FACULTY OF HEALTH SCIENCES

UNIVERSITY OF CAPE TOWN

Education for Sustainable Healthcare at the University of Cape Town (UCT)

IAMSE webinar; 2 Oct 2025

Dr James Irlam
Dept. Family, Community & Emergency Care/
School of Public Health, Division of Environmental Health

EDUCATION FOR SUSTAINABLE HEALTHCARE

Committee Members:

Dr James Irlam

Prof Milind Chitnis

Dr Christian Lueme Lokotola

COMMITTEE MEMBERS

Dr James Irlam (PhD (Public Health); MSc (Climate Change & Development); MPhil (Epidemiology)) is the Chair and founder of the Education for Sustainable Healthcare (ESH) SIG. He is a Senior Lecturer in the Dept. of Family, Community and Emergency Care, and in the Division of Environmental Health at the University of Cape Town (UCT). His undergraduate and postgraduate teaching focuses on Planetary Health, Climate Change, and Sustainable Healthcare. His PhD on ESH in health professions education identified the barriers and opportunities for curricular integration in South African health sciences faculties. He is leading curricular integration of ESH at UCT Health Sciences and is committed to supporting other faculties via the ESH SIG.

Prof Milind Chitnis is the Associate Professor and Head of the Department of Paediatric Surgery at the East London Hospital Complex, affiliated with Walter Sisulu University. He has been the Honorary Secretary of the Pan African Pediatric Surgical Association (PAPSA) (2023-2027), the Global Initiative for Children's Surgery (GICS) (2024-2025) and the College of Paediatric Surgeons of South Africa (2020-2023) and a member of the Council of the College of Paediatric Surgeons of South Africa (2017-2026). He is also a founding Trustee of the NPO- Eyabantwana for the Children, which supports the needs of the Department of Paediatric Surgery in East London. He is passionate about improving paediatric surgical care and training in low- and middle-income countries, particularly in Africa.

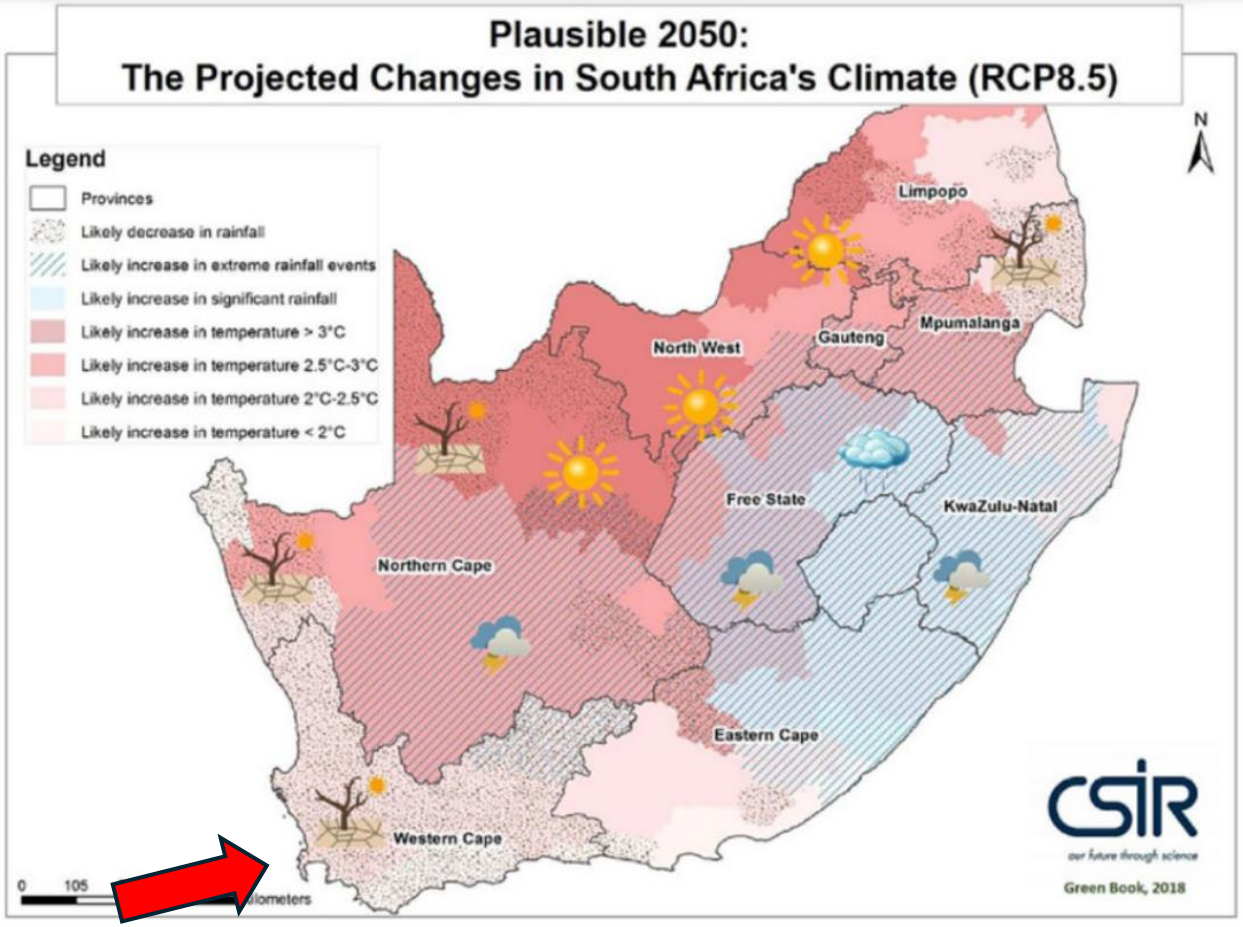
Dr Christian Lueme Lokotola (PhD: MPH) is an early-career researcher focused on climate change and the effects of air pollution on human health and healthcare services. He holds an MPH and a PhD in Public Health. His current expertise lies in climate-resilient and environmentally sustainable healthcare and Planetary Health Medical Education, which involves integrating planetary health into Medical and Health Professional Education, alongside an ecosystem approach to health. He aims to develop climate-resilient and environmentally sustainable Primary Health Care. Dr Lokotola serves as a reviewer for international journals, assessing scientific papers concerning climate change and its health impacts, Planetary Health and medical education, and air pollution's effects on health and healthcare. He is fluent in both English and French.

Outline

- Climate Change Impacts in South Africa
- Education for Sustainable Healthcare (ESH) in South Africa
- Integrating ESH into Curricula: the UCT Faculty of Health Sciences (FHS) experience, 2022-2025
- Building a Community of ESH Practice, 2021-2025
- Closing Reflections

Climate Change Impacts in South Africa

Health, Vulnerabilities, & Healthcare



Source: Le Roux et al, 2019; Van Niekerk et al, 2020, Lotter et al, cited in CSIR, 2021

WELCOME TO THE UNIVERSITY OF CAPE TOWN NEWS

SEARCH | NEWS | CAMPUS COMMUNICATIONS | MEDIA COMMUNICATIONS | ARCHIVES | CONTACT US

What climate change means for South Africa and its people

11 MARCH 2024 | **STORY** MICHELLE SHIELDS. **Read time** 6 min.

Climate change threatens these [agriculture and biodiversity] assets with increased frequency and intensity of droughts, heatwaves and severe flooding in some parts of the country.
These extreme weather events are likely to damage crops and infrastructure and threaten plants and animals that attract tourism.
The impacts of climate change are likely to affect livelihoods, food and water security and ultimately increase the cost of living for South Africans.

https://www.news.uct.ac.za/article/-2024-03-11-what-climate-change-means-for-south-africa-and-its-people?s=09

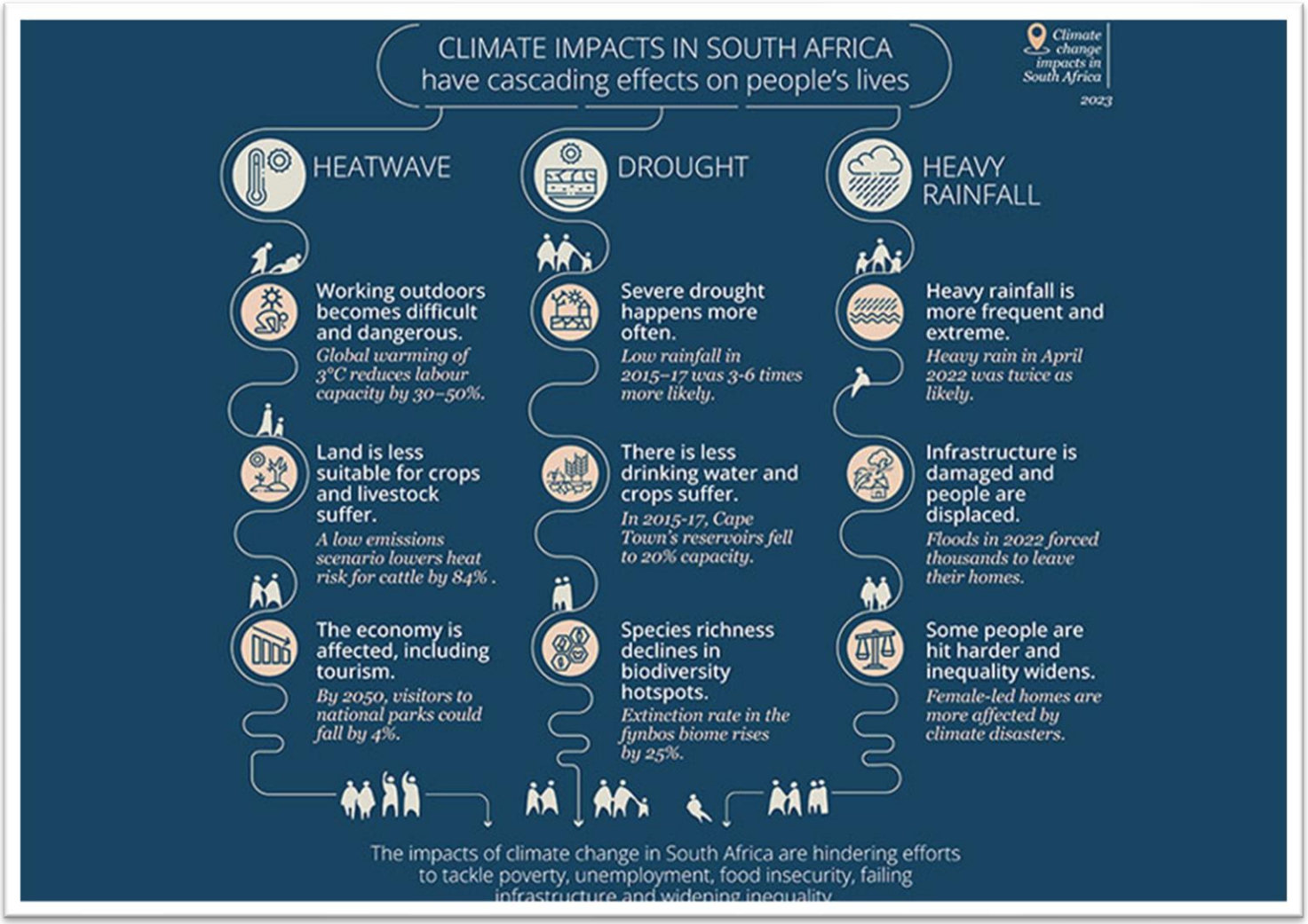
Cascading effects on livelihoods

*To farmers, crops are important; to insurers, payouts are important; and to a man living in an informal settlement, his house matters**, but we all have to work together to address the crisis***

Luckson Zvogbo (UCT ACDI)

*Combating the impacts of climate change requires **both adaptive measures (eg farming practices**) as well as **governmental coordination and international commitment to reduce emissions***

Anton Cartwright (Econologic)



Extreme weather damage to health facilities

Many vulnerable populations

EXPOSURE

Exposure is contact between a person and one or more biological, psychosocial, chemical, or physical stressors, including stressors affected by climate change.

