

# **ANNUAL REPORT 2021**





UiO **University of Oslo** 

#### ANNUAL REPORT SHE 2021

## Table of Contents

Abstract	. 2
Questions and goals	. 3
Organization	. 5
Members of International Advisory Board	. 5
Future organization	. 6
Results compared to the application and centre plan	. 6
Main focus areas of the work packages in 2021	. 6
Main accomplishments / projects in 2021	. 8
Dissemination and impact	19
Further progress	21
Site visit	22
Appendix 1: Goals and Milestones 2020-2024	25
Appendix 2: Expenditures and budget 2021	26
Appendix 3: Publications	27
Appendix 4: Keynotes and invited conference presentations	28
Appendix 5: In Media	29
Appendix 6: Student Scholarship Projects	29
Appendix 7: Events	32
Appendix 8: People in SHE	34
Appendix 9: Mandates	38



#### Abstract

The Centre for Sustainable Healthcare Education (SHE) is a Centre of Excellence in Education hosted by the Faculty of Medicine, University of Oslo, and opened formally in June 2020. SHE was awarded funding from the Norwegian Directorate for Higher Education and Skills (HK-dir).

Education is an integral part of the 17 Sustainable Development Goals (SDGs) and a key enabler of successful implementation of the United Nations 2030 Agenda. The aim of SHE is to develop, implement and disseminate innovative education strategies, conduct translational research (from research to education) on sustainability in medicine and provide students and healthcare workers with knowledge and skills needed to incorporate sustainability values and principles into comprehensive medical decisions. The educational activities in SHE is to raise the students' awareness about how concepts related to the SDG's gain form and might serve many and sometimes conflicting agendas as they find their way from the political to the professional and practical levels of the healthcare system.

A priority for SHE has been to engage and involve students as partners. Several student projects are funded in order to support innovative approaches to decision making related to the corona pandemic, climate crisis and inequity in health. Being active change agents, students have produced new teaching content and played an important role in dissemination of knowledge and practices, as well as in the development and management of SHE.

A broad range of R&D projects have been implemented with topics as diverse as exploration of SDGs as premises for evidence based decisions, antibiotic resistance, digital health, plus development of an open access text corpus to promote critical analyses of sustainability discourses. Researchers related to the centre have published extensively in 2021 and have submitted an impressingly high number of grant applications with relevance for different aspects related to sustainable healthcare education.



## **SHE vision**

SHE's vision is to educate change agents in health care, so that UN's Sustainable Development Goals become a matter of course - in the face of for example pandemics, antibiotic resistance, overtreatment or the aging population.



Figure 1: SHEs vision and United Nations Sustainable Goals 2030.

#### Questions and goals

The centre sets out to address the following fundamental questions:

- How do the SDGs challenge, and how should they impact, how we frame health care and health professional decisions?
- How can we prepare future health professionals for meeting the SDGs and for providing health care that is sustainable taking ecological, social and economic dimensions of the concept into account?
- How can we translate the 17 SDGs and their sub targets into operational principles for healthcare education, as well as content and pedagogical approaches to be used in the teaching of health professional students?

In order to answer these questions it is not sufficient to focus on single goals and targets, we must interrogate the cross-cutting principles underpinning the SDGs (see figure 2) and how these principles challenge health professional education.

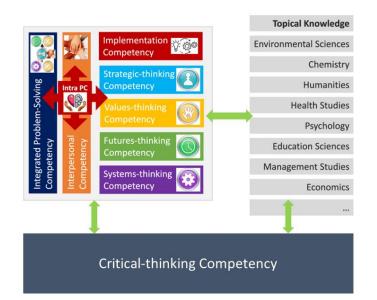


### Cross-cutting principles



Figure 2: UN SDGs & SHE, cross-cutting principles that underpin all SDGs.

In an educational setting, this implies providing students and future healthcare workers with the knowledge and competencies needed to incorporate sustainability values and principles into comprehensive medical decisions. But equally important, students should develop critical awareness and reflection about how concepts related to the SDGs gain form and might serve many and sometimes conflicting agendas as they find their way from the political to the professional and practical levels of the healthcare system. Figure 3 outlines a model of the various skills and knowledge that SHE attempts to provide.



https://link.springer.com/article/10.1007/s11625-020-00838-2

Figure 3: Key-competencies in sustainability framework.



ANNUAL REPORT 2021

#### Organization

SHE is hosted by the Faculty of Medicine at the University of Oslo. The Centre Management Board (CMB) is responsible for the budget, policy and strategy. The Vice-Dean of Postgraduate studies, Professor Eivind Engebretsen, chairs the CMB as executive chairman (accounting for 50 % of this workload) and has the overall financial responsibility for SHE. Professor Kristin M. Heggen is the Director of SHE accounting for 50 % of her workload and is responsible for the SHE staff. Trine Kleven works as Administrative Manager in 50 % of her workload. (See mandates for the CMB, Executive Chair, Director and Administrative Manager in Appendix 9)

The centre consists of 8 work packages (WPs) each led by a WP leader. WP 5 (on student and teacher involvement) is from 2021 co-led by four students (hired in 10-15 % positions by SHE). The centre also hosts the research group Knowledge in Translation (KNOWIT) and several projects financed through other sources.

International Advisory Board (IAB) supports SHE's leadership and the CMB. The main task for IAB is to advise on further development and future strategies of SHE. Due to the broad spectrum of disciplines covered by SHE, IAB is composed of experts collectively covering the work carried out within SHE.

