



Annual Report 2021

DEPARTMENT OF EPIDEMIOLOGY AND GLOBAL HEALTH



UMEÅ UNIVERSITY

Annual Report 2021

Department of Epidemiology and Global Health

Umeå International School of Public Health (UISPH)

Prologue

To all staff, students, collaborators and other colleagues,

We entered 2021 in the midst of another wave of Covid-19 pandemic, by then experienced with zoom meetings, online teaching, and working from home routines. During the year we experienced both, long stretches of time when the campus was almost close as well as precious windows of opportunities when we could come together in person.

During 2021 we, EpiGH, celebrated 35 years as an academic environment, and although the names and organisation of the environment have seen changes in these years, the core values have remained the same. The values of curiosity, solidarity and integrity guide our work. We build our strength on diversity in perspectives and disciplines. We aim for creative and critical thinking in open and safe spaces. Please visit our Mission-Vision- Values statement on page 9.

Our current teaching, research and collaborative work are the result from collective efforts by staff, students and collaborators over the years. The educational courses, research papers, and policy briefs are tangible “outputs” contributing to long-term impact. Behind all this, there is however a wealth of relationships created and nurtured in everyday encounters during meetings, teaching activities, seminars as well as in the “fika” breaks. These relationships weave the invisible fabric which is a consequence and a condition for everything we do. We cherish our collaborations with institutions and individuals in the region, nationally, and around the world and are grateful for these long-lasting networks.

Please take a moment to learn more about our activities in this Annual Report!

We thank Karin Johansson, Susanne Walther, Raman Preet and Miguel San Sebastián for their support and work with this year’s Annual Report.

And thanks to everyone for all your contributions over the year!

ANNA-KARIN HURTIG
Head of Department

KLAS-GÖRAN SAHLÉN
Deputy Head of Department

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Celebrating 35 years

This year, 2021, we took the opportunity to celebrate the 35 years since the establishment of our workplace, Epidemiology and Global Health. It came at the right moment after almost two years of the COVID-19 pandemic that posed different challenges for meeting in-person or face-to-face. The theme of the day for celebrations was **“Reconnecting”** during which several activities were conducted around this theme.

The morning half of the day was dedicated to reconnecting ourselves, the staff, with our values. It started with a game comprising of different questions related to the history of EpiGH and its diverse activities for creating a familiar and relaxing environment. After that, a new game aiming to reconnect with our values was performed. The main values of the Department such as solidarity, curiosity, and integrity, expressed in the Mission-Vision-Values document, were discussed and communicated creatively in interactive group work.

The afternoon session started with a presentation titled, “Ten commandments for seminar participants”. This guided a discussion on the meaning of having a “good/constructive” seminar culture and what practical steps could lead to it.

After a day of meaningful deliberations, nothing felt better than disconnecting and relaxing with a session of drums and music. Two of the colleagues, Mike and Pelle introduced the group to the rhythm of the drums and several had the opportunity to discover a new passion in their lives.

The day concluded with an “appetizing dinner” where senior and/or retired staff met the younger and newer members in a festive atmosphere. The delicious food, a magic session, going down the memory lane with old photos and video messages from colleagues from other parts of the globe, and finally dancing left us feeling mesmerized with the connections we got to nurture in these 35 years.











Frånö, Kramfors 2001



Etiopia 2006



Riga 2011



Medlefors 2012



Lycksele 2013



Skellefteå 2017



Järnäsklubb 2018



Skeppsvik 2019



UMEÅ UNIVERSITY

EPIDEMIOLOGY AND GLOBAL HEALTH



Our **VISION** is to be an international, collaborative and diverse academic environment committed to social change for equitable health and welfare. Northern Sweden is our home, and the world is our landscape.

Our **MISSION** is to undertake meaningful work through multidisciplinary research and transformative education, and by engaging collaboratively with the surrounding society, both within Sweden and internationally.

The **VALUES** of solidarity, curiosity and integrity guide our daily work. Our environment strives for

- Open minds in an open climate
- Creative and critical thinking
- Inclusive and safe spaces
- Strength in diversity

Organisational setting

Organisation, Leadership and Staff

The Department of Epidemiology and Global Health (EpiGH) is shaped by a set of key values that are central to the way in which we conduct our work, research, education and engagement with society. These efforts are underpinned by our ambition which is to contribute to equitable and sustainable improvements in health and welfare across the globe. We work with a broader definition of global health including public health issues in Sweden, as well as in the rest of the world. Our mission, vision, and values are presented on page 9.

EpiGH is a multidisciplinary research, education and teaching environment. At EpiGH we host Umeå International School of Public Health with Masters Programmes' in Public Health (MPH) and an extensive doctoral programme (PhD). Additionally, since 2020 we also have the responsibility for coordinating the one-year Master's programme in Working life and Health (ALPHA).

A guiding principle of our organization is to ensure that each member of the staff has the possibility to contribute, as far as possible, to our collective work, both in the short- and long-term. Our Research Strategic Group and the Educational Strategic Group have key responsibilities to facilitate and guide future developments in this regard. The Midpoint Researchers' Group includes post-docs and others at the beginning of their research careers. The Academic Dialogue Spaces having emerged from bottom-up initiatives encourage increased scientific dialogue and promote the development of cutting-edge expertise. Our research and education operates under three research profiles: 1) *Emerging Global Health Challenges*, 2) *Health Systems and Policy*, and 3) *Northern Sweden Health and Welfare*,

which are consolidating and strengthening every year. (see page 32).

The Extended Leadership Group, which meets once a month, comprised the following members in 2021:

Anna-Karin Hurtig	Head of Department
Klas-Göran Sahlén	Deputy Head of Department
Marie Lindkvist	Study Director, MPH
Karin Johansson	Administrative Coordinator
Sara Forsberg	Finance Coordinator
Miguel San Sebastián	Study Director, Research education
Helene Johansson	Study Director, ALPHA
Anneli Ivarsson	Rep. Research Strategic Group
Isabel Goicolea	Rep. Research Strategic Group
Mazen Baroudi	Rep. Doctoral Students
Faustine Kyungu Nkulu Kalengayi	Rep. Midpoint Group, Spring
Petter Stoor/ Ida Linander	Rep. Midpoint Group Autumn
Fredrik Norström	Rep. Working Environment
Raman Preet	Rep. Equal Opportunities

EpiGH has about 60 employed staff and additionally approximately 60 affiliated researchers and doctoral students. We benefit from wide ranging prior education and experience in our membership. This includes physicians, nurses, psychologists, economists, social workers, dentists, statisticians, physiotherapists, and nutritionists. This broad mix of experience - across clinical medicine and the social sciences - greatly enriches our multidisciplinary research and teaching environment.

All staff are encouraged to participate in our monthly staff meetings (PUMP) and the Department Days that are held each semester. In 2021 meetings continued to be virtual as a consequence of the restrictions on physical encounters during the pandemic.

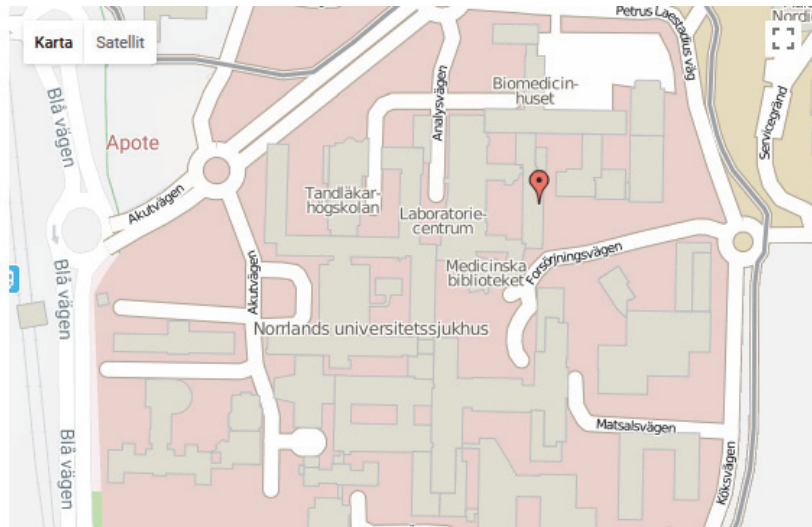


Figure 1. Map showing the location of our offices within the hospital area.

Information Committee

An Information Committee manages the entire internal and external communication and dissemination for the Department. Like other years, even in 2021 extensive use of social media platforms (Facebook and Twitter) was done to inform researchers, alumni, prospective students, and the general public about our activities. The two large conference rooms at EpiGH, Alicante and Butajira, were fully equipped with technical solutions to perform mixed meetings (physical & digital) as most meetings were still online due to Covid-19 restrictions. This equipment strengthens our digital capacity.

Members of the Information Committee are Klas-Göran Sahlén (chair), Klara Johansson Ulrika Järholm, Göran Lönnberg and Karl-Erik Renhorn



Epidemiology and Global Health on Facebook

Finances

The total revenues for this year amounted to 59,7 MSEK, out of which approximately 54% originated from sources external to the University (Figure 2). Our main activities, i.e., education and research, are reflected in the budget. Both are key activities in our daily work, although research activities are the

largest component (Table 1). This year revenues were higher than the costs. We had planned for a deficit but due to less activities, such as less travel and more working from home during and one more year with the pandemic, we ended up with a result with a net profit of 3 240 T SEK (Table 1).

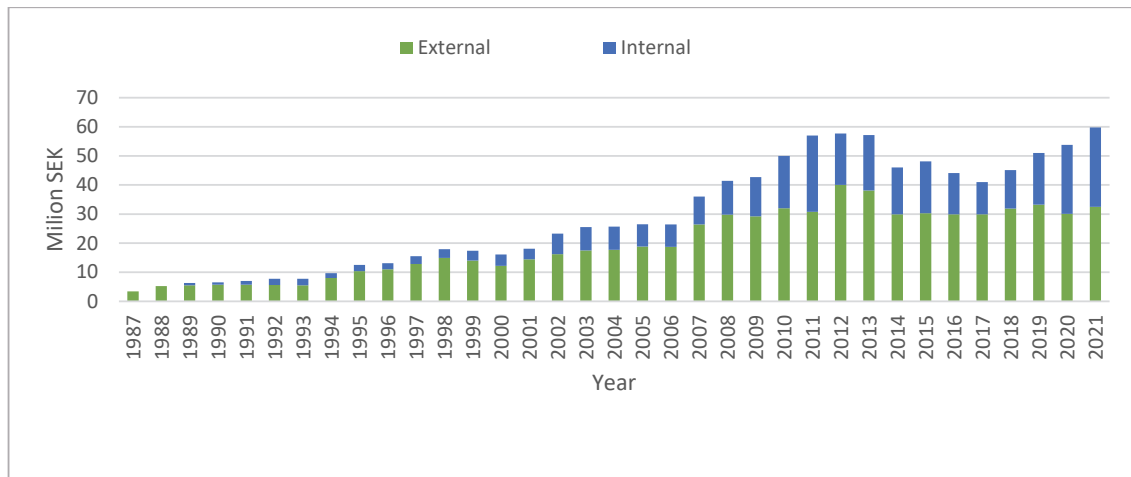


Figure 2. Annual income, EpiGH 1987-2021, showing internal and external funding.

Table 1. Revenues and costs.

Fakultet/motsvarande: Medicinsk fakultet Institution/motsvarande: 3850 Epidemiologi och global hälsa			
	Overall Department Education		Research
	Ack utfall (tkr) t o m 2021-12-31	Ack utfall (tkr) t o m 2021-12-31	Ack utfall (tkr) t o m 2021-12-31
Revenues			
Governments Grants	23 739	7 904	15 836
Co-Financing	1 062	54	1 008
External Grants	23 074	936	22 138
Commissioned Grants	19 087	5 285	13 801
Accrued External Funds	-9 636	-918	-8 718
Sales Revenue	2 469	3	2 466
Other Revenue	2	0	2
Summa	59 798	13 264	46 534
Costs			
Personnel costs	-38 697	-9 177	-29 520
Other Personnel costs	-470	-97	-373
Premises	-578	-286	-292
Operating Costs	-7 847	-1 451	-6 396
Overhead	-7 220	-1 579	-5 641
Overhead	-1 666	-608	-1 058
Other Costs	-10	-5	-4
Depreciation	-70	0	-70
Grant Transfer	2 475	1 998	477
Grant Transfer	-2 475	-1 998	-477
Summa	-56 557	-13 202	-43 355
Result			
Result	3 240	61	3 179
Summa	3 240	61	3 179

Our education income amounted to 13,2 MSEK, out of which 7.9 MSEK was supported via governmental grants to our MPH programmes and now also for our ALOHA programme. The other dominating source was tuition fees (Table 1). A few students paid these out-of-pocket, but the

majority were awarded scholarships from different sources: *Erling-Persson foundation*, the *Swedish Institute*, and *Umeå University Scholarship*. Figure 3 shows that EpiGH is a key source of student fees within the Medical Faculty and the University as a whole.

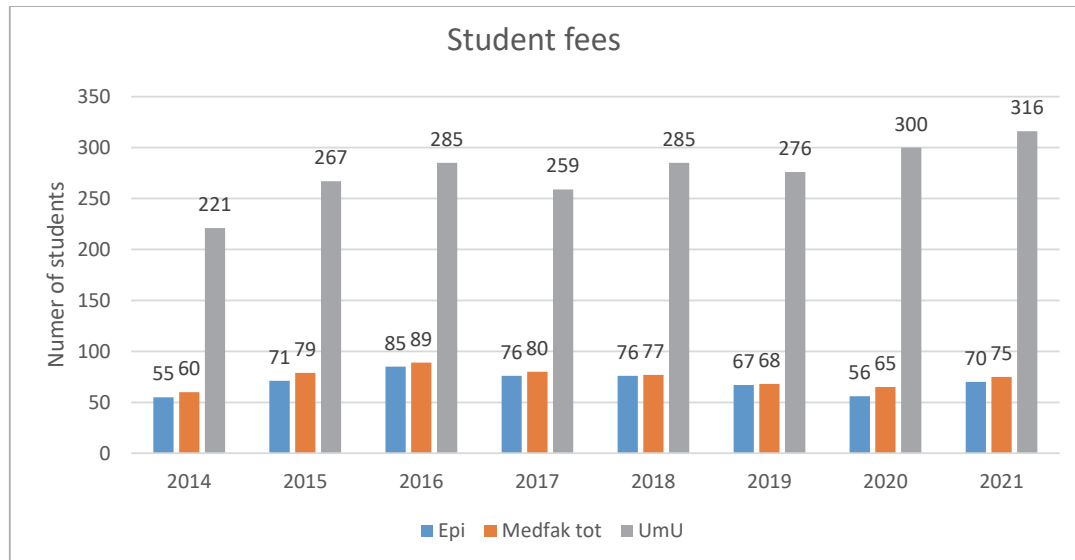


Figure 3. Fee paying students, EpiGH, Medical Faculty, University, 2014-2021.

However, as in previous years a major part of research funding in 2021 was from external sources comprising both grants and contracts.

Our external revenues for commissioned research have been increasing year after year, (Table 1). One significant reason for this is the many contracts we have with the Swedish Public Health Agency and the Sami Parliament of Sweden. The Largest contributor (57%) for external grants continues to be FORTE-Swedish Research Council for Health, Working Life and Welfare. Other benefactors are the VR-Swedish Research Council and SIDA-

Swedish International Development Agency (See Figure 4).

Our education outcome had a small profit of 61 T SEK this year, an excellent result because we are showing that we are using the funds that we get (Table 1). The result for Research was 3,179 MSEK, main reason for the positive result is that we have invoiced a lot at the end of 2021 but will not use it until the funds until 2022.

In the year 2021, our annual income has never been higher since 1987 the beginning of EpiGH (Figure 2). We are hopeful that this trend will continue in 2022 (see Figure 5).

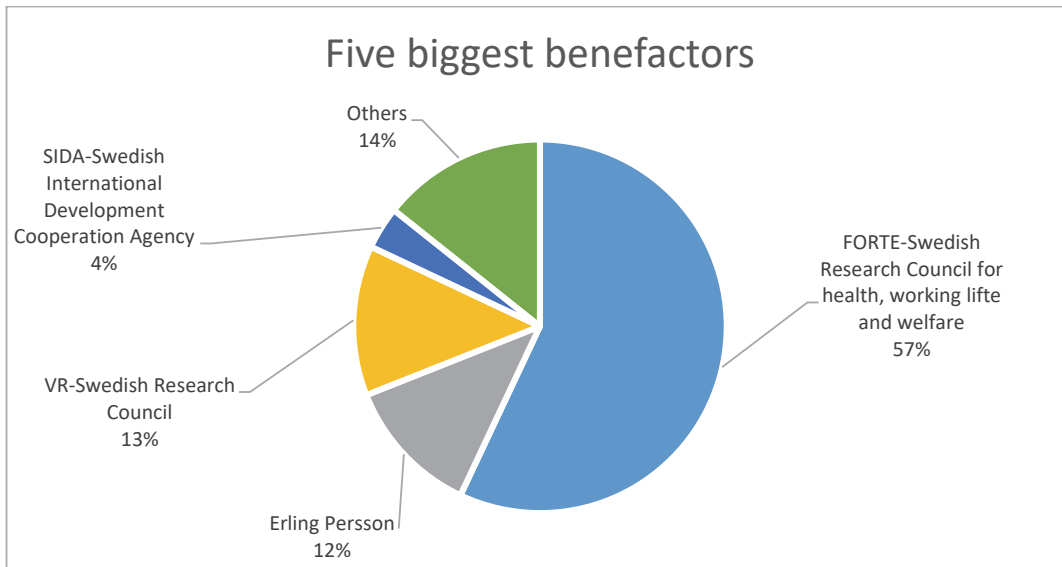


Figure 4. Main grant sources, EpiGH, 2021.