SENSITIVITY

Sensitivity is the degree to which people or communities are affected, either adversely or beneficially, by their exposure to climate variability or change.

ABILITY TO ADAPT

Adaptive capacity is the ability of communities, institutions, or people to adjust to potential hazards such as climate change, to take advantage of opportunities, or to respond to consequences.

VULNERABILITY
of Human Health to Climate Change

HEALTH OUTCOMES

Injury, acute and chronic illness (including mental health and stress-related illness), developmental issues, and death.

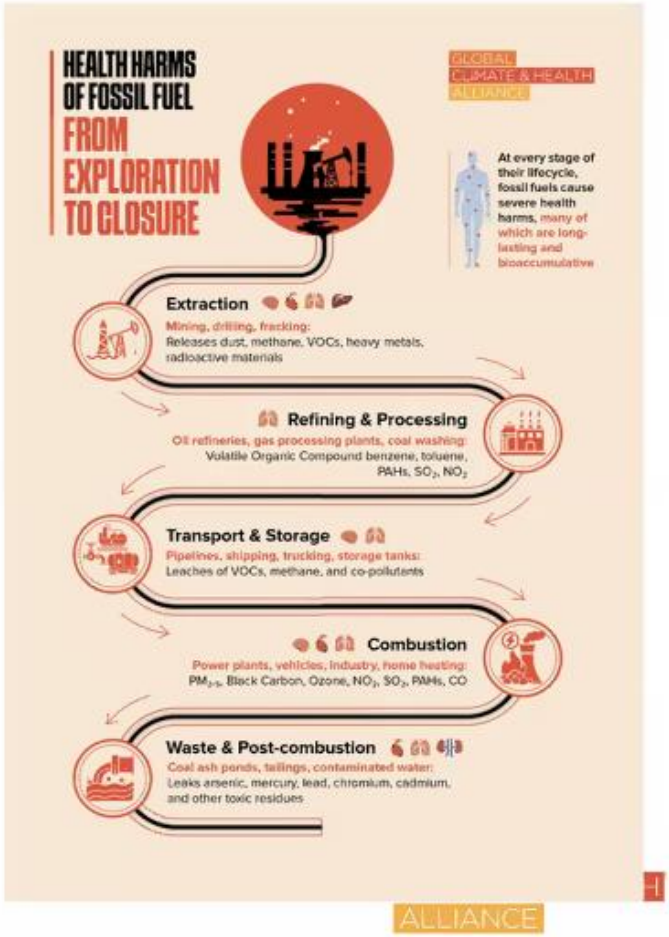
EXPOSURE	SENSITIVITY	ABILITY TO ADAPT
 **Low-income populations** may be exposed to climate change threats because of socioeconomic factors. For example, people who cannot afford air conditioning are more likely to suffer from unsafe indoor air temperatures.	 **Pregnant women** are sensitive to health risks from extreme weather such as hurricanes and floods. These events can affect their mental health and the health of their unborn babies by contributing to low birthweight or preterm birth.	 **Older adults** may have limited ability to cope with extreme weather if, for example, they have difficulty accessing cooling centers or other support services during a heat wave. Heat-related deaths are most commonly reported among adults aged 65 and over.
 **Occupational groups** such as first responders and construction workers face more frequent or longer exposure to climate change threats. For example, extreme heat and disease-carrying insects and ticks particularly affect outdoor workers.	 **People with pre-existing** medical conditions, such as asthma, are particularly sensitive to climate change impacts on air quality. People who have diabetes or who take medications that make it difficult to regulate body temperature are sensitive to extreme heat.	 **People with disabilities** face challenges preparing for and responding to extreme weather events. For example, emergency or evacuation instructions are often not accessible to people with learning, hearing, or visual disabilities.
 **People in certain locations** may be exposed to climate change threats, such as droughts, floods, or severe storms, that are specific to where they live. For example, people living by the coast are at increased risk from hurricanes, sea level rise, and storm surge.	 **Children** are more sensitive to respiratory hazards than adults because of their lower body weight, higher levels of physical activity, and still-developing lungs. Longer pollen seasons may lead to more asthma episodes.	 **Indigenous people** who rely on subsistence food have limited options to adapt to climate change threats to traditional food sources. Rising temperatures and changes in the growing season affect the safety, availability, and nutritional value of some traditional foods and medicinal plants.

Pollution from coal mining, combustion & waste

KEY FINDINGS

Fossil fuels negatively impact health at every stage of their life cycle - from extraction to disposal.

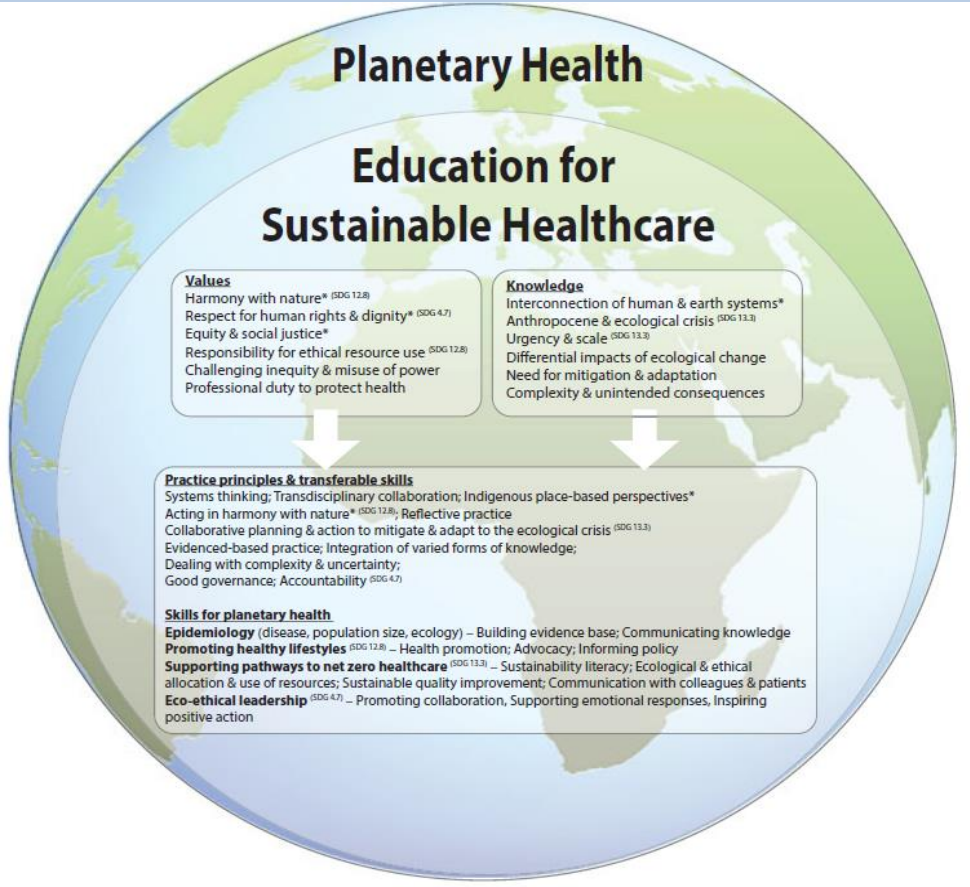
- **Oil and gas extraction:** Children whose parents lived closer to a fracked gas well while the child was in-utero, had more than twice the odds of developing acute lymphoblastic leukemia
- **Transporting fossil fuels**: leaks, spills and explosions
- **Powering vehicles:** exposure to traffic related air pollution is associated with an increased risk of developing Parkinson's disease and Type 2 Diabetes
- **Generating electricity**: shutting down fossil fuel power plants resulted better health for children nearby (reduced asthma, better cognitive development)



Education for Sustainable Healthcare (ESH) in South Africa

- AMEE Consensus Statement on Planetary Health and Education for Sustainable Healthcare, 2021
- A Mixed Methods Study of ESH In South African Faculties of Health Sciences, 2021-22

AMEE Consensus Statement on Planetary Health and Education for Sustainable Healthcare (ESH)



*Education for Sustainable Healthcare is the organization of health professions education to develop **knowledge, skills, and attitudes** about the interdependence of human health and ecosystems, including the effects of climate and environmental changes on health, and the impacts of health systems on the environment.*

International Association of Health Professions Education (AMEE 2021)

A Mixed Methods Study of ESH In South African Faculties of Health Sciences

J Irlam, 2021-22

Phase 1

National audit of HPE curricula in SA faculties

Sept-Dec 2021

AJHPE 15(4); 2023

Phase 2

National Delphi panel of faculty educators

April-May 2022

AJHPE 15(4); 2023

Phase 3

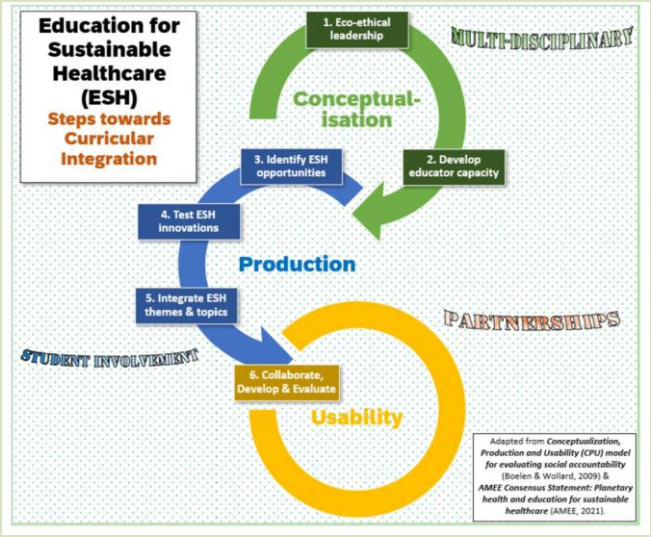
Planetary Health Report Card for UCT FHS