#### Members of International Advisory Board

- Ole Petter Ottersen, Professor and the Vice-Chancellor at Karolinska Institutet, Sweden. Ottersen is the chair of IAB.
- Helen Clark, former Prime Minister of New Zealand and former UN Development Program (UNDP) Administrator.
- Trish Greenhalgh, Professor of Primary Care Health Sciences, Oxford University, United Kingdom.
- Jonathan Grant, Professor & Director, Different Angles, Cambridge, United Kingdom.



#### Future organization

SHE has started a process to reorganize the centre from work packages to projects. After an initial phase, it is now time to change focus from working process and infrastructure to content and results. The deliverables and activities, and intercollaborative relations between the WPs, will be more visible and clear.

#### Results compared to the application and centre plan

#### Main focus areas of the work packages in 2021

WP1: Innovative SDG Courses, Seminars & Workshops: Leader: J. Breivik

**Objective**: Develop, implement & test EDS content & approaches

**Focus areas:** Emphasis has been on collaborative skills (SDG17) and team-building among first years students at the Medical Program and Clinical Nutrition Program.

WP2: Strategic ESD Development & Adaptation: Leader: E. Engebretsen & E. O. Rosvold

**Objective:** Implement SDG including UNESCO principles into existing & new program structures.

**Focus areas:** Focus has been on developing a new Honors Certificate (Master's supplement) in sustainability in education and trialing innovative research-driven educational methods through collaboration with the European University Alliance Circle U and other international partners.

#### WP3: Educational Material Development in EDS: Leader: D. Banik

**Objective:** Develop & validate material for open ESD in higher education. **Focus areas:** The emphasis of this WP, consisting of political scientists, social psychologists, anthropologists, and medical students, has been to develop and apply ESD material in research, teaching and dissemination activities.



WP4: Digital Solution Development in ESD: Leader: P. Grøttum / E. T. Aasheim

**Objective:** Develop & test digital support & tools in ESD.

**Focus areas:** There has been and will continue to be explorations of cases focusing on digital dissemination of sustainable evidence-based decisions making in primary health care. This WP has also been gradually expanded during 2021 to include activities and solutions related to climate change and health.

#### WP5: Promote student & teacher engagement in ESD:

Leaders: A group of four students representing different study programs

**Objective:** Empower students to become resources & active participants in ESD.

Focus areas: Emphasis is on communication with students through social media and

announcement and evaluation of applications for scholarship to student projects.

#### WP6: Research & development for ESD: Leader: K. M. Heggen

**Objective:** Engender & support R&D related to ESD.

**Focus areas:** Among researchers in healthcare and education, attention is increasingly being paid to sustainability and the complex ideologies and discursive exchanges through which the concept is loaded with various (and partly conflicting) connotations.

#### WP7: Knowledge translation approaches to ESD and stakeholder involvement:

Leader: N. K. Vøllestad

**Objective:** Develop & sustain SDG dissemination channels.

**Focus areas:** A key activity for WP7 in the first phase of SHE has been to contribute to a common understanding of how knowledge translation between the WPs can enhance different development activities in the centre, how to interact with other parts/groups at the faculty and university, as well as interaction with stakeholders.



#### WP8: Management of SHE: Leader: K. M. Heggen

**Objective:** Ensure professional & efficient management of SHE.

**Focus areas:** The establishment of SHE as a medium-sized organization (in the middle of a pandemic) has required a strong focus on integration within the Faculty of Medicine, the University of Oslo and Circle-U, which is a research-intensive inter-disciplinary European university alliance.

#### Main accomplishments / projects in 2021

The following projects and achievements are linked to the focus areas described above and are partly the outcomes of individual work packages and partly the result of collaborative efforts between work packages (as specified below):

#### **Oslo Medical Corpus**

Leader: Mona Baker

Work package / focus area: 2 and 6

*Team*: Eivind Engebretsen, Kristin M. Heggen, Tony Sandset, Ida Lillehagen, Gina F. Henrichsen, Hilde Vandeskog, Gabriela Saldanha, Saturnino Luz, Shane Sheehan, Marcela Fraas + team of 3 students.

*Cooperation*: Genealogies of Knowledge Research Network

*Content:* The aim of the educational activities in SHE is to raise the students' awareness about how concepts related to the SDG's gain form and might serve many and sometimes conflicting agendas as they find their way from the political to the professional and practical levels of the healthcare system.



During the first period, an intensive work has been done to develop the Oslo Medical Corpus (OMC), which is a unique, large suite of freely accessible electronic corpora running into tens of millions of words, accompanied by a novel, open-source corpus analysis and visualization interface to support a wide range of empirical studies into various discourses on sustainability, both mainstream and non-mainstream.

#### Results:

- Oslo Medical Corpus established and is currently being developed in collaboration with students and external collaborators.

- New webpage (with graphic profile) developed: Home - Oslo Medical Corpus

- Method article published in Medicine, Healthcare and Philosophy

- OMC presented at international conferences, including SDG conference in Bergen

#### The politics of concepts in Global Health

Leader: Eivind Engebretsen

Work package / focus area: 2 and 6

*Team*: Mona Baker, Jan Buts, Henry Jones, Saturnino Luz, Antoinette Mary Fage-Butler, Loni Kraus Ledderer, Btihaj Ajana, Irena Fiket, Kristin M. Heggen, Tony Sandset, Ida Lillehagen, Gina F. Henrichsen, Hilde Vandeskog, Gabriela Saldanha, Shane Sheehan, Marcela Fraas *Cooperation:* Circle U.



