



Norwegian Forum
for Global Health Research

FORUM

10 years
anniversary

A young child with dark skin and short hair is walking barefoot on a light-colored path. They are carrying a large, black, oval-shaped plastic bucket on their back, which is resting on their shoulders. The child is wearing a blue t-shirt and denim shorts. They are smiling and looking towards the camera. The background shows a grassy area with some trees and a white vehicle in the distance.

To make a
difference in
the world

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From the Forum Chair

TEN YEARS OF FORUM activities have passed. A lot of work and efforts have been performed these years. Together, we have achieved great results. For instance, all the conferences Forum has contributed to, have been of importance, and Forum has been important both by the work in the secretariat and by all the work from scientists. A large number of students have participated and become inspired by the conferences, and this is important for recruitment to the scientific field. The co-operation with the Norwegian Research Council has been close and well-functioning.



Participants at Forum board meeting in Tromsø, November 2016.

As Forum has this ten-year anniversary, the Forum board decided to celebrate by making this small booklet. Forum invited member organizations to describe shortly some of their work within the area of global health. The texts illustrate clearly the high activity we have in global health in Norway at present.

There will probably be changes in the Forum work in the future. A Norwegian Institute for Global Health is planned. It is at present unclear how this will function, and how Forum will be organized in the future. However, let us hope this will be very beneficial for the global health research in Norway. The important thing is to be very conscious about the aim of the work. Forum wants to make a difference in the world.



The secretariat, Ingvild Hope and Therese Istad. Photo: B.E. Moen

Monclair, Miriam Christ and Wenche Dageid. And last but not least: A large thank you to Therese M. Istad and Ingvild Hope who has been a great secretariat.

Bergen, December 18th 2016

Bente E. Moen
Chair of Forum Board

Highlights from the activities in Forum

Therese Istad,
Ingvild Hope and
Bente E. Moen,
Forum secretariat

Conferences

Forum has co-operated closely with The Research Council of Norway over the years, and has participated in the planning and organizing of several large research conferences, most of them have been conferences related to the research programme «Globvac». Here is the list of conferences where Forum has contributed to the arrangement:

- 2016 Bergen, Forum conference 20 – 21 April 2016. Norwegian Global Health Networks with Impact
- 2015 Oslo, 9th conference, 17 – 18 March 2015. How can research inform the Post 2015 agenda for women's and children's health and rights?
- 2013 Bergen, 8th conference, 16 – 17 Oct 2013. Implementation Research in Global Health
- 2012 Trondheim, 7th conference, 26 – 27 Sept 2012. Innovation for Global Health
- 2011 Oslo, 6th conference, 12 – 13 Sept 2011. Contributions to Global Health Research, Capacity building and Governance
- 2010 Tromsø, 5th conference, 6 – 8 June 2010. Environmental Change and Global Health
- 2009 Oslo, 4th conference, 30 Nov – 2 Dec 2009. Meeting the challenges of the Millennium Development Goals and beyond – Health research and policy
- 2008 Bergen, 3rd conference, 30 – 31 Oct 2008. Global health – research for improved implementation
- 2007 Trondheim, 2nd conference, 18 – 19 Oct 2007. Engaging in global health research – Building capacity in Norway and in low-and middle-income countries
- 2006 Oslo, 1st conference, 16 – 17 Nov 2006. Norwegian Research for the Millennium Development Goals 4 and 5.

Inputs to important discussions on global health

Forum has been a participating voice in several discussions over the years, for instance:

Input for «Visjon2030 – nasjonal innovasjonsdugnad» (spring 2015)

<http://www.visjon2030.no/>

HelseOmsorg21 – Research and innovation strategy (finalized June 2014)

Three Forum members participated as delegates in the working group for global health challenges (Inger Scheel, Ottar Mæstad, Graziella Van den Bergh)

<http://www.forskningsradet.no/servlet/Satellite?c=Page&pagename=helseomsorg21%2FHovedsidemal&cid=1253985487298>

Input to report after white paper on Global Health (2012–2013)

Input to a report from the global health environment in Norway – in connection with the white paper on global health (Medl St 11, 2011-2012): Global health in foreign and development policy – Norwegian actors' engagement in global health

<http://www.globalhealth.no/norad-bredtt-engasjement-og-mange-suksesshistorier-iglobal-helse/>



Climate and health: Declaration on Climate and Health

Adopted by the Board of the Norwegian Forum for Global Health Research, September 10, 2010

http://folk.uib.no/lfa021/Klima%20og%20helse/Summaries&Documents/Declaration_on_Climate_and_Health%5B1%5D.pdf

Stener Kvinnsland
opens the Forum 2016
conference in Bergen.

Photo: T. Tylleskär

The Lancet – UiO Commission on global governance for health (2014)

The Forum has supported the Lancet – UiO Commission on global governance for health. A spin-off has been the establishment of an international independent panel on Global Governance for Health <http://bit.ly/17X2TJD>

Collaboration between students and the Forum

Students have been important for Forum, and some specific activities have been performed by students:

Mapping project (2012–2013)

A one year project where the Forum collaborated with 10 medical students who interviewed and made an overview of the stakeholders working within global health in Norway. This resulted in a report: “Complex Challenges Call for Collaboration Across Boundaries: A Mapping of Perspectives from Research Institutions and Civil Society within Norwegian Global Health”

<http://www.globalhealth.no/wp-content/uploads/2013/09/Final-GlobPol-reportprint-web-Oktober-2013.pdf>

Launch seminar (2013)

The report above was presented and its findings discussed at a seminar organized by the students and the Forum – the seminar entitled “Can we work together? Improved coordination and coherence within Global Health in Norway” was held at the Norwegian Directorate for Health at 2nd of October 2013 with a lot of invited speakers.

http://www.globalhealth.no/wp-content/uploads/2013/09/Improvedcoordination-and-coherence-within-Global-Health-in-Norway_Program.pdf



Posters made by students have always been an important part of the conferences where Forum has been involved. This is from Bergen 2016: Clare, Suzanna and Giulia. Photo: T. Tylleskär

The social meetings between persons have been important at the conferences. Here is from a conference party at the Oslo Opera 2015. Photo: T. Tylleskär



Film screening and panel discussion (2014)

The Forum, together with Universities Allied for Essential Medicines and Medhjem hosted a film screening of the film “Fire in the blood” (on the Aids epidemic), and organized a discussion afterwards with a panel discussion on access to essential medicines at Litteraturhuset in Oslo. <http://www.globalhealth.no/events/fire-in-the-blood-filmvisning-og-paneldebattom-tilgang-til-medisiner-litteraturhuset-oslo/>

Lancet Youth Commission on Essential Medicines Policies (2015)

The Forum supports a group of young medical doctors and students in forming a Youth Commission for Essential Medicines to run alongside the Lancet Commission of the same name. <http://ycemp.com/>

Norwegian Research School of Global Health

www.ntnu.edu/nrsggh

IN 2016, the Norwegian Research School of Global Health (NRSGH) was established. This School aims to strengthen the quality of PhD education and to facilitate recruitment of young researchers in global health. An important task is to build capacity in global health by a strong national team to meet the challenges within education and research.

PhD candidates with projects in global health, registered at a Norwegian University or University College, can become members.

Main objectives are;

- to provide relevant courses for members in the network
- to facilitate for candidates to participate in courses, by providing mobility grants
- to build a network among the PhD candidates, by arranging annual conferences
- to strengthen academic capacity, by arranging regional seminars in partner institutions in a low income setting
- to improve quality of supervision in order to increase the quality of PhD theses in global health
- to increase awareness among academic leadership and policymakers to promote global health as a crucial research area

The research school is funded by the Norwegian Research Council for a six-year period, starting in April 2016. NRSGH is coordinated by the Faculty of Medicine and Health Sciences, NTNU. Professor Elisabeth Darj at Department of Public Health and Nursing at NTNU is the director of the school.