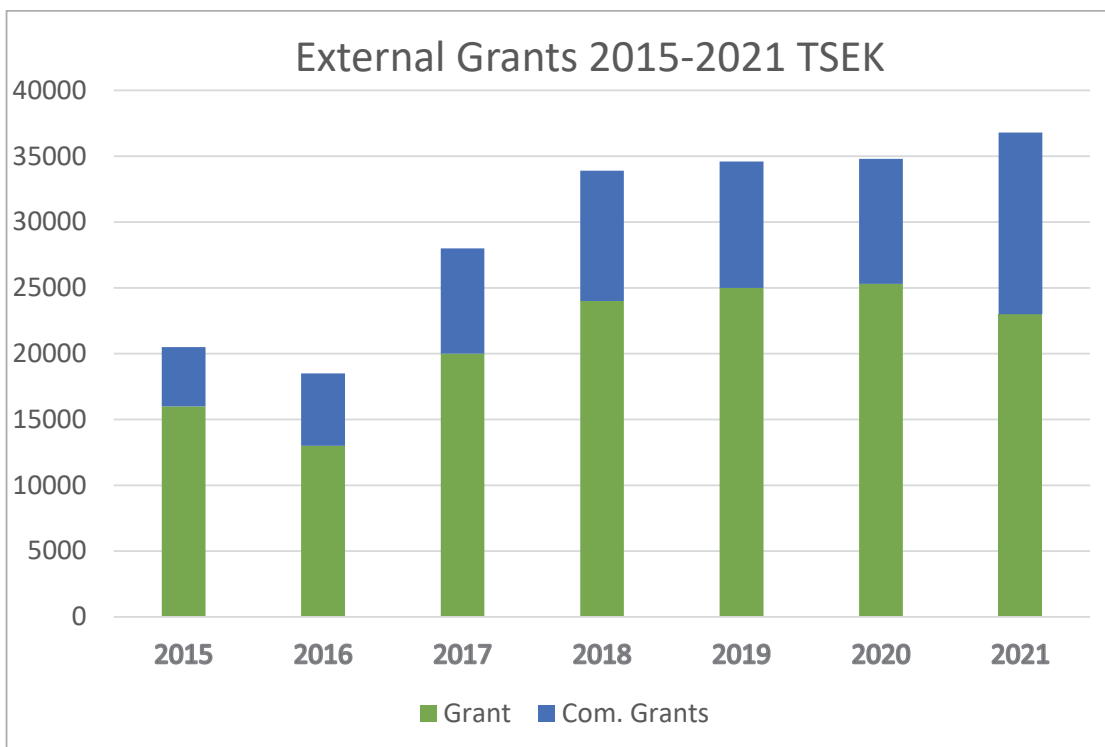


Figure 5. Incoming grants, EpiGH, 2015-2021.

Outputs

There are no measures that can fully evaluate our activities. However, one outcome criterion is the number of publications (Figure 6). The ups and downs of the curve result reflect the processes leading up to a publication, i.e. from a research idea over project planning, data collection, and analysis, and ultimately to the measurable outcome - the published paper.

In 2021 four PhD students successfully finalised their studies (Figure 7). At the end

of 2021, 33 PhD students were associated with our Department, including five new students registered during the year.

The Medical Faculty budget model uses three parameters for the assessment of productivity: publications, PhD exams, and external grants. Each department is given a budget, based partly on this assessment system. EpiGH has been increasingly competitive in this regard.

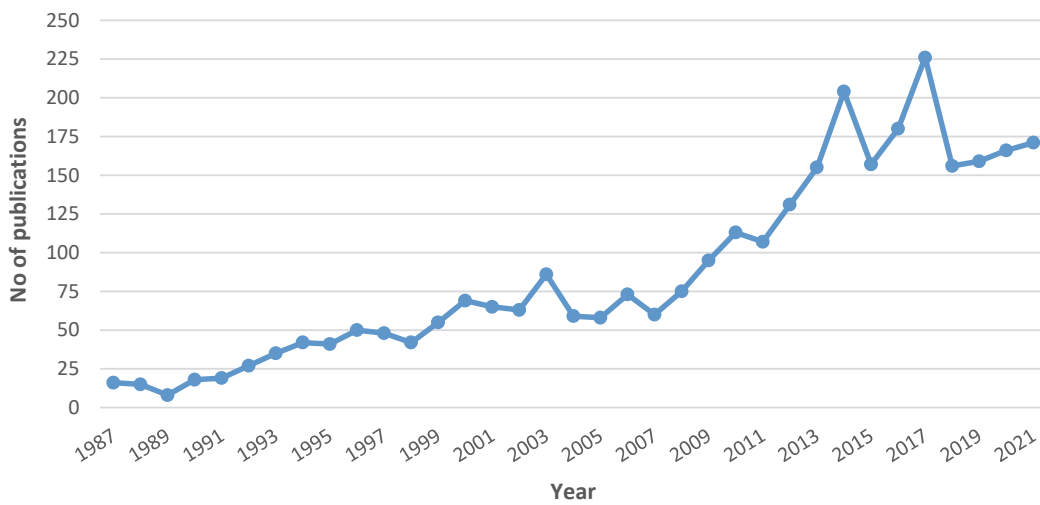


Figure 6. International peer reviewed publications by EpiGH members, 1986-2021 (registered in the publication database DIVA).

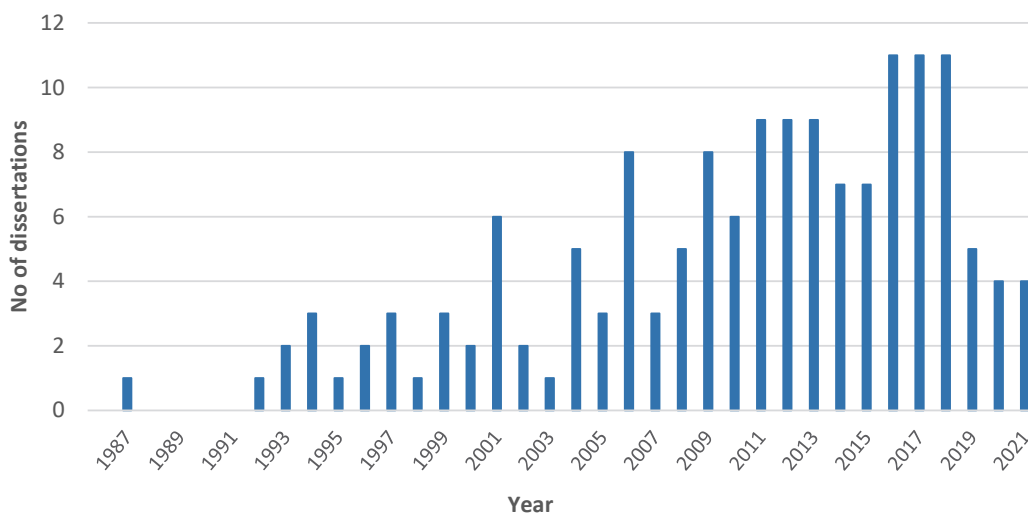


Figure 7. EpiGH, doctoral dissertations, 1987-2021.

Staff



Camilla Andersson. Doctoral student in public health, MA in media and communication, journalist. Research interests are in climate change, mitigation, adaptation, sustainable communication and health aspects. The thesis project focuses on the potential contribution of households to climate change mitigation and whether health aspects, as eg gains from mitigating activities, can be used as triggers when communicating needs for low carbon pathways



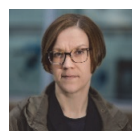
Cartrine Nancy Anyango. Doctoral student in Public Health Science at the Department of Epidemiology and Global health with an affiliation at Centre for Demographic and Ageing Research (CEDAR), master's in Public Health (MPH), and an undergraduate background in sociology. Her doctoral research thesis focuses on Intimate Partner Violence service provision to women with disabilities and how the current services address women with disabilities needs. Her research interests include gender-based violence, sexual and reproductive health, and rights and health systems



Mazen Baroudi. Doctoral student focusing on young immigrants' sexual and reproductive health and rights and their access to healthcare in Sweden. His main research interests are health system and migration health.



Hanna Blåhed. Doctoral student focusing on the ongoing reform of the Swedish primary health care system, from the perspective of rural communities in Västerbotten/Norrbottn.



Hanna Bäckström. Post-doctoral Fellow with a PhD in Gender Studies. Studies young women's self-organizing against gendered violence and young women's ill-health within the Swedish women's shelter movement. Research interests also involve civil society involvement in welfare provision, social movements for migrant rights, and feminist ethics.



Kerstin Edin, PhD, associate professor and docent in Public Health with a clinical background as a RN midwife. 2012-2019 she had a position as a programme coordinator and an associate professor at the midwifery master programme at the department of Nursing. Her research (in Sweden and in low-income countries) has mainly focused on sexual & reproductive health, violence against women and gender. Involved in an qualitative health economic sub-study of CALY (Capability-Adjusted Life Years).



Maria Emmelin. Professor of Global Health at Department of Clinical Sciences, Social Medicine and Global Health, Lund University. She has a special interest in public health evaluation and the social determinants of health. Her research has focussed on self-rated health and the social aspects of cardiovascular disease prevention in northern Sweden. She has worked with the HIV/AIDS epidemic in Tanzania, smoking cessation in South Africa, reproductive health in Ethiopia, and violence against women (and children) in Ethiopia, Tanzania and Indonesia. She is co-editor with Global Health Action.



Mikael Emsing. Doctoral student at Epidemiology and Global Health and the Post-graduate school for Educational Sciences. Working on the thesis "Perceptions of conflict management and its association with mental health and quality of life among Swedish police officers". The project seeks to examine the associations of conflict management and personality with mental health and Quality of Life among Swedish Police.



Louise Ehrenberg. Project assistant. Project coordinator for TOPAS, an experimental study carried out on behalf of the Swedish Public Health Agency with the purpose of evaluating a tobacco prevention program aimed at secondary schools in Sweden. Affiliated to the Epidemiology and Public Health Intervention Research group at Karolinska Institutet.



Nadja Fagrell Trygg. PhD student and project assistant in the project Complex inequalities in mental health.



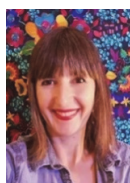
Inna Feldman. Associate professor in health economics. Research and teaching on health economics, Theoretical and empirical health-economics evaluations.



Osvaldo Fonseca. Senior Research Assistant. Ph.D. in Veterinary Science. Also affiliated to the Department of Clinical Microbiology and the Centre for Demographic and Ageing Research (CEDAR) at Umeå University. Participates in several research projects such as “Health impacts of weather types in Sweden – the context of climatic and demographic change” and “Complications following COVID-19 – register studies”.



Sara Forsberg. Financial coordinator. Responsible for budgeting, economic planning and accounting.



Isabel Goicolea. MD, Professor. Her research interests are in gender relations, men’s violence against women, young people’s health and sexual and reproductive rights. Currently involved in research on youth health in Sweden, India and Zambia, and gender-based violence in Sweden and Spain.

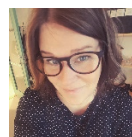


Anne Gotfredsen. Doctoral student at the Department for Epidemiology and Global Health. Also affiliated to the Umeå Centre for Gender Studies (UCGS). The overall aim of my doctoral thesis is to explore and understand how teenagers involved in various civic organizations and leisure activities develop a collective capacity to influence their mental health.



Per Gustafsson. PhD in Child and Adolescent Psychiatry, Associate Professor in Epidemiology, and Docent in Public Health. My research falls

within social epidemiology and social inequities in health and health care, particularly intersectional perspectives. I teach theory and methods for e.g. basic epidemiology, social epidemiology and philosophy of science at advanced and doctoral levels. Chair of the Program Council at the department and involved at the faculty through The Educational Strategic Board, The Council for Doctoral Education, and as Programme Director for the Doctoral education programme.



Ulrika Harju. PhD research administrator and administrator for Masterprogram in working life and health, ALOHA.



Anna-Karin Hurtig. MD, DrPH, DTM&H, MSc. Professor in public health. Head of the Department of Epidemiology and Global Health. Main areas of interest: international health policy and systems research, community based health systems and primary health care, and migrant health. Capacity building.



Elisabet Höög. MD in Public Health. Research fellow. MA in work- and organizational psychology. Research focus on facilitation of and support structures for change and development in welfare organizations. Research coordinator at FoU Socialtjänst, Region Västerbotten.



Ulf Högberg. MD, Professor emeritus in obstetrics and gynecology. Research in global reproductive health, clinical and perinatal epidemiology



Anneli Ivarsson. Professor in Epidemiology and Public Health Sciences. MD with specialist training in Paediatrics and a PhD in Paediatrics. Consultant at the Public Health Unit, Strategic Management Office of Region Västerbotten. Scientific leader of the Salut Child-Health Intervention Programme in Västerbotten and interlinked research Founder of the Umeå SIMSAM Lab focusing on multidisciplinary register-based research for connecting childhood with life-long health and welfare.



Urban Janlert. MD, Professor emeritus in Public Health, specialist in Social Medicine. Research in social epidemiology (unemployment, social deprivation).



Angelica Johansson. Programme Administrator of the Public Health Programmes. Secretary for the Programme council for master programmes in public health (PRPH) and responsible for the administration in Selma. Also working with student support and course administration



Helene Johansson. PhD in Public Health. Research fellow. Director of studies for the Master's programme in Working life and Health. Research areas: risk communication, community health promotion, prevention, implementation, collaboration/integration. Teaching subjects: health, health promotion, prevention, working life and health, qualitative methodology. Supervision of students at the master's and PhD level.



Karin Johansson. Administrative coordinator. Responsible for departmental and staff administration.



Klara Johansson. PhD, research fellow in epidemiology and public health. Research on social inequalities of health, primarily child and adolescent health; currently working on how unemployment of parents is related to mental health of adolescents. In 2021 started a partnership with Region Västerbotten about evaluation of social differences in health in the region.



Frida Jonsson. Research fellow with a PhD in Public Health. Conducts research with a focus on theory driven evaluations of complex interventions that centres largely on how access to and experiences of health and social care can be improved for marginalised groups, especially youth and elderly.



Håkan Jonsson. Statistician, associate professor and docent in cancer epidemiology. Research areas are early cancer detection/screening and register based epidemiology. Principal investigator for projects related to mammography screening with focus on effectiveness, overdiagnosis, tumour characteristics and treatment.



Ulrika Järholm. Department administrator. Working with web and communication, research courses, PhD administration and project administration



Ida Linander. PhD in public health and postdoctoral fellow. Does qualitative research about LGBTQ people's experiences of health and healthcare and also about broader issues of gender, sexual health and healthcare systems. Affiliated with Umeå Centre for Gender Studies (UCGS).



Lars Lindholm. Professor in Health economics. Studies on equity in health economic evaluation and the use of epidemiological data in the distribution of health care resources.

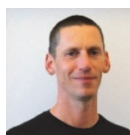


Marie Lindkvist. Director of Studies at the Unit. Associate professor in Epidemiology and Biostatistics, PhD in Statistics and B.Sc in Mathematics. Appointed as Excellent teacher in Umeå University's pedagogical qualification model. Lecturer in biostatistics and statistical consultant. Responsible for statistical considerations and analyses in the Salut child health intervention programme in Västerbotten.



Kristina Lindvall. Researcher, Dietitian, master in Food and Nutrition, PhD in Public Health. Involved in research on Complex interventions and their implementation (in Västerbotten, Sweden and Upstate New York), Weight maintenance (in Västerbotten, Sweden and Upstate New York, US), Risk communication within CVD. Also engaged in an interdisciplinary research program investigating the links between health, livestock-based livelihoods,

human well-being, and land management and governance in Uganda and Kenya.



Wolfgang Loehr. Medical data manager, involved in different research projects.



Curt Löfgren. Associate Professor (senior consultant). Lecturing and research in health economics. Presently involved in developing tools for the economic evaluation of interventions aiming at improving lives for socially disadvantaged children and adolescents.



Göran Lönnberg. Statistician, data scientist, research assistant, involved in different research projects.



Kaspar Meili. PhD student in health economics, working on CALYs - Capability-Adjusted Life Years. CALYs are based on Sen's capability approach and can be used in similarly to QALY, for example in economic evaluations. CALYs aim to measure quality of life in terms of accessible capabilities, giving individuals freedom how to realize their lives.



Paola Mosquera Mendez. Psychologist, MSc, PhD. Researcher. Her research focuses on the evaluation of public health policies, the measurement and explanation of health inequalities and the application of an equity lens to public health interventions. She is currently leading a research project exploring how to apply a life course approach to analyze socio economic inequalities in cardiovascular health and another one evaluating the effects of the primary care choice reform on population health and socioeconomic inequalities in health in Sweden.



Anna Månsdotter. Associate professor in public health. Working at the Public Health Agency of Sweden (governmental assignments and scientific support). Research and teaching on public health, economics/ethics, and gender equality.



Fredinah Namatovu. Research fellow; PhD in Epidemiology and Public Health. Also affiliated with CEDAR (Centre for Demographic and Ageing Research) at Umeå University. Her current interests include research on gender-based violence, reproductive health, disability, and population ageing within the Swedish context and in Sub-Saharan Africa. Principal investigator of the study on Strengthen service provision among people with disabilities that experience intimate-partner violence in Sweden (DIS-IPV).



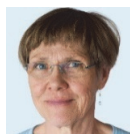
Nawi Ng. Visiting Professor of Epidemiology and Global Health. His research interests are in ageing and disability, chronic non-communicable disease, behavioral change and implementation research. Lead two research projects at UmU: (i) a multidisciplinary research programme on digital coaching for behavior change in Västerbotten County (Forte Programme, 2018-2021); and (ii) an implementation research for integrating the tuberculosis, diabetes mellitus and smoking prevention programme in India and Indonesia (VR Research Link, 2019-2020).



Maria Nilsson. Professor in public health; social scientist with a PhD in epidemiology and public health sciences. Her main focus is climate change and health, with specific interest in adaptation, policy, communication and vulnerable populations. She also has an interest in research on tobacco control and prevention. Affiliated to the Public health unit, Region Västerbotten.



Faustine Nkulu Kalengayi. MD, MPH, PhD. Research fellow. Research on Migrant health and access to health care services. Collaborative research with the Public Health Agency of Sweden on HIV/STIs and migrants' sexual and reproductive health and rights.



Margareta Norberg. Docent, MD, PhD in Family Medicine and Epidemiology. Long term experience of population wide clinical prevention of cardiovascular diseases (CVD) within the Västerbotten Intervention Programme (VIP). Research focused on prevention of CVD, currently Co-PI for VIPVIZA, a pragmatic randomised controlled trial nested in the VIP, ClinicalTrials.gov, NCT 01849575. Affiliated also to the Dep of Public Health and Clinical Medicine.



Fredrik Norström. Docent in Epidemiology and Biostatistics and Associate Professor in Health Economics. Principal investigator for the research projects Is better public health worth the price? - A health economic evaluation of increased staffing in home care and Covid-19 and home care: a high price for new lessons learned. Research interests are: i) health economic modelling, ii) unemployment and health, iii) work environment and health, iv) development of statistical methodology within epidemiology and public health, and v) celiac disease.