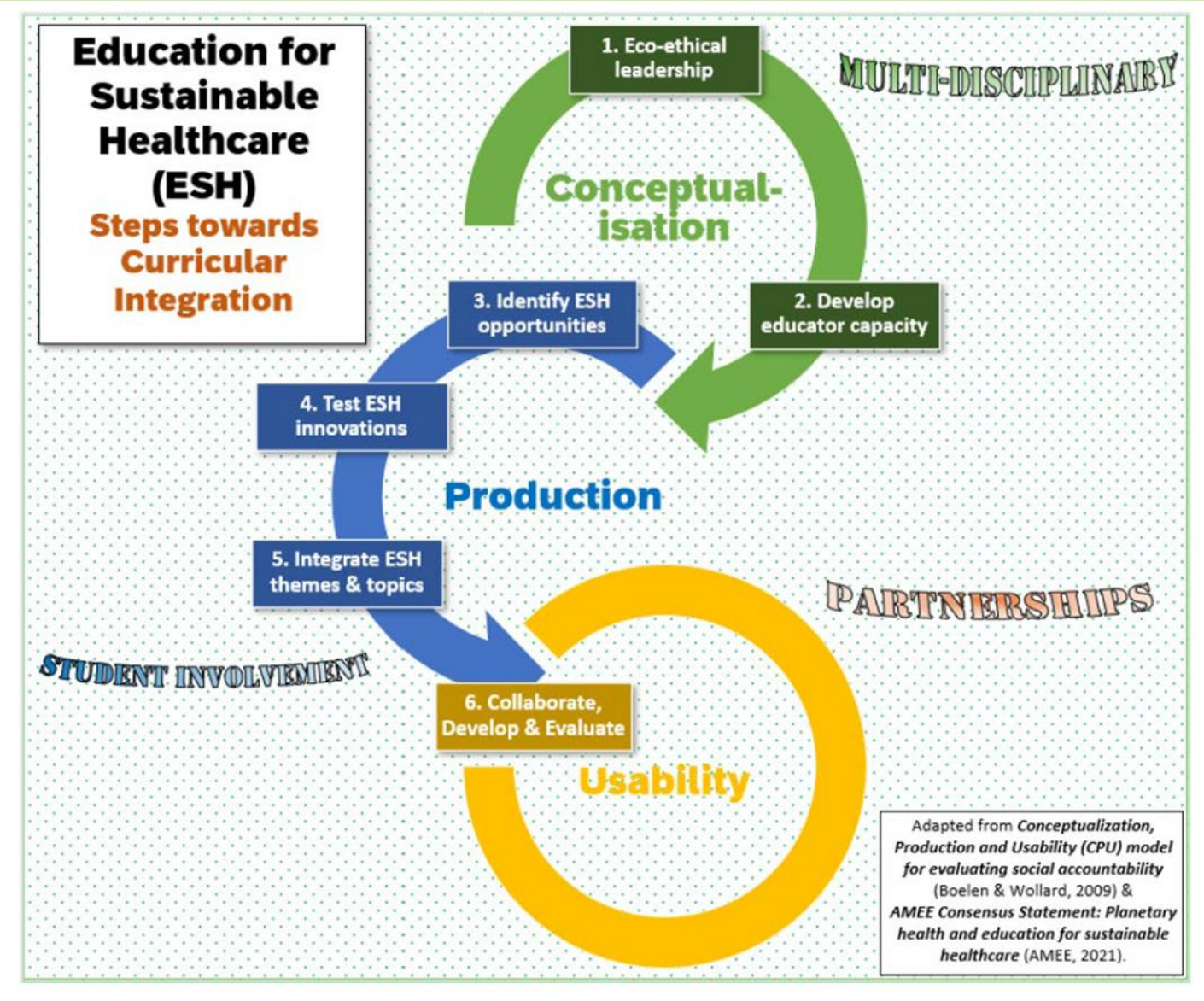
Aug-Dec 2022

A Mixed Methods Study of ESH In South African Faculties of Health Sciences

Delphi panel consensus on Learning Objectives

- K1.1 Discuss how **local and global ecological crises impact on individuals and communities**
- K1.2 Describe the **interaction between local and global ecological crises and the social determinants of health**
- K2.3 Understand **how the health system contributes** to the problem of planetary degradation
- KS1.2 Describe **how changes in disease burden due to environmental change may be identified**, characterised and quantified, and how such information can inform planning and practice to address health needs
- KVA1.3 Discuss the **role of health professionals** in mitigation, adaptation, advocacy and activism for planetary health and environmental stewardship
- KVA1.1 Discuss examples of **eco-ethical leadership**




Education for Sustainable Healthcare (ESH)
Steps towards Curricular Integration
1. Eco-ethical leadership
MULTI-DISCIPLINARY
Conceptual-isation
2. Develop educator capacity
3. Identify ESH opportunities
4. Test ESH innovations
Production
5. Integrate ESH themes & topics
PARTNERSHIPS
STUDENT INVOLVEMENT
6. Collaborate, Develop & Evaluate
Usability
Adapted from Conceptualization, Production and Usability (CPU) model for evaluating social accountability (Boelen & Wollard, 2009) & AMEE Consensus Statement: Planetary health and education for sustainable healthcare (AMEE, 2021).

Integrating ESH into Curricula: the UCT FHS Experience 2022-2025

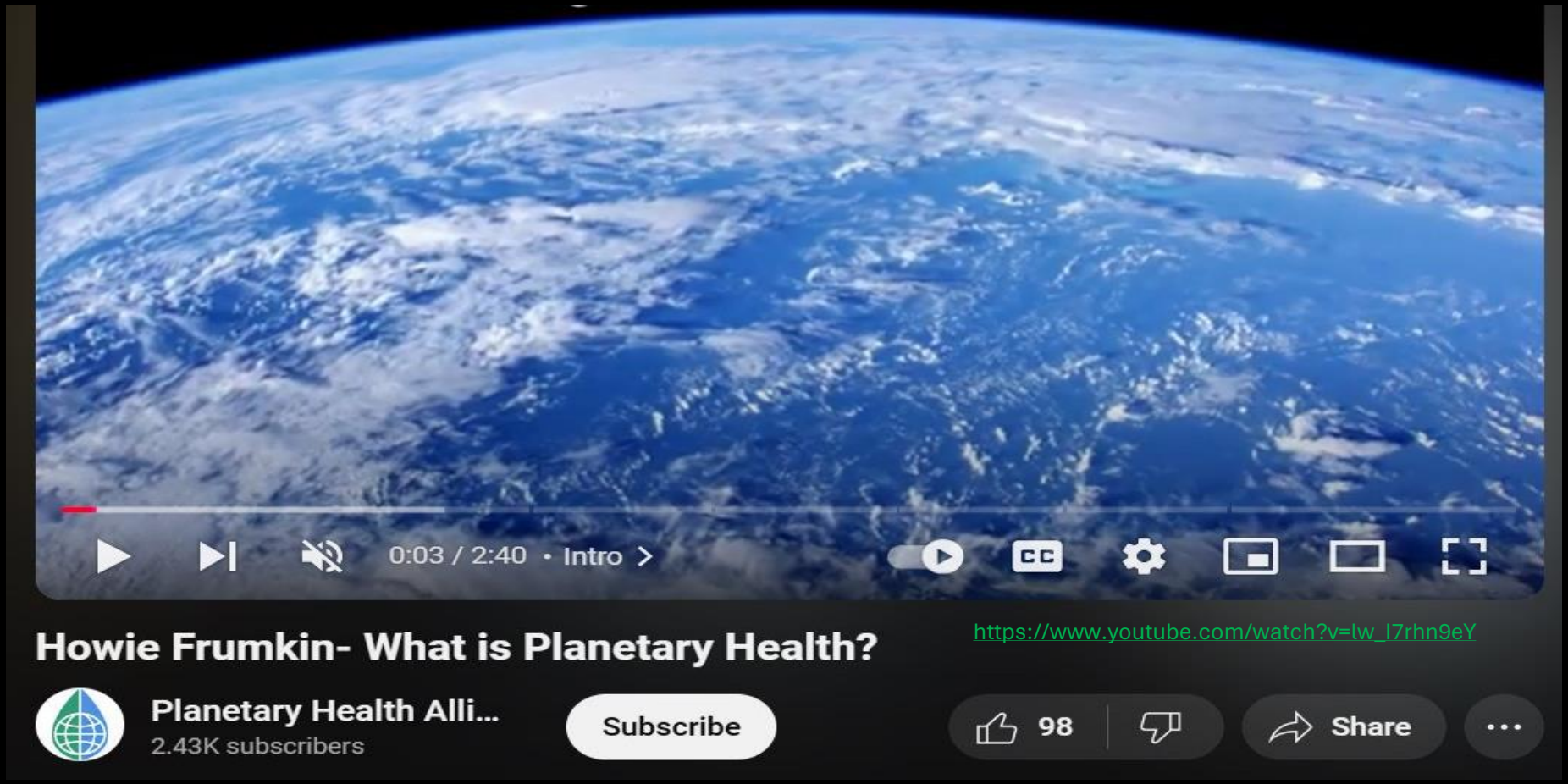
- ESH teaching & learning activities 2024-2025
- Planetary Health Report Card 2022/3 & 2025/6

ESH Curriculum Development in UCT FHS, Sept 2025

Activity	Plans for Semester 2 2025
Map 2025 ESH curriculum for MBChB	Complete mapping using LOOOP software
Develop ESH curricular theme for MBChB (2025-2030)	Finalise curricular theme for MBChB 2026 on Planetary Health & Sustainable Healthcare
Refine ESH lecture content & assessments for MBChB	Refine learning objectives, learning activities & lecture content; develop new assessments
Develop content on sustainable healthcare	Develop sustainable surgery projects for year 5 2026; offer more electives in sustainable quality improvement (SusQI)
Planetary Health Report Card (PHRC) 2025-26 with student team	Complete PHRC interviews with FHS stakeholders (Aug – Nov. 2025)