The annual budget is 3 mill NOK, made available through a grant from the Norwegian Research Council, Global Health and Vaccination Programme (GLOBVAC). NRSGH is a collaboration between Norwegian University of Science and Technology (NTNU), University of Oslo (UiO), University of Bergen (UiB), The Arctic University of Norway (UiT) and Norwegian Institute of Public Health (NIPH). All partner institutions are represented in the NRSGH Board.



Board meeting for NRSGH in Trondheim in October 2016.

Photo: J. Tellefsen

Board Members

- Elisabeth Darj, NTNU (Scientific director NRSGH)
- Thorkild Tylleskär, UiB (Chairman of the board)
- Johanne Sundby, UiO
- Jan Rosenvinge, UiT
- Bjørn Gunnar Iversen, NIPH

PhD candidates:

- Andrea Solnes Miltenburg, UiO
- Janne Lillelid Gjerde, UiB
- Evgeniya Sovershaeva, UiT

International representative:

- Flemming Konradsen, University of Copenhagen

NRSGH Administration

- Elin Yli Dvergsdal, Coordinator NTNU
- Line Marie Løw, UiO
- Jorunn Hvalby, UiB
- Turid Austin Wæhler, UiT

The Programme for Global Health and Vaccination Research

Wenche Dageid,
The Research Council
of Norway

GLOBVAC IS AN observer to The Norwegian Forum for Global Health Research Board. We are pleased to support the Forum, which has played a key role in strengthening global health research in Norway and has promoted communication and collaboration among actors in the field. Initiatives such as the Norwegian Research School in Global Health and the successful national network conference in Bergen in 2016 are proofs of the increased engagement between stakeholders in global health in Norway and internationally. GLOBVAC congratulates the Forum with its 10-year Jubilee and is convinced that the future for global health research is bright!

The primary objective of the GLOBVAC programme (2012-2020) is to support high-quality research with potential for high impact that can contribute to sustainable improvements in

health and health equity for poor people in low- and lower-middle income countries.

Secondary objectives of the Programme are to:

- Develop and support internationally competitive and sustainable public and private research groups and institutions in Norway.
- Develop and support national and international research collaboration and partnerships.
- Secure capacity building through developing and supporting partnerships with research groups and institutions in low- and lower-middle income countries.
- Inform and increase awareness among policymakers, researchers and the public about needs for and results from global health research.

Wenche Dageid from RCN is visiting Zambia and one of the Globvac funded projects in 2014. Photo: T. Tylleskär



GLOBVAC works in a number of ways to achieve these objectives. We fund researcher projects, young research talents (post docs) and PhD students; events and workshops; and innovation projects for the industrial sector. We create meeting places, such as seminars and the biannual GLOBVAC conference: Be aware of the 2017 GLOBVAC conference which will take place in Trondheim 13-15 March 2017. We also give advice to and liaise with government and national and international stakeholders in global health.

The thematic areas of the GLOBVAC programme are:

1. Prevention and treatment of, and diagnostics for, communicable diseases with particular relevance for low and lower-middle income countries
2. Family planning, reproductive, maternal, neonatal, child and youth health
3. Health systems and health policy research
4. Implementation research
5. Innovation in technology and methods development for maternal and child health

A mid-term evaluation of the first phase of the GLOBVAC programme (2012-2015) was carried out between September 2015 and February 2016. The evaluation concluded that GLOBVAC has made significant achievements in a number of areas and fills an important gap in the Norwegian funding landscape. GLOBVAC has been particularly successful in boosting the national capacity for global health and vaccination research.

GLOBVAC plays a key role in the funding and initiation of Norwegian research projects that can contribute to solving the large and often

neglected global health challenges. GLOBVAC is also important for increasing the proportion of Norwegian investments in health research for developing countries. The programme contributes to building sustainable research environments in global health in Norway and in low- and lower-middle income countries (LMICs). Projects funded by GLOBVAC have demonstrated an increasing number of partnerships with international actors in global health, for example philanthropic institutions and product development partnerships as well as renowned research institutions abroad.

GLOBVAC is working proactively to identify knowledge gaps and areas of research needs and opportunities, through organizing conferences, participation at international meetings, dialogues with funding ministries, keeping in close contact with the research community and with inputs from the GLOBVAC Programme Board. The Programme Board's composition of international experts from renowned research institutions contribute to the strengthening of international connections, both through enhancing the visibility of Norwegian research, and also stimulate Norwegian research communities to take part in international research consortia.

Funding for the GLOBVAC Programme comes from the Ministry of Foreign Affairs and the Ministry of Health and care Services. GLOBVAC is a thematic research programme at the Division for Society and Health at the Research Council of Norway.

NEXT GLOBVAC CONFERENCE

"Ensuring healthy lives for all"
Trondheim 14-15 March 2017

How Forum started

TEN YEAR AGO, two professors; Gunnar Bjune at the University of Oslo and Gunnar Kvåle at the University of Bergen had an important conversation. The result was a decision to establish Norwegian Forum for Global Health Research. Forum asked them some questions about this event. Professor Gunnar Kvåle was at home in Os, outside Bergen, and used some time to answer our questions. Forum also got in contact with Gunnar Bjune. Bjune was very busy packing for a longer trip to Thailand, with very little time for interviews, but he supplemented some of the information from Gunnar Kvåle. Here is what they told us:

– *How was Forum established, can you tell us about this process?*

Kvåle: The establishment of the Forum was based upon the work related to a report commissioned by the Research Council of Norway (RCN): "Global Health Research Report from a Planning Committee Commissioned by the Research Council of Norway". The Research Board for Strategic Priorities at the Research Council established a Programme Committee for this work in 2004. The participants in this committee were: Gunnar Kvåle (chair), Per Brandtzæg, Ib C. Bygbjerg, Antonie Egeland, Sigrun Møgedal, John-Arne Røttingen, Johanne Sundby and Nils Gunnar Songstad (secretary). The Committee presented plans for a new program for global health research in April 2005. The Committee concluded that a national forum for global health research should be established as an organization representing groups involved in global health research in Norway. These groups were surveyed as part of the preparation of the report. The main conclusions of the report were as follows:

"Less than 10% of the amount invested in health research globally is devoted to research on health problems that account for 90% of the global disease burden.

In Norway this fraction is estimated to be only 5%. To reduce this gap, the planning committee proposes that the Norwegian government establishes a research programme for global health research, by an allocation of funds through the Research Council of Norway: NOK 20 million in 2006 increasing to NOK 52 million in 2010. This is necessary to bring Norway to the average international level in global health research. The programme will prioritize support to the best research groups in order to build sustainable research institutions with the potential of reaching the international forefront».

The main reasons for establishing the Forum were:

"Better co-ordination of Norwegian activities in global health and global health research is needed. Through the proposed programme, new activities in global health research will be initiated at Norwegian institutions. As a consequence, there will be a stronger requirement for national exchange of information to improve research collaboration between institutions and to disseminate knowledge to central authorities in health and development"

The main functions of Forum were to:

- Improve knowledge exchange and collaboration in research among Norwegian institutions in the field of global health
- Improve dissemination of knowledge to the government, relevant ministries and central authorities dealing with global health issues and identification of policy relevant areas by dissemination in the other direction.
- Improve collaboration on global health issues among research institutions, the government and the NGO sector.
- Contribute to international processes and initiatives in the field of global health and health research.
- Be a forum for development of evidence-based policy on international health issues
- Keep an inventory of research activities and resources used for global health research in Norway
- Organize conferences on global health research at a regular basis in collaboration with the Board of the new global health research programme at the Research Council of Norway



Gunnar Kvåle speaking at a conference in 2002.

Photo: T. Tylleskär

åsen in connection with a global health conference there. Board members were appointed on the recommendation of the participating institutions.

– *Why was it important to establish Forum?*

Kvåle: The purpose was to strengthen global health research and training by establishing a national forum for this field, as described in the report of the Planning Committee for the Research Council's new program for global health research delivered in 2005. Earlier, the Norwegian Association for International health (NIHA) had covered parts of this field, but NIHA was not a forum for researchers in the field. When Forum was established, NIHA was dissolved in 2006. Norway had at the time, unlike many European countries, no association for tropical medicine or international health and had therefore not been represented in the "Federation of European Societies for Tropical Medicine and International health" (FESTMIH). The Forum started to represent Norway in this organization. FESTMIH organizes European conferences in tropical medicine and international health biannually.