Lennarth Nyström. Associate Professor in epidemiology, Senior consultant. Research focus on evaluation of the effectiveness of mammography screening in Sweden, effectiveness of treatment of hypertension in Västerbotten and efficacy of health coaching to promote healthier lifestyle among older people at moderate risk of cardiovascular disease, diabetes and depression in Sweden. Other research includes medical adherence to endocrine treatment for breast cancer in Sweden, epidemiological studies of hip fractures and hip arthroplasty in Umeå



Monica Nyström. Associate professor in Medical management, organisation, and innovation. Leads the FORTE project LST-STRATEGY – Strategies for large system transformations in a decentralized healthcare system and the Vinnova financed projects “Develop the developers of the future!”, “Innovative development in the North - New forms for supporting innovative development in large healthcare organizations”, and the SALAR funded “FK-Hälsa Works part time at Umeå University with her main employment at Medical Management

Centre, Department LIME, at Karolinska Institutet where she is a research group leader for the SOLIID-group.



Sarah Osman. BDS, MPH. Project assistant of EU H2020 Project ZikaPLAN hosted at the Department. Her research focuses on infectious diseases and health inequalities and has a special interest in tobacco control and oral health. Ended her employment June 30, 2021.



Anne Ouma. PhD in medical geography, MSc. environmental science. Main areas of interest; Sustainable development goals in global health and wellbeing with specific interest in Community, vulnerable groups, primary health care & health policy action research and capacity building. Affiliated to the Centre of Sami Research CESUM and Centre for Rural Medicine - Region Västerbotten-GMC.



Solveig Petersen. PhD in Pediatrics, Associate Professor in Epidemiology and Public Health. Ongoing research in the fields of epidemiology and prevention of mental ill-health, recurrent pain and overweight in children in Sweden and internationally. Principal investigator of the Study of Health in school-children from Umeå (the SISU project). Also holds an analyst position at the Public Health Agency of Sweden.



Raman Preet. A Dental and Public Health Professional, Research Coordinator and Manager, and Equal Opportunity Officer. Working as Project coordinator of EU H2020 funded Project ZikaPLAN (25 beneficiaries with 11.5 M Euro grant) hosted at the Department. Vast experience in providing strategic guidance on pre- and post-award preparations of EU funded health research projects and their implementation. In conjunction, teaches global health and lectures on various topics especially sustainable development goals, global oral health inequalities, and communication and collaboration in public health research projects.



Anni-Maria Brännström. MSc, PhD. Researcher and teacher in health economics. Research focuses on the evaluation of multisectoral and complex interventions. Coordinator of the Faculty's Equity in Health thematic space.



Susanne Ragnarsson. PhD in Epidemiology and global health. Involved in the Study of Health in schoolchildren from Umeå (the SISU project). My PhD Studies were about recurrent pain in school-aged children and the relation to academic outcome. Also a part of Post-graduate School for the Educational Sciences. Ended her employment February 2021.



Karl-Erik Renhorn. Research coordinator. Provides information, advice and support in relation to external funding to the researchers at Epidemiology and Global Health. Also assists researchers in the development of grant proposals and the management of research projects. Teaches on and co-ordinates the postgraduate course "How to write grant applications", and co-ordinates the thesis courses of our Master's programmes. Also affiliated with Umeå University's research Support Office.



Linda Richter Sundberg. Research fellow, PhD public health MSc Psychology. Health systems researcher with focus on policymaking and implementation processes in health systems. Ongoing research on e-health innovations for behavior change and accessibility of mental health services in the health system. Teaches evidence-based policymaking, evaluation in public health and qualitative research methods. Coordinator of the Network of implementation research and practice in health and social services.

Arian Rostami. Doctoral student at the Department of Epidemiology and Global Health. Also affiliated to the Police Education Unit and the Umeå Centre for Gender Studies (UCGS). The overall aim of my doctoral thesis is to study mental health and job satisfaction in relation to work-related stress, personality and resilience in police officers working in vulnerable areas. Also,

gender-based and sexual harassment as one of the main job stressors will be assessed in this investigation with a specific focus on female police officers.



Klas-Göran Sahlén. R.N, PhD. Associate Professor and deputy head of the department. Studies in the area of aging, prevention and health economics. Lecturer in health economics, ethics and qualitative methods. Responsible for the software Open Code. Research in Vietnam and Tanzania linked to PhD projects. Part of the Somali-Swedish network and course director for the training in Somalia. Coordinator for Nordplus project Nordic Network for Global Health.



Miguel San Sebastián. Professor in public health; Medical Doctor with a MSc degree in control of infectious diseases and a PhD degree in environmental epidemiology. He practiced public health during 12 years among indigenous communities of the Amazon basin of Ecuador. Currently working as Professor teaching different courses at Master and PhD level. His current research is focused on strengthening health systems in low income countries and social inequalities in health in the Swedish context. He is also the health research leader at Várdduo-Center for Sámi Research.



Eva Selin. Study administrator and Study counselor of the Public health programme. Working with student support and course administration.



Julia Schröders. Postdoctoral fellow also affiliated to the Dept. of Sociology and CEDAR. Training in medical anthropology (MA) and epidemiology & public health (MSc & PhD). Interested in social network theory/analysis and the construction of social and health vulnerabilities across the adult life course in both Sweden/Europe and low- and middle-income countries with ongoing work in Indonesia, Nepal, and Somalia. Teaching basic and advanced methods in epidemiology and social theories for global health. Editor for Global Health Action; facilitator for the research space 'Emerging Global Health Challenges'.



Barbara Schumann. Associate Professor/research fellow; PhD in epidemiology. Affiliated also with CEDAR (Centre for Demographic and Ageing Research) at Umeå University. Research on health impacts of weather and climate change in Sweden and in low- and middle income countries. Another focus are public health challenges of environmental change in East Africa. Ended her employment July 31, 2021.



Oscar Sedholm. Project assistant for the research group Lávvuo - Research and education on Sámi Health. Focused on researching the COVID-19 pandemic's effects on Sámi society in Sweden, as part of the international ARCTIC-COV research project financed by the Arctic Council and the Sustainable Development Working Group (SDWG).



Anna Stenling. MSc. Doctoral student evaluating the Västerbotten Intervention Programme from a health economic perspective.



Jon Petter Stoor. Psychologist, PhD in Health Sciences, senior research assistant. Mainly working with coordination and projects within the Sámi health research group Lávvuo at EpiGH. Main responsibilities include PI of the Swedish/Sámi case study within the ARCTIC-COV multiple case-study, and CO-PI of the “SámiHET-study”; the first-of-its-kind public health survey among Indigenous Sámi in Sweden (data collected spring 2021). Commissioner in the Lancet Commission on Arctic Health, the Lancet Commission on Suicide and Self-harm, and member of the Global Collective for Indigenous Adolescent Health and Evidence-Based Action. Part time position (20%) at the Centre for Sámi Health Research at UiT in Tromsø, Norway.



Sun Sun. Research Fellow, PhD in Health Economics. Affiliated researcher at Karolinska Institutet. Members at EuroQol Group and ISPORE. Works in the field of health outcomes research and health economics, real world evidence. PI for Forte project on Health outcomes and resource utilization for bariatric surgery: evidence from real-world data in Sweden”. Teaching and supervision for Master and PhD students.



Moses Tetui. Associate professor at the department of Epidemiology and Global Health at and a Postdoctoral researcher at the School of Pharmacy, University of Waterloo, Canada. He also holds an affiliation with the Makerere University School of Public Health in Uganda. His current research works include building confidence in Covid-19 vaccines in Canada by engaging with diverse stakeholders such as Public Health authorities, community members and a multidisciplinary research team. His other research works include contraceptive use in urban informal settlements, access to maternal and neonatal health services, health managers capacity development and knowledge translation. He is motivated by a desire to make health systems more responsive for the most vulnerable across the world.



Thomas Vogt. Project Assistant working on the determinants of social-emotional problems in children of 3 years of age in Västerbotten.



Malin Wahlström. Doctoral student, MSc in Public health and Nursing. Working in research project concerning work environment in home care, with special focus on possible effects of the covid-19 pandemic. Main research interests are occupational health and work environment.



Stig Wall. Professor Emeritus of epidemiology and health care research. Epidemiologist with a social science background. Research on epidemiology and international health, environmental and social epidemiology, prevention and medical technology assessment.



Susanne Walther. Financial administrator. Working with budget and departmental administration. Also involved in the project on celiac disease.



Masoud Vaezghasemi. PhD in Epidemiology and Public Health. Current research focuses on social-emotional health among preschool children in Northern Sweden. His research interest lies within social and contextual determinants of health and health inequalities. Also interested in the double burden of malnutrition in Low- and Middle-Income Countries.



Lars Weinehall. Senior Professor in Epidemiology and Family Medicine. Was 1985-2007 the coordinator of development and countrywide implementation of one of the world's largest ongoing population-based intervention program for the prevention of cardiovascular diseases (CVD) and diabetes, the Västerbotten Intervention Program (VIP). Research on analysis of the role of primary care in population-oriented prevention and supervised a number of PhD students both from Sweden, the US, Indonesia and Vietnam.



Anna Westerlund. Post doc. PhD. MSc in work- and organizational psychology. Currently her research is focused on knowledge governance and implementation processes in healthcare and social services.



Annelies Wilder-Smith. Infectious disease physician and public health practitioner with a special interest in emerging infectious diseases and vaccine-preventable diseases. The past 15 years have been devoted to dengue research, in particular dengue vaccine development and dengue in international travelers. Prof Wilder-Smith is President of the International Society of Travel Medicine, Editorial Consultant to the Lancet, Senior Advisor to the Dengue Vaccine Initiative, and serves on various WHO committees. She is the Principal investigator of the EU funded project, “Zika Preparedness Latin American Network – ZikaPLAN”.

Postdoc - beginning

I was trained as a qualitative researcher, and I defended my PhD thesis on suicide among Indigenous Sámi at UiT in northern Norway in December 2020. Recently, I started my two-year post-doc grant from FORTE (Swedish research council for health, working life and welfare), which focuses on the health of young Sámi in Sweden. This is of course an exciting opportunity for me, and fortunately, FORTE also allows me to “spread out” my grant over three years in total. For me, that means I am in the middle of making plans for the next 35 months, rather than just two years. More importantly, it also means I will be able to strengthen myself as a teacher, as well as a researcher.

An important goal for my post-doc-time is to broaden my methodological tool-box to include quantitative methods. Aside from

developing as a researcher, I believe it will also enable me to effectively advance Sámi public health science in Sweden – by being able to draw more easily from the SámiHET-dataset that our *Lávuvuo* research group collected in 2021. To simultaneously develop myself as an educator, I am planning and will be responsible for the first UmU-course on *Sámi and Indigenous health* (7.5 ECTS), which will start as a fully digital course in autumn 2022. To support this effort, I will be taking several courses at the Centre for Educational Development (UPL, UmU).

Altogether, I am very grateful for the chance to embark on yet another learning journey, this time at EpiGH!

Jon Petter Stoor

Reflection on being a post-doc

I started my post-doc in February 2020. It is a Forte-financed project with the title: “How can young trans people’s mental health be improved? A participatory study that aims to develop action plans based on interviews, policy analysis and concept mapping”. I developed the project idea based on my thesis where I explored adult trans people’s experiences of health and healthcare. I defended my thesis in Public health within the Graduate school of gender research and during my post-doc I have also had the possibility to continue my collaboration and work with the Umeå Centre for Gender Studies, which has allowed me to continue to be in an interdisciplinary research environment and conduct interdisciplinary research.

The purpose of a post-doc is to be able to dig deeper into one field of research, and to use this time to establish oneself in the field and expand collaborations. I think it has been very good to have a lot of time for research and it has been great to get the opportunity to work within a project that I have myself designed and planned, with input from

colleagues of course. This has however also been one of the main challenges; working by myself in the project. I think I have become very used to work in a larger research group, and I also think we tend to generally do that in public health. To counteract this, I have for single papers invited colleagues to collaborate which has been very fruitful.

During the years for the post-doc I have gotten myself involved in quite many other things, for good and for bad. Although it has taken some attention from the post-doc I think it has also been a good learning experience; getting into new research fields, new collaborations and teaching in new programs. Although a post-doc felt like getting a quite long-term work-plan I also realized quite quickly that I had to continue to apply for funding to be able to continue to do research. This of course takes time and energy, but it has also opened up for possibilities ahead. I now look forward to work, for example, in new research project on gender-based violence and expand my knowledge in this field.

Ida Linander

Education



Introduction day August 2021

Umeå International School of Public Health

Public health education and training has been integral to the success of our international research collaborations. Many ad hoc training courses, workshops and short courses in epidemiological methods have provided a springboard for international projects. These activities have helped to build what is now a highly regarded international school within Umeå University. Maintaining a strong research focus in our teaching has been critical for mutual success in education, training and international partnerships.

The first courses in public health in Umeå were given in 1986. Five years later, in 1991, a one-year Master of Public Health (MPH) programme was introduced. The structure of the programme remained fairly similar until

2007, when an additional two-year programme was introduced, covering epidemiology more broadly to include health systems and the social determinants of health.

As a result of a decision taken by the Swedish Parliament, since autumn 2011, students from outside the European Economic Area (EEA) and Switzerland have been required to pay tuition fees for higher education in Sweden. This led to a drop in enrolments from non-European students in 2011/12. Despite this challenge we remained committed to promoting the one- and two-year MPH programmes and further developing and diversifying their educational content.

In the autumn of 2015, in collaboration with the Umeå School of Business and Economics, we introduced an MPH with a specialization in health economics. This recognises the breadth of health economics across a range of topics that include making evidence-based decisions about the best use of resources for maximising health gains, ways of analysing systems, organizational change, and health financing.

To ensure flexibility and offer common ground for students, the first year of the MPH is identical for all students regardless of whether they are undertaking a one- or two-year program, with or without the health economics specialty. This first year includes courses in: global health conditions; health systems analysis; social determinants of and inequalities in health, and quantitative and qualitative methods useful for developing, implementing, and evaluating public health policies. The two profiles for the second year expand on the knowledge and skills developed so far, both when it comes to depth and breadth. They comprise a mix of set courses to ensure a foundation in core topics, but also a selection of elective courses on a range of relevant topics. This arrangement offers students possibilities to shape their own unique profiles according to their interests and needs. Taken together, the programmes provide public health practitioners and researchers with the skills needed to comprehensively understand, analyse and ultimately improve population health.

During the 2021/2022 academic year we had an intake of 38 new students comprising 12 one-year students, 15 two-year students enrolled in the regular programme and 11 students enrolled in the health economics specialisation. In addition, there were 22 second-year students, 13 of whom are in the regular two-year program and 9 of whom are in the health economics programme. In 2021 our incoming students originated from Sweden, Europe, Asia, South America, North America and Africa. The multi-cultural composition of the students promotes a diverse academic and social climate, which students frequently highlight as a major strength of our programmes.

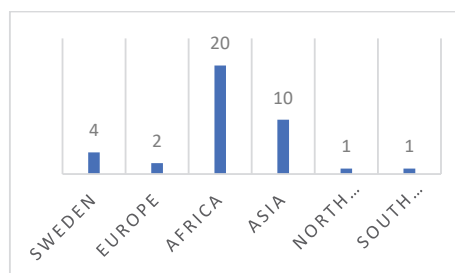


Figure 8. Master's students 2021/2022

Since the introduction of tuition fees, scholarships from the Swedish Institute have been instrumental in the recruitment of students outside the EU. In 2021, 17 of our international students were fortunate enough to receive scholarships from the Swedish Institute. 15 students were supported by the Erling-Persson Family Foundation. We are most grateful to the Foundation for the many years of support in providing scholarships to students from outside the European Economic Area.

The pandemic situation with Covid-19 has during 2021/2022 continued to lead to a different study environment. Some courses have been performed digitally and some have been performed on campus.



EpiGH is a member of tropEd, an international network for higher education in international/global health from Europe, Africa, Asia, Australia, and Latin America. The Network provides postgraduate opportunities for education and training which contribute to sustainable development. The focus is on improving the management of health services for disadvantaged populations.

TropEd offers a Master's programme in international health. In 2020 EpiGH held tropEd accredited courses on various public and global health related topics. During the years 2020-2022, EpiGH has an active role in tropEd through our director of studies,

who participates in the executive committee and was acting President in 2021 and is Past President for 2022.

EpiGH is also part of the Nordic Network on Global Health. This network, which was established in 2017 with support from Nordplus, currently comprises six universities from five Nordic countries. EpiGH has joined with other Nordic universities to further expand the course portfolio,

and benefit from the learnings in different Nordic higher education environments. This underscores a strong commitment to the principles of equity and global health partnerships. The Nordic countries and their universities aim to build an extensive knowledge network of student and teacher exchange thereby strengthening their strong profiles within global health education.

One-year Master Programme in Occupational Health

Since 2020, EpiGH is responsible for the one-year master programme in Occupational Health”. The field of Occupational Health is interdisciplinary, and the programme offers three specializations: Behavioural Science, Ergonomics, and Occupational health nursing. The program runs at half speed and is carried out as a distance education. In addition to EpiGH, four other departments/sections at Umeå university are involved in the teaching; Law, Psychology, Physiotherapy, and Sustainable Health.

The programme includes three common courses and three specialization-specific courses. The common courses give a base where age, gender, class, and cultural aspects are addressed as well as a global perspective on working life and health. The specialization-specific courses provide an opportunity to delve into the field based on profession/ specialization.