Critical analysis of sustainability discou <i>Oslo Medical Corpus</i>	rses – Mona Baker
s. # Protests remained <b>mostly peaceful</b> , though some prop	erty destruction occurred when anarchists
urs the protest remained <b>mostly peaceful.</b> # " This is the kir	nd of situation we feared, and here it
ans. The protests have remained <b>mostly peaceful</b> however.	French police have used tear gas to disper-
roups were <b>mostly peaceful</b> and police did not report any	major problems or arrests. # This is not
nt years have been <b>mostly peaceful</b> , with labor and immigr	ation groups holding festive marches.
. " The first ( <b>mostly peaceful</b> ) protests already took place. S	till Hamburg is bracing itself for an escalation
	<u>iWeb</u>
• Corpora provide 'a large empirical database	of natural discourse' <sup>1</sup>
<ul> <li>Policy documents, internet material, news m</li> </ul>	nedia, scientific papers etc
<ul> <li>Identification of patterns (repetition and difference)</li> </ul>	ference)
<ul> <li>Supported by a range of visualization tools</li> </ul>	

Critical-thinking Competency

Figure 4: Critical Analysis of sustainability discourses. Oslo Medical Corpus.

*Content:* We will collaboratively design and test a corpus-assisted datathon model – inspired by software developers' concept and practice of hackathons – in which students from partner institutions will first receive training in corpus analysis in an intensive summer school setting, and then be brought together to engage in collective corpus analysis and interrogation of key concepts of the sustainability agenda in order to confront its paradoxes and ambivalences, and to debate ways in which these paradoxes might be addressed through productive (rather than antagonistic) disagreement.

#### Results:

Circle U Academic Chair awarded to Eivind Engebretsen to carry out this mission: Circle U.
 Chair Programme: The Politics of Sustainability in Global Health - Centre for Sustainable
 Healthcare Education (uio.no)



A strong network of collaboration within the Circle U network, the Oslo-Russia
 Collaboration and the Fudan-European Centre for China Studies (FECCS) is
 established

#### **Antibiotic Resistance Unit**

Leader: Sundeep Sahay

Work package / focus area: 2 and 6

*Team*: Ernst Kristian Rødland, Ida Lillehagen, Eivind Engebretsen, Gabriela Saldanha, Mona Baker, Kyunghye Kim, Firdaousse Ouknider

*Cooperation*: Norwegian Institute of public Health, INFRA, OUS (A-team), local partners in India.

*Content*: SHE has set out to establish a research and education unit on multidisciplinary approaches to antimicrobial resistance (AMR) in a global context.

#### Results:

Host of the Interdisciplinary Forum for Research on Antimicrobial resistance (INFRA)
 *Equity*AMR – Digital Equity in Antimicrobial (AMR) policy and practice - Building equity in digital global health: the case of antimicrobial resistance in low and lower-middle-income countries, 325985-Forsker21 - Funded by RCN under Global Health - 12 Million NOK, from 2021 (November 1) to 2025 (October 31)

*DMgtAsia* - Digital Platforms for Disease Surveillance and Control: Best Practices Case
 Studies from Asia, UTF2020/10211 - Funded by Diku under UTFORSK for 3 Million NOK, 2021
 (August 1) to 2025 (July 31)



#### Team training and collective decision-making in medical education

Leader: Jarle Breivik and Eivind Engebretsen Work package / focus area: 1 Team: Carolina Rue Steuernagel, Hanna Mülder, Kristin M. Heggen Cooperation: Institute of Basic Medical Sciences and Faculty of Educational Sciences, University of Oslo

*Content*: This project explores the introduction of team training strategies in medical education as a fundamental shift in the concept of decision-making in medicine from an individual cognitive function to a collective endeavor.

#### Results:

- The TEAMS project is also defined as one of four projects/work packages in the Faculty of Medicine's strategy to meet new demands for digitalization, labor market relevance and collaborative skills in medical education, and is gradually being incorporated in the established curriculum.

- MED-teams cooperates with 1) a PhD study on quality and innovation in student-centered learning environments at the Faculty of Education, and 2) a study on cultural and ethnic diversity in medical education at SHE.

#### **Digital Health and Human Rights**

Leader: Tony Sandset

Work package / focus area: 6

*Cooperation*: Graduate Institute Geneva, Global Network of People Living with HIV, Kenya Ethical & Legal Issues Network on HIV & AIDS, STOPAIDS, BRAC University James P Grant School of Public Health, Universidad de los Andes

*Content*: The project is focusing on how new technologies could transform weak health systems in low-resource settings, with a special emphasis on people living with HIV, migrants, women and girls - groups who rarely have input into the policy decisions that shape what kinds of data are gathered about them, by whom, and how that data is used or managed.



#### Results:

- A large number of data-set ready to be used in publications and facilitate political discussions.