Bjune: The most important reason was the financial system for international health research. Norway had several small and vulnerable research environments, and these groups needed careful growth and working conditions. We discovered that the RCN had started plans for a program where the applicants had to apply to an application system similar to the one used in EU for large projects. We wanted to influence the situation. Using Forum, we could cooperate with RCN as well as with each other. We wanted to create a platform for scientific discussions and scientific updates within international health research. The Forum could serve as a unit fostering

At the Global Health Conference in 2005, the proposal was discussed. There was an interest in going ahead with the plan, and Gunnar Bjune and Gunnar Kvåle developed a proposal as a basis for the inaugural meeting February 9, 2006.

– *Where did you have the inaugural meeting, and who was present?*

Kvåle: The inaugural meeting was held on February 9, 2006, at the Department of International Health, University of Oslo. Present at the meeting were: Gunnar A. Bjune, University of Oslo, Gunnar Kvåle, UiB, Berit Rostad, NTNU, June Jacobsen Steen, AUC, Tore Jarl Gutteberg, UiT and Nils Gunnar Songstad (NGS), University of Bergen (secretary).

As observers attended: Karen Lieve Ria Hosten, Research Council of Norway, Paul R. Fife, Norad. An Interim Board was appointed, with the following members: Gunnar A. Bjune (UiO), chairman, Gunnar Kvåle, (UiB), Deputy Chairman, Tore Jarl Gutteberg (UiT), June Jacobsen Steen (AUC), Berit Rostad (NTNU), Nils Gunnar Songstad (UiB), secretary.

The first General Assembly with a regular election was held on 16 November 2006 at Voksen-



Gunnar Bjune on a travel in Thailand.

Photo: S.G. Hinderaker

co-operation between researchers; supporting multidisciplinary research.

– *What did you expect would be the consequence of having Forum?*

Kvåle: The starting point was to create a network that could contribute to strengthening global health research, not only at the universities, but also at other research institutions where small groups or only a few individual researchers were involved in global health research. The funding was at that time weak and uncertain, as stated in the report of 2005. The report was released in advance that the program GLOBVAC was established in 2006. Instead of a gradual increase in funding to NOK 52 million annually that we had proposed, Jens Stoltenberg decided to allocate NOK 50 million a year, earmarked for vaccination research, already from the year 2006. This was good, but led to a different focus of global health than the planning committee had envisaged and proposed in their report of 2005.

– *What were the largest challenges in the early years of Forum?*

Kvåle: We had hoped for a greater involvement

and greater direct support from the institutions who participated in the Forum. With exception of the University of Bergen, the establishment of large research groups in global health research, was rather slow. Another challenge was to develop and provide good funding for other important fields in global health in addition to vaccine research. The annual conferences run in cooperation with the NRC was initially meant to cover all areas of global health, not just vaccination research. GLOBVAC with focus on vaccine research and its own program committee played naturally an important role in setting priority for research agenda and topics to be covered at the annual conferences.

Bjune: I think the relation to RCN became a bit too close. Forum followed the activities in RCN, and did not create own activities. It was difficult to run an independent association when it at the same time was necessary to be very close to RCN.

– *What do you think has been the most positive aspect of the Forum work?*

Kvåle: Forum created clearly greater interest and involvement in Global Health Research. There

Professor Rune Nilsen was the leader of Forum in a period, and has been very supporting in the establishment of multidisciplinary projects.

Photo: T. Tylleskär



has been a growing participation at GLOBVAC conferences, also by scientists and students from low-income countries. Networking for improving the quality of academic training among the different members of the network was a priority work from the early years. Some institutions in the network were small and had limited possibilities for high quality teaching at PhD level in global health. Therefore, work with the aim of establishing a national research school in global health was initiated. It is satisfying to see that funding for a research school in global health has been achieved from GLOBVAC for the period 2016-2022 as a result of an application coordinated by NTNU.

It is especially satisfying to see how research in global health has grown, both in quantity and quality, during the ten years the Forum has existed. GLOBVAC has covered most of the important thematic areas, in addition to vaccination research, more similar to the strategic priorities listed in the RCN-report from 2005. Many candidates have been trained to the PhD and postdoc level. In order to achieve full benefit of this important investment, the establishment of positions for senior scientists and professors in the field of global health at the Universities and other research institutions should now have the highest priority.

Bjune: The annual conferences have given an impressive picture of the research we have in Norway in the field of global health. When I think about how few we were in the first years Forum existed, and how low the activity was, I really see how much this research field has grown. I think the change has taken place with relatively minor investments from our national budget. There is still room for more activity in our scientific population, we have many interested persons who could be included in projects. We need to continue the work and keep spirits up for international health.

The first Board Members

After two meetings in an interim board, Board Members for Forum were appointed November 16th 2006, after suggestions from the member institutions. The interim board was chaired by professor Gunnar A. Bjune, and the interim board meetings were held on February 9th and August 18th 2006. The election for a formal board establishment was held at a General Assembly in Forum at Voksenåsen kultur- og konferansehottell in Oslo. Here are the first board members:

University of Tromsø

Member: Jon Øyvind Odland
Deputy: Nina Emaus

NTNU Trondheim

Member: Berit Rostad
Deputy: Arne Myhre

University of Oslo

Member: Gunnar A. Bjune
Deputy: Gerd Holmboe-Ottesen

University of Bergen

Member: Gunnar Kvåle (First Chair)
Deputy: Bente E. Moen

Bergen University College

Member: Karen Marie Moland
Deputy: Ingrid Onarheim Spjeldnæs

Agder University College

Member: June Jacobsen Steen
Deputy: Svein Gunnar Gundersen

Research institutions

Member: Ottar Mæstad, CMI
Deputy: Laila Garberg Hagen

Independent members

Member: Birger Sørensen
Deputy: Eystein Skjerve
Member: Berit Schei
Deputy: Bente Træen

The Chairs of Forum

Gunnar Kvåle (2006 – 2008)
Jon Ø. Odland (2008 – 2010)
Rune Nilsen (2010 – 2011)
Inger Scheel (2012 – 2014)
Bente E. Moen (2014 – 2016)

University of Oslo

Professor Johanne Sundby,
Department of Community
Medicine and Global Health,
University of Oslo

THE LARGEST ANCHOR in international health at the University of Oslo (UiO) was cast in the nineties when we got our own professorship, first with Staffan Bergström, later with Gunnar Bjune. The professorship was added to the Institute of Public Health, now Institute of Health and Society. Another important player was the Centre for Development and Environment, which covered parts of the social aspects of international health. We received a portion of the generous budget The Research Council of Norway had allocated for health and population in developing countries (HEBUT), and I was attached to the department through post-doc funds. Benedicte Ingstad worked on Gambia and Women in Development for the World Bank. This was just ahead of the International Conference on Population and Development (ICPD) in Cairo in 1994 (where I was as Norwegian delegate) and the Women's Conference in Beijing. The policy from these conferences was to be implemented in programmes and in teaching.

Naturally, there was much focus on women, reproduction and fertility in the beginning, also in our group. Gradually, Global Health at UiO found three solid legs to stand on: Tuberculosis, diabetes and reproductive health rested on the shoulders of three researchers.

I worked for some years myself with research on fertility and infertility in Gambia and Zimbabwe. During this period, we were able to start a cooperation with University of the North in South-Africa, with funds from NUFU, and we were also able to start a cooperation with Mozambique within the same framework. Gunnar Bjune brought with him experiences from a master study in Bergen, and without further ado, we started this study in Oslo, largely driven by volunteer work, and implemented by cutting a number of bureaucratic corners. It shows that if you really want to make something work, you can, even though the system works against you.

The Master study at HELSAM grew big and



Johanne Sundby Photo: C. Smaadal

strong – aided by NORAD stipend funds and quota scholarships, NUFU and other sources of funding. We had a huge number of applicants for our 20-25 places, and too few supervisors...