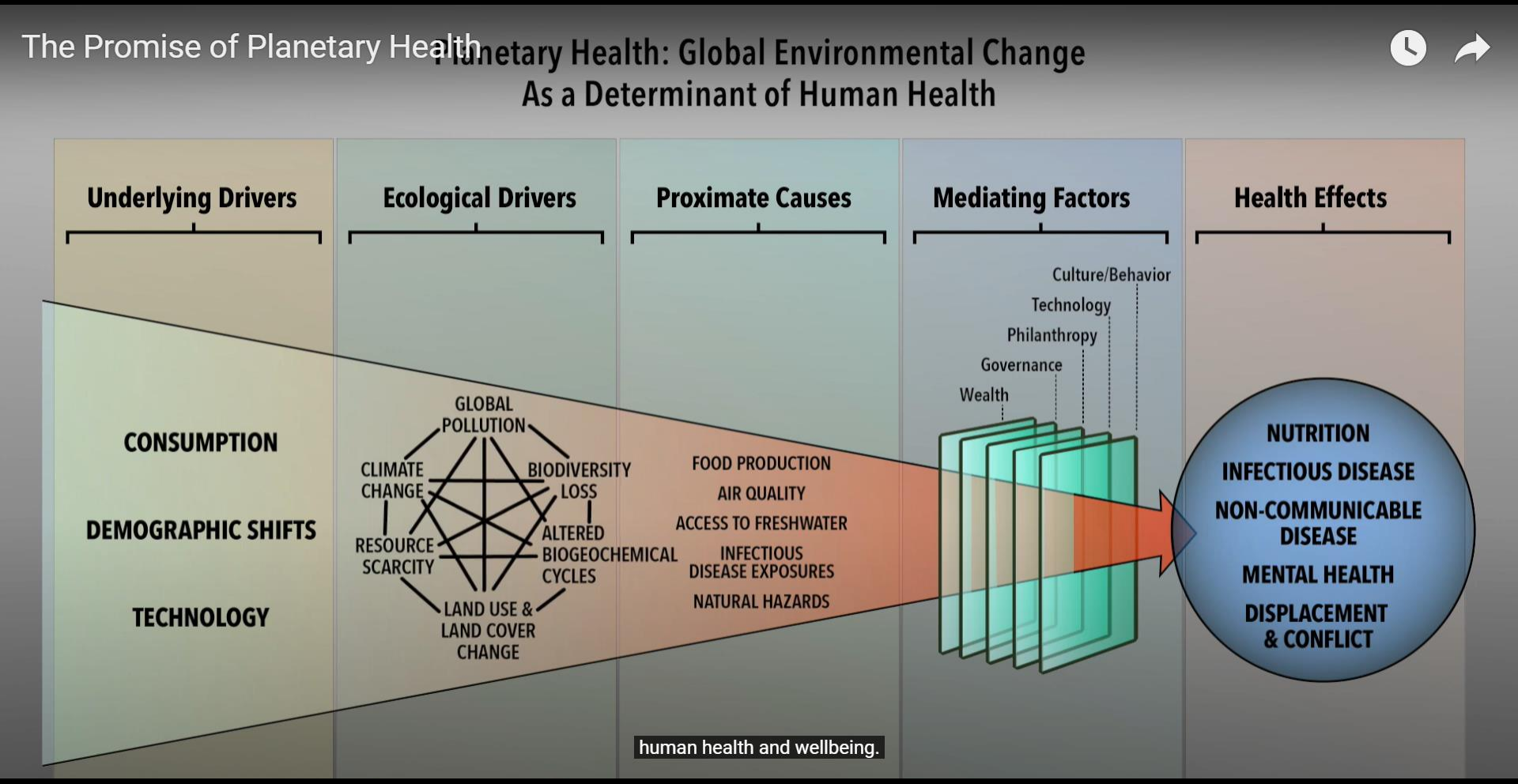
Introduce Planetary Health

Brief History & Key Principles



Class Discussion Starter

https://youtu.be/9cZ0zBSJz_g?si=XnDSJg3UMDMf7dDm



We know what to do – will we do it?

Link Planetary Health to Prior Learning on SDGs

Interactions between the Sustainable Development Goals

THE 17 GOALS | Sustainable Development (un.org)

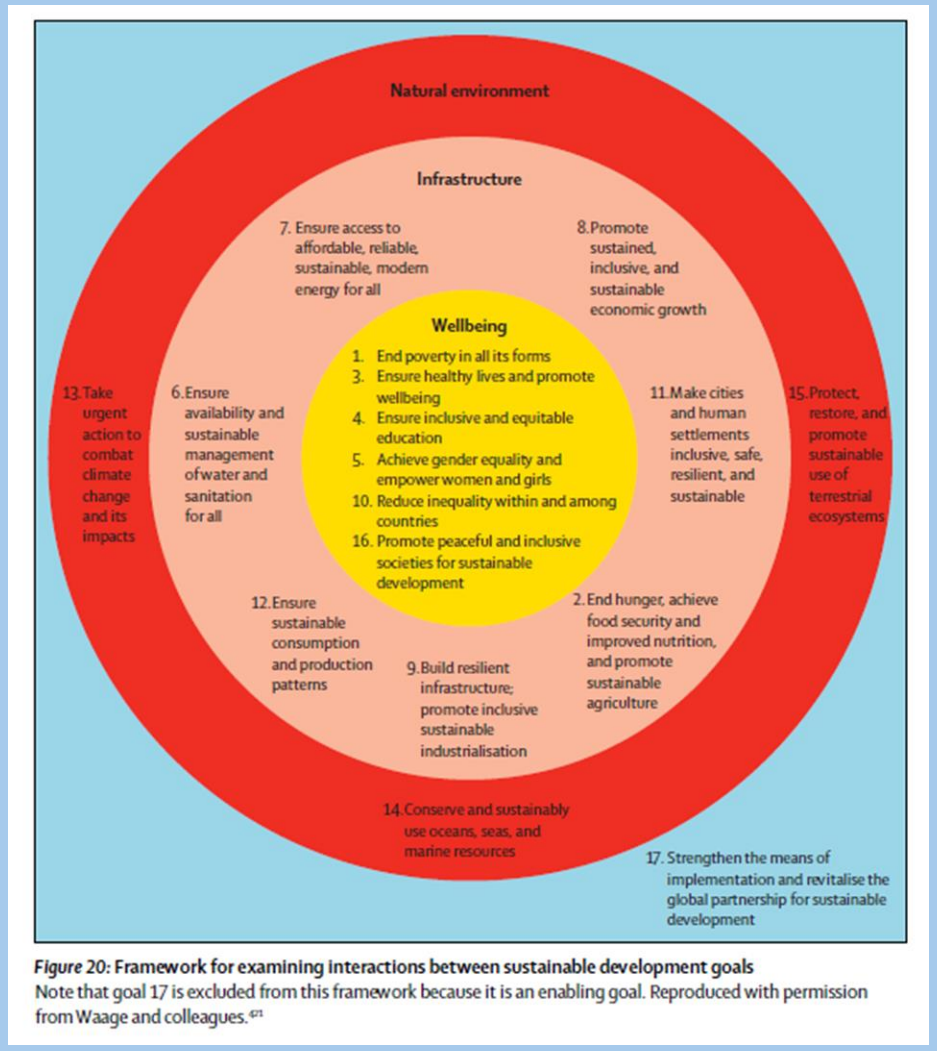
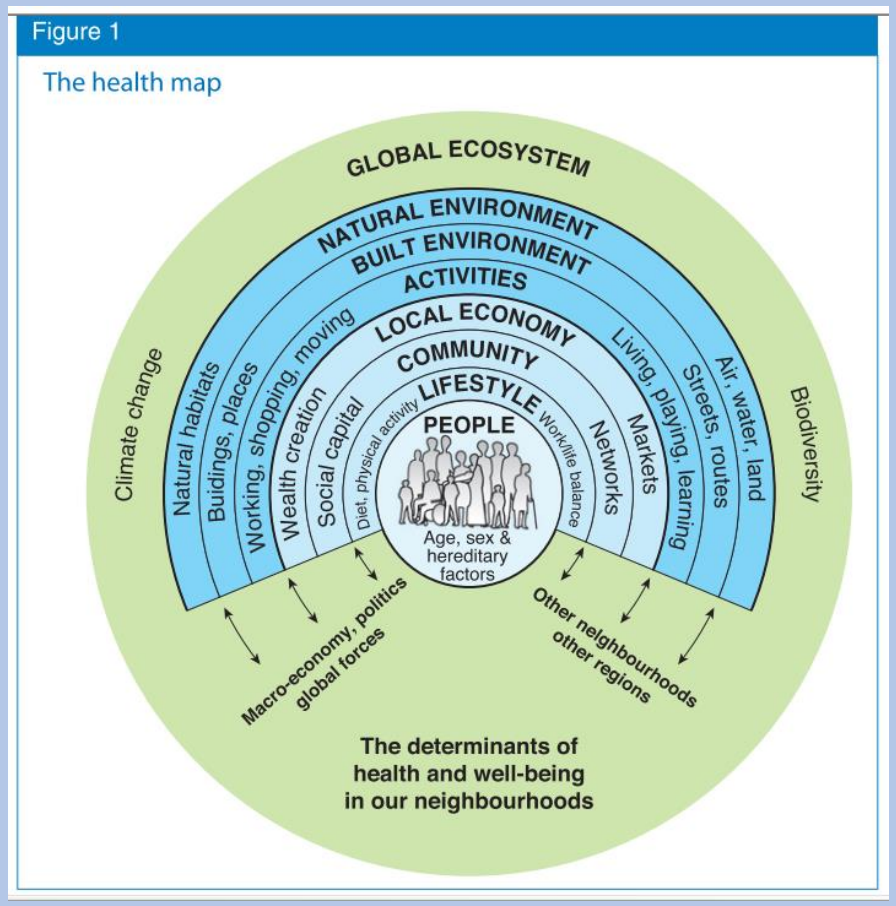


Figure 20: **Framework for examining interactions between sustainable development goals**
Note that goal 17 is excluded from this framework because it is an enabling goal. Reproduced with permission from Waage and colleagues.[471]

Link Planetary Health to Prior Learning on Determinants of Health



Barton, H., & Grant, M. (2006). A health map for the local human habitat. *The journal for the royal society for the promotion of health*, *126*(6), 252-253.