#### **Knowledge Translation**

Leader: Eivind Engebretsen Work package / focus area: 6 Team: Members of the research group KNOWIT Content: This group explores factors that impede and facilitate translation processes in healthcare and develops concepts and models to understand, evaluate and facilitate such processes

#### Results:

- Body in Translation – historicizing and reinventing medical humanities and knowledge translation (financed by Centre for Advanced Study (CAS))

- Bodies in Translation: Science, Knowledge and Sustainability in Cultural Translation (collaboration with Faculty of Humanities, financed by Research Council of Norway, builds on the CAS-project)

## Elective Course (in Norwegian): Knowledge and power in healthcare (Makt og kunnskap i helsesektoren)

Leaders: Kristin M. Heggen & Eivind Engebretsen

*Content:* This course focuses on power dynamics embedded in translation of knowledge from research evidence to decision making practices. Questions like the following are discussed: How is power used by whom to decide what is considered to be sustainable depending on what premises? Which ideologies determine what knowledge we can trust and who we consider as experts? How do modern forms of governance affect the development of knowledge in the health sector? Not least: How must and can the global sustainability challenges shape the decisions made by healthcare professionals together with patients?



#### **Virtual Presence**

Leader: Gemma Hughes Work package / focus area: 6 Team: Eivind Engebretsen, Trish Greenhalgh, Clemet Askheim Collaboration: Oslo Met (PI Marit Haldar) and University of Oxford Content: Research projects will provide a cultural analysis of how loneliness is perceived and represented in relation to the emerging phenomenon of loneliness technologies.

#### Results:

- Protocol published in BMJ Open

#### **Students for Sustainability & Wise Decisions**

Leader: Kristin Heggen in collaboration with Stefan Hjørleifsson, leader of Steering Committee, Choosing Wisely Campaign, The Norwegian Medical Association. *Work package / focus area*: 5 *Students*: Siri H. Quamme, Martin S. Aagaard, Rie Mols, Ben Bjørsvik, Mathieu Børkja, Evgenia Taranova *Cooperation*: University of Bergen, NTNU and The Arctic University of Norway & "Choosing Wisely Norway campaign", The Norwegian Medical Association *Content:* This project explores how to introduce the international movement towards appropriate medical care (choosing wisely) to Norwegian students in medicine and nutrition. The aim is to develop a student-run program to inspire students to become leaders/change agents who are able to include sustainability as a premise for wise clinical decisions.

#### Results:

- First draft of a one-year training program for students





Figure 5: Meeting with Students for Sustainability & Wise Decisions.

#### Sustainability challenges in community health

Leader: Erlend T. Aasheim, Kristin M. Heggen

#### Work package / focus area: 4 and 6

Cooperation: Norwegian Directorate of Health, Oslo Municipality

*Content:* A pre-project phase exploring areas of interest related to climate changes and sustainability in healthcare, as well as exploration of possible areas for fruitful cooperation between Oslo municipality and SHE. Discussions about possible research designs, how to identify the best qualified and motivated PhD candidates, compound of supervisor team, available resources and the time frame.

#### Results:

- Financial support from Oslo Municipality to a Public Sector PhD



#### Health decisions and prioritization in Primary Care

Leader: Nina K. Vøllestad Work package / focus area: 7 Cooperation: HELSAM, UiO Content: Develop cases from various priority settings in primary care.

Results:

- A Norwegian Research application submitted

#### Sustainable Healthcare Education for Primary care

Leader: Elin Olaug Rosvold

Work package / focus area: 2 and 6

Team: Sietse Wieringa, Kristin Heggen, Eivind Engebretsen, Trish Greenhalgh

Cooperation: University of Oxford

*Content*: The aim of this project is to explore, critique and develop how primary healthcare education could contribute to sustainable clinical decisions in line with the UN SDGs, and how to design education enabling primary care professionals to take evidence-based sustainable healthcare decisions.

#### Results:

- A scholarship (Scientia Fellow) from the transnational fellowship program in the field of Health Life Sciences.

Climate and Health in Medical Education in Norway Leader: Anne Kveim Lie Work package / focus area: 2 Team: Lene Frost Andersen, Ritika Sharma (UiO) and professors and students from University of Bergen, NTNU and The Arctic University of Norway



*Content:* an overview of educational content related to climate crises and health in Norwegian medical education and identification of best practices from international universities. In addition, a presentation of appropriate content and methods in training of health professionals.

#### Results:

- A national report about climate and sustainability in Norwegian medical and healthcare education. <u>Here is the link to the report.</u>

#### Master's Degree/Honors Certificate in Sustainable Healthcare Education

#### Work package / focus area: 2

*Team:* Judy Overall, Eivind Engebretsen, Kristin M. Heggen, Elin O. Rosvold *Content*: The first step has been to make an overview of existing educational master's programs, summarizing aims, teaching and learning methods, content, and examples of evaluation forms and methods. Present a list of important questions to be considered when establishing sustainable healthcare education.

#### Results:

- Drafts for curriculum frameworks and guidelines.

## Elective Course (in Norwegian) for medical students: Climate changes and health (Klimaendringer og helse)

#### Work package / focus area: 3 and 4

Leader: Erlend T. Aasheim together with Dan Banik

*Content:* The course focuses on climate change as both the greatest threat to public health of our time, and our greatest opportunity. It covers topics such as how climate change harms health, and how health professionals can play a central role in the work against climate change. Students also learn how to communicate effectively about why climate change must be stopped.



#### In Pursuit of Development (Podcast)

Leader: Dan Banik

Work package / focus area: 3

Content: Prof. Dan Baniks podcast «In Pursuit of Development» has successfully disseminated knowledge on topics related to sustainability and health. Recent episodes have discussed political development, COVID-19 and vaccine distribution, COVAX, aid and sustainability (see Appendix 7). With listeners in 160 countries, the podcast has a wide reach.

#### Student engagement in sustainable development

*Leader:* Dan Banik *Work package / focus area*: 3

#### Results:

- Student Ritika Sharma carried out a survey on how students relate to sustainable development.