Our scientists started cooperation in Ethiopia, Bangladesh (NOMA, Akthar Hussain), Malawi (NUFU), and Tanzania (Kåre Moen). We expanded to include PhD-candidates, and also won an award for quality in the master study. The majority of our candidates completed their studies and returned to their home countries. If you try to establish a cooperation with Malawi and Gambia these days, you will run into “graduates” from UiO in all parts of the system there. They have learnt research and analytical work – and brought with them some of our values: the global community, an equitable distribution of services, quality of health interventions. The number of countries we cooperated with increased; Espen Bjertness and Gerd Holmboe Ottesen opted to work with the new Palestinian institutions and the need for documentation of living conditions there.

People have come and gone; some of our founders have retired, major funding sources have ceased to fund us, new topics and new bureaucratic processes have come to stay. We cannot mention all. Heidi Fjeld, Trygve Ottesen,

Scenes from a project
in Gambia, run by professor
Johanne Sundby.

Photos: C. Smaadal





Field work in Ghana. Photo: C. Smaadal

Kåre Moen, Benedikte Lindskog, Viva C. Thorsen, Ahmed Madhar and more have been faithful participants and supporters together with colleagues from The Norwegian Knowledge Centre for the Health Services and Norwegian Institute of Public Health.

Myself, I quickly changed field from infertility and fertility research to a broader focus on reproductive health. Together with my master students and PhD-candidates from Norway and the South, we looked at pregnant women with HIV, mothers' health, circumcision, antenatal care, perinatal mortality, illegal abortion, norms and barriers. I believe we have to do more than just count – we need to understand and explain, discuss and find strategies for change.

In the latest years we have expanded with NORHED projects in Myanmar and Ethiopia. We also have a new initiative: Centre for Global Health and a new professorship. Professor Andrea Winkler from Germany has recently been

employed. We have also shifted focus from being on a grass root level to understanding political systems, global decisions and major initiatives. Both are important. The master study continues without any scholarships to give out, and therefore also with more students from the north rather than the south. We have also achieved more in our PhD-programme, with courses in global health and now also the joint Norwegian research school.

We also expand thematically; neurology, infections, mental health, medical history with a global view. We are still small, and struggle to make ends meet, to gain enough resources for all the tasks that are standing in line, and all the bureaucratic impositions that these days keep popping up like rabbits from top hats. People such as Vibeke Christie, Line Løv and Ragnhild Beyrer have been with us all the way, together with people who have joined us along the way.

Thank you everyone.

We will keep on working together!

Elisabeth Darj
and Elin Dvergsdal,
Norwegian University
of Science and Technology
(NTNU), Trondheim

NTNU HAS THE VISION; *Knowledge for a better world* with a pronounced goal, 40% of the students at the university shall participate during some part of their studies in a foreign setting of an academic environment. Faculty of Medicine and Health Sciences has the vision; *Health for a better world* and one goal is that global health shall be taught in all educational programs. Global health is a prioritized area of the Faculty and the university. In September 2013 the first professor in global health was employed at NTNU, Elisabeth Darj, a Swedish obstetrician/gynecologist, with vast experience of research in developing regions. She is affiliated to the Department of Public Health and Nursing at NTNU and to the Department of Obstetrics and Gynecology at St. Olavs Hospital.

Global Health Day

Every year a 'Global Health Day' is held in October. Recognized international and national scholars are invited to speak for researchers, students, PhD candidates and employees at St. Olavs Hospital. Two current topics are in focus each year. *Antibiotic resistance* and *Migration Health* were the chosen themes in 2016. We have been financially supported by and has collaborated with the Research Council of Norway, St. Olavs Hospital, Helse Midt-Norge, and the former Høgskolen i Sør-Trøndelag (HiST). This event has received considerable media attention and reaches now between 300–400 delegates, from Norway and neighboring countries. In collaboration with the Faculty, medical students arrange an evening event before Global Health Day, in order to promote the importance of global health issues for healthcare students.

<http://www.ntnu.no/mh/globalhelsedag>

Global health seminars

Regularly every month since 2014 we arrange global health seminars, where students, researchers and PhD candidates present their

research, methodology and results. These seminars have developed into a forum for discussions of global health projects.

International Master program in global health

In August 2015, NTNU started a new two-year international Master's program in Public Health with specialization in Global Health at NTNU. In the first year 498 students applied for the program and 25 students from 13 different countries were admitted to the program. Seven theoretical courses are held in the first two semesters, providing 7,5-15 ECTS each; *Basic Global Health, Statistics, Epidemiology, Qualitative Research Methods, Health Policies, Experts in Team* and *Innovation in Global Health*. In the following semester the students collect data for their master thesis, preferable in a low income country. After field work they return to Trondheim for analyzing and writing the master thesis, in collaboration with the supervisors. Students at NTNU are planning a national network for master students in global health.

<http://www.ntnu.edu/web/master-of-science-in-public-health-msph->



Elisabeth Darj is standing between Albrecht Jahn, University of Heidelberg and Sabrina Moyo from Muhimbili University of Health and Allied Sciences, Tanzania/ University of Bergen. This was on the Global Health Day at NTNU, Trondheim in October 2016. Photo: E.Y. Dvergsdal

Norwegian Research School of Global Health

The Faculty of Medicine and Health Sciences applied together with the universities in Oslo, Bergen, Tromsø and Institute of Public Health and received funds for establishing a national research school in global health. This school started in April 2016. Currently approximately 80 of the eligible PhD candidates are member of the school.

<http://www.ntnu.edu/nrsgh/>

Global health education at NTNU

During medical studies global health is introduced already in the first semester. Global health is a recurring subject during the education, connecting clinical practice to the situation in other countries. Several students participate in clinical practice or perform their theses of medicine (hovedoppgave) in a low income setting and a Summer school for medical students in Norway is established in Nepal at Kathmandu University. Likewise, is global health a mandatory course at the Nursing school in Trondheim.

NTNU has lately been hosting national events, such as the Vision2030 conference with a global aspect of health and education in 2015. In November 2016 Crown princess Mette-Marit met the Special advisor, Tore Godal in a public dialog concerning his long contribution in WHO and how to put global health challenges on the international agenda. Together they stressed the importance to involve young students for achieving a better world for the next generation. Sir Michael Marmot, chairman of the Commission on Social Determinants of Health and President of the World Medical Association was selected and became Honorary Doctor at NTNU this year.

Strategically collaboration countries

The Faculty of Medicine and Health Sciences has strategically chosen five low income countries for collaboration. This has facilitated networking and capacity building in these universities, apart from ongoing individual research contacts in other countries. PhD-, Master-, medical-, nursing-, and students in physiotherapy and other disciplines are all benefitting from these formal collaborations.

NTNU has established collaboration and signed an agreement with Kathmandu University School of Medical Science (KUSMS) in *Nepal* in order to strengthen the research capacity and several research projects are ongoing. A large project in emergency care at Duhlikhel Hospital, aligned with KUSMS, aims to improve immediate care and has successfully introduced a triage system. This came directly in use during the two major earthquakes that struck Nepal in April and May 2015. PhD-candidates are studying the triage system during emergencies at the hospital, mental brain disorders, different aspects of domestic violence, cervical cancer, and neonatology in Nepal. All candidates have supervisors at NTNU and locally and they are financed from various Norwegian funders.

In collaboration with the University of Kwa-Zulu-Natal, *South-Africa*, education in obstetric ultrasound examinations is performed. In an interdisciplinary innovation project, robust ultrasound machines have been developed, suitable for resource limited, low income settings. The project aims to detect abnormal findings and refer women with high risk pregnancies to a higher level of care, with the ultimate goal to reduce maternal and fetal morbidity and mortality.

Malawi is one of the poorest countries in the world. NTNU has an agreement with the College of Medicine at University of Malawi for collaboration. In Malawi there is an unacceptable high maternal mortality and unsafe abortion is a substantial part of these fatalities. A research project with an intervention to improve post abortion care is currently ongoing.