One-year Master’s programme in Occupational Health

General courses
Working life and health, 15 credits
Communication and the consultive approach, 7.5 credits
Theory, methods and ethics of science in Occupational Health, 7.5 credits
Specialization-specific courses
Behavioural science
Behavioural change and rehabilitation, 7.5 credits
Conflict, stress and bullying from an individual and organizational perspective, 7.5 credits
Master thesis in Occupational Health with specialisation in Behavioral Sciences, 15 credits
Ergonomics
Physical ergonomics: Work place analysis and evaluation, 7.5 credits
Work ability and rehabilitation in working life, 7.5 credits
Master thesis in Occupational Health with specialisation in Ergonomics, 15 credits
Occupational-Health Nursing
Physical aspects in Occupational Medicine, 7.5 credits
Chemical aspects in Occupational Medicine, 7.5 credits
Master thesis in Occupational Health with specialisation in Occupational Health Nursing, 15 credits

Master programme courses 2021/22

First year

Global Public Health, 10 credits
 Biostatistics 5 credits
 Epidemiology, 10 credits
 Qualitative Methods 5 credits
 Health Systems: Organization and Financing,
 5 credits
 Health Economic Evaluation Methods, 5 credits
 Theory and Management in Health promotion,
 5 credits
 Master Thesis, 15 credits

Second year

Evidence Based Public Health, 4 credits
 Equity and Health, 3.5 credits
 Qualitative Data Analysis, 7.5 credits
 Advanced Biostatistics and Epidemiology,
 7.5 credits
 Advanced Topics in Health Economics Evaluation
 Methods, 7.5 credits **or**
 Social Epidemiology – Theory and Methods,
 7.5 credits
 Health, Environment and Sustainability, 3.5 credits
 Leading change and development in welfare
 organizations, 4 credits
 Evaluation in Public Health, 7.5 credits
 Master Thesis, 15 credits

Second year with specialization in Health Economics

Tools and Methods for Economists, 7.5 credits **or**
 Evidence Based Public Health, 4 credits **and** Equity
 and health, 3.5 credits
 Health Economic Theory, 7.5 credits
 Social and Environmental Entrepreneurship,
 7.5 credits **or**
 Project Management, 7.5 credits **or**
 Environmental Resource Economics, 7.5 credits **or**
 Advanced Biostatistics and Epidemiology,
 7.5 credits
 Advanced Topics in Health Economic Evaluation
 Methods, 7.5 credits
 Health, Environment and Sustainability, 3.5 credits
 Leading change and development in welfare
 organizations, 4 credits
 Evaluation in Public Health, 7.5 credits
 Master Thesis, 15 credits

New scholarship for Master programme students

The Erling-Persson Family Foundation is providing 12 million SEK towards scholarships for students from non-EU/EEA countries studying the Master's programmes in Public Health in our Department. This funding is covering tuition waivers, and partially covers living costs, for up to eight students each year. The scholarship provisions started with the autumn intake in 2020-2021. The Foundation also provides generous support to our PhD students.

Other teaching activities

All courses within the MPH can be taken as single subjects. Priority is given to those enrolled in the MPH but a number of non-programme students are also accepted. This is especially true for the more methodologically oriented courses such as *Biostatistics*, *Epidemiology* and *Qualitative Methods*, and courses concerning health systems, policy, organization and financing, e.g. *Health Systems: Organizing and Financing* and *Health Economic Evaluation Methods*. In our view it is essential that these subjects are accessible to research students in related disciplines.

Since 2018 we have two single subject courses outside the programme that have also attracted masters' students. Those courses are "From a thesis to a paper" and "R-a tool for statistical analyses". Other single subject courses the department offer are "Global health for the health sciences" and "Hälsoekonomiska utvärderingsmetoder i praktiken" (given in Swedish).

The Department has teaching within the Medical Programme, where we collaborate closely with the unit of Sustainable Health within the Department of Public Health and Clinical Medicine and the Department of Law. Since many years we have been responsible for a 4-weeks module on semester 5 entitled "Samhällsmedicin", i.e. Community Medicine, embracing a large range of subjects as Global Health, Occupational and Environmental Medicine, Medical Law, Epidemiology and Social Medicine.

Staff of our Department also teach in several other programmes. Teaching is carried out at all academic levels - from basic to doctoral. During the first semester of the 'Biomedical Programme' (180 credits), our Department is responsible for teaching a 7.5-credit course in Epidemiology and Biostatistics. Members of the Department are further teaching (from basic to master's level) in various courses (including topics like Agenda 2030 and global health, Global oral health, etc.) at the Medical Faculty and the Faculty of Social Sciences.

Educational Strategic Group

The Educational Strategic Group was established in early 2017. The Group is headed by the Director of Studies for the Master of Public Health (MPH) Programmes. The other members are the Chair of the Programme Council, the Director of Research Education and four teacher representatives. The purpose of the group is to provide a strategic perspective on the educational development of MPH programmes and act as an advisory body for the Director of Studies. Ongoing work includes the review and improvement of the content and structure of different courses from an integrative programme perspective, the discussion of strategies for recruitment

and collaborations, and devising solutions for programme issues as they arise. During 2021 the group's priorities were to develop and change the syllabus for some courses on our MPH programmes, work with routines for course evaluations and perform mapping of courses in relation to the Agenda 2030.

Promoting Educational Exchange

We aim to promote opportunities for educational exchanges with low- and middle-income countries. As part of these efforts, in 2018 we launched two "new" MPH initiatives whereby foreign students can take first-year courses in their home countries and can continue into a second year in Umeå.

During 2019-2020 we continued our collaboration with Nordic countries as part of a Nordic-Plus application. Further, we have been more engaged in the tropEd network for Master's education in Global Health. Moreover, in 2021 we had European tropEd students in three of our master courses.

CONTACT: *Marie Lindkvist*



Figure 9. Home country of Master of Public Health students 1987-2021

Coordination of public health work at regional level

In 2019, the County Administrative Board of Västerbotten was commissioned by the Government to develop a pilot project with the aim of proposing methods for how public health cooperation can be coordinated at the regional level.

Umeå University has been represented in the work in the form of employees at the Department of Epidemiology and Global Health (Helene Johansson, Elisabet Höög and Lars Weinehall), who since the start have participated in the pilot's planning and implementation. In addition, they have also actively followed the development both through observational studies, mapping and analysis of working methods, experiences and outcomes.

The model of regional coordination of public health work that has been developed in Västerbotten basically aims to concretize collaboration between the County Administrative Board of Västerbotten, the Västerbotten Region and the county's municipalities. As a first step, the municipalities' own ongoing public health work was mapped, as well as their future intentions, including future needs for support and collaboration. At the same time, based on consultation meetings with the municipalities, a Letter of Intent was formulated for good and equal health in Västerbotten, where the purpose was to formulate a common focus for the county's future public health work. The various parties in the collaboration were first invited to comment on the preliminary version of the Declaration of Intent. Second, the final version was confirmed by the highest decision-making bodies of the municipalities, the Region and the County Administrative Board.

By approving the Declaration of Intent, a proposal for an organizational structure for the collaboration also was confirmed – The Västerbotten Public Health Forum. The function of the Forum is intended to be a dynamic "hub" in regional public health work. The Forum is led by the Governor and

four experienced political decisionmakers, with a secretariat that assists and which prepares the basis for concrete cooperation efforts within the county. The broad contact area with municipalities, authorities and civil society consists of recurring Collaborative Conferences, where the intention is to invite to dialogues on relevant public health topics, share information, exchange experiences and support development and education.

In order to give employees and decision-makers within the collaborating organizations stronger opportunities to contribute to the collaboration, Epidemiology and Global Health has, on behalf of the pilot project, carried out commissioned training program in Public Health Science and practical public health work. Klas-Göran Sahlén has been responsible for the educational program in which a number of the department's researchers have participated as lecturers.

The commissioned training program, which contains 7 half day sections and ending with presentations of the participants' project works, has been completed in two rounds. A total of 90 people have participated, mainly representing political decision-makers and employees of the county's municipalities, the Västerbotten Region and the County Administrative Board of Västerbotten. Representatives of the various actors in civil society were also invited to participate. At least two more rounds are planned for.

The pilot project was completed in December 2021, whereby its final report (*Örat mot marken och blicken mot horisonten. Västerbottensmodell för samordning av regionalt och lokalt folkhälsoarbete*), was submitted to the Swedish Government.

https://www.lansstyrelsen.se/vasterbotten/om-oss/vara-tjanster/publikationer/visning-av-publikation.html#esc_entry=60&esc_context=34&esc_org=lss%3Acounty%2FAC

Research

Epidemiology and Global Health is host to a dynamic, multidisciplinary and international research environment. Our research falls into three broad and overlapping

profiles: Health Systems and Policy; Northern Sweden Health and Welfare and Emerging Global Health Challenges.

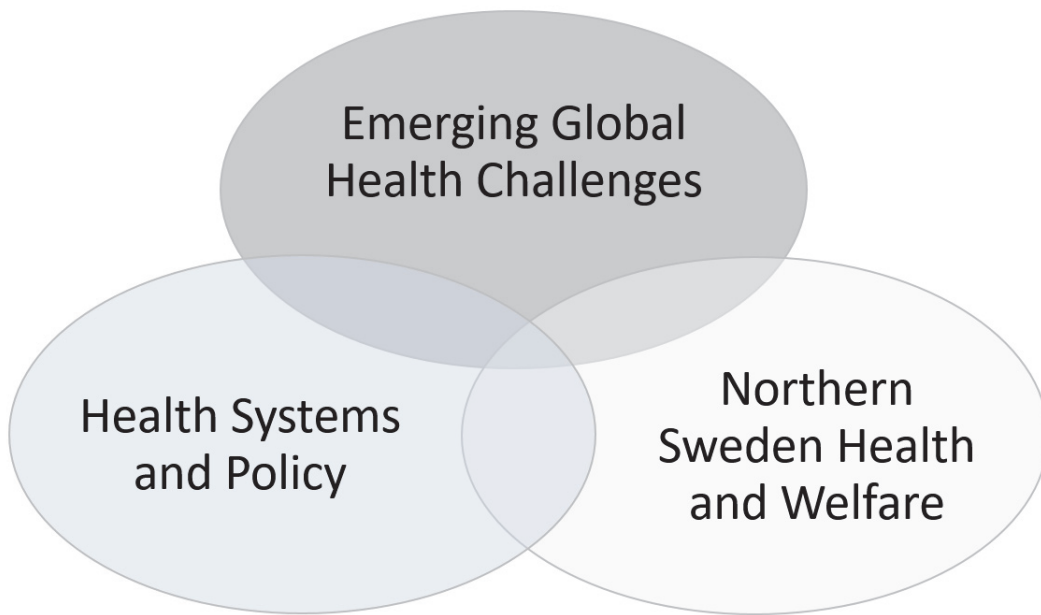


Figure 10. Research profiles at the Department of Epidemiology and Global health.

Ongoing research projects – the three profiles

Emerging Global Health Challenges

The world is becoming increasingly globalized, and we are faced with challenges to health which transcend national borders. While migration, climate change and ageing populations are emerging health threats, the negative impacts of poverty and social inequalities persist.

Over the course of the past decades, our Department has been collaborating with multidisciplinary stakeholders around the

world to address these major global health challenges. Together we strive to fill knowledge gaps by improving our understanding of the dynamic interaction of demographic changes with social, economic, and environmental factors influencing population health.

Our endeavour contributes to the implementation of policies and actions needed to create sustainable, resilient, and healthy societies globally.

EMERGING GLOBAL HEALTH CHALLENGES		
PROJECT TITLE	CONTACT PERSON	FUNDING AGENCY
How does Integration of sexuality education in schools shape sexuality decisions among adolescents? A community based participatory research driven realist evaluation in Zambia	Anna-Karin Hurtig	Swedish Research Council
Zika Preparedness Latin American Network	Annelies Wilder Smith	European Commission
Lancet countdown 2030 on climate change and health	Maria Nilsson	Wellcome Trust
Population dynamics and socioeconomic well-being.	Joacim Rocklöv	Sida
Mitigating poverty and disablement in older age: Understanding the complex interactions of factors influencing equitable healthy ageing in Myanmar	Malin Eriksson	Swedish Research Council
Designing implementation research for integration of tuberculosis, diabetes, and tobacco control programme: research link collaboration between India, Indonesia, and Sweden	Nawi Ng	Swedish Research Council
Strengthening youth resilience and mental health in North India	Isabel Goicolea	Swedish Research Council
Can mental health and health care be promoted among young prisoners in Cambodia?	Miguel San Sebastián	Swedish Research Council
Sexual and reproductive health and rights among migrant youth	Anna-Karin Hurtig	Public Health Agency of Sweden
Sexual and reproductive health among HIV positive women in Sweden	Anna-Karin Hurtig	Public Health Agency of Sweden
The SomSwe network - using social network theory and analysis to develop research capacity among young Somali academics to support evidence-based public health in the fragile state of Somalia.	Anneli Ivarsson	Swedish Research Council
Mitigating Climate change through communicating health benefits and risks – tailored and timely messages to lower household consumption	Maria Nilsson	Umeå Medical faculty
Network for inclusive, socially accountable and resilient Community Health Systems: CHS-Connect	Anna-Karin Hurtig	Swedish Research Council
Strengthening social accountability for improving health system in Tanzania: how can health facility governing committees fulfil their role?	Miguel San Sebastian	Swedish Research Council

Community Health Workers to achieve universal health coverage: Building on the Latin American legacy	Miguel San Sebastian	Swedish Research Council
Linking Swedish, Nepalese, and Indonesian capacities to inform the design of effective, efficient, and equitable Social Network Interventions for health and poverty reduction: The 'SNI-LINKS' Network	Julia Schröders	Swedish Research Council
The Effect of Climate Change and Ultra-processed Foods on the Double Burden of Malnutrition	Masoud Vaezghasemi	South Africa - Sweden University Forum (SASUF)

Health Systems and Policy

It is essential to understand how societies organize themselves in achieving public health goals, and how different actors interact in policy and implementation processes to contribute to improved health outcomes. Health systems worldwide are struggling to respond to the needs of populations and provide universal health coverage. We conduct interdisciplinary research in

relation to decision makers, service providers, communities and citizens with the aim of contributing to the strengthening of systems. During the past decade, the Department has been involved in projects aiming to strengthen the equity, quality and safety of health systems globally, and also in methodological development for more valid and reliable strategies to evaluate health policies.

HEALTH SYSTEMS AND POLICY		
PROJECT TITLE	CONTACT PERSON	FUNDING AGENCY
Towards a democratic and equitable health system: Building citizens health literacy and intrinsic motivation to becoming co-creators in health promotion	Maria Nilsson	Swedish International Centre for Local Democracy (ICLD)
Health policy and systems research. Strengthening community based health systems	Anna-Karin Hurtig	STINT
Perceptions of conflict management, association with mental health and quality of life among Swedish police officers	Mikael Emsing	Police Education Unit, School of Education
Validation of the health related life quality instrument EQ5d 5L for Sweden	Klas-Göran Sahlén	EuroQol Foundation, Region Stockholm
How can mental health care services be integrated in youth clinics? A health policy and systems study	Isabel Goicolea	Swedish Research Council for Health, Working Life and welfare (FORTE)
Health Outcomes and Resource Utilization for Bariatric Surgery: Real World Evidence from Sweden	Sun Sun	Swedish Research Council for Health, Working Life and welfare (FORTE)
Capability-adjusted life-years (CALYs) - a novel measure for evaluating welfare interventions	Lars Lindholm	Swedish Research Council for Health, Working Life and welfare (FORTE)
The role of regional collaboration and support structures for knowledge governance within social services.	Elisabet Höög	Swedish Research Council for Health, Working Life and welfare (FORTE)
From outsider to insider. Improved municipal decision support: A new calculation model for interventions aimed at social exclusion.	Anni-Maria Pulkki-Brännström	Skandia – Idéer för livet
Strengthening health system research capacity for enhancing innovations and sustainable socio-economic development in Tanzania.	Anna-Karin Hurtig	Sida
The National Celiac Disease Register in Children	Anneli Ivarsson	The national pediatric working group for celiac disease
The times they are a-changin' – Managing change in healthcare to retrain and attract competence	Linda Richter Sundberg	Swedish Research Council for Health, Working Life and welfare (FORTE)
Service design as a tool for creating innovation - how the National Board of Health and Welfare can promote the innovation capacity in the social service in the future	Linda Richter Sundberg	VINNOVA
Network for inclusive, socially accountable and resilient Community Health Systems: CHS-Connect	Anna-Karin Hurtig	Swedish Research Council

Leaving no one behind: an intersectional population approach for health system equity in Sweden	Per Gustafsson	Umeå Medical Faculty
Covid-19 and home care: a high price for new lessons learned	Fredrik Norström	AFA Försäkring
Evaluating Healthy Cities project in two Swedish municipalities	Elisabet Höög	Public Health Agency of Sweden
How and under what circumstances are Swedish youth clinics reaching migrant youth? A health policy and systems study to bridge the gap in access	Anna-Karin Hurtig	Umeå Medical faculty

Northern Sweden Health and Welfare

Northern Sweden is a large geographical area encompassing both the sparsely populated inland and the more populated coast. This region is rich in natural resources and home to the indigenous Sámi people, but also faces challenges concerning population health and health services. We conduct regionally based research on, for example,

cardiovascular disease prevention and health promotion across the life course, service provision in rural areas and equity in health and health care. We collaborate closely with Region Västerbotten and other public health institutions, and also make great use of high-quality Swedish registers. With point of departure in this unique context, and together with our collaborating partners, we contribute to improved regional public health and global health research across the world.