#### Dissemination and impact

The centre view dissemination and impact more as co-creation than as separate phases in the R&D activities. Dissemination and impact have been and will be a rolling item on the board and International Advisory Board meetings. We will continue to enlist members of our wider networks in identifying people and organizations who may be able to be interested in and support SHE's work.



Figure 6: Photo by Miguel A. Amutio on Unsplash.

SHE has a strong international focus through our international guest professors and has also developed a close collaboration with the European University Alliance Circle U. (financed through Erasmus +). We consider the European network created through Circle U. as a testbed for innovations developed in our centre.

By trialing innovations such as our student-led datathons and by collaborating with Circle U. about courses and honors certificate we ensure that SHE has an impact on a European scale.



The centre will be responsible for developing a new educational course, an honors certificate which will also be offered as a lifelong learning (LLL) possibilities for healthcare practitioners.

We will widen the focus of dissemination with an ambition to reach:

- across the educational program, PhD, and post-doctoral program.
- across contexts, from healthcare sciences to humanities and social sciences
- across institutions nationally and internationally (assisted by Circle U)
- across sectors; research institutes, government, business
- across activist groups (e.g. climate activist)

SHEs website is the main channel to communicate to Higher Education Institutions, authorities, researchers, students and stakeholders about our activity. Supportive channels are newsletter by email, Twitter, Instagram and Facebook. The last two are created by the students in SHE.

We create events, and have in 2021 mainly two kinds of public events:

1. SHEtalks. A researcher's lunch. The aim is to connect researchers and to enlighten aspects of sustainability, health, education, research and the SDGs.

2. Seminars on Sustainability and a topic, like economy, nutrition, loneliness, democracy, otherness, etc. where the participants are a researcher and a student. The aim is to focus on sustainability, its meaning in different aspects and topics, and to look at challenges in a broad sense. Another purpose is to tell about SHE to various Higher Education Institutions, researchers and students. See Appendix 7 for more information.

SHE has launched scholarships in order to mobilize students' creative abilities and provide students with an active role in updating sustainability challenges relevant to the faculty's education. In our second announcement, we highly recommended students to find a teacher/researcher they eager to work with, and whom can be an important resource to their project. See Appendix 6 for more information.



#### Further progress

The Centre Management Board met four times during 2021. The aim was to focus on SHEs main values and possibilities for a centre for excellence in education, and to strengthen the relation to health programs at the Faculty of Medicine. Agendas and minutes from the meetings can be found on the SHE webpage.

The International Advisory Board (IAB) met for the first time in September. To summarize the meeting and further development of SHE, there are four essential measures:

- We need to operationalize the complicated and ambitious SHE goal which is to remodeling educational content and pedagogical approaches in line with the SDGs using the students as drivers of change.
- We need to reflect on whether the UNESCO competencies represent an adequate basis for the educational innovations. Are 'competencies' what we need or should we rather talk about 'complexities', 'virtues', 'values', 'tensions' and 'paradoxes' as guiding principles for our innovative practices?
- We need to think about sustainability in the broad context of resilience and capacity development. The need for a radical transdisciplinary and cross disciplinary approach that moves beyond what is traditionally associated with the health sector is absolutely necessary.
- We should consider challenging 'global health' as a terminology. Global health risks reducing the global to one aspect of health, often associated with health somewhere else (i.e. in low and middle income countries) and blurs the fact that all health is essentially global.





Figure 7: Photo by Jarli&Jordan/UiO.

#### Site visit

In November SHE had its first site visit from Norwegian Directorate for Higher Education and Skills (HK-dir). Two days filled with fruitful discussions and engagement, ended up as a <u>site</u> <u>visit report written by Tina Bering Keiding</u> (Aarhus University) on behalf of Norwegian Directorate for Higher Education and skills (HK-dir).

#### The goal of the site visit

- Provide advice to the centre about further development and priorities.
- Provide insight and reflections on centre development in the context of the centre plan.

The discussions of the site visit mainly focused on:

- How do the SDGs challenge our understanding of health and health decisions?



- How can we prepare future health professionals to act in accordance with the sustainability goals and to make health decisions that are sustainable in a social, economic, and ecological perspective?

- How can we translate the 17 SDGs and sub-objectives into operational pedagogical principles for health education and into content that is relevant in the education of health science students?

#### Strengths of SHE

The report summarizes the strengths of the centre as follows:

• A management board with direct link to the rectorate and the three healthcare departments

- An international advisory board which might be an important partner for international attention and collaboration of research and education
- A dedicated group of students representing different programs
- A well-established research group (KNOWIT)

• International collaborations on both research and education. An important element is the collaboration around the open access resource Genealogies of Knowledge providing a digital corpus that can be used for exploring sustainability discourses in relation to healthcare

#### Master's program?

In the application the centre has committed to developing a master program in sustainable healthcare. During the visit the question, whether this is the right solution, turned up. The question was not whether a master program is relevant or feasible, but if the impact of the centre would be higher focusing on a portfolio of micro-credentials that can be taken individually or build together to an honors degree. The micro-credentials also have the potential to open for life-long learning activities for professionals in the healthcare system.



