investments with fossil-fuel companies and there have been **no efforts** to change that.

Score explanation: As a public institution, the University of Fribourg cannot have an investment agenda.

However, the university can partly be financed by private investors that could themselves have fossil fuels investments.

https://www.swissinfo.ch/fre/sci-tech/l-apport-de-deniers-priv%c3%a9s-dans-le-monde-acad%c3%a9migue-inqui%c3%a8te/46694674

(article on private funding of swiss universities, no data on the University of Fribourg) None of the people contacted gave us a clear answer.

### Section Total (17 out of 32)

53.125%

### 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%
В	60% - 79%
С	40% - 59%
D	20% - 39%
F	0% - 19%

<sup>\*</sup>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 Section of Medicine, University of Fribourg

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

Section	Raw Score %	Letter Grade
Planetary Health Curriculum (30%)	$(35/72) \times 100 = 48.61\%$	С
Interdisciplinary Research (17.5%)	$(5/17) \times 100 = 29.412\%$	D
Community Outreach and Advocacy (17.5%)	$(1/14) \times 100 = 7.143\%$	F
Support for Student-led Planetary Health Initiatives (17.5%)	(6/15) x 100= 40%	C-
Campus Sustainability (17.5%)	$(17/32) \times 100 = 53.125\%$	C
Institutional Grade	(48.61x0.3 + 29.412x0.175 + 7.143x0.175 + 40 x 0.175 + 53.125x0.175) = 37.277%	D+

### **Report Card Trends**

### **Section Overview**

This graph demonstrates trends in overall and section grades for the years in which the University of Fribourg has participated in the Planetary Health Report Card initiative.

### **Planetary Health Report Card Trends for Fribourg University**