NORTHERN SWEDEN HEALTH AND WELFARE		
PROJECT TITLE	CONTACT PERSON	FUNDING AGENCY
Implementation of evidence-based practice in rural Sweden - Exploring innovative strategies for realization of national guidelines for treatment and support for people with schizophrenia	Linda Richter Sundberg	Swedish Research Council for Health, Working Life and welfare (FORTE)
How do civically-engaged youth develop the collective capacity to influence alcohol consumption?	Evelina Landstedt	Systembolagets alkoholforskningsråd
STAR-C: Sustainable behaviour change for health supported by person-Tailored, Adaptive, Risk-aware digital Coaching in a social context	Nawi Ng	Swedish Research Council for Health, Working Life and welfare (FORTE)
Strengthening community-based health systems through e-health innovations?	Anna-Karin Hurtig	Swedish Research Council for Health, Working Life and welfare (FORTE)
Health impacts of weather types in Sweden – the context of climatic and demographic change	Barbara Schumann	The Swedish Research Council for Environment, Agricultural Sciences and Spatial Planning (FORMAS)
Causation and Novel Risk Modelling for Person-Centred Prevention and Control of Cardiovascular Diseases	Nawi Ng	Swedish Research Council
Can the health-promoting Salut Programme for children and parents contribute to the health of the population	Anneli Ivarsson	Swedish Research Council for Health, Working Life and welfare (FORTE)
Visualization of asymptomatic Atherosclerotic disease for optimum cardiovascular prevention – a pragmatic randomized controlled trial nested in the Västerbotten Intervention Program	Margareta Norberg	VLL, Swedish Research Council, Svenska Läkaresällskapet, Visare Norr, Stroke Riksförbundet, Norrländska hjärtfonden
The Salut Child-Health Intervention Programme	Anneli Ivarsson	Region Västerbotten
The Västerbotten Intervention Program	Lars Weinehall	Region Västerbotten
Impact of the free patient choice reform on population health and health inequalities in Sweden	Paola Mosquera	Swedish Research Council for Health, Working Life and welfare (FORTE)
Effect evaluation of a comprehensive school-based tobacco prevention method targeting youth	Maria Nilsson	Public Health Agency of Sweden
The mental health and access to mental health care among the Sámi in Sweden; which are the main social determinants?	Miguel San Sebastián	Swedish Research Council
The mental health and well-being of the Sámi in Sweden: does ethnic discrimination play any role?	Miguel San Sebastián	Umeå Medical Faculty

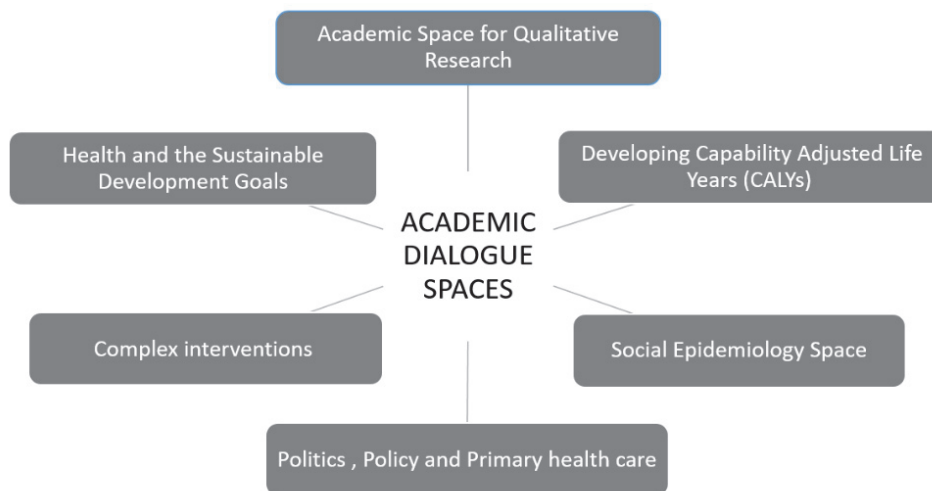
Paving the way for children's right to good and equal social and emotional health - an epidemiological and health economic study	Anneli Ivarsson	Strategic grant, Medical Faculty at Umeå University Swedish Research Council for Health, Working Life and welfare (FORTE)
Socioemotional problems among 3 years old children: evaluating the validity of the "Age and stages questionnaire: social emotional (ASQ:SE)" and socioeconomic differences	Anneli Ivarsson	Public Health Agency of Sweden
The Salut Child-Health Intervention Programme	Anneli Ivarsson	Region Västerbotten
What are the implications of the COVID-19 pandemic for young people who are neither in employment, education nor training, and the societal initiatives that are in place to support them?	Frida Jonsson	Swedish Research Council for Health, Working Life and welfare (FORTE)
How can we support 'NEET' youth through neat interventions? A realist evaluation and implementation study of (re)engagement initiatives for young people not in employment, education or training	Frida Jonsson	Swedish Research Council for Health, Working Life and welfare (FORTE)
Daring to ask about violence? Analysing and improving social services' question-centred responses to gender-based violence	Isabel Goicolea	Swedish Research Council for Health, Working Life and welfare (FORTE)
Leaving no one behind: intersectional health system equity in Sweden	Per Gustafsson	The public health agency of Sweden
The mental health and access to mental health care among the Sámi in Sweden	Miguel San Sebastian	Swedish research council
How can young trans people's mental health be improved? A participatory study	Ida Linander	Swedish Research Council for Health, Working Life and welfare (FORTE)
Impact of national Covid-19-related policies on loneliness among elderly receiving elderly care	Per Gustafsson	Swedish Research Council for Health, Working Life and welfare (FORTE)
Support, empower and change: A qualitative study of the Young Women's Empowerment Centers' support and advocacy work	Hanna Bäckström	

Research Strategic Group

The Research Strategic Group, consisting of senior researchers at the Department, meets on a monthly basis to discuss short and long-term strategic issues. The Group also meets together with the Education Strategic Group at least once each semester. Discussions aim to identify specific priority areas and recommend strategic development and ways of implementing decisions. During 2021 the focus was on how to strengthen our research profiles (see page 30). Other strategic areas are “Grant application support” which focuses on streamlining and strengthening support structures; “PhD and MPH funding” which covers searching for funds for stipends and “Academic Dialogue Spaces” which encourage researchers to establish meeting places for academic discussions. The “spaces” are presented below.

Academic Dialogue Spaces

There are currently six Academic Dialogue Spaces in our Department. These are formed around the following themes: 1) Qualitative Research, 2) Developing Capability Adjusted Life Years (CALYs), 3) Social Epidemiology 4) Politics, Policy and Primary Health Care, 5) Complex Interventions, and 6) Health and the Sustainable Development Goals (SDGs). Academic Spaces bring together researchers, often with diverse expertise and experience, around a research topic of mutual interest. They are forums for generating discussions, identifying synergies and promoting research development both for individual researchers and for the Department as a whole. Members of each Space meet periodically. At times the Spaces meet together to discuss research topics from different perspectives. A brief description of each Academic Dialogue Space follows.



Qualitative Research

The Qualitative Research Space cultivates dialogue among those with interest in the methodological strengths and challenges of qualitative research, e.g. recruiting, interviewing, coding and analysis, and also theoretical discussions. The group meets on average once a month to discuss texts (our

own and others), shared challenges and to plan open seminars.

Coordinators: *Ida Linander, Anne Gotfredsen and Isabel Goicolea.*

Developing Capability Adjusted Life Years (CALYs)

This Space builds upon two research projects in which researchers from the Department have participated. One is about social exclusion, and the costs of preventing exclusion. The second is about capabilities and their potential use in the evaluation of public interventions. These two projects have now joined forces to develop a common research agenda, which stretches from normative philosophy to statistical method. Dialogue on these issues is ongoing.

Coordinator: *Lars Lindholm.*

Social Epidemiology

The Social Epidemiology Space gathers five-six times per year to discuss articles on issues of relevance for social epidemiology and equity in health, and discuss drafts of articles or research proposals from the group.

Coordinators: *Miguel San Sebastian and Per Gustafsson.*

Politics, Policy and Primary Health Care

Here the focus is on health policy and systems research particularly local and community based systems. Methodologies inspired by systems thinking are explored as well as current topics on the politics of health. The group meets once a month to share ideas/ongoing activities and discuss published work.

Coordinators: *Lars Lindholm and Anna-Karin Hurtig.*

Health and the Sustainable Development Goals

This Space takes a holistic and broad perspective on the SDGs and their role and relevance for public health and health research. We dig deeper into specific goals and targets (e.g. SDG 16 Corruption), discuss and reflect on concepts (e.g. social innovation) and on SDGs in decision-making. We also facilitated an SDG-focus for the Department Day with awareness-raising and discussion of the use of SDGs in teaching.

Coordinator: *Anni-Maria Pulkki-Brännström*



Academic Seminars 2021

January	
February	Julia Schröders – Dissertation Aging and transitions: understanding the role of social networks for older adults' health in Indonesia
	Ida Linander, Linda Richter Sundberg, Isabel Goicolea – Seminar The medical gaze on health - What can theories of (medicalization and) biomedicalization offer public health research?
	ZikaPLAN – Seminar Pioneering research: Scientist united in global effort to combat Zika
March	Petter Stoor, Miguel San Sebastian – Seminar Samisk hälsa på lika villkor
	Seminar Impact of Scientific Research Beyond Academia
	Anne Gotfredsen – Pre defense Young people's collective responses to everyday stressors within the context of leisure and civic engagement in Northern Sweden
	ZikaPLAN – Seminar Zika and the nervous system: emerging lessons for emerging viruses
	ZikaPLAN – Seminar A lasting legacy: beyond ZikaPLAN
	Northern Sweden health and Welfare – Seminar
	U-CHEC – Open lecture Scaling up evidence-based falls prevention to the national level: challenges, opportunities and implications
	Theme Equity in Health - Seminar Elder abuse: What is it and what can we do about it?
May	U-CHEC – Seminar Progression in teaching in qualitative methods from undergraduate to postgraduate levels
	The Sami Studies - Seminar
June	Anna Bengtsson - Pre defense
	Anne Gotfredsen – Dissertation
	Information group – Seminar How to: make news at Share point, open Zoom meetings with different settings, add calendar functions, all news in Zoom, make sub-titles in recordings
	Chanvo Daca – 50% seminar Understanding the key drivers for maternal and child health in Mozambique: The role of socioeconomic inequality and the gaps between policy and implementation.
	Hanna Blåhed – PhD plan seminar
	The research profile Northern Sweden Health and Welfare – Seminar Shadowing a public health collaboration process – challenges and benefits
August	Catrine Odhiambo – PhD plan seminar
	Malin Wahlström – PhD plan seminar
	Information group – Seminar Series on research communication and internal communication
September	Research profile Health policy and system – Seminar Ten Tips for Constructive Climate- the first profile seminar of the semester
	Anna Bengtsson – Dissertation
	Kaspar Meili – 50% Seminar
	Information Group – Seminar Communication in research and research projects Speakers – Karl-Erik Renhorn and Raman Preet
	Aditya Ramadona – Pre defense Seminar

October	RCC – A resource for cancer research and improvement of cancer care - <u>Seminar</u> Anna-Lena Sunesson and Arvid Widenlou Nordmark from RCC Norr
	The National Network in Epidemiology and Nutrition, NEON - <u>Seminar</u> What is a sustainable diet?
	Theme Equity and Health – <u>Seminar</u> Invisible women: Analysing the health system response to intimate partner violence against ethnic minority women. Speakers: Daniel La Parra and Carmen Vives Cases, University of Alicante
November	Health among Sámi youth in Norway: focus on mental health and discrimination – <u>Seminar</u> Speakers: prof Siv Kvernmo and prof Ketil L. Hansen from UiT – the Arctic University of Norway.
	Miguel San Sebastian – <u>Seminar</u> De-constructing statistical inference: an existential dilemma
	Solveig Petersen – <u>Seminar</u> Supervision of review-type master’s theses: review studies and how to supervise
	The ‘Emerging Global Health Challenges’ Research Profile – <u>Seminar</u> Higher education and research cooperation with fragile contexts: consolidating three decades of research capacity-building in Somalia. Speakers: Julia Schröders, Klas-Göran Sahlén and Stig Wall.
	Prasad Liyanage – <u>Pre defense seminar</u>
	Paul Chavula – <u>PhD plan seminar</u>
	Information group – <u>Seminar</u> How can you think as an individual researcher when you want to use social media? Speaker: David Meyers from the communication office
	Maria Emmelin, Lund University – <u>Seminar</u> Challenges in moving from codes to themes in qualitative research – conceptual descriptions versus interpretive explanations.
	Karl-Erik Renhorn – <u>Seminar</u> A Tool-box for principal investigators: setting up a project and leading a proposal
	Theme Equity in Health - <u>Seminar</u> Daring to ask about violence? Analysing healthcare and social services’ responses to gender-based violence. Speaker: Isabel Goicolea
Ester Steven Mzilangwe – <u>PhD plan seminar</u>	
December	U-CHEC – <u>Seminar</u> Narrativ och tolkande metod som resurs för hälsovetenskaplig forskning. Talare: Staffan Josephsson, Professor i Arbetsterapi vid Karolinska Institutet, ledamot i Stygruppen för Strategiska Forskningsområdet Vårdvetenskap (SFO-V) och Gästforskare vid Institutionen för Samhällsmedicin och Rehabilitering.
	Petite Nobel Day – <u>Seminars</u>
	Penipawa Panduleni Shimanda – <u>50% Seminar</u>
	Aditya Lia Ramadona – <u>Dissertation</u>
	Research profile Health policy and system – <u>Seminar</u> Horizontal priorities in Swedish health care-principles and methods Speaker: Professor Lars Lindholm

Medical Faculty - Theme Equity in Health

Epidemiology and Global Health coordinates Theme Equity in Health, a thematic space for senior researchers and doctoral students active in the field of equity and health, and others interested in the topic. The theme falls under the umbrella of U-CHEC – Umeå Centre of Health Science.

A seminar series has been running since 2014 with alternating speakers from the U-CHEC departments (Epidemiology and Global Health, Nursing, Community Medicine and Rehabilitation). The seminars aim to stimulate debate and creative thinking by offering ample time for discussion. Three out of four seminars this year focused on violence and abuse against women and against the elderly. Digital participation had its benefits, with one

presenter joining from Spain – honorary doctor Carmen Vives Cases – but the return of *fika* in the year's last seminar was also highly valued. For details about upcoming and past seminars, go to: <https://www.umu.se/en/research/groups/theme-equity-in-health/>

The course “Equity and Health” (3.5 ECTS) offers PhD and MSc students the opportunity to explore general theories about justice and fairness in society, and their connections with research and practice in public health, health economics, and midwifery science. Students have consistently rated the course very highly since its inception in 2017. www.umu.se/en/education/courses/equity-and-health2/

CONTACT: Anni-Maria Pulkki-Brännström

Global Health Action continue to grow



Global Health Action is a leading open-access journal in global health, hosted in our department, and published in collaboration with Taylor and Francis. The journal was one of the very first

journals to adopt to open access publishing in medicine and health. The journal publish research in the field of global health and address transnational health and policy issues.

The journal has grown steadily over the last years. In 2020, the first year of the pandemic, the number of submitted manuscripts had a 75% increase compared with the previous two years. In 2021 we received almost as many, nearly two submissions per day, in total we received 626 submissions and accepted 137 papers for publication (22%). The average time from submission to first decision was 13 days, from submission to first post-review decision 44 days and from acceptance to online publication 36 days.

It's always sad to reject manuscripts, authors submitting have worked hard and have high hopes of acceptance. The reasons for rejection vary from papers lacking a clear aim or research question, to poor study design, small sample size, and inappropriate analytical methods to name a few. Sometimes there are also more formal reasons why we can't accept a paper. On the journal's webpage we state clearly as a rejection criterion that *"The study uses primary data that were collected by local researcher(s) in low- or middle-income countries and are not publicly available, but does not include any local researcher(s) as co-authors"*. It still happens we get submissions from authors who have parachuted in somewhere, organised research and written up a paper without

apparently collaborating with local institutions and researchers. We wish that other journals take a similar position so that this kind of neo-colonialist approach to research could be eliminated once and for all.

Up to the end of 2021, *Global Health Action* had published 1,750 papers since the start in 2008. We have established editorial practices that are both rigorous and reasonably fast, and many of our published articles have become highly cited. The journal's h5-index was 43 (meaning that 43 papers had 43 or more citations) and the impact factor for 2021 had risen to 2.66.

In 2021 the founding editor Stig Wall and the Editorial team with co-authors published an editorial "Global Health Action at 15 – revisiting its rationale", you find it at: <https://www.tandfonline.com/doi/full/10.1080/16549716.2021.1965863>. In the editorial you can read about the journals first 15 years and the results of a recent study performed to ascertain the accuracy of Global Health Action editor's decisions at the initial screening step.

GHA will continue to publish high quality papers in core global health topics such as health determinants and health information, public health interventions, health- and gender inequalities, environmental and climate change impacts on public health, with a specific focus on the most vulnerable regions and populations. Three points are particularly important while doing this, we i) want to contribute to capacity building with the goal of decreasing health information gaps between rich and poor countries, ii) expect strong implementation and policy components in our published research, as understood by the name of the journal, and we iii) want to increase the number of manuscripts published based on inter- and transdisciplinary research, increasingly needed to meet some of the major current global health challenges.

CONTACT: Maria Nilsson

Lávvo – research and education for Sámi health

A new research group was formed at EpiGH during autumn of 2021: “Lávvo – research and education for Sámi health”. We are a group of Sámi and non-Sámi scholars committed to produce knowledge and education in support of Sámi health. Currently, the group consists of Jon Petter Stoor, Lena Maria Nilsson, Oscar Sedholm, Laila Daerga and Miguel San Sebastián.

Lávvo – and the Sámi values we celebrate

The meaning of the word *Lávvo* is the Sámi tent for a nomadic lifestyle. With our spelling - in Ume Sámi - we highlight that the Umeå University main campus is located on traditional Ume Sámi lands. Also, the particular structure of the Lávvo connects to values of importance in Sámi culture, and our work. This includes *equity*, *cooperation* and *responsibility*. Inside a Lávvo, which consist of just one room, everyone is aware of their interdependency and must treat each other with *equity* to co-exist. While flexible and built by single rods, the structure of the Lávvo is greatly enhanced by the rods leaning against each other – reminding that *cooperation* generates strength. Finally, the Lávvo is central for the traditional Sámi nomadic lifestyle, which in turn is based on the Sámi philosophy of *responsibility* towards nature and future generations. Through responsibly managing resources, a sustainable system is built, that will serve not only the interests of individuals, but of people, animals and nature - our shared planet.

Research

We have several on-going externally funded research projects. Of greatest strategic importance is the SámiHET-study, which is a population-based Sámi public health questionnaire. Data collection was carried out spring 2021, and our 3779 Sámi participants (response rate of 40.9%) constitute the largest self-reported Sámi dataset ever collected – to our knowledge. Several articles and sub-projects are

underway, concerning issues like mental health, discrimination, traditional medicine, attitudes and experiences relating to the health care system and experiences during the corona pandemic. Other important research projects include our Swedish/Sámi case study in an Arctic multi-site project relating to the effects of the pandemic in different Arctic countries, a project focusing on health among Sámi youth – and a new mixed method project on violence towards Sámi women (commencing 2022). Our funders include FORTE, the Swedish Research Council (VR) and commissioned research by the Public Health Agency of Sweden, the Sámi parliament in Sweden and the Arctic Council.

Education

Although our university was explicitly founded to train health care personnel for Northern Sweden (starting with dentists), training in Sámi health has been absent up until now. To change and improve the situation we are offering a basic Sámi health package (about one day worth of lectures and seminars) to health and social programmes at UmU. So far, we are teaching at our MPH program as well as the medical school. Also, starting during autumn 2022 we will offer a 7.5 ECTS course on “Sámi and Indigenous Health”, aiming to reach both international students and current health care personnel in northern Sweden.

Engagement

None of our other activities would be sustainable without a solid engagement with Sámi society. We are cooperating with several Sámi NGO's including the *Sámiid Riikkasearvi* (representing local and reindeer herding Sámi associations) and the Sámi youth organisation *Sáminuorra*. Most importantly, we build and maintain a strong relation to both the administrative and political functions of the Sámi parliament in Sweden – the *Sámediggi*.