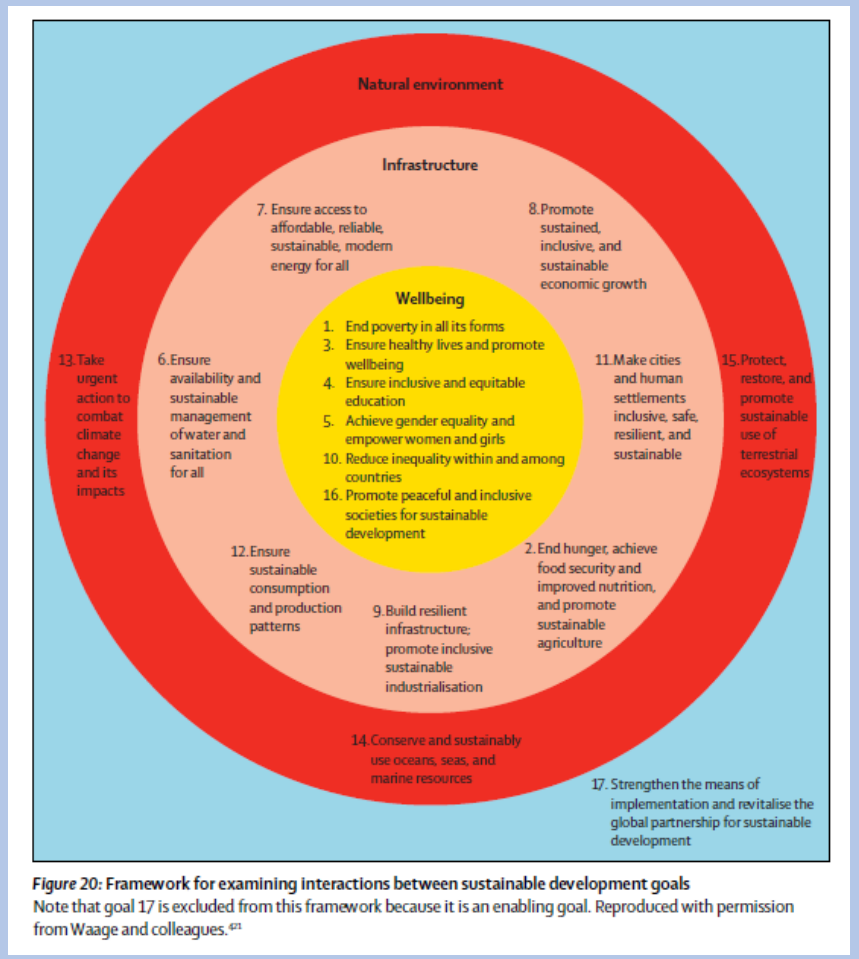


Figure 20: **Framework for examining interactions between sustainable development goals**
Note that goal 17 is excluded from this framework because it is an enabling goal. Reproduced with permission from Waage and colleagues.[671]

The Doughnut for the Anthropocene

An ecologically safe and socially just space for all humanity to thrive

A Doughnut for the Anthropocene: humanity's compass in the 21st century

A new model of human wellbeing is emerging to guide humanity in the Anthropocene. In essence, it recognises that wellbeing depends on enabling every person to lead a life of dignity and opportunity, while safeguarding the integrity of Earth's life-supporting systems. The conceptual framework of social and planetary boundaries—which has come to be known as the Doughnut—contributes to this paradigm by concisely visualising its ambition (appendix), and so providing a compass for humanity's 21st century progress.

Since I created the Doughnut at Oxfam in 2012,[1] it has been widely applied within academia, policymaking, progressive business, urban planning, and civil society as a tool for reconceptualising sustainable development.[2–6] Here I present a renewed and strengthened framework, based on recent advances in both internationally agreed social standards and in Earth-system science, which respectively provide the basis for establishing the Doughnut's social and ecological boundaries.

The Doughnut combines two concentric radar charts to depict the two boundaries—social and ecological—that together encompass human wellbeing (figure). The inner boundary is a social foundation, below which lie shortfalls in wellbeing, such as hunger, ill health, illiteracy, and energy poverty. Its twelve dimensions and their illustrative indicators are derived from internationally agreed minimum standards for human wellbeing, as established in 2015 by the Sustainable Development Goals adopted by all member states of the United Nations.[7]

The Doughnut's outer boundary is an ecological ceiling, beyond which lies an overshoot of pressure on Earth's life-supporting systems, such as climate change, ocean acidification, and biodiversity loss. Its nine dimensions and their indicators are defined by the planetary boundaries framework, which seeks to identify and safeguard critical processes that regulate Earth's ability to sustain Holocene-like conditions, and this framework was likewise revised in 2015.[8] Between these two sets of boundaries lies an ecologically safe and socially just space in which all of humanity has the chance to thrive (appendix).

By quantifying and visualising the global scale of shortfalls and overshoot, the Doughnut acts as a concise compass for assessment of the current state of human wellbeing (the appendix contains the full data and methods).

Millions of people currently lead lives that fall far short of the social foundation's internationally agreed minimum standards, ranging from nutrition and health care to housing, income, and energy. At the same time, human activity has led to overshoot for at least four planetary boundaries: climate change, biodiversity loss, nitrogen and phosphorus loading, and land conversion. Improving humanity's wellbeing this century depends on eliminating this social shortfall and ecological overshoot simultaneously (figure).

The Doughnut raises four key implications for the pursuit of human wellbeing in the Anthropocene. First,

See Online for appendix

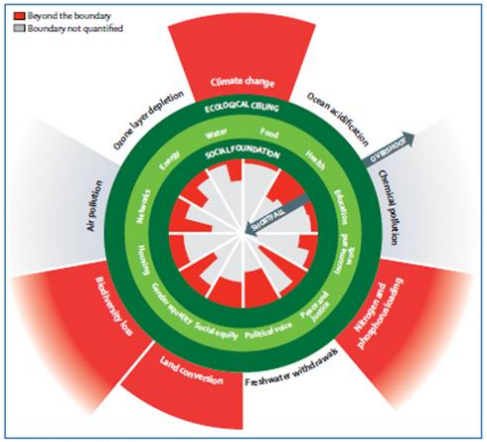
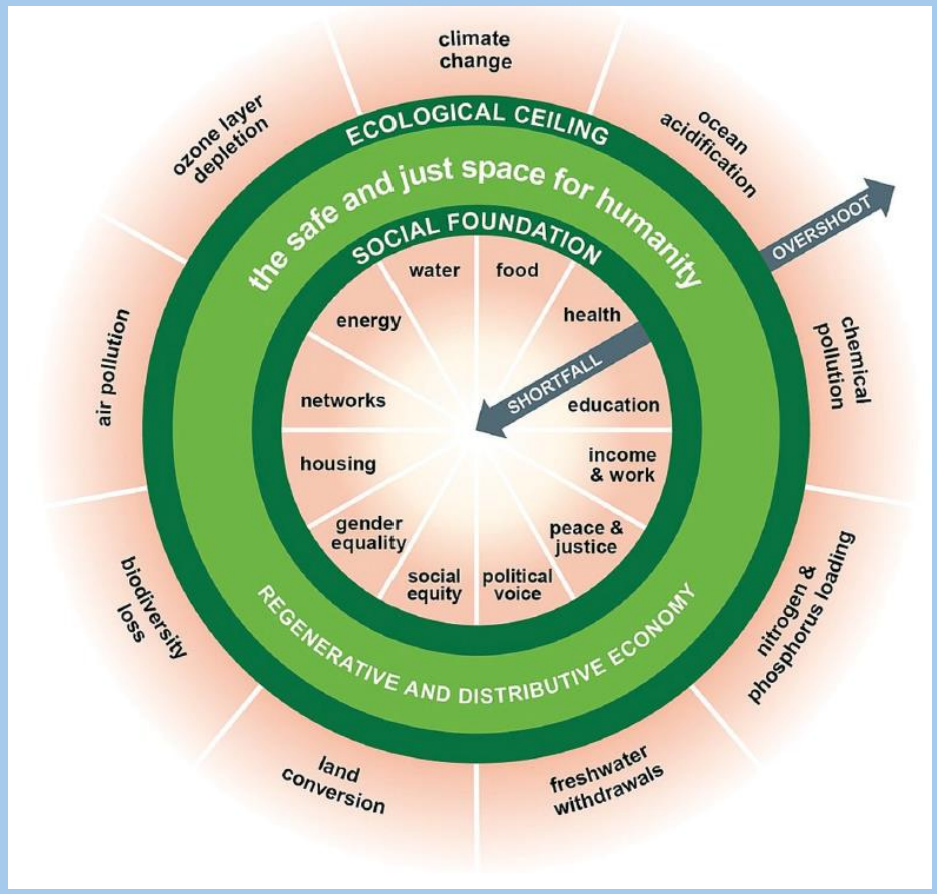
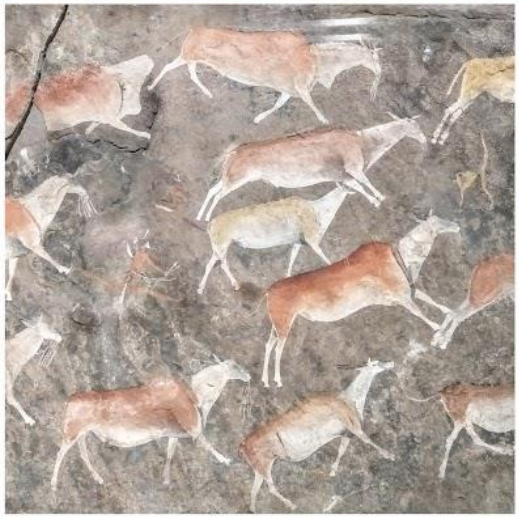


Figure: Shortfalls and overshoot in the Doughnut
Dark green circles show the social foundation and ecological ceiling, encompassing a safe and just space for humanity. Red wedges show shortfalls in the social foundation or overshoot of the ecological ceiling. The extent of pressure on planetary boundaries that are not currently being overshot is not shown here (see appendix for all graphics).



Connect Planetary Health with Local Indigenous Knowledge Systems

MBChB Year 3 Selective Course



MBChB Year 3 Selective Course

iziko
museums of
South Africa

an agency of the
Department of Sport, Arts and Culture

Home » Exhibitions » Humanity

Humanity

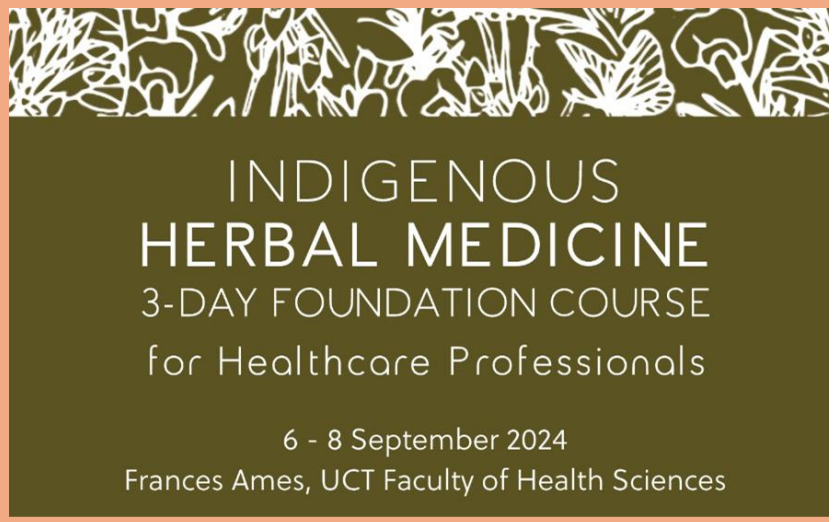
Reimagining the story of human evolution