#### Balancing academic and activist agendas

The site visit revealed two agendas that must be dealt with and continuously negotiated:

- The academic and analytical agenda striving to enable students to make professional decisions in complex situations where different – and sometimes conflicting – considerations must be taken into account. An important aspect of this agenda is to teach students to reflect critically on how concepts, e.g. sustainability, carries different and potentially conflicting meanings in different domains and discourses.
- 2. The activist and normative agenda insisting that sustainability is and must be a part of the future healthcare system and hence a part of the healthcare educations. A fundamental task for SHE is to provide suggestions to what this mean and how it can be done, i.e. a didactic track. Another task is to ensure the capacity to reflect critically on the normative agenda.



## Appendix 1: Goals and Milestones 2020-2024

Work packages (WPs) and milestones (M)	2020	)			2021 2022				2023	1			2024							
WP1: SDG Courses and Pedagogical	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Approaches Overall course plan developed	<u> </u>	<u>├</u>			<u> </u>	<u> </u>		<u> </u>		<u> </u>	<u> </u>	<b>├</b> ──		<u> </u>	<u> </u>	<u> </u>	<u>├</u>	<u> </u>		<u> </u>
First cohort of courses developed	-	<u> </u>						<u> </u>		<u> </u>	-	<u> </u>			<u> </u>	-	<u> </u>	<u> </u>		-
	<u> </u>	<u> </u>	<u> </u>	<u> </u>							-	<u> </u>			<u> </u>	<u> </u>	<u> </u>		-	<u> </u>
Second cohort of courses developed	<u> </u>						<u> </u>	<u> </u>			<u> </u>									
Third cohort of courses developed																				
Pedagogical methods developed																				
Team based education courses																				
WP2: Strategic ESD Development and	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Adaptation	<u> </u>	<u> </u>			<u> </u>	<u> </u>				<u> </u>	<u> </u>	<u> </u>		<u> </u>		<u> </u>				
Overall plan for MA program developed	<u> </u>	<u> </u>													<u> </u>	<u> </u>	<u> </u>			<u> </u>
Content development of MA program																				
Implementation of MA program																				
Implementation of SDG courses (WP1) in																				
existing programs UNESCO skill courses	<u> </u>						<u> </u>				<u> </u>	_			<u> </u>	<u> </u>				
	<u> </u>	<u> </u>		<u> </u>						<u> </u>								-		<u> </u>
Career development and leadership courses																				
WP3: Educational Material Development in EDS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
MOOCs developed																				
Online seminars																				
WP4: Digital Solution Development in ESD	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Digital translation of course content in WP1																				
Student feedback schemes developed																				
WP5: Promote student and teacher engagement in ESD	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Student driven seed-funding																				
Peer-to-peer teaching schemes planned and developed																				
Peer-to-peer teaching schemes implemented																				
WP6: Research and development for ESD	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Development of implementation tools																				
Research on EBM model																				
Research on implementation of programs and																				
courses																				
WP7: Networking and dissemination	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Maintain up-to-date information about SHE																				
Consolidate a national and international network of students, teachers and stakeholders																				
Conferences and workshops																				



## Appendix 2: Expenditures and budget 2021

NOK – Norwegian kroner	Budget 2021	Expenditures 2021
Personnel and indirect costs		
Personnel	3 772 902	2 429 420
Indirect costs	732 543	485 884
SUM – Indirect costs	4 505 445	2 915 303
Other costs		
Other expenses	0	0
Purchase of services	626 815	517 223
Equipment	0	0
Other operating expenses	2 580 000	117 800
SUM – Other costs	3 206 815	635 023
TOTAL	7 712 260	3 550 327



#### Appendix 3: Publications

- Vandeskog, H.O, Heggen, K.M., Engebretsen, E. <u>Gendered vulnerabilities and the</u> <u>blind spots of the 2030 Agenda's leave no one behind pledge.</u> Critical Policy Studies. (2021)
- Buts, J., Baker, M., Luz, S., Engebretsen, E. <u>Epistemologies of evidence-based</u> medicine: a plea for corpus-based conceptual research in the medical <u>humanities.</u> Medicine, Health Care and Philosophy. (2021)
- Heggen, K.M., Berg, H. <u>Epistemic injustice in the age of evidence-based practice:</u> <u>The case of fibromyalgia.</u> Nature.com - Humanities and Social Sciences Communications (2021)
- Engebretsen, E., Ottersen, O.P. <u>Vaccine Inequities, Intellectual Property Rights and</u> <u>Pathologies of Power in the Global Response to COVID-19</u>. International Journal for Health Policy and Management (IJHPM) (2021)
- Engebretsen, E., Wahlberg, A., Ottersen, O.P. Counter Innovations. Responsibility of universities to act on the SDGs. In: Brink, C (ed.). The Responsive University. Leiden: Brill Publishing (2021)
- Sandset, Tony Joakim Ananiassen; Villadsen, Kaspar; Heggen, Kristin & Engebretsen, Eivind. <u>Discipline for pleasure: a new governmentality of HIV</u> <u>prevention</u>. BioSocieties (2021)
- Sandset, Tony Joakim Ananiassen. <u>The necropolitics of COVID-19: Race, class and</u> <u>slow death in an ongoing pandemic.</u> Global Public Health (2021)
- Sandset, Tony Joakim Ananiassen. "Translating global epidemics: The case of Ebola." The Routledge Handbook of Translation and Health. Routledge, 2021. 269-284.