Future

Our aim is that our research group in the years to come will develop into a “National competence centre for Sámi health research and education”. That would allow us to build the continuity and sustainability

needed to serve the Sámi and Swedish societies needs related to Sámi health, including monitoring Sámi health, training health care personnel and conducting research at the forefront of Indigenous health globally.



Swedish Development Research Conference, #DevRes2021, hosted and chaired by EpiGH

We at the Department of Epidemiology and Global Health hosted, chaired, organized, and planned the Swedish Development Research Conference. From June 14-16, 2021 with around 800 participants connecting at various times, we examined the challenges for ‘*Advancing Sustainable Transformation*’ during the Agenda 2030 era with the aim of improving conditions in low-resource settings.

Formerly scheduled for June 2020, the conference was postponed due to the global COVID-19 pandemic, demanding conducting it differently during the times when ‘we cannot travel or mingle’ as we always have. The action and decision were according to the need - ‘**go digital!**’ Hence, making DevRes 2021 a fully virtual conference.

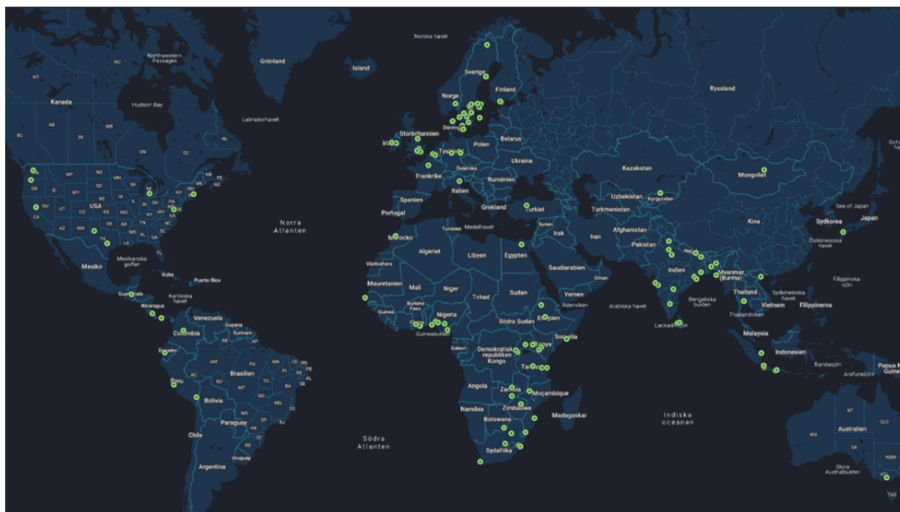
Realizing that this uncertain time has led to secluded learning spaces for our young graduates and/or current students it provided experiential learning, for a group of 12 young professionals, the DevRes Interns. The Interns weaved the communication and dissemination on social media channels giving it a larger spread and attraction. The map below showcases ‘where all in the world’ the participants connected from across the globe.

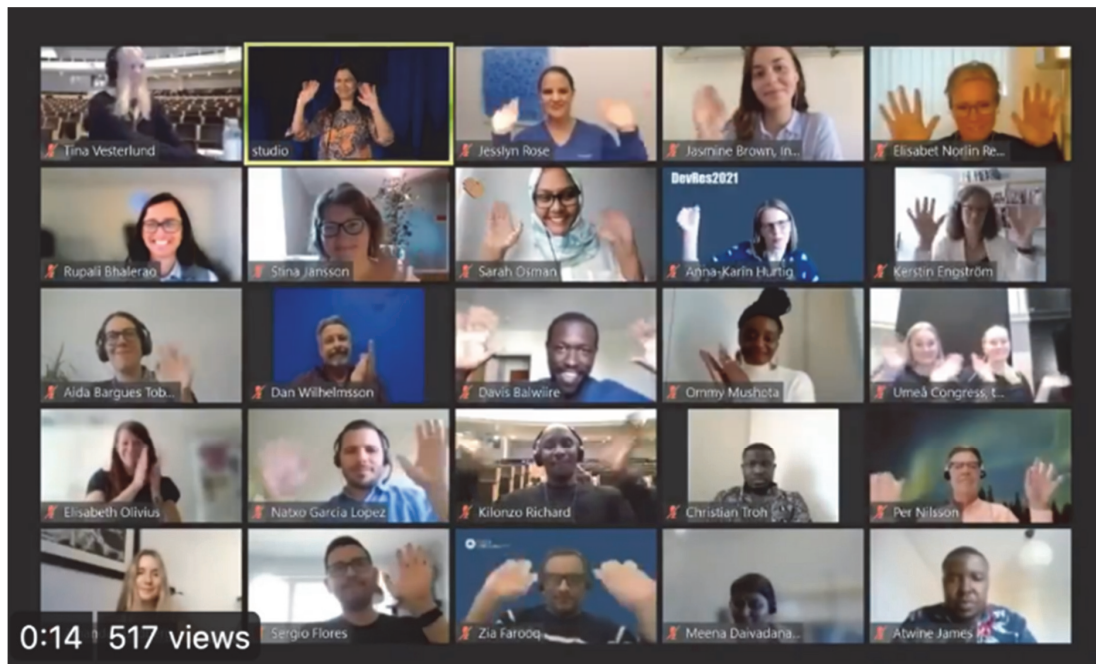
This widespread global participation could only be achieved due to long-term

preparations including adapting locally driven technological solutions allowing all great contributions from hundreds of researchers to be presented live in real-time over three days!

In a panel dialogue with representatives from our funding organizations, SIDA, VR, FORMAS, and Ministry for foreign affairs we heard the mandates and visions they have and are working towards while sharing their views on ‘how research supports the development in the low-resource settings?’ Having a broad system-based approach, co-creating, and co-designing new knowledge that is interdisciplinary; can support implementation and enhance transformation.

Meaningful discussions, online chats, and networking were ongoing during the 7-9 parallel sessions on all three days making about 50 sessions in total. Many members of EpiGH supported the conference in various ways – as speakers, moderators, panel discussants, and presenters. The DevRes2021 closing session was reflective and experience-sharing where the ‘Interns’ expressed on screen, including the appearance of many other groups who made it possible – spotlighting – it is the PEOPLE behind Projects, Programs, Partnerships who support PROCESSES for them to truly happen.





While gathered for a multi-disciplinary conference to facilitate the conversations about development in the low-resource settings, reflecting on ‘Development Aid and/or ‘Development Assistance for Health’ we paused to speculate and reframed AID, suggesting...

A – Address, Analyze and Advance with **ACTION**

I – Impart knowledge, for Implementation and create **IMPACT**

D – draw Directions, Decisions and Dimensions for **DEVELOPMENT**

& Support the Sustainability with Solidarity!

Anna-Karin Hurtig, Chair of the Conference

Raman Preet, Conference Host and Organizing Committee Member

Somali Swedish Research cooperation for health

The bilateral research collaboration between Somalia and Sweden was first launched in early 1981/82. This research partnership focused primarily on capacity building, but was abridged by the 1991 extended civil war and conflict in Somalia.

An initiative to revive this cooperation was started in late 2013, followed by a joint conference and a workshop organized in Umeå in 2014 and 2015 respectively. These 11 academic institutions in Somalia and Sweden, and Somali Swedish Research Association (SSRA) participated actively.

As results of the activities 2014 and 2015 capacity building was requested. An online research training course was started with intensive face-to-face activities was organized between 2016 to 2018 in Hargeisa, Somaliland, bringing together 24 Somali participants from the six Somali universities and three engaged ministries of health. The course taught the basics of epidemiological and qualitative design, analysis and interpretation.

A VR supported projected initiated by Julia Schröders built upon a social network theoretical approach aims to develop a network with Somali / Swedish junior and senior researchers. The work has started 2021 despite the challenges Covid 19 have caused. Four junior researchers from Benadir and East Africa University are recruited together with two senior researchers.



Participants in the SomSwe project in a meeting in Nairobi

CONTACT: Klas-Göran Sahlen



During 2021 we participated in the activities to start a new journal, Somali Health Action Journal (SHAJ). Launching activities were conducted in Somalia in all collaborating universities. The library at Umeå university have contributed significantly with technical support to make the operation of SHAJ possible. From our department works Klas Göran Sahlen as the managing editor. Stig Wall and Maria Emmelin also works with the journal together with several others from SSRA.

Research Training

Our PhD program

During 2021, a total of 33 research students (16 men and 17 women) were registered and actively engaged with their research activities at the Department.

The Covid-19 pandemic that started in 2020 continued to affect our PhD program in different ways. It was still not possible for many of our students to travel to Sweden and likewise for the supervisors to visit them in their countries. While this situation affected to some extent the quality of the training and supervision, both students and supervisors tried to adjust to this new circumstance in the best possible way and other new opportunities emerged. Everybody had to adapt to digital communication.

Supervision mainly became digital, allowing continuous monitoring of the students' progress. PhD courses were transformed to a distance-based model, facilitating the registration and attendance of some students, which in other circumstances would have not been possible. New students (Uganda, Sudan, The Gambia, Vietnam) could present their plans and be registered. In addition, several mid-term seminars and even two PhD defences were organized digitally and worked very well. Excellent meetings between PhD students were also



Aditya Ramadona's PhD defense, December 2021

organized along the year to keep the sense of the group, with different levels of participation. Four defenses were held, all of them as an hybrid, between distance and on-place event.

While this situation has not been ideal and hopefully we will be able to receive our students again in 2022, it is clear that many of these digital possibilities will remain after the pandemic.

CONTACT: Miguel San Sebastián



Julia Schröders's PhD defense, January 2021

PhD students and projects

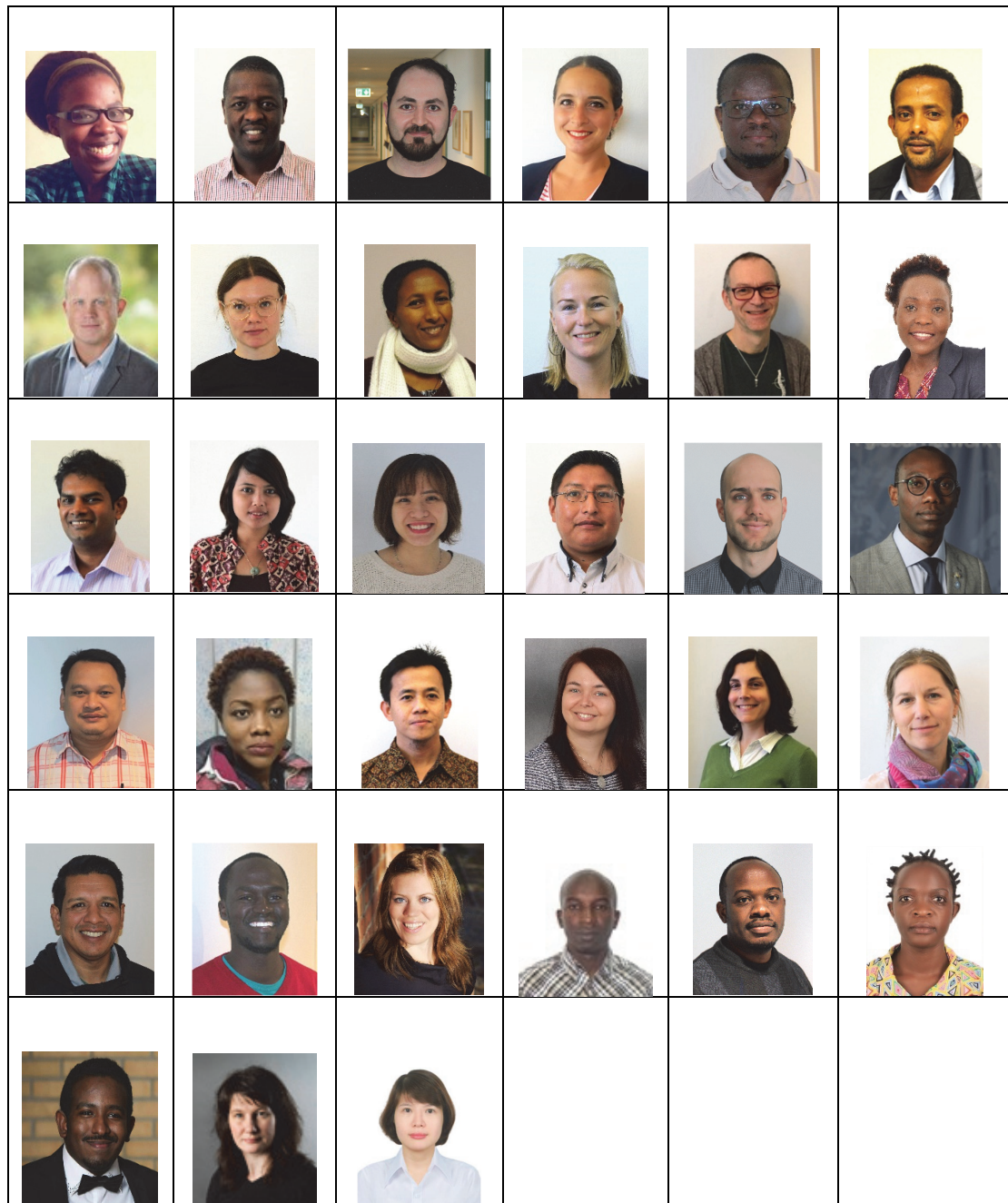


Table 2. PhD students registered at the department 2021.

Name	Background	Country	Thesis subject	Main supervisor
Camilla Andersson	MA Master of Philosophy	Sweden	The role of health communication and household's habits in Climate change mitigation.	Maria Nilsson
Paul Amani	MA Public policy	Tanzania	Health care utilization by the elderly in Tanzania: Does insurance status matter? A case study of Igunga and Nzega districts.	Miguel San Sebastián
Vu Nu Anh	MA Public health	Vietnam	Establishing a national threshold value for cost effectiveness analysis in Vietnam	Sun Sun
Edwinah Atusingwize	BA Environ health science	Uganda	Alcohol and social media use among university students: Perceptions, patterns and experiences, and the feasibility of social media-based interventions for alcohol prevention	Maria Nilsson
Huzeifa Jabir Aweesha	MA in sciences of Public health	Sudan	Effective Development Cooperation: improving health system governance - Efforts, challenges, and opportunities in Sudan	Miguel San Sebastian
Mazen Baroudi	MD	Sweden	Youth migrants' sexual and reproductive health and access to healthcare services in Sweden	Anna-Karin Hurtig
Susanna Bellander	MA Criminology	Sweden	The Swedish Police Authority's work against terrorism; An explorative study of the implementation of Governments strategy against terrorism.	Mehdi Ghazinour
Anna Bengtsson (Dissertation 2021)	MD	Sweden	Visualisering av asymtomatisk arterosklerotisk sjukdom inom VIPVIZA projektet – Aspekter av nya metoder för optimal primärprevention av kardiovaskulär sjukdom	Margareta Norberg
Hanna Blåhed	MSc Public Health	Sweden	Good quality, Local (e) Healthcare in Rural Northern Sweden: A Policy Practice and Community Approach	Anna-Karin Hurtig
Chanvo Salvador Lucas Daca	MA International Health	Mozambique	Understanding the drivers for child and reproductive health in Mozambique: The role of socioeconomic inequality and the gaps between policy and implementation	Barbara Schumann
Atakelti Derbew	MSc Public Health	Ethiopia	Under 5-year morbidity and mortality in Tigray Region, Ethiopia: an equity perspective.	Anna Myléus
Mikael Emsing	MA Pedagogics	Sweden	Perceptions of conflict management, association with mental health and quality of life among Swedish police officers	Mehdi Ghazinour
Tsigemariam Teklu Geberlassie	BSc Public Health	Ethiopia	Epidemiology of Visceral Leishmaniasis and epidemiological interaction with concomitant infections in north Ethiopia.	Anna Myléus

Name	Background	Country	Thesis subject	Main supervisor
Anne Gotfredsen (<i>Dissertation 2021</i>)	MSc Global Health	Sweden	Samhällsaktiva ungdomars kollektiva förmåga att utöva inflytande över sociala bestämningsfaktorer för emotionellt välbefinnande.	Evelina Landstedt
Johan Hambræus	MD	Sweden	Evaluation of intervention at pain management mainly focused on zygopophysial joint pain	Lars Lindholm
Angela Kisakye	MA Public health	Uganda	A Gender analysis of the health workforce in Uganda: Implications for policy, planning and Human Resource development	Helene Johansson
Prasad Liyanage	BSc Medicine and Bachelor of Surgery	Sri Lanka	Implementation of Early warning decisions for control and prevention of dengue in Kalutara (Sri Lanka)	Joachim Rocklöv
Septi Kurnia Lestari	BA Nutrition	Indonesia	The role of social relationship on health ageing among European population	Nawi Ng
Vu Thi Quynh Mai	MSc Health economics	Vietnam	Feasibility and applicability of health related quality of life in Vietnam healthcare planning system	Klas-Göran Sahlén
Yercin Mamani Ortiz	MD	Bolivia	Cardiovascular diseases in Cochabamba, Bolivia: Identifying preventable risk factors and assessing social inequalities.	Paola Mosquera Mendez
Kaspar Meili	MPH Health economics	Switzerland	Estimating and applying weights for Capability-Adjusted Life Years	Anna Månsdotter
Chama Mulubwa	BSc Biological sciences, MPH	Zambia	Community-based reproductive and health system for adolescents in Zambia: A realist evaluation approach	Isabel Goicolea
Cartrine Nancy Anyango-Odhiambo	MSc Public Health	Sweden	Intime violence: Towards improving service provision to women with disabilities in Sweden	Fredinah Namatovu
Edy Rolando Quizhpe Ordóñez	Medical doctor	Ecuador	The health system reform in Ecuador: advancing towards universal health coverage?	Anni-Maria Pulkki Brännström
Puthy Pat	MA Counselling	Cambodia	Promoting mental health of young prisoners and strengthening the mental health care system in the prisons of Cambodia	Miguel San Sebastián
Adivya Ramadona (<i>Dissertation 2021</i>)	MSc Environmental science	Indonesia	Developing and validating a dynamic model of dengue transmission with application to early warning and climate change projections	Joachim Rocklöv
Arian Rostami	MA Health education	Iran	Mental health and job satisfaction in relation to work-related stress, personality and resilience in police officers working in vulnerable areas	Monica Burman
Julia Schröders (<i>Dissertation 2021</i>)	MPH	Sweden	Diversity, Dynamics and Deficits: The Role of Social Networks for the Health of Aging Populations in Indonesia	Miguel San Sebastián