The Faculty of Medicine and Health Sciences has collaboration with a Norwegian NGO, Capa Care, working in *Sierra Leone*. Due to severe lack of surgeons in the country, Community Health Officers (CHOs) are enrolled in a three-year training program to manage the most common surgical and obstetric emergencies and traumas presenting at district hospitals. Since the start in 2011, 48 Sierra Leonean surgical assistants and young medical doctors have been trained in this program. The surgical assistants have performed 30,000 major surgical operations and are responsible for more than half of the caesarean sections that are performed. In a project, researchers from NTNU are studying the effects of the ongoing education of non-physicians in surgery. Sierra Leone was badly affected by the Ebola outbreak and the group was able to publish the situation and access to caesarean sections before, during and after the Ebola outbreak.

Tanzania is the fifth strategically chosen country for collaboration. The Vice Chancellors of NTNU and Muhimbili University of Health and Allied Sciences (MUHAS) in Dar es Salaam signed a Memorandum of understanding in 2014. Medical students from NTNU have had their practical training in Muhimbili National Hospital. Common applications for funding have been produced and collaboration between the two universities concerning their respective Masters programs in Public Health and Global health is ongoing. Data collection for research projects emanating from NTNU are performed at MUHAS.



Men in Bakthapur. Photo: E.Y. Dvergsdal

University of Tromsø

Erik Anda,
University
of Tromsø

THE ACADEMIC COMMUNITY of global health at the University of Tromsø (UiT) – Norway’s Arctic University – is small, but strong. It is characterized by dedicated enthusiasts who run projects both in health and educational activities, as well as projects with a more direct solidarity focus. UiT and the University Hospital of Northern Norway (UNN) are known to be solidarity institutions, which is exemplified by the work of Mads Gilbert in Gaza, Vegard Skogen in Russia and of projects at the former Tromsø Mine Victim Resource Centre, which worked to strengthen the competence in trauma care in countries like Cambodia, Vietnam and Afghanistan.

Common challenges gives neighbor co-operation

Within research and education, there has traditionally been much co-operation with Russia in the Northern area. This began in the early 1990s,

and still characterizes much of the work in global health, both at UiT and UNN. All departments at UiT in Health Sciences, currently have co-operation with Russia in research and/or education. The co-operation involves everything from teaching collaboration in public health research to research in dentistry in the Barents Region. In addition, projects in telemedicine and e-learning are highlighted as examples of co-operation with Russia on issues related to global health. Northwest Russia is an area which is similar to Northern Norway, being characterized by large distances and limited infrastructure in several places. Norway and Russia have for over two decades worked together to improve health services for people in rural areas, with special emphasis on nomadic populations.

From a seminar on global health in the north, arranged by Senter for arktisk og global helse and Forum 4. november 2016. Photo: T.A. Wæhler



Gori in November with the Caucasian mountains in the background. Photo: T.A. Wæhler

From Russia to Malawi

Russia is an important partner for UiT and UNN, and northwestern Russia is, together with Malawi, the priority partner for both UiT and UNN in the field of international health. A particularly important research project aims to improve the quality of life for HIV-infected mothers and children in Malawi, Zambia and Zimbabwe.

Large-scale registry project in Georgia

Georgia in Caucasus is the only country in the world defined as a developing country which has a national medical birth registry. ”The Georgia Birth Registry (GBR)” was created through a partnership with UNICEF, the Institute of Public Health in Tbilisi and UiT. The register commenced on January 1, 2016 and is now fully functional with a coverage of over 98% and nearly 60 000 registered births. The register is digital and fully integrated with every part of antenatal care. It turns out, however, that the expertise in the use of the registry, i.e the registry epidemiology, is somewhat limited. If the potential of the register should be fully used, we would have to apply for funds for a research and education project that have in mind to raise this expertise in both Georgia and Norway. The project, which has been named ”Georgian-Norwegian Collabo-

orative in Public Health (GeNoC-PH)” is funded by the Centre for International Cooperation in Education (SIU) and will run for a period of four years. It is important to emphasize that this is not aid, but a genuine partnership. UiT utilizes both teachers and medical data from Georgia, and additionally gets its exchange obligations in an agreement between the two local universities fulfilled. As of 1 January 2017, two master students and three PhD students work with data from GBR. The projects cover topics such as; i) perinatal morbidity and mortality, ii) maternal morbidity and mortality, iii) the overuse of cesarean sections, iv) quality assurance through ”case reporting” and v) the development of national growth curves in pregnancy. Further plans for cooperation with Georgia includes the establishment of a Master’s degree in midwifery in Tbilisi.

International population surveys

The position of UiT on ”the top of the world” brings an Arctic dimension into the global health work; with its associated indigenous groups; which separates UiT from other Norwegian institutions. It has been proved that the best way to conduct public health research in the North is not necessarily to focus on ethnicity alone, but to



Georgia is the only developing country in the world with a national birth register. Photo: T. A. Wæhler

study large populations, such as the Tromsø Study. This project is also relevant for a global context. The project "Heart to Heart" compares data from the Tromsø Study with data collected from northwestern Russia. The purpose is to gain knowledge of what makes great differences in mortality due to cardiovascular diseases, comparing Norway and Russia. Russians have four times higher risk of dying from this type of diseases than Norwegians, and we would like to know why. The project is led by David Leon, adjunct professor at the University of Tromsø, and aims to raise awareness of cardiovascular disease in general, and to improve treatment for patients with this type of disorders in Russia.

The way forward

For just over a year ago, UiT, UNN and Helse Nord RHF decided to join their competence in global health in northern Norway to one unit. This is why we now have established the Centre of Arctic and global health (SAG), which is anchored at all these three institutions. This establishment demonstrate that this scientific area is a strategic research area in the North. We hope for a fruitful co-operation in the years to come.

Arne Eide, SINTEF

SINTEF'S HEALTH RESEARCH community has been engaged in global health for the last 20 years. Originally, this research activity was mainly related to research on disability and rehabilitation. In recent years, there has been a shift towards research on vulnerable groups, with living conditions of disabled persons as a central topic. In addition, this research has a service perspective in relation to healthcare and other basic services. Consistently for much of this activity, we have a user perspective of the research, both thematically and organizationally. The scientists involved in global health research at SINTEF have various types of expertise, such as anthropology, technology, public health, behavioral science, political science and economics. Geographically, research and development projects at SINTEF have the main activity in the southern part of Africa, but the project portfolio also includes other geographical areas, such as Africa north of the Sahara, the Middle East and several Asian countries.

Here are examples of research that SINTEF either leads or is in partnership with others:

- Development aid projects. SINTEF has conducted 12 national, representative studies that have surveyed the living conditions of disabled people in nine countries in southern Africa and in Nepal. In 2016, studies on living conditions in Nepal and Botswana were ended, and a study in Malawi started. Nine of the studies has been funded by the FFO in Norway / Atlas Alliance, two by UNICEF and one by the Research Council of Norway. The studies have been conducted in collaboration with local universities and organizations for the disabled.
- Local Rehabilitation Workshops (LOREWO): Development of services for disabled people in Zimbabwe and Namibia. This includes creation, training and production of wheel-chairs and walking aids and an extensive cooperation with authorities and organizations about the deployment, customization and maintenance. This development project was initially funded by UNDP, and later taken

Interviewing in Zambia, in a SINTEF project. Photo: K.G. Hem



over by the Atlas Alliance. The development project was carried out in cooperation with local authorities and disability organizations.

- **EquitAble:** These are studies on access to and quality of health services for vulnerable groups in Sudan, Malawi, Namibia and South Africa. The project is a combination of policy analysis, surveys and qualitative studies. This has been performed as an international consortium with partners in Europe (Trinity College Dublin) and in Africa (Ahfad University for Women, University of Malawi, University of Namibia and Stellenbosch University) and has been funded through the EU FP 7.
- **GeoHealthAccess:** A combination of survey data from EquitAble and geographic data to develop and test a model for identifying barriers of access to health care for vulnerable groups in poor countries. The project has extensive cooperation between SINTEF and NTNU, the University of Malawi and the University of Namibia, Cambridge and East Anglia Universities and is funded by the Research Council of Norway
- **ALMA:** This is a national representative study and qualitative study that looks at the relationship between poverty and alcohol use in Malawi. The study also looks at the prevalence of alcohol use among the population and their drinking patterns. In this project SINTEF has a cooperation with the Norwegian aid organization FORUT, their partners in Malawi, the University of Oslo, the University of Malawi and Hedmark University College.