#### Appendix 4: Keynotes and invited conference presentations

- Eivind Engebretsen, The politics of sustainability in global health, Korea-China LEADership Program 2021
- Eivind Engebretsen and Mona Baker, Evidence and Uncertainty in the time of Pandemics, Tolerating Uncertainty, King's College London 2021
- Eivind Engebretsen, Panelsamtale: Hvordan lykkes med prosjektsamarbeid for bedre utdanningskvalitet? v/Linda Rutledal, NHH, Eivind Engebretsen, UIO, Anja Olsen Moberg og Leva Serapinaite, HK-dir, Erasmus-seminaret 2021
- Kristin Heggen acted as an international expert during the spring semester for students at Medical University of Lodz, Poland in workshops titled: «Sustainability, health, and evidence based decision making»
- Kristin Heggen: «The future of health professions education Emerging international trends»

25<sup>th</sup> anniversary for Family Medicine, North-Western State Medical University in Saint-Petersburg (Russia) named after I.I. Mechnikov

 Kristin Heggen: Betydningen av teori i utdanningsforskning. Presentasjon på den årlige nasjonale konferansen om utdanningsforskning, NTNU – 2021



#### Appendix 5: In Media

- Kleven, T., Engebretsen, E. Studentinvolvering i SHE, leder, MED-nytt nr. 20-2021
- <u>Vi sløser bort ressurser i den febrilske jakten på eksterne midler</u>, Tony Sandset fast spaltist i Khrono, 18/10-2021
- <u>Historien bak koronakonflikten om luftsmitte</u>, Morgenbladet, 16/10-2021
- Koronaforskere i skyttergravsforskning. Morgenbladet, 15/10-2021
- Heggen, K.M., Engebretsen, E., Rosvold, E. O., Gladhaug, I.P., <u>Nasjonal satsning på</u> <u>klima og bærekraft ved de fire medisinske fakulteten</u>e, debatt, Khrono, 4/2-2021

#### Appendix 6: Student Scholarship Projects

Students in WP5 read and make a short list of all applications. They create Instagram stories about the projects after a while.

«Towards sustainable healthcare: Prediction of Norway's health workforce by regression analysis in the next two decades» Sahand Baratinardin, Research article Supervisor: Tron Anders Moger

«Clinical characteristics, survival rates and health seeking behavior among patients diagnosed with prostate cancer receiving treatment at Ocean Road Cancer Institute in Dar Es Salaam, Tanzania» Mette Frier Hansen, Research article and power point presentation

Supervisor: Elia John Mmbaga, Ane Haaland



«How equal is Norway? An analysis of migrant workers' occupational health and safety in Norway» Nabaraj Adhikari, research articles

«Challenges faced by midwives in Matertnity Service Provision to Newly Arrived Migrant Women» Mackenzie Kay, research articles Supervisor: Johanne Sundby, Benedikte Lindskog, Sukhjeet Bains

«Evidence-based Public Health in the era of Pandemic-based infodemic» Syeda Anum Fatima, research articles Supervisor: Dominique Caugant

«The teaching experience of Dhaka, Bangladesh school teachers and assessment of mental health status during the Covid-19 pandemic» Cinderella Akbar Mayaboti, research articles Supervisor: Dr. Ibrahimu Mdala

«Flom og forkjølelse» – podcast Anne Sigrid Lindblad Stokke

«Folkefeber», – podcast season 3 Ida Sofie Rettedal Skjæveland, Sine Grude, Amanda Hylland Spjældnes Supervisor: Anne Kveim Lie

«Et bærekraftig helsevesen- Et bærekraftig arbeidsliv» - Podcast Steffen Alvestad Falkevik Supervisor: Helge Skirbekk



«Educating students about sustainable food system in accordance with the UN food system summit & scientific advisory» Reyhaneh Lashkari & Saeka Zafar, 3 lectures/e-learning moduls

«Combatting inappropriate use of antibiotics among immigrants in Norway» Saima Orangzeb, Master's Degree in International Community Health

«Sustainable skin care, a student podcast» Marit Berg Mathisen, Medicine Student

«Project on Somalis health in Norway» Onmia Khalil

«Folkefeber» – Podcast season 2

Emma Lengle, Ida Sofie Rettedal Skjæveland, Sine Grude, Amanda Hylland Spjældnes Supervisor: Anne Kveim Lie

«Implementing LARG» Sahand Baratinardin

«Relation between hypothyroidism and obesity» Omnia Alaaeldien, Zaki Mohamed Khalil



#### Appendix 7: Events

#### Student Webinar 22/4 «Who is SHE?»

By Ritika Sharma, Martin Aagaard, Siri Hundstad Quamme, Mathilde Røed Jørgensen

**Student event 22/10: UN Day: «How Climate Change Affects Health Services»** By students in SHE & UN Students Cooperation: UN Union and House of Literature, Oslo

#### SHEtalks, a research lunch

16/12: «Mediated relationships between humanitarian aid workers and beneficiaries» By researcher Carmen Delgado Luchner

2/12: «Education for sustainable healthcare decisions in Primary care»By researcher Sietse WieringaCooperation: Oxford University

18/11: «Antibiotic Resistance»By researcher Ida Lillehagen, Professor Sundeep Sahay and PhD student Yogita ThakralCooperation: Department of Informatics, University of Oslo

7/10: «A Marie Curie Project about sustainability and translation» By Dr. Marta Arnaldi

30/9: «The Oslo Medical Corpus as a platform for socially engaged education and research on sustainability» By Professor Mona Baker and Professor Eivind Engebretsen



8/4: «Book Launch: Sustainable Sexual Health, analyzing the implementation of the SDGs» By researcher Tony Sandset, Professor Eivind Engebretsen, Professor Kristin M. Heggen