Name	Background	Country	Thesis subject	Main supervisor
Melissa Scribani	BS in Biology, MPH	USA	Consequences of obesity and determinants of weight maintenance: a study of adult populations in rural New York State and Västerbotten County, moving towards an intervention to stem the tide of the obesity epidemic	Margareta Norberg
Panduleni Penipawa Shirmanda	MSc Public Health, specialization Health Economics	Namibia	The burden of rheumatic heart disease in Namibia and seeking cost-effective interventions to lower its magnitude	Fredrik Norström
Adam Silumbwe	BA healthcare management	Zambia	Evaluating Zambia's response to non-communicable diseases: a policy and systems analysis approach	Klara Johansson
Anna Stenling	Civ. engineer, BA economics	Sweden	Hälsöekonomisk utvärdering av hjärt-kärlförebyggande befolkningsintervention – Västerbottens hälsoundersökningar	Fredrik Norström
Alieu Sowe	MSc Public Health	Gambia	Investigating inequitable vaccination: predictors of, social inequalities in, and intervention against sub-optimal vaccination in The Gambia	Per Gustafsson
Elia Swai	MA Physiotherapy	Tanzania	Children and adolescents with physical disabilities in Tanzania. Exploring characteristics, needs and challenges in the Kilimanjaro region	Klas-Göran Sahlén
Nadja Trygg	Health sciences, MPH	Sweden	Complex inequalities in mental health	Anna Mänsdotter
Malin Wahlström	MSc Public Health	Sweden	Working in home care during the pandemic - What can we learn, moving forward?	Fredrik Norström

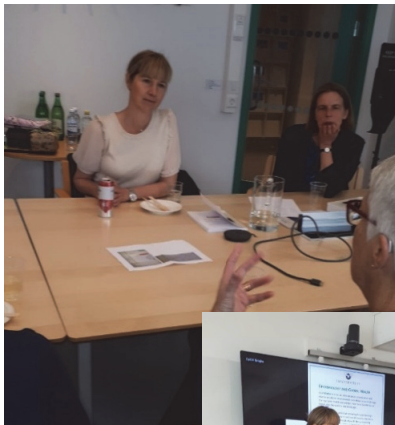
Dissertation events and thesis abstracts



Anne Gotfredsen



Julia Schröders



Anna Bengtsson



Aditya Ramadona

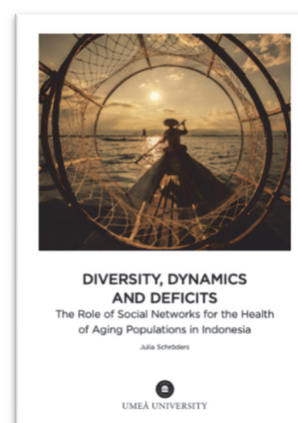
JULIA SCHRÖDERS

Diversity, dynamics and deficits: the role of social networks for the health of aging populations in Indonesia

Thesis defended: February 5, 2021

Supervisors: Prof Miguel San Sebastian, Prof Maria Nilsson, Prof Fatwa Sari Tetra Dewi, Prof Mark Nichter

Opponent: Prof Andreas Motel-Klingebiel, Linköpings University, Sweden



Background: This thesis takes as a predicate that humans are social animals and as such, that their social networks and health are intrinsically connected. A guiding heuristic of this thesis was the Berkman model which conceptualizes how social networks impact health. Considering social networks as a ‘mesosocial’ level between individuals’ health and larger social structures permits assessments of four processes, or pathways: macro↔meso↔micro. The overall aim of this thesis was to contribute to a better understanding of the role of social networks for the health of aging populations in the Southeast Asian context of Indonesia. This work was divided into four sub-studies (I-IV) aiming to i) review existing evidence on social networks and adult health; ii) assess the health effects of social networks; iii) examine how macro-level conditions affect health behavioral pathways through social networks; and iv) understand the macro-level determinants of social network formations.

Methods: This thesis employed a mixed methods design integrating evidence syntheses (I) with quantitative (II, III) and qualitative (IV) approaches. The four sub-studies included different conceptual angles on structural, functional and quality aspects of social networks, i.e., network diversity (II), dynamics (III), deficits and loneliness (IV). Following the PRISMA guidelines, a systematic literature review covering the years 2000 to 2015 was conducted. For the two quantitative studies, data on older adults aged 50+ years from the fourth (2007/08) and fifth (2014/15) waves of the Indonesian Family Life Surveys, were analyzed. First, employing an outcome-wide epidemiological approach, evidence for causal effects of social network diversity on 19 outcomes along the disablement process spectrum were evaluated using multivariable regression adjustments, propensity score matching, and instrumental variable analyses. Second, following a systems-approach to conceptualize social networks on four ecological levels, causal mediation analyses were performed to cross-sectionally examine the mediating role of social networks and their dynamics between a latent socioeconomic position indicator and two healthcare utilization outcomes. Also, the socioeconomic patterning of healthcare utilization and network dynamics were analyzed longitudinally, i.e., before and after Indonesia’s Universal Health Coverage implementation. The qualitative study draws on eight focus group discussions with 48 ‘older adult children’. Data were collected in four rural villages in the Gunung Kidul regency during 2016. The theoretical framework was inspired by symbolic interactionism and sensitizing concepts of systemic networks and network deficits, interpersonal emotions, and the social construction of risks. Data were analyzed using Grounded Theory. The final mixed-methods synthesis (I-IV) was based on notions of systems-thinking, ecological transitions theory, and a framework for studying social processes in aging.

Results: The results showed (i) that despite an increased focus on social determinants of health, in Indonesia, social networks remained an under- and unresearched social determinant of non-communicable diseases and inequalities therein, respectively; (ii) that social network diversity conferred a vast array of strong and long-term – yet heterogeneous and gender-

specific – effects across the entire disablement process, i.e. affecting pulmonary health outcomes, proinflammatory processes, physical and cognitive functioning, and disability states; (iii) that both social networks on various ecological levels and their dynamics were socio-economically patterned and mediated the association between socioeconomic position and healthcare utilization outcomes while showing stronger mediating effects after Universal Health Coverage implementation; (iv) that ‘older adult children’ experienced their own aging as a process of ‘bargaining for a sense of security’ which reified how and why loneliness emerged amidst the challenges of social, demographic and epidemiological transitions and how in response to this, unconventional compromises, which affected both their networks of caretakers and the places of old-age care, were being made.

Conclusion: The results explicated several previously less understood pathways and particularly spoke to the so-called ‘downstream experiences’, ‘upstream questions’, and offered a holistic perspective. Notions of ‘transitions’ within different levels collectively conveyed an understanding that such transitions created risks, and that networks played a crucial interstitial role in both cushioning or exacerbating effects of and on these risks. The final mixed-methods synthesis allowed a comprehensive view on various dimensions of social networks and enabled a multi-contextual and multi-dimensional integration of findings. Collective insights were distilled into two main discussion points which were divided based on their ‘upstream’ and ‘downstream’ foci. The first explicated the macro-social phenomena that appeared in this thesis i.e., epidemiological transitions, population aging, social change, and discussed – with a focus on network diversity, dynamics and deficits – the meso-social effects on and of such macro-level transitions. The later elucidated both the ‘social network-health’ nexus by explicating the ‘Janus face’ of social networks, as well as the transitions in the interplay of formal and informal social networks and their implications for old-age care. After presenting methodological considerations, the thesis concludes with selected implications for research, policy, and practice which emphasize on strengthening social network research in low and middle-income countries, addressing the precarious conditions of older adult women in rural economies, and promoting the role of the healthcare system.

ANNE GOTFREDSEN

Carving out collective spaces: Exploring the complexities of gender and everyday stressors within rural youth leisure

Thesis defended: June 4, 2021

Supervisors: Ass Prof Evelina Landstedt, Prof Isabel Goicolea

Opponent: Docent Sanna Aaltonen, Sociology, Department of Social Sciences, University of Eastern Finland Kuopio Campus



Background: The reasons why young people are increasingly suffering from mental health problems, and the opportunities to turn this development around are globally debated. Stressors such as education, relationships, future trajectories of housing and employment all constitute important factors affecting young people's mental health, leading to stress and achievement pressure especially among girls and young women. The need to reduce individualization of young people's health problems, and instead encourage spaces for collective support, action, and change has been called for in previous studies. Leisure participation has the potential to be such a collective space where young people together can respond to stressors experienced in their daily life. Apart from studies on individual behavior change, leisure participation has been an overlooked arena within public health and within research on young people's mental health and stress in particular. The complexity of youth leisure, especially in relation to gender and spatiality, calls for further investigation, exploring the social places of leisure that young people create themselves.

Aim: The aim of this thesis is to understand how places of youth leisure are perceived and collectively constructed as social factors of youth mental health, and to analyze the strategies developed within these places to handle and respond to the everyday stressors experienced by young people.

Conceptual framework: The analysis builds on four conceptual sections: (i) The stress process model explores stressors as situated in a wider social context, where social factors shape both the stressors that affect mental health, the resources to handle those stressors as well as the mental health outcomes. (ii) The social practice theory highlights how social practices within places of leisure can be identified as resources in relation to responses to stressors. (iii) The third section of the framework takes on the relationship between stress, leisure, and post-feminist perspectives on gender and successful femininity. The final section (iv) outlines leisure as a spatial (re)construction; emphasizing rural space and place in relation to gender, stress, and precarity.

Methods: This thesis builds on two sub-studies, generating three papers. Sub-study I is based on data from individual interviews with eight adult leaders from different leisure organizations (paper 1), and sub-study II (paper 2 and 3) is based on an ethnographic multiple-case study with 16 girls (age 14-21) from two leisure organizations. The setting for both sub-studies is rural northern Sweden. The material from the ethnographic study was collected through participatory observations and focus group discussions using photo elicitation. For the first and second paper, thematic analysis was used as an analytical strategy, while a 4 discursive psychology approach (interpretative repertoires) was used for the third and final paper.

Results: The first part of the results concerns how girls and adult leaders perceived and experienced daily stressors within the context of youth leisure. Such stressors were represented

by the high demands girls face in relation to achievement pressure and time management, school, gender norms and expectations, but also in relation to their leisure engagement. The second part explores how the girls and adult leaders developed and negotiated strategies to respond to stressors, within the context of leisure. Responses were constructed through daily social practices within the context of leisure e.g. through sharing experiences of stress with each other, based on a sense of belonging and trust. In the final part, rurality holds a central position in how place and space were discursively constructed by the participants, in relation to leisure, gender, and stressors. Here, one of the main results in the third part was the complexity of how the participants' constructed leisure as a place of wellbeing. In order to build and maintain a space that enabled responses to stressors, the girls constantly needed to invest time, engagement, achievements, and emotions. In addition, places of leisure needed to be constructed in certain ways to be perceived as beneficial and 'positive', for example as a place marked by respectability and self-development. This illustrates the precarity of youth leisure where educational and labor-market opportunities have changed how young people now understand free time as something that should be 'productive and meaningful'. The metaphor of 'carving out spaces' speaks for the effort the girls had to make in order to create and sustain such places; not only in relation to a successful femininity, but also in relation to the rural community and the survival of rural places of leisure.

Conclusions: This study contributes to a better understanding of youth leisure, and how to build sustainable and inclusive places of leisure from a gender and rural perspective. Places of leisure and civic engagement are perceived as important social factors of youth mental health, and needs to be taken into considerations when young people's stress and mental health are discussed. Places of youth leisure are spaces where responses to everyday stressors can be collectively developed. At the same time, youth leisure is also precarious, demanding, and contributes to the reproduction of gendered discourses on respectability and responsibility, both in relation to a successful femininity, but also in making it work for the rural collective.

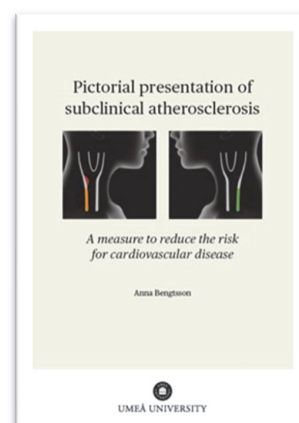
ANNA BENGTSSON

Health for future: self-rated health and social status among adolescents

Thesis defended: September 17, 2021

Supervisors: Docent Margareta Norberg, PhD, MD Eva Fhärm, Prof Per Wester

Opponent: Prof Maj-Lis Hellénus, Karolinska Institute, Stockholm, Sweden



The overall aim was improved cardiovascular disease (CVD) prevention through the VIPVIZA intervention. This includes the provision of pictorial information of subclinical atherosclerosis to participants and their general practitioners (GPs), follow-up phone call, and written information to the participant. VIPVIZA is a Prospective Randomized Open Blinded End-point (PROBE) trial nested within VIP, a CVD prevention program in primary health care in Västerbotten county, Sweden. Middle-aged individuals at low/intermediate CVD risk were enrolled to VIPVIZA and randomized 1:1 to an intervention (n=1749) or control group (n=1783 who received no pictorial or other information). Preventive measures were managed within primary health care.

At baseline, clinical risk factors were measured and carotid ultrasound examination was performed. The prevalence of subclinical atherosclerotic disease was assessed as intima media thickness and presence of plaque. The association between clinical risk factors and measures of subclinical atherosclerosis was investigated. In addition to conventional risk factor-based risk evaluation, the impact of the VIPVIZA intervention on CVD risk, traditional risk factors and pharmacological treatment was evaluated after 1 and 3 years. Individual interviews were conducted with 15 GPs to explore how a pictorial representation of subclinical atherosclerosis affects physicians in their perception and communication of CVD risk. The interviews were analyzed by qualitative content analysis.

The plaque prevalence was 44.7% in this population. Clinical risk factors explained more of the variation in a combined ultrasound measurement than single measurements. The results up to three years showed a VIPVIZA intervention effect, with lower and sustained CVD risk in the intervention as compared to the control group. The effect was partly mediated by differences in intake of lipid-lowering medication and partly by lifestyle behaviour. The GPs described their risk assessment and patients' risk perception as more accurate with the VIPVIZA intervention. Informing patients about examination results prior to a consultation can facilitate shared decision-making and enhance adherence to preventive measures.

The results show that the VIPVIZA intervention reduces CVD risk over three years. In the long run this has the potential to reduce the incidence of CVD events.

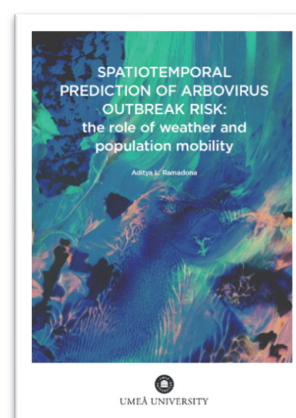
ADITYA LIA RAMADONA

Spatiotemporal prediction of arbovirus outbreak risk: the role of weather and population mobility

Thesis defended: December 13, 2021

Supervisors: Joacim Rocklöv, Yesim Tozan, Hari Kusnanto, Lutfan Lazuardi

Opponent: Ass Prof Paula Moraga, King Abdullah University of Science and Technology, Thuwal, Saudi Arabia



Background: Arboviruses such as dengue and chikungunya have been a significant public health burden globally for several decades. In Indonesia, all four dengue serotypes are circulating. Considering that Indonesian children are exposed to dengue early in life, and secondary infection is more likely to cause severe dengue, the population of Indonesia is confronting a high potential risk of severe dengue. Severe complications such as hemorrhage can develop and lead to fatal outcomes. There exists no specific treatment for dengue infection, but symptomatic treatment can be effective to prevent deaths. Consequently, vector control has become a critical component for controlling dengue transmission, but it is currently often triggered as a reactive response to observed outbreak clusters. Based on disease surveillance, it thus remains challenging to implement vector control efficiently to prevent outbreaks. While meteorological conditions have shown to be predictive of dengue incidence over space and time, it has rarely been used to predict outbreaks at a fine-scale intra-urban level. Further, as the propagation of dengue outbreaks and the introduction of viruses has been found to be associated with human mobility, predictive models combining meteorological conditions with granular mobility data hold promise to provide more predictive models. The objectives in this thesis were to 1) describe the influence of temperature, rainfall, and past dengue cases, and population mobility on dengue risk; 2) develop and validate spatiotemporal models of dengue outbreak risk at fine-scale at the intra-urban level; 3) to utilize new data to assess the emergence and spread of chikungunya in an outbreak situation.

Methods: Initially, multivariate time series regression models were established to analyze the risk of dengue corresponding to monthly mean temperature, cumulative rainfall, and past dengue case. Following that, we investigated the potential use of geotagged social media data as a proxy of population mobility to estimate the effect of dengue virus importation pressure in urban villages. Subsequently, we employed distributed lag non-linear models with a Spatiotemporal Bayesian hierarchical model framework to determine the exposure-lag-response association between the risk of dengue and meteorological data while allowing the spatial covariance to be informed by mobility flows. Finally, we validated the selected best-fitted model by its predictive ability using an unseen dataset to mimic an actual situation of an early warning system in use.

Results: We found that an optimal combination of meteorology and autoregressive lag terms of past dengue cases was predictive of dengue incidence and the occurrence of dengue epidemics. Subsequently, when we integrated mobility data our results suggested that population mobility was an essential driver of the spread of dengue within cities when combined with information on the local circulation of the dengue virus. The geotagged Twitter data was found to provide important information on presumably local population mobility patterns which were predictive and can improve our understanding of the direction and the risk of spread.

Conclusions: A spatiotemporal prediction model was developed that predicted a prognosis of dengue at fine spatial and temporal resolution. Subsequently, such a prognosis can be used as the foundation for developing an early warning system to more effectively deploy vector control prior to the establishment of local outbreak clusters. These findings have implications for targeting dengue control activities at the intraurban villages level, especially in the light of ever increasing population growth, mobility and climate change.

Engaging with society - a mission for research and education

At the Department of EpiGH we have excellent opportunities for engagement with society. Our research and education directly relates to the health and social sectors and is therefore relevant for policy development. EpiGH is therefore committed to engaging with society, not only as a way of transferring knowledge but also as a way of keeping informed about societal needs that require further research and/or capacity building.

In this year's report we especially focus on the numerous works that were commissioned by the Public Health Agency of Sweden. We present here a summary of the different projects that took place during 2021.