- **'The myth of asexuality':** This is a study that examines how stigma affects disabilities opportunities to achieve sexual and reproductive rights in South Africa. The study is a combination of a survey aimed at the general population which studies attitudes and knowledge about disabilities and sexuality, as well as a qualitative study that uses 'photo voice' and qualitative in-depth interviews of people with physical disabilities. The study is conducted in collaboration with University of East London, Stellenbosch University and Southern African Federation of the Disabled (SAFOD), and is funded by the International Foundation of Applied Disability Research (FIRAH).
- **Disability and Education in Malawi:** This is a qualitative study that looks at children with various disabilities and their experiences related to the educational system in Malawi. The study is conducted in collaboration with the University of Malawi and funded by the FFO.
- **A new project will be carried out from 2017** in collaboration with DEAF AID, Listen AS, NTNU and Open University, Tanzania. Funded by Norwegian Research Council/Vision 2030. The project will aim at increasing primary and lower secondary school attendance and achievement for children with hearing impairment in Tanzania. The idea is to develop new equipment to support hearing and that is adapted to contexts and situations with limited resources and a sustainable and participatory model for hearing impairment services in Tanzania.



Repairing of wheel chairs locally is a part of a SINTEF project in Bulawayo, Zimbabwe. This is from a LOREWO workshop, 2013.

Photo: T. Øderud, SINTEF

SINTEF has an ambition of contributing in the battle against poverty, through studies that greatly contribute to new knowledge about living standards in vulnerable groups. SINTEF is a technological institute, but has a large group of social scientists and researchers with a health care background. Part of the strengths of SINTEF is to combine different types of high skills in order to solve major social tasks. SINTEF can thus connect global health competence with

expertise in medical technology, ICT and welfare technology and can develop intervention studies that will show to what extent and in what way modern technology can help in the fight against poverty.

University of Bergen

Bente E. Moen,
CIH, University
of Bergen

THE CENTRE FOR International Health at the Faculty of Medicine and Dentistry (MOF), University of Bergen (UiB) aims to initiate and foster education and research relevant to important health problems in developing countries. CIH has a particular obligation to work interfaculty at the UiB; together with the departments at MOF as well as with other faculties at UiB, and also to cooperate with other Norwegian research entities. From 2013 the centre has been a part of Department of Global Public Health and Primary Care at UiB.

History of CIH

The Centre for International Health was established in 1988, under the leadership of professor Bjarne Bjorvatn, and has later been headed by the professors Gunnar Kvåle, Bernt Lindtjørn, Rune Nilsen and Knut Fylkesnes. The Centre has now 12 professors, and is an important interdisciplinary centre in international health in Scandinavia. About 140 PhD students and several hundreds of students with a Master's degree have

graduated from this scientific environment, most of them from low or middle income countries. A large number of the graduated candidates, from a large number of countries, are now based in the universities in their home countries, and are important for development of scientific skills and higher education.

Research groups at CIH were evaluated as "Excellent" by the Research Council of Norway (RCN) both in 2003 and in 2011. A research Centre of excellence funded by RCN – "Centre for Intervention Science in Maternal and Child Health" (CISMAC) was inaugurated at CIH 15th October 2013, under the leadership of professor Halvor Sommerfelt.

Education at CIH

The centre is much involved in teaching medical students global health. All medical students at the faculty participate in a one week "Global Health" course. Some medical students choose "Global Health" as an additional elective course. This course is very popular and includes field work in a low income country. In 2016 more than 30 students participated in this elective course and stayed for 8 weeks at partner institutions.

The participants from Bergen on the Globvac conference in Oslo 2015. Photo: T. Tylleskär



PhD candidate Barbara with her data collectors in Uganda. Photo: T. Tylleskär

The centre also runs a Master study. Earlier on, we had two studies for the Master's degree: Master in International Health and Master of Philosophy in Oral Sciences. These two have been merged to a joint Master in Global Health. CIH has a local research school, the CIH research school. About 60 PhD candidates are members of this research school, and most of these are in their home countries.

Research at CIH

The main research topics at CIH are: Mother and child health, Child health and nutrition, Reproductive health, HIV/AIDS, Tuberculosis, Development of new interventions and impact evaluation of existing interventions, Vaccines for childhood diarrhea, Scale-up of exclusive breastfeeding, Treatment of common childhood infections, Health policy and systems research, Disease prevention and health promotion, Oral health in a global perspective, Occupational health, Respiratory health problems.

As mentioned, CIH hosts a Centre of excellent research: CISMAC – Centre for intervention science in maternal and child health. CISMAC and CIH work together to fulfill their visions of improving health for poor populations, through high quality research and learning. CISMAC re-

search generates knowledge that will contribute to improve health and survival of mothers and children in Asia and Africa. It hopes to play a pivotal role in CIH's quest to foster excellent research and capacity strengthening in international health. CISMAC is an international consortium, anchored at CIH. Research institutions elsewhere in Norway and in Ethiopia, India, Nepal, South Africa, Uganda and Zambia are partners in the consortium, and CISMAC is also supported by the WHO.

Staff at CIH

The main core of CIH is located in Overlege Danielsens House at the University of Bergen. Twelve professors and eight temporary employed scientific personnel have their offices there and in addition, there is an administration of ten persons. However, a large number of scientific personnel are associated with the centre, and participate in teaching or research. In 2015 we counted 75 persons in this category. It is great to have this type of activity at the centre.

Network – partners

Researchers at CIH have active research cooperation with a large number of developing countries: Tanzania, Ethiopia, South-Africa, Uganda, Zambia, Botswana, Guinea-Bissau, Ghana, The Democratic Republic of Congo, India, Malawi, Nepal, Sri Lanka, Pakistan and Bangladesh. CIH is in partnership with institutions in these coun-



Centre for International Health is engaged in several projects on malaria, like here in Ethiopia. Photo: B. Lindtjörn

tries, and researches at CIH often work in these countries with teaching, supervision and network relations.

Global challenges

As a part of a new strategic plan at the University of Bergen, UiB has decided that “Global Challenges” will be a main area for the coming years (2016–2020). CIH will be in the lead of this strategic work. The plan is to develop interdisciplinary work in this area, as an interfaculty action.

CIH will work close with an administrative unit, UiB Global, to fulfil the planned work. This is a great challenge and we are excited and look forward to this new co-operation.

The centre vision

We would like our research and teaching in international health to contribute to improved health for the poor populations in the world.

Bergen University College

Graziella Van den Bergh,
Bergen University Collage

BERGEN UNIVERSITY COLLEGE (BUC) has been part of the Forum for Global Health Research since its inception. The inclusion of allied health professions and social scientists in a medically dominated network confirms the Forum’s holistic and interdisciplinary vision, something the Sustainable Development Goals, and human resources’ crisis in health, call for.

BUC comprises Faculties of Education; of Engineering and Administration; and of Health and Social Sciences, and it offers multiple bachelors, masters and PhD programs to (by December 2016) about 7,700 students. BUC has a social mission: to provide education, research, academic and artistic development, innovation and dissemination - with the aim of solving regional, national and global challenges, such as promoting health and health care for marginalized population groups, locally and globally.

In global health, the Faculty of Health and Social Sciences has contributed through educational and research partnerships from BSc to PhD-level, while collaborating with several low- and middle-income countries (LMIC) in curricu-

lum development and capacity- and competence-building, at home and abroad. Activities were funded by Ministries, the Norwegian Research Foundation, NORAD and its Quota grants, the Centre for International Education Collaboration (SIU), the exchange organization Fredskorpset (FK), and NGO’s.