25/3: «How much health can a tonne of carbon buy? » By Anand Singh Bhopal, University of Bergen

#### Seminar Sustainability & health issues

26/10: «Bærekraft & Ernæring» (Sustainability & Nutrition) Professor Lene Frost Andersen and student Siri Hundstad Quamme Cooperation: HumSam, library at University of Oslo

21/9: «Sustainability & Pandemics» Research Professor Svenn-Erik Mamelund and student Ida Sofie Rettedal Skjæveland Cooperation: OsloMet

26/5: «Bærekraft & ensomhet» (Sustainability & Loneliness) Professor Marit Haldar and student Ida Maria Martinsson Cooperation: OsloMet

27/4: «Sustainability / Democracy»Professor Dan Banik and student Siri Hundstad QuammeCooperation: Centre for Development and environment, University of Oslo

**Prof. Dan Baniks podcast «In Pursuit of Development»** has successfully disseminated knowledge on topics related to sustainability and health. 3 seasons monologues and interview with politicians, civil servants, activists, media personalities and academics. With listeners in 160 countries, the podcast has a wide reach. <u>Here is link to the website</u>.



### Appendix 8: People in SHE



**Eivind Engebretsen** 

Executive Chairman



Kristin Margrete Heggen

Director



Trine Kleven

Administrative Manager



#### Researchers

- Eivind Engebretsen, SHE
- Kristin M. Heggen, SHE
- <u>Tesfamichael Alaro Agago</u>, KNOWIT and Jimma University
- <u>Clemet Askheim</u>, KNOWIT
- Mona Baker, KNOWIT, Genealogies of Knowledge Research Network/Oslo Medical Corpus
- Trish Greenhalgh, SHE, University of Oxford
- <u>Gina Fraas Henrichsen</u>, KNOWIT/Oslo Medical Corpus
- Gemma Hughes, KNOWIT and University of Oxford
- Ida Lillehagen, KNOWIT/Oslo Medical Corpus
- Tony Joakim Sandset, KNOWIT
- Carolina Borges Rau Steuernagel, KNOWIT
- <u>Hilde Ousland Vandeskog</u>, KNOWIT/Oslo Medical Corpus
- Erlend T. Aasheim, SHE
- Ingrid Aarsland, SHE
- Jorunn Marie Myhre, SHE
- Marta Arnaldi, KNOWIT and University of Oxford
- <u>Sietse Wieringa</u>, KNOWIT og University of Oxford
- <u>Sundeep Sahay</u>, SHE and Department of Informatics
- Gabriela Saldanha, KNOWIT, Oslo Medical Corpus
- Shane Sheehan, University of Edinburgh/Oslo Medical Corpus
- <u>Saturnino Luz</u>, University of Edinburgh/ Oslo Medical Corpus

#### Center Management Board

- <u>Eivind Engebretsen</u>, Vice-Dean of Postgraduate studies/Professor and Executive Chairman of SHE
- Elin O. Rosvold, Pro-Dean in Medical Studies
- <u>Biørn Stensaker</u>, Vice-rector for Education
- Anders Malthe-Sørenssen, Director of Center for Computing in Science Education
- Jarle Breivik, Professor at Institute of Basic Medical Sciences
- Knut Lundin, Professor at Institute of Clinical Medicine
- Magnus Løberg, Associate Professor at Institute of Health and Society
- Oline Marie Sæther/Amanda Rose Magnum, students



• Ayna Mousavi/Sine Grude, students

<u>The Directorate for Higher Education and Skills</u> is a board observer. The Director of SHE acts as secretary to the board.

#### Students in SHE

- Siri Hundstad Quamme
- Mathilde Røed Jørgensen
- Ritika Sharma
- Martin Aagaard





**International Advisory Board** 



- <u>Ole Petter Ottersen</u>, Professor and the Vice-Chancellor at Karolinska Institutet, Sweden. Ottersen is the chair of IAB.
- <u>Trish Greenhalgh</u>, Professor of Primary Care Health Sciences, Oxford University, United Kingdom.
- Jonathan Grant, Professor & Director of Different Angles, Cambridge.
- <u>Helen Clark</u>, former Prime Minister of New Zealand and former UN Development Program (UNDP) Administrator.



#### Appendix 9: Mandates

#### Executive Chair (50 %)

- Support the Director in ensuring scientific, strategic and conceptual development of SHE
- Lead the Centre Management Board in the execution of its obligations and responsibilities to SHE
- Act as liaison between International Advisory Board, Centre Management Board and Centre Executive
- Financial management of SHE
- Represent SHE in relevant for a internally and externally (with emphasis on Circle U)
- Work package lead of Circle U (WP5)
- Lead R&D activities at SHE (with emphasis on the research group KNOWIT)

#### Director (50 %)

- Ensure professional and efficient daily management of SHE
- Personnel responsibility for SHE staff
- Ensure synergy across all activities of the WPs.
- Prepare matters for board meetings in the CMB and IAB
- Foster student and teacher participation in planning and implementation of all activities.
- Ensure an adequate and comprehensive monitor and evaluation of all centre activities.
- Represent SHE in relevant for a internally and externally
- Lead R&D activities at SHE (with emphasis on the WPs)



#### Administrative Manager (100 %)

- Ensure professional and efficient coordination of activities at the centre
- Ensure professional communication on SHE
- Secretary for The Centre Management Board (CMB)
- Take part in the management of the centre
- Coordinator Circle U. (WP5)
- Report to Director and Executive Chairman