Humanity exhibition at the South African Museum

MBChB Year 3 Selective Course

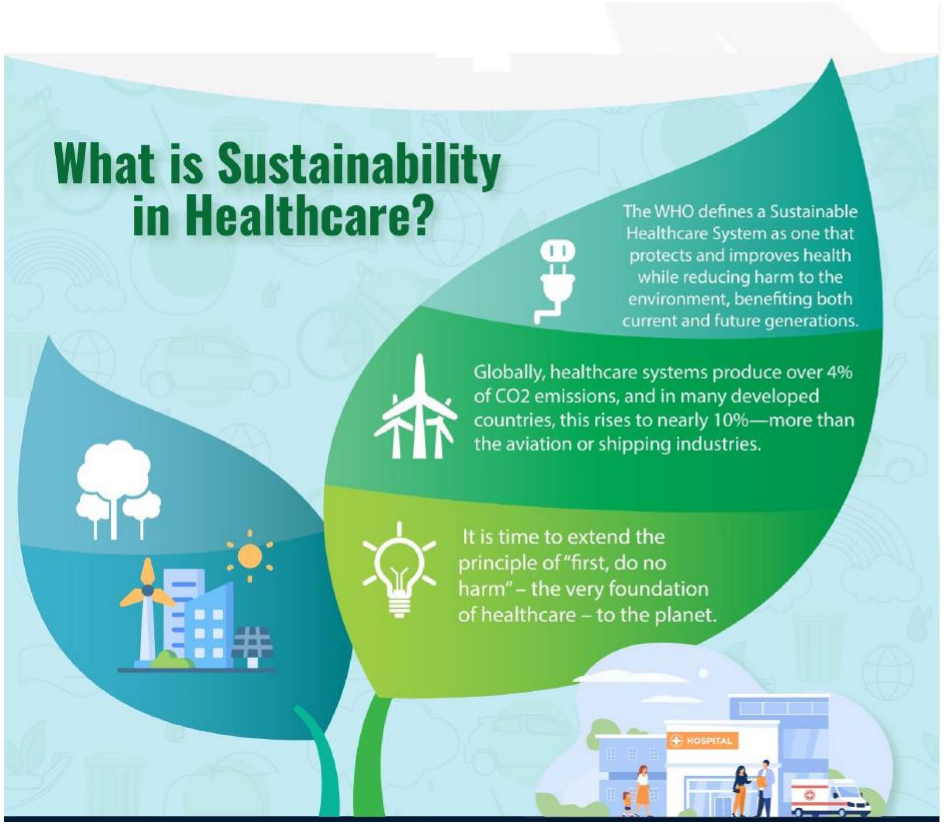
Visit to Khoi & San Indigenous Heritage Centre

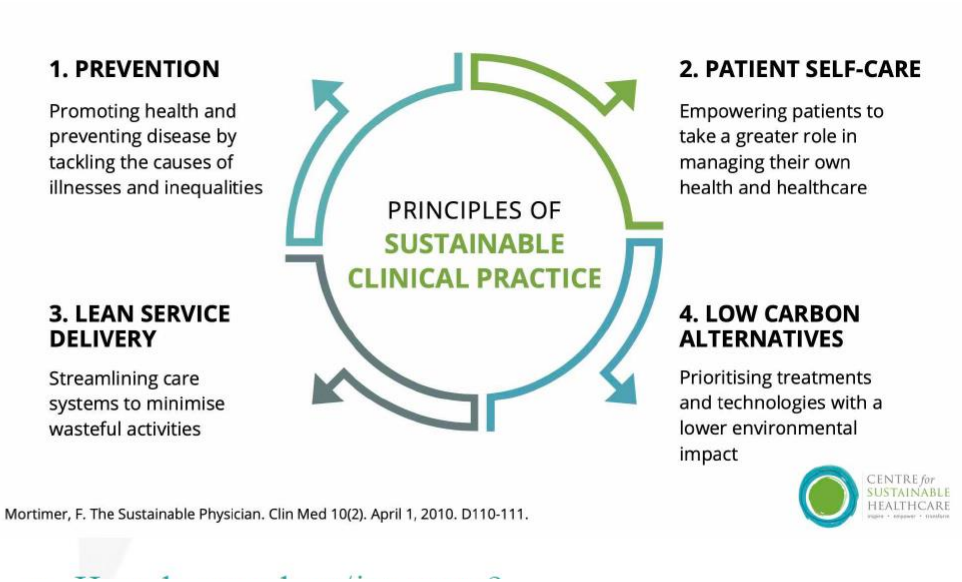
MBChB Year 3 Selective Course



Indigenous Herbal garden planting on Campus

Introduce Sustainable healthcare





GLOBAL GREEN and HEALTHY HOSPITALS

Share local examples of Green Healthcare

GLOBAL GREEN and HEALTHY HOSPITALS

ABOUT JOI

Acting together

Join the network

https://greenhospitals.org/

Home | About | Programs | Climate Change | Membership | Benefits | GGHH in action

Access GGHH Connect

GGHH Agenda and its Sustainability Goals

Global Green and Healthy Hospitals has its foundation in a comprehensive framework of 10 interconnected goals for the health sector to adrress and promote greater sustainability and environmental health.

The Global Green and Healthy Hospitals Agenda sets out to support existing efforts around the world to promote greater sustainability and environmental health in the health sector, and thereby to strengthen health systems globally.

The 10 Goals

Click on each of the goals to learn more.

1. LEADERSHIP: Prioritize environmental health
2. CHEMICALS: Substitute harmful chemicals with safer alternatives
3. WASTE: Reduce, treat and safely dispose of healthcare waste
4. ENERGY: Implement energy efficiency and clean, renewable energy generation
5. WATER: Reduce hospital water consumption and supply potable water
6. TRANSPORTATION: Improve transportation strategies for patients and staff
7. FOOD: Purchase and serve sustainably grown, healthy food
8. PHARMACEUTICALS: Safely manage and dispose of pharmaceuticals
9. BUILDINGS: Support green and healthy hospital design and construction
10. PURCHASING: Buy safer and more sustainable products and materials

Begin your enrollment as a member of GGHH by sending a letter of intent indicating your support for the GGHH

Health Care Without Harm

Sustainable Science: The IDM's Path to Green Lab Certification

Institute of Infectious Disease and Molecular Medicine

UCT Faculty of Health Sciences

Dr Selisha Naidoo
IDM H&S, Biosafety and Facilities Manager

UNIVERSITY OF CAPE TOWN
IYUNIVESITHI YASEKAPA • UNIVERSITEIT VAN KAAPSTAD

IDM INSTITUTE OF INFECTIOUS DISEASE AND MOLECULAR MEDICINE

Support Student Activism

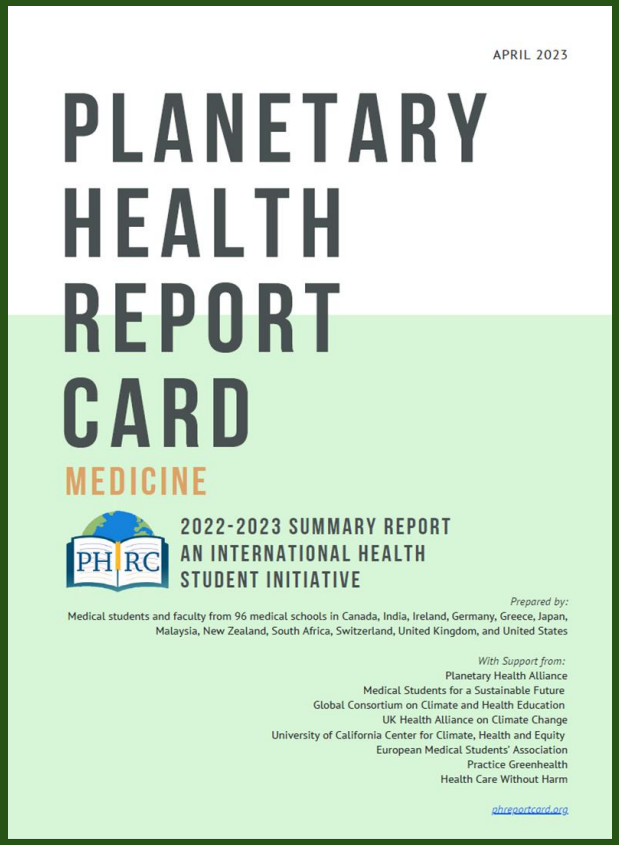
Transformation Project:

#FOSSIL FREE UCT

The Founding Campaign of Fossil Free South Africa

Planetary Health Report Card (PHRC)

A global student-led initiative



As future health professionals, we must be prepared to address the impacts of human-caused environmental changes on our patients' health, and to understand and mitigate the environmental impact of clinical care.

*It is imperative that we hold our institutions accountable for **educating** health students on planetary health and education for sustainable healthcare, generating **research** to better understand health impacts and solutions, supporting related **student initiatives**, embracing **sustainable practices** on our campuses and in our hospitals, and **engaging with surrounding communities** that are most affected by environmental threats.*

*Because climate change and environmental threats disproportionately affect marginalized populations, **these issues are inherently ones of equity and justice***

First Planetary Health Report Card for UCT's Faculty of Health Sciences

31 MAY 2023 | CÉLINE GRAVENOR (MBCHB), AYA YOKWE (MBCHB), IMRAAN MOOSA (MBCHB), SAYURAN PILLAY (MBCHB), JAMES IRLAM (SENIOR LECTURER, EPIDEMIOLOGY & ENVIRONMENTAL HEALTH). **Read time** 4 min.

[Current | University of Cape Town (uct.ac.za)]

PLANETARY HEALTH REPORT CARD

April 22, 2023

Planetary Health Report Card Newsletter

Happy Earth Day!

We are delighted to announce the launch of our **2023 Planetary Health Report Card Results!** This year we had an amazing number of participants with **105 reports** from...

- **13 nations:** Canada, Germany, Greece, India, Ireland, Japan, New Zealand, South Africa, Switzerland, UK, and U.S., Australia, and Malaysia; and
- **4 disciplines:** 96 Medicine, 1 Physiotherapy, 4 Pharmacy, and 4 Nursing.

2022-2023 Summary Report

South Africa

University of Cape Town

Overall	C
Planetary Health Curriculum	C

Planetary health (PH) and sustainable healthcare (SH) topics are included in the FHS medical (MBChB) and health and rehabilitation sciences (HRS) programmes. Chronic curriculum overload; 'siloed' learning and timetabling; and low consciousness among educators are key barriers to integration however. There is growing awareness of the need for SH, despite insufficient leadership; few 'best-practice' examples; and the general priority given to cost-cutting over an ethic of sustainability.

Recommendations:

Adopt trans-disciplinary and inter-faculty approaches towards integration of PH and SH
Incorporate indigenous ecological knowledge and values into curriculum design and delivery
Integrate PH and SH into foundational year lectures and problem-based learning (PBL) cases
Teach clinical educators about SH for more sustainable practice in clinical teaching environments

Interdisciplinary Research in Health and the Environment	C

UCT's Khusela Ikamva ("Secure the Future") Sustainable Campus project is developing a diverse community of practice that is informed by leading research.

Recommendations:

Khusela Ikamva should include more FHS researchers.
The FHS should seek local and international partners in PH research.