Global health and social work education through student- and staff mobility

Activities began with outgoing and incoming student- and staff mobility, to Cuba, Botswana, Ethiopia, Malawi, South Africa, Sudan, Tanzania and beyond. At a bachelor and continuing education level, several hundreds of students from nursing, physiotherapy, occupational therapy, radiography, social work and social education, midwifery, community nursing and mental health had clinical practice- and theoretical studies in partner countries. International modules and hybrid face-to-face and online courses (from 3 to 60 ECTS credits), such as “Global Health and

Protheses are important in rehabilitation. G. Van den Bergh





First Operation nurses batch at Millennium Medical College, Ethiopia Photo: HIB

Cultural Awareness in Nursing»; “Comparative Social Work” and “Community Work in an International Perspective” (<http://vircamp.net/>) or “Body Awareness in Physiotherapy and Mental Health” have run for over a decade. A “Global Health Summer Institute in Physiotherapy” at BUC/Duke University (2012–2016), allowed about 90 international (HIC) students to attend a one-week course on global rehabilitation.

The other way around, (yet too few) quota bachelor and master students in physiotherapy, nursing and social work from Sudan, Ethiopia and Tanzania for example, have graduated at BUC before returning home.

Global capacity building in allied health professions

In the field of capacity building, staff exchange collaborations have flourished, which yearly gives several hundreds of graduates with high-level competence.

A fruitful collaboration was with Ahfad University for Women (2007–2015), in developing a BSc in Physiotherapy in Sudan, resulting in batches of physiotherapists graduating since

2012, thus scaling-up sustainable rehabilitation services. This initially North-South; and lastly South-South collaboration has included rehabilitation institutions in Tanzania (CCBRT: <http://www.ccbirt.or.tz/home/>) and the University of Western Cape (South Africa) thus securing context-appropriate networking.

In Ethiopia, BUC has collaborated with Millennium Medical College (2011–2015), developing both an Intensive care and operation nursing postgraduate education, thus increasing capacity and quality in hospital-care.

Another most successful academic endeavour was a NOMA funded master degree program in Tanzania, Ethiopia and Uganda (2010–2014). In collaboration with Muhimbili University of Health and Allied Sciences, and Addis Ababa and Makerere University, clinical MSc in nursing within maternal and women’s health, critical care and mental health were developed, to train high-level teachers in the respective countries. As graduates expressed, they are to become “the leaders and policymakers of the future in our respective fields!”.

Multi-disciplinary global health research

Along these activities, several individual and collaborative research projects were carried out and/or supervised by BUC faculty, of whom many have double-competence in both a health profession and in political sciences, social anthropology or psychology. Topics included: community work, public health, sexual and reproductive health, epidemiology, social protection, rehabilitation etc.

Doctoral theses were defended (2008–2013) on fertility and motherhood in Gambia; on Tanzanian teenagers, abortion and HIV, and on young parenthood in South Africa. Multiple master theses were delivered: on disaster management; female circumcision in Somaliland; clubfoot-management, and physical activity in diabetes in Tanzania; fracture management

in Malawi or hospital hygiene; or midwives’ challenges in Ethiopia. Much results in new partnerships, such as education of midwives in Afghanistan.

Nursing and Social Work Depts. had central roles in research with Tanzania, Sudan and Ethiopia, through several NUFU and NRC grants (2001–2012). Examples are projects on maternal and child health in AIDS contexts, including film-production, and on social mobilization among vulnerable groups regarding reproductive rights and social protection, on issues of HIV prevention, breastfeeding, orphans, female circumcision or albinism. An impressive number of the African master- and PhD students funded by these projects are now employed in leading positions at home, whether as deans or department- or research directors.

Disability and rehabilitation

Disability and rehabilitation is another important research subject at BUC. Due to global population ageing, growing incidence of chronic diseases and mental illnesses, and environmental factors, periodic and chronic disability will likely increase. Today, approximately 15% of the world’s population live with a disability, and 90–150 million are children (WHO, 2011; UNICEF, 2013). Research on the role of NGOs and civil society for children with disabilities in Sudan and Tanzania (2012–2015), showed how successful practices result in increased public and systemic focus on inclusion and enablement in both countries. Our research has focused on nutrition in cerebral palsy and autism; on community-based rehabilitation (CBR); on mobility devices for children with disabilities and on their psycho-social well-being. Furthermore, the BUC faculty has supervised disability-related PhD/MPhil projects at other institutions; on injuries in Sudan, health promotion in Kenya, mobility technology in Pakistan and Peru, obstetric fistula in Uganda etc.

BUC arranged the conference: «Disability and

Global Health: Implications for rehabilitation», in June 2016. BUC’s various partnerships culminated in assembling participants from Bangladesh, Eastern Europe, Nepal, Peru, South Africa, Sudan, Tanzania, Vietnam etc. who discussed successes and challenges in filling rehabilitation-gaps and responding to the Rights of Persons with Disabilities at this conference. Sessions on leadership, policy and governance, service provision, human resources, and technology addressed how to assure a continuum-of-care between facility-based and community-based services, bridging prevention, treatment and rehabilitation, whether for congenital or acquired disabilities (spina bifida, burns, spinal cord injury, stroke, diabetes, fistula etc.). Papers demonstrated how rehabilitation policies must be holistic, not only addressing health, but also acting upon education, livelihood, social participation and empowerment. Training (and retaining!) professionals and lay-workers; the use of ICT, mobile technology and telemedicine, and equitable financing models need more exploration, especially for rural areas.

Finally, BUC’s research engagement is expanding to immigrant and minority health. For instance, the Centre for Care Research leads a large project on multicultural staff in Norwegian nursing homes, while the Centre for Evidence-Based Practice works on maternal health among immigrant women.

Merge of university collages

From January 1 2017, BUC merges with Stord/Haugesund University College and Sogn og Fjordane University College to become Western Norway University of Applied Sciences. With about 16,000 students and a vision of contributing to global knowledge development for a sustainable society, the scope of promoting global health partnerships, training and critical research will continue, while securing broader geographical, professional and scientific fields.

Norwegian Institute of Public Health

Jagrati Jani-Bølstad
and Frode Forland,
Norwegian Institute of
Public Health, Oslo

IN CONNECTION WITH the 10th year anniversary of the Norwegian Forum for Global Health Research, the Norwegian Institute of Public Health (NIPH), as a partner in the Forum, offers here a description of its global health activities.

NIPH recognizes the increasing need to address global health issues both as a national concern and to serve the global community. The field of global health requires mutual responsibility and solutions that involve cooperation, joint actions, and international agreements to ensure access to global public goods across sovereign country boundaries.

NIPH has grounded its global strategy on rights, solidarity, equality and fairness. These pillars of the strategic plan for global health guide and ensure collaboration between countries and global institutions, with particular emphasis on equity. What makes the NIPH a strong partner in the Forum for Global Health Research is the unique role that the Institute plays as research institution on the one hand and an advisory institution to the ministries on the other hand.

NIPH's new strategic plan (2016-2020) anchors its global health strategy among its first four goals which NIPH will attain through international networking and cooperation with global institutions and partners in high-income to middle and low income countries.

Through these cooperative partnerships, a range of global activities is carried out, including:

- a) Exchange of Knowledge (development of simple and affordable laboratory tests, capacity building through e.g. European Centre for Disease Prevention and Control, knowledge sharing and twinning with sister organizations through the International Association of National Public Health Institutes - IANPHI)
- b) Generate and disseminate knowledge through research projects in public health and health systems research
- c) Provide evidence-based advice through

systematic reviews, evaluations and assessments to guide national and international health authorities

The scope of collaboration in Global health

NIPH efforts in global health include collaborations with multilateral organizations such as:

1. World Health Organization

The Norwegian Institute of Public Health is the national focal point for the International Health Regulations (IHR). Upon WHO request, the Institute contributes with expertise especially in emergencies. Additionally, the Institute's scientific staff participate in different WHO networks such as the WHO reference laboratory for meningococci, the WHO National Influenza Centre for Norway, the WHO national laboratories for measles, rubella and poliovirus, WHO collaborating Center for Meningococci and Drug Statistics.