Community Outreach and Advocacy	D+

There is little awareness-raising and advocacy by the FHS to protect local communities' health from environmental and climate threats, and to promote more sustainable healthcare.

Recommendations:

Develop more active community partnerships that address environmental health threats. Produce educational materials about how to mitigate climate-health impacts.

Support for Student-Led Initiatives	D-

The FHS provides little support and no funding for PH and SH-related student projects.

Recommendations:

Offer opportunities for quality improvement (QI) and community-based sustainability projects.
Collaborate with student leaders for sustainability in curricula development and campus operations.

Campus Sustainability	C-

UCT's Environmental Sustainability Strategy has a goal of a net zero carbon, water and waste-to-landfill campus by 2050 or sooner, led by a Director of Sustainability. Waste recycling is promoted; and sustainable water management is practised, but without effective monitoring and evaluation. Renewable energy use is low and green building standards are not prevalent. A pilot orientation course is being transformed into a 'sustainability literacy' course for all faculties.

Recommendations:

Increase energy efficiency and solar power on new green building projects.
Increase staff training about promotion of waste recycling.
Implement and evaluate the pilot orientation course on sustainability.

Curricular Opportunities for ESH at UCT

- ✓Include campus sustainability in First Year Experience orientation
- ✓Introduce Planetary Health & Sustainable Healthcare in year 1
- ✓Integrate planetary health & environmental sustainability into problem-based learning in years 2-3
- ✓Offer student selectives (year 3) & electives (years 5&6)
- ✓Develop sustainable healthcare project-based learning (years 5&6)

"We've had a seminar and several workshops where we were thinking about ***what it means to decolonize the curriculum.*** *And I think that we can't do that without talking about environmental sustainability as part of that.*

*So, I think there are opportunities...****to start thinking about how we embed this into our practices****, rather than making it an add-on."*

SECURING THE FUTURE

STUDENT-STAFF COLLABORATION TOWARDS A SUSTAINABLE CAMPUS AT THE UNIVERSITY OF CAPE TOWN (UCT), SOUTH AFRICA

Reflections from the PHRC team at the UCT Faculty of Health Sciences
C. Gravenor (MBChB 6), A. Yokwe (MBChB 2), I. Moosa (MBChB 2), S. Pillay (MBChB 2),
J. Irlam (Senior Lecturer, Epidemiology & Environmental Health)

SHARE (Sustainable Healthcare Academic Research and Enterprise) Conference 2023 Poster Theme 1

BACKGROUND

The University of Cape Town (UCT) has recently launched the 'Khusela Ikamva' / 'Secure the Future' Sustainable Campus Initiative. Its goal is a net-zero carbon, water and waste-to-landfill campus by 2050 or sooner.

The UCT Faculty of Health Sciences (FHS) is transforming its health professional education curricula to incorporate principles of social and environmental accountability, among others.

We recently completed a baseline Planetary Health Report Card (PHRC) for the UCT FHS which recommended integrating planetary health (PH) and sustainable healthcare (SH) principles and topics into FHS curricula, research, student leadership, community partnerships, and campus operations & services.

Khusela Ikamva
Sustainable Campus Initiative
UNIVERSITY OF CAPE TOWN

WHAT HAS PHRC CONTRIBUTED TO PLANETARY HEALTH EDUCATION AT UCT FHS?

- The PHRC brought awareness of sustainability (or lack thereof) in health care. Discussions related to PHRC highlighted areas for improvement.
- We have improved understanding of the concept of sustainability among staff; examples from other institutions were very useful for illustrating possible changes.
- Introducing comparison with other institutions brings perspective into our progress.
- We have created a new baseline for evaluating future activities and research.
- Broad scope of interviewees – with reach in most departments of the health faculty.
- Interviews and the compilation of the final report have helped staff and students accept their responsibility as educators and student representatives in advancing sustainability.

WHAT IS OUR HOPE FOR PLANETARY HEALTH EDUCATION AT UCT FHS?

- Greater participation of student representatives as drivers of change.
- More emphasis on integration of planetary health concepts in a practical way throughout the curriculum.
- More awareness across entire student and staff body.
- More frequent and adequate assessments of the institution's environmental and climate impact.
- Regular reviews of key changes to reduce the institution's impact and improve its capacity to adapt.

WHAT WORKED WELL?

- The structured format of the PHRC questionnaire facilitated constructive interviews and discussion focused on 'objective measurement'
- We received good support from leadership (Deputy Dean of FHS & Director of Environmental Sustainability at UCT)
- Very helpful to have a member of staff facilitate interviews with a wide range of people through connections in the faculty
- We had the participation of staff who can make changes necessary for a more sustainable institution
- Having interviews online made it easier to access more interviewees

WHAT WERE THE CHALLENGES?

- Student representation was limited largely due to the lack of student voice on planetary health issues
- Scheduling appropriate times with some interviewees was difficult
- Online interviews sometimes limited the building of rapport
- Multiple interviews were needed to compile the PHRC when interviewees' scope of knowledge was not broad enough to complete an entire section of the PHRC

WHAT HAVE YOU GAINED FROM YOUR PARTICIPATION?

- Lots of insight, ideas, inspiration!
- Important insights on how to have effective conversations about environmentally sustainable practices in an academic setting.
- Insight gained into methods of bringing about conversations in spaces considered to be above student influence i.e. lecturers, curriculum heads and society heads.
- Learning about the impact of the curriculum and student representation on raising climate change awareness.
- Enhanced collaborative skills, and learning from team members.
- Improved interview skills.
- Greater understanding of how to measure sustainability.
- Heightened appreciation of the need for environmental sustainability in the healthcare setting.
- An opportunity to participate in something meaningful.

PHRC SCORE FOR UCT FHS 2022-2023

OVERALL GRADE: C

Planetary Health Curriculum: C (54.17%)
Interdisciplinary Research: C (52.94%)
Community Engagement: D+ (35.71%)
Support for Student-led Initiatives: D- (20%)
Campus Sustainability: C (40.63%)

43 interviews were held:

- 26 interviews contributed to curriculum scoring
- 3 to research scoring
- 6 to community engagement scoring
- 5 to support for student-led initiatives scoring
- 3 to campus sustainability scoring

KEY REFLECTIONS

- Collaboration between students and staff imperitive
- Baseline set for future comparison
- Value in speaking to staff with power to make change
- PHRC created awareness
- Students learned valuable skills for change-making

OUR RECOMMENDATIONS

1. Develop relationships with invested members of staff to drive changes necessary to improve sustainability scores, and monitor progress.
2. Foster interest in sustainability amongst students, and encourage advocacy for sustainability across campus e.g. in curriculum review, support for student initiatives.
3. Realise the collective goal, towards improving the wellbeing of the planet, underlying all that we do in healthcare – this can ease student-staff relationships.
4. Vocalise PHRC scores; broaden the potential impact of measuring sustainability scores, to stimulate discussion and improvement.

PLANETARY HEALTH REPORT CARD

PHRC–SHARE Conference Poster Stream

SHARE (Sustainable Healthcare Academic Research and Enterprise) 2023

Free, online conference co-hosted by University of Brighton, Brighton and Sussex Medical School and Centre for Sustainable Healthcare

12 May 2023 10am-4:30pm British Standard Time

PHRC student poster category: Open to all international PHRC teams to submit a poster reflecting on the collaborative working relationship in completing the PHRC and advocacy of planetary health education in health professional schools.

All posters to include school scores and no posters to be a 'What is the PHRC' poster. Student PHRC teams can choose one of the following themes for the poster:

Theme 1: Student-staff sustainability working relationships

- What worked well?
- What were the challenges of working with University staff?
- What are the collaborative achievements/benefits of these relationships?
- How did the collaboration with staff contribute to planetary health education?

OR

Theme 2: Interdisciplinary student working as part of the Planetary Health Report Process

- What worked well?
- What where the challenges of working with students from other disciplines?
- What are the collaborative achievements/benefits of these relationships?
- How did the collaboration with other students contribute to planetary health education?

Format instructions: PDF, A2 size, portrait orientation, font size at least 12pt (references 10pt, abbreviated style acceptable).
Email the poster as a PDF file to SustainablitySSHS@brighton.ac.uk by 27 Mar 2023

Conference registration and keynote speaker info

20 SHARE 23

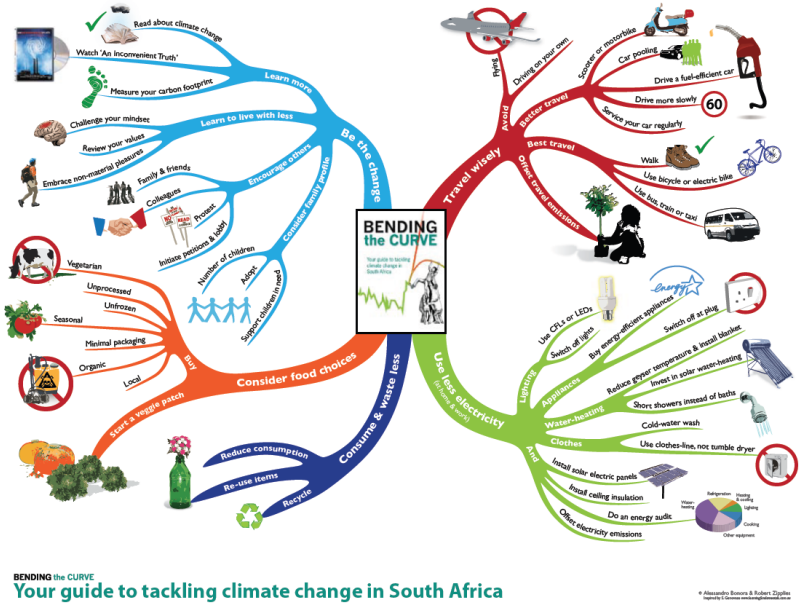
brighton and sussex medical school · University of Brighton School of Sport and Health Sciences · Centre for Sustainable Healthcare

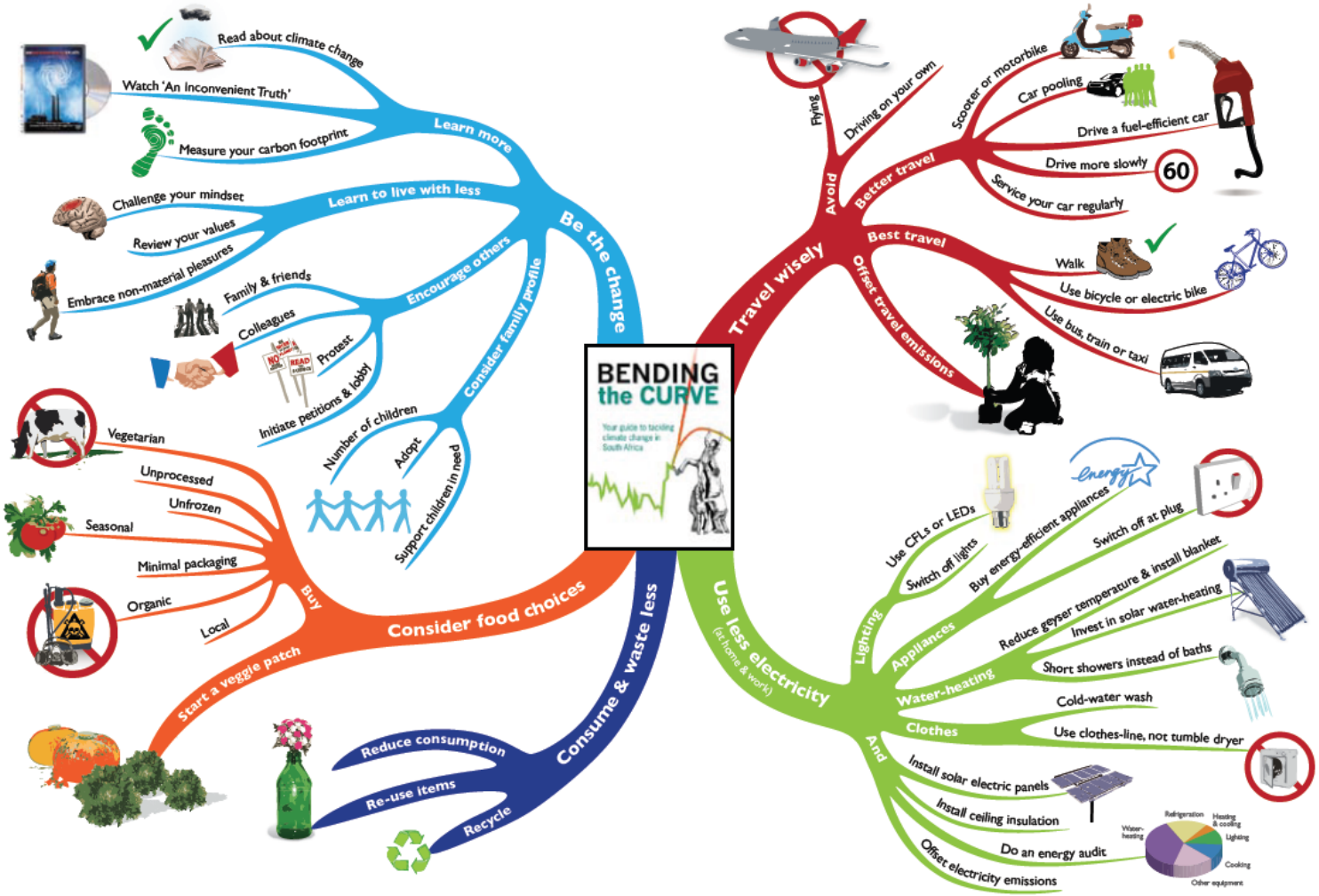
I have gained important insight on how to go about having effective conversations regarding environmentally sustainable practices in academic teaching.

Additionally, I have learnt about the impact of curriculum and student representation on the raising of climate change awareness

Emphasise the Agency of Health Professionals

- SA is highly vulnerable to climate change impacts on public health
- **Health professionals should use their "voice" to protect public health from climate change**
- **Health professionals should advocate for 'greener' health systems**
- We should all consider our lifestyle choices- energy, food, water & waste and get involved in local environmental initiatives





BENDING the CURVE

Your guide to tackling climate change in South Africa

Building a Community of ESH Practice

Education for Sustainable Healthcare Group; Southern African Association of Health Educationalists (SAAHE); 2021-25

African Journal of Primary Health Care & Family Medicine
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Planetary health and environmental sustainability in African health professions education

Authors:
James H. Irlam[1]
Charlotte Scheerens[2,3]
Bob Mash[4]

Affiliations:
[1]Department of Family, Community and Emergency Care, Faculty of Health Sciences, University of Cape Town, Cape Town, South Africa

[2]Department of Public Health and Primary Care, Faculty of Medicine, University of Ghent, Ghent, Belgium

[3]Department of Economics, Faculty of Medicine, University of Ghent, Ghent, Belgium

[4]Department of Family and Emergency Medicine, Faculty of Medicine and Health Sciences, Stellenbosch University, Cape Town, South Africa

Corresponding author:
James Irlam,
James.Irlam@uct.ac.za

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CliMigHealth and the Education for Sustainable Healthcare (ESH) Special Interest Group of the Southern African Association of Health Educationalists (SAAHE) call for the urgent integration of planetary health (PH) and environmental sustainability into health professions curricula in Africa. Education on PH and sustainable healthcare develops much-needed health worker agency to address the connections between healthcare and PH. Faculties are urged to develop their own 'net zero' plans and to advocate for national and sub-national policies and practices that promote the Sustainable Development Goals (SDGs) and PH. National education bodies and health professional societies are urged to incentivise innovation in ESH and to provide discussion forums and resources to support the integration of PH into curricula.

Contribution: This article provides a position statement for integrating planetary health and environmental sustainability into African health professions education curricula.

Keywords: planetary health; sustainable healthcare; health professions education; environmental sustainability, climate change.

Introduction

Education for sustainable healthcare (ESH) has been defined as the organisation of health professions education to develop knowledge, skills and attitudes about the interdependence of human health and ecosystems, including the effects of climate and environmental changes on health, and the impacts of health systems on the environment.[1] Put simply, planetary health (PH) is the health of human civilisation and the state of the natural systems on which it depends.[2]

The 2021 AMEE *Consensus Statement on Planetary Health and Education for Sustainable Healthcare* is an important milestone in the development of ESH worldwide, which recognises the agency of health professionals to protect the planetary foundations of health and urges collective action: *Our health and well-being are dependent on a healthy planet. The window of opportunity to protect our ecosystems is fast disappearing, so urgent, collective, transdisciplinary action is required. The 2020s can be the decade in which we step up action on pressing issues such as a changing climate*. The consensus statement outlines the

SAAHE

EDUCATION FOR SUSTAINABLE HEALTHCARE

UNIVERSITY OF THE WESTERN CAPE

SEFAKO MAKGATHO HEALTH SCIENCES UNIVERSITY

UNIVERSITY of the WESTERN CAPE

University of Cape Town • iYunivesithi yaseKapa • Universiteit van Kaapstad

UNIVERSITEIT iYUNIVESITHI STELLENBOSCH UNIVERSITY

SAAHE

SAAHE

EDUCATION FOR SUSTAINABLE HEALTHCARE

Education for Sustainable Healthcare (ESH)

Tues. 9 Sept from 16-17h00 on TEAMS

Join the meeting now

Time		Presenters
16-16h10	WELCOME & INTRODUCTIONS	Dr James Irlam (SAAHE ESH SIG exco)
16h10-16h20 (incl. Q&A)	Education for Sustainable Healthcare through IPECP: curriculum development and research at SMU	Dr Gerda Botha (Health Sciences Education, SMU)
16h20-16h30 (incl. Q&A)	Shaping Tomorrow's Physiotherapists: Our Journey at Stellenbosch University	Prof Marianne Unger (Physiotherapy, SU)
16h30-16h40 (incl. Q&A)	Insights from integrating environmental and planetary health education into the Bachelor of Nursing curriculum (2023–2025) at UWC	Prof Talitha Crowley (School of Nursing, UWC)
16h40-16h50 (incl. Q&A)	Embedding Planetary Health into Medical Education teaching and training	Dr Christian Lueme (Planetary Health, SU)
16h50-16h55	Fostering Climate Resilience and Eco-Ethical Practice in the UCT Faculty of Health Sciences	Dr James Irlam (Div. Environmental Health, UCT)
16h55-17h00	Call for papers - Environmental sustainability across the medical education curriculum	

[Call for papers - Environmental sustainability across the medical education curriculum]

Call for papers - Environmental sustainability across the medical education curriculum

Guest Editors

James Irlam, PhD, University of Cape Town, South Africa
Rebecca Philipsborn, MD, MPA, Emory University, USA
Katharina Wabnitz, MD, MSc, University of Augsburg, Germany

Submission Status: Open | Submission Deadline: 27 February 2026

BMC Medical Education is inviting submissions for a Collection entitled Environmental sustainability across the medical education curriculum. This Collection aims to gather studies that explore sustainable healthcare practices, environmental ethics, and climate-smart healthcare, contributing to the development of future healthcare professionals who are committed to addressing the health impacts of climate change and promoting a sustainable healthcare system.

SPRINGER NATURE GROUP SDG Programme
supporting the Sustainable Development Goals

This Collection supports and amplifies research related to SDG 3: Good Health and Well-being and SDG 13: Climate Action

Submit to Collection

Personal Reflections

I am learning to

- foster critical systems thinking and reflection by my students & peers on eco-ethical leadership
- better communicate the role and agency of health professionals to protect planetary health & promote sustainable healthcare

I am seeing how ESH can

- enrich professional identity formation among students
- prepare students for future-facing clinical & public health practice

I am committed to developing a community of ESH practice via SAAHE

Selected references

1. Irlam J. **Education for Sustainable Healthcare in South Africa: Stepping Up Climate Action** *Wits Journal of Clinical Medicine, 2022, 4(3) 1–4*
2. Irlam, J. H., et al. (2023). **Planetary health and environmental sustainability in African health professions education**. *African Journal of Primary Health Care & Family Medicine;15(1)*
3. Irlam, J, Razzak, Z and Rother, HA **Student knowledge and perceptions of climate change and environmental sustainability at the Faculty of Health Sciences, University of Cape Town, South Africa**. *African Journal of Health Professions Education 2023; 15(1): 4-8.*
4. *Irlam, J. H., et al. (2023).* **Planetary health and environmental sustainability in African health professions education** *African Journal of Primary Health Care & Family Medicine; Vol 15, No 1 (2023)DO - 10.4102/phcfm.v15i1.3925.*
5. Irlam, J, Dreyer, A, Filies, G, et al. ***Education about Planetary Health and Sustainable Healthcare: a national audit of health professions education curricula in South Africa.*** *African Journal of Health Professions Education 2023; 15(4)*
6. Irlam, J, Reid, S and Rother, H-A ***Education about Planetary Health and Sustainable Healthcare: a national Delphi panel assessment of the AMEE Consensus for health professions education in South Africa***. *African Journal of Health Professions Education 2024; 16(1)*
7. Irlam, J, Reid, S and Rother, H-A ***Education about Planetary Health and Sustainable Healthcare in low- and middle-income countries: a Planetary Health Report Card assessment of perceptions at the University of Cape Town Faculty of Health Sciences***. *Education for Health 2024*

Outline

- Climate Change Impacts in South Africa
- Education for Sustainable Healthcare (ESH) in South Africa
- Integrating ESH into Curricula: the UCT Faculty of Health Sciences (FHS) experience, 2022-2025
- Building a Community of ESH Practice, 2021-2025
- Closing Reflections