2. International Association of National Public Health Institutes (IANPHI)

NIPH supports and participates in IANPHI's network of 100 public health institutes throughout the world to establish new sister organizations and strengthen existing national public health institutes. IANPHI facilitates cooperation, support and knowledge transfer between public health institutes.

3. Arctic Council

This council is a political platform of countries in the Arctic region it's a common goal to preserve the unique environment and indigenous people's livelihood as a global common good. NIPH participates in the Arctic Human Health Expert Group.

4. EEA Grants

NIPH works as a Donor Programme Partner under the EEA Grants with prioritized countries in Europe. The NIPH coordinates and provides advice to national health authorities and links institutions in these prioritized countries with relevant Norwegian research and academic institutions.

Financial Resources for Global health

The global health portfolio is primarily financed by external sources such as the Research Council of Norway, the EU, the Norwegian Ministry of Foreign Affairs and others.

Through a framework agreement with Norad consultancies and evaluations are financed. Although this funding sources isn't aimed at research, it strengthens our understanding and participation in global debates and synergizes funding opportunities.

The road to success for Global Health

NIPH has several national functions with in preparedness, research and health analyses, evaluations and advice, services and infrastructure and communication.

These functions involve multi-professionals clustered in interdisciplinary teams aiming to deliver at the global level.

During the last four years, NIPH has experienced rapid growth in the Institute's global health activities. The new strategy of the Institute envisions global health anchored in and across all departments, targeting global and national champions in partnerships. To facilitate sustainability of research projects, the Institute stimulates integration of global health research and Global Health Programs.

A success indicator is the range of global health research projects funded in the last years, e.g.: global pharmaceutical policy; eRegistries for Maternal and Child Health; vaccine trials for Ebola, rota virus and meningococcus; climate-environment and health etc.

Sustainability of global health activities requires efforts to maintain funding overtime and creativity to generate new and relevant research questions. NIPH believes that internal synergies can be created by using existing funded platforms. A short description of a program at NIPH with huge potential to foster global health research is the Global Health Preparedness Program (GHPP) as a part of Norwegian contribution to a Global Health Security Agenda. It includes 50 countries and is designed to strengthen international efforts in prevention, detection and response to events that threaten public health worldwide.

Vaccine development is an important research area at the Norwegian Institute of Public Health. Photo: G. Tjalvin



GHPP invites global health research on implementation of the IHR and measures to improve health preparedness and system strengthening.

NIPH has received a grant from the Norwegian Ministry of Foreign Affairs and has established collaboration with four countries for the period 2016–2020. The program has generated international interest and contributed to voice globally the need for a united effort for health security and preparedness.

Better capacity to prevent, detect and respond will help improve public health in every single country and may contribute to reduce inequalities in health. It will also significantly promote health security across country borders. Public health institutes or equivalent national functions in the various countries play a significant role in health security. NIPH will, through the GHPP, collaborate with sister institutes in Ghana, Malawi, Moldova and Palestine to strengthen institutional capacity related to the IHR and health preparedness.

The main collaborating partners at the country level include national health authorities, sister institutes, the WHO, the CDC, NGOs and IANPHI.

Adding a research agenda to an already funded program, will not only generate new knowledge and facilitate better programming, but may also reduce costs of a research project, as infrastructure for research, access to well-established networks, and implementation capacity will already be in place through the existing program.

Chr. Michelsen Institute

Ottar Mæstad,
Chr. Michelsen
Institute

CHR. MICHELSEN is the largest development research institute in Scandinavia. The institute is based in the social sciences. Global health is one of our priority research areas. CMIs global health research focuses on how health outcomes and patient well-being can be improved through understanding and shaping the behaviour of health professionals and patients, and by strengthening health systems. We also explore how factors outside the health sector can improve health outcomes.

The focus of our current research is:

- The effect of using incentives (performance-based financing) to improve quality and access to health services.
- How to reduce early marriage and pregnancy.
- How adolescent health can be improved through more and better education.
- How to strengthen the implementation of sexual and reproductive health rights.
- How to improve malaria treatment for children.

CMI is partner in the Centre for Intervention Science in Maternal and Child Health (CISMAC), a Centre of Excellence (SFF). This international consortium involves institutions in seven countries and is anchored at the Centre for International Health at the University of Bergen. Below you can see examples of projects:

Performance-Based Financing in Tanzania

Performance-based financing has been launched as a strategy to increase the use and improve the quality of health services in low- and middle-income countries. Nearly 40 countries are in the process of conducting experiments with this funding model, especially with a view to strengthening health services for mothers and children.

Performance-based financing implies that health clinics and/or health workers receive cash in relation to how well they perform. The basic

idea is that such incentives will encourage greater efforts to raise the quality of care and increase the number of clients.

This project studies the implementation and impact of performance-based financing of maternal-child health services in Tanzania. Tanzania is the first large low-income country to implement such a system at scale. We will study this process and measure how performance-based financing affects access to and use of primary health services, the quality of services, productivity, and the effects on various health indicators. The project is the first to compare short term with long-term effects. Are the effect enhanced over time, or do they decline? Are any unintended effects greater or smaller in the long run?

Partners: London School of Hygiene and Tropical Medicine, Ifakara Health Institute.

Reduce teenage childbearing through education and empowerment of adolescent girls

CMI participates in two randomized controlled trials (RCTs), studying how teenage childbearing can be reduced.

The first study is implemented in Tanzania. 3500 girls of age 16-17 years were randomly selected to receive (i) reproductive health training, (ii) entrepreneurship training, (iii) both trainings combined, and (iv) no training. The training modules were launched under the headings “Protect your life” (reproductive health training) and “Build your life” (entrepreneurship training). Comparing (i) and (ii) allows us to test whether reproductive health programs or entrepreneurship trainings are more effective at delaying early pregnancies, promoting safe sex and simultaneously promoting economic activities and incomes. And (iii) allows us to estimate the importance of the combination of reproductive health information and economic opportunities. In addition to self-reported data on pregnancy and economic outcomes, the project is collecting

biomedical data (STDs, malaria, pregnancy) to have objective measures of health status and sexual activities.

Partners: Femina Hip, Choice Lab (Norwegian School of Economics), Economic and Social Research Foundation, Development Pioneer Consultants

The second study is implemented in Zambia, in collaboration with CISMAC partner. More than 5000 girls have been randomly selected to receive i) an economic benefit package, including support for school fees, ii) economic support plus a community training program, iii) no intervention. The study aims to measure (1) the effect on marriage and pregnancy rates of providing economic support to girls and their families (2) whether economic support combined with a community program targeting beliefs and norms related to education and sexual and reproductive health (SRH), can have an even stronger impact on the same outcomes.

Partners: University of Zambia, Centre for International Health (UoB)

Political determinants of sexual and reproductive health

One way in which politics and power dynamics impact health is through the use of criminal law. This project provides insights into the causes and effects of criminalisation of abortion and same sex relations, which is widespread in low and middle income countries, and has significant detrimental effects on mental health, maternal mortality; the health of women and LGBTs, and HIV transmission.

The project investigates health effects of criminalizing sexual and reproductive behaviour and health services, and analyses the political dynamics that drive, hamper and shape the uses of such criminal law in nine African countries, including both predominantly Christian Sub Saharan countries (Uganda, Malawi, Ethiopia, Kenya, Mozambique, Zambia, South Africa) and North

Quality health care is at the core of CMI's health research. In Tanzania, we study the implementation and impact of performance-based financing of maternal-child health services. Photo: I. Lindkvist



African Muslim countries (Sudan and Tunisia). The project will develop insights into political game changers that can improve conditions for sexual and reproductive health. An effective decriminalisation agenda requires better insights into the political and social dynamics – inside the health system as well as outside – and this project aims to contribute to filling this gap.

The projects is implemented by the Centre of Law and Social Transformation at CMI.

Partners: University of Bergen, Harvard University, North-Eastern University, World Bank, University of Pretoria, Makerere University, HRAPF (Uganda), ICJ (Kenya).



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