Digital solutions to promote health and prevent disease in the area of alcohol, drugs, doping and tobacco during the COVID-19-pandemic: supporting the strive towards equity in health? (2021-2022)

COVID-19 and Sweden's infectious control measures have posed challenges in continuing with traditional public health practice, both in terms of health promotion and disease prevention. In the area of alcohol, drugs, doping and tobacco, local and regional actors have largely moved from physical to digital solutions to remain operational despite the barriers imposed by the pandemic. To strengthen the knowledge-base in the area, the aim of this project was to explore how the transition to, and management of, digital solutions within alcohol, drugs, doping and tobacco prevention might support the overall Swedish strive towards equity in health.

This was a qualitative study where 13 local coordinators from 7 municipalities participated. Data was collected through 9 individual and 2 group interviews (semi-structured). The analysis was inductive and followed the thematic analysis approach.

Three themes were developed illustrating how the local implementation of digital solutions in the area of alcohol, drugs, doping and tobacco might support the transition towards equality in health by 'making time and resources available for development and innovation', 'improving the ability to reach and engage with vulnerable groups' and '(re)shape initiatives to act inclusively'.

Project leaders: Frida Jonsson and Robyn Schimmer (Department of Psychology)

"What was already grey turned greyer" – a study exploring consequences of the COVID-19-pandemic for young people who are neither in employment, education nor training (2021-2022)

Youth organisations internationally and in Sweden have expressed concerns about the detrimental impact of COVID-19 and subsequent infectious control measures for young people more generally, and ones being in 'NEET' situations (neither in employment, education nor training), in particular. During the pandemic, there have also been indications that initiatives to support young people at the margins of education and employment are struggling, something that may further complicate the situation of a group whose road to studies or work was long and winding already before crisis. To

learn more about ‘NEET’ young people’s experiences of COVID-19 and the infectious control measures, the aim of this project was to explore how their health status and life situation have been affected by, and changed during, the pandemic.

This was a qualitative study where 15 young people aged 16-29 years participated. Data was collected through verbal or written semi-structured interviews, conducted either via phone or chat. The analysis was inductive and followed the thematic analysis approach.

Preliminary findings, developed into three overarching themes, indicate that the COVID-19-pandemic has shaped the lives of ‘NEET’ young people by ‘worsening an already challenging health and life situation’, ‘extending a long and winding road to education and employment’ and ‘promoting a shift in focus towards relations and reflection’.

Project leader: Frida Jonsson

Social-emotional problems among 3 year-old children. Assessing the optimal cut-off of the Ages and Stages Questionnaire: Social Emotional (ASQ:SE) and exploring the social inequalities (2021)

Emotional and behavioural symptoms as early as in preschool age can predict mental health problems in adolescence and adulthood. The Ages and Stages Questionnaires: Social-Emotional (ASQ:SE) was developed to reflect social and emotional ability in young children with adequate psychometric properties. Despite its popularity and application internationally, only few studies have attempted to examine whether the cut-off values set based on the American population is optimal to detect social-emotional problems among children from other contexts. To find an optimal cut-off for the ASQ:SE in a Swedish setting we

need an instrument for the comparison. The Strengths and Difficulties Questionnaire (SDQ) is reported to be one of the best tools for identification of mental health problems in children and adolescents which has been widely used in Sweden.

In addition, ending avoidable health inequalities is a long-term goal for the Swedish government and the basis for the Swedish Commission for Equity in Health. To close the equality gap, a realignment of equity-in-health research specifically towards early life is needed. Despite the importance of socioeconomic differences in the prevalence of mental health problems in all age groups reported by the Public Health Agency of Sweden, our knowledge is limited when it comes to preschool children.

Accordingly, we aim:

1. To investigate the optimal cut-off value for the ASQ:SE among Swedish 3-year-olds.
2. To investigate social inequalities among 3-year-olds’ social-emotional problems based on their parents’ income, education, and place of birth.

Preliminary results have showed that a lowered ASQ:SE cut off (from 59 to 50) would be optimal in the Swedish context to identify children with social-emotional vulnerability. Additionally, a striking social gradient in children’s social-emotional vulnerability at three years of age was found.

Project leader: Anneli Ivarsson

The health of the Sámi in Sweden: an epidemiological and register study (2021-2023)

There is a lack of knowledge regarding the current health status of the Sámi in Sweden. No quantitative empirical (or register-based) health studies have been conducted among the Sámi in Sweden during the last ten years. The overall purpose of this commission work is to get an overall description of different

health outcomes and factors that can affect the health of Sámi in Sweden.

Data will be collected partly via a) a survey aimed at Sami aged (18-84 years) in Sweden and partly via b) an epidemiological register-based study. The results of the analyzes will be compiled and reported in three background reports. Report 1 will include a descriptive basic report of the Sámi health / ill health, living habits and the experience of the covid-19 pandemic on the basis of the survey. Report 2 will include a descriptive basic report of the study group's mental health, care opportunities for certain psychiatric conditions, suicide attempts and death by suicide based on register data during the period 2000–2017. Report 3 will include a descriptive basic report of the study group's main diagnoses in somatic health and main causes of death from patient and death registers during the period 2000–2017.

For the assignment, a project group was formed consisting of representatives from the Swedish Public Health Agency and Epidemiology and Global Health. An advisory reference group consisting of representatives from the Sámi Parliament and the Swedish Sámi National Association will also be included.

Project leaders: Miguel San Sebastián and Petter Stoor



Topas – A study of the program Tobacco Free Duo

In Sweden, tobacco prevention programs with young people as a target group have for many years been initiated, developed, and run by municipalities, regions and the non-profit sector. However, they have rarely been scientifically evaluated.

Tobacco Free Duo (T-Duo) is a so-called complex school-based intervention program that aims to prevent young people's tobacco use (smoking of cigarettes, pipe, hookah, e-cigarettes and snus). It started in Västerbotten County in 1993 and has since spread to about 80 municipalities in Sweden through regions (former county councils), municipalities or individual schools. A key component of the program was the so-called Tobacco-Free Duo, a child and an adult 18 years or older forming a couple (a duo) at the end of grade 6 or at the beginning of grade 7. The duo agreed and signed up to be tobacco-free together until the child finished grade 9, and the adult would actively support the child in the decision to be tobacco-free.

Since T-Duo had spread in the country, the Public Health Agency of Sweden commissioned a study aiming to provide a higher scientific strength, compared with the cross sectional and cohort studies previously conducted. The Topas-study is led by Umeå University in collaboration with Karolinska Institutet and started in 2017 designing the study, and with recruiting schools, data collection, analysis and reporting 2018-2022. The study had a mixed design: 1) a cluster randomized controlled study (CRCT) where 43 schools in 11 regions in mid-Sweden were assigned to the program T-Duo's six core components or a minimal component in the form of a structured education, 2) an observational study where program schools were compared with schools in an external reference group and 3) a health economic evaluation of the cost effectiveness of the program. In 2022, the project and the results will be reported to the Public Health Agency of Sweden and thereafter the final results will be published scientifically.

Two study protocols have been published:

Galanti R, Pulkki-Brännström A-M, Nilsson M. Tobacco-Free Duo Adult-Child Contract for Prevention of Tobacco Use Among Adolescents and Parents: Protocol for a Mixed-Design Evaluation. *JMIR Research Protocols*, 2020. Vol. 9, (10).

Pulkki-Brännström, Anni-Maria; Galanti, Maria R.; Nilsson, Maria. Protocol for the evaluation of cost-effectiveness and health

equity impact of a school-based tobacco prevention programme in a cluster randomised controlled trial (the TOPAS study). 2021. *BMJ Open*, Vol. 11, (8):e045476.

Project leader: Maria Nilsson

Interview study with migrants living with hiv in Sweden

Although the group of migrants living with hiv in Sweden is significant and the need for support from society, including health care, is large, research on their experiences of what it is like to live with hiv in Sweden is very limited.

This study is based on 20 interviews with migrants living with hiv in Sweden. It provides knowledge about their own experiences and experiences, with a focus on living conditions, the encounter with health care, social services and other public activities as well as support from civil society.

Each interview began with a structured interview section with background questions then a semi-structured thematic interview

guide was used. Topics covered by the interview guide in the study included; experiences of and thoughts about stigma and discrimination in relation to hiv/migrant status, experiences of psychosocial support and peer support, experiences of primary care in general (health centers, dental care, maternity and child care centers) but also health and medical care in connection with HIV treatment, health interviews in connection with arrival in Sweden, the relationship with the treating doctor and rules of conduct according to the Infection Control Act. Experience and needs in contact with social services and other public activities were also affected. The results of the study show that migrants living with hiv in Sweden experience that social integration in the new country is a greater challenge than hiv. They experience that life with hiv in Sweden means both opportunities and challenges. Opportunities refer to good living conditions and the relative security that the welfare state has to offer, LGBTQ rights, and a well-functioning hiv care at the infection clinics. The challenges are primarily related to migration status and related social processes.

Project leaders: Faustine Kyungu Nkulu Kalengayi, Anne Ouma and Anna-Karin Hurtig



Figure 12. During 2021 we have presented our research through many different media.

Consultancy and advisory functions

We regularly contribute our time and expertise within Umeå University and externally, the latter at local, regional, national and international levels through a variety of consultancy and advisory functions. Examples of such roles are given below (Table 3). In addition, our researchers are of course referees and on editorial boards for a large number of scientific journals.

We are key advisers behind the Region Västerbotten Public Health Policy programme. On a regular basis we train local

and regional political assemblies, as well as patient organisations and public associations. We participate in many public health education activities, both for basic public health training and the dissemination of public health research. We regularly inform decision-makers, such as politicians and officials from the municipalities and the county councils, of public health issues in the northern region of Sweden.

Table 3. Consultancy and advisory tasks among the staff.

Name	Institution	Task
Kerstin Edin	Save the Children Sweden – Rädda Barnen	Deputy Chair of the Local Board in Umeå
Per Gustafsson	Swedish Ethical Review Authority Umeå University	Member (deputy) of Regional Board in Umeå Member of Strategic Board of Education, Faculty of Medicine Member (co-opted) of Council for Doctoral Education, Faculty of Medicine Chair of Program Council for Master Programs in Public Health, Faculty of Medicine Program Director, Doctoral Program at Faculty of Medicine
Anna-Karin Hurtig	Umeå University	Member of Board of Research, Faculty of Medicine Member of Strategic Committee for Internationalization, Faculty of Medicine Member of the Committee for Equal opportunities, Faculty of Medicine
	The Swedish Association of Social Medicine and Public Health	Member of Board and Secretary
	Swedish Medical Association	Member, Committee for Global Health
	Consortium for Advanced Research Training in Africa (CARTA)	Focal person UmU
	Swedish Research Council	Member of the Committee for Development Research
	The Research Council of Norway	Member of review panel (research projects for scientific renewal)
Anneli Ivarsson	Medical Faculty, Umeå University	International Director Chair, Strategic Committee for Internationalisation Chair, Council for Internationalization of the Education Member, Reference group for the new 6-year Medical Programme
	International office, Umeå University	Member, Evaluation group for Minor Field Research Studies
	SBU: Swedish Agency for Health Technology Assessment and assessment of social services	Expert for a systematic review on promotion of mental health for children and young.
	Swedish Institute for Global Health Transformation (SIGHT)	Member, representing Umeå university in a network of Swedish universities
	SASUF – a South African-Sweden University Forum funded by STINT strategic innovation program	Member, Academic Advisory Committee on behalf of Umeå University for the theme “Burden of disease & health systems”
	Family law and parental support authority	Member, Reference group concerning parental support
	Save the Children Sweden – Rädda Barnen	Chair of the Västerbotten district

Marie Lindkvist	Umeå University	Member of The council for internationalisation of education (RIU)
	tropEd, Network for education in international health	Acting President
Urban Janlert	Swedish Research council for Health, Working Life and Welfare (Forte)	Chairperson of review panel (health promotion and behaviour)
Håkan Jonsson	Swedish Association of Local Authorities and Regions (SKR)	Member of national working group for mammography
	The National Board of Health and Welfare	Member of groups for revision of national recommendations and evaluation of mammography screening
Kristina Lindvall	European Centre for Disease Prevention and Control	Advisory board member on the project "Updating Core Competencies in Applied Infectious Disease Epidemiology"
Nawi Ng	Hanoi University of Public Health, Vietnam	Member of the International Publishing Adviser
	Gadjah Mada University, Indonesia	Member of Scientific Advisory Committee for Sleman HDSS
	Swedish Research council for Health, Working Life and Welfare (Forte)	Member of the Epidemiology and Population-Based Study panel for Research Grant
Maria Nilsson	European Academies Science Advisory Council (EASAC)	Member of expert group on Decarbonisation of buildings
	Lancet Countdown on Climate Change and Health - global	Member and Co-Chair WG 2
	Lancet Countdown - Europe	Chair
	Umeå University	Member, Faculty board, Faculty of Medicine
	UTRI - Umeå Transformation Research Initiative, Umeå University	Member of Steering group
Fredrik Norström	BMC Public Health	Associate Editor
	Skaraborgsinstitutet, Scientific Council	Member
Lennarth Nyström	Joint Research Centre, Ispra, Italy	Expert, European Guidelines for breast cancer screening and diagnosis
Raman Preet	Swedish Society of Medicine	Member, Committee for Global Health
Anni-Maria Pulkki-Brännström	Swedish Ethical Review Authority	Scientific member
Linda Richter Sundberg	Ministry of Health, Sweden	Scientific advisor concerning Knowledge governance and implementation in the Swedish Health System
	Socialmedicinsk tidskrift	Board member
	Swedish Association of Psychologists	Member of the Ethical board Coordinator
	Umeå University	Network for implementation science and practice In the Northern Sweden
Klas-Göran Sahlén	Umeå University	Member of the Education Strategic Committee, Medical faculty
		Board member, CERUM
		Hiring and Docent Board, Faculty of Medicine
Miguel San Sebastián	International Journal for Equity in Health	Associate editor
Jon Petter Stoor	Sámi parliament, Norway	Scientific member, Ethical review board on Sámi health research, Norway
	Lancet	Member, Lancet commission on Arctic Health
		Member, Lancet commission on Suicide and suicidal behavior
	Sámi parliament, Sweden	Advisory consultant, the new Swedish national plan for mental health and suicide prevention
	Region Västerbotten	Member, Coordinating committee for suicide prevention
Sun Sun	EuroQol Group	Member, and Member of Membership Review Committee
	ISPORE	Member
Moses Tetui	Frontiers in Women's Health	Guest editor
	Kitchener-Waterloo4 Ontario Health Teams, Canada (KW4OHT)	Member, Community Council Design Committee (CCDC)
	Makerere University, School of Health Sciences, Uganda	Member, Research and Ethics Committee
	University Research Council Company URC	Implementation Science Consultant
Lars Weinehall	Umeå University	Member, Faculty of Medicine committee on ethical issues
	Swedish Association of Local Authorities and Regions	National program initiative on healthy lifestyle in health service (Chair)

Publications

Original articles

Akour A, Abuloa S, Mulakhudair A R, Kasabri V, **Al-Tammemi A B**. *Complementary and alternative medicine for urinary tract illnesses: a cross-sectional survey in Jordan*. *Complementary Therapies in Clinical Practice*. 2021;43:101321.

Aljaberi M A, Alsalahi A, Juni M H, Noman S, **Al-Tammemi A B**, Hamat R A. *Efficacy of interventional programs in reducing acculturative stress and enhancing adjustment of international students to the new host educational environment: a systematic review and meta-analysis*. *International Journal of Environmental Research and Public Health*. 2021;18(15):7765.

Alrawashdeh H M, Al-Tammemi A B, Alzawahreh M K, Al-Tamimi A, **Elkholy M**, Al Sarireh F, Abusamak, M, **Elehamer, N M K**, Malkawi A, Al-Dolat W, Abu-Ismaïl L, Al-Far A, Ghoul I. *Occupational burnout and job satisfaction among physicians in times of COVID-19 crisis: a convergent parallel mixed-method study*. *BMC Public Health*. 2021;21(1):811.

Amaku M, Covas D T, Bezerra Coutinho F A, Azevedo Neto R S, Struchiner C, **Wilder-Smith A**, Massad E. *Modelling the test, trace and quarantine strategy to control the COVID-19 epidemic in the state of Sao Paulo, Brazil*. *KeAi Communications*. *Infectious Disease Modelling*. 2021;6:46-55.

Amani P J, Hurtig A, Frumence G, Kiwara A D, **Goicolea I, San Sebastian M**. *Health insurance and health system (un) responsiveness: a qualitative study with elderly in rural Tanzania*. *BMC Health Services Research*. 2021;21(1):1140.

Andersson J, Wikström J, **Högberg U**, Wester K, Thiblin I. *External Hydrocephalus as a Cause of Infant Subdural Hematoma: Epidemiological and Radiological Investigations of Infants Suspected of Being Abused*. *Pediatr Neurol*. 2021 Sep 30;126:26-34. doi: 10.1016/j.pediatrneurol.2021.09.018.

Ayeni O A, Walaza S, Tempia S, Groome M, **Kahn K**, Madhi S A, Cohen A L, Moyes J, Venter M, Pretorius M, Treurnicht F, Hellferscee O, Von Gottberg A, Wolter N, Cohen, C. *Mortality in children aged <5 years with severe acute respiratory illness in a high HIV-prevalence urban and rural areas of South Africa, 2009–2013*. *PLOS ONE*. 2021;16(8):e0255941.

Backman A C, Lövheim H, **Lindkvist M**, Sjögren K, Edvardsson D. *The significance of nursing home managers' leadership: longitudinal changes, characteristics and qualifications for perceived leadership, person-centredness and climate*. *Journal of Clinical Nursing*. 2021.

Backman A C, Sjögren K, Lövheim H, **Lindkvist M**, Edvardsson D. *The influence of nursing home managers' leadership on person-centred care and stress of conscience: A cross-sectional study*. *BMC Nursing*. 2021;20(1):200.

Bangoura C, Dioubaté N, Manet H, Camara B S, Kouyaté M, Douno M, **Tetui M**, El Ayadi A M, Delamou, A. *Experiences, Preferences, and Needs of Adolescents and Urban Youth in Contraceptive Use in Conakry, 2019, Guinea*. *Frontiers in global women's health*. 2021;2:655920.

Baroudi M, Hurtig A, Goicolea I, San Sebastian M, Jonzon R, Nkulu Kalengayi F. *Young migrants' sexual rights in Sweden: a cross-sectional study*. *BMC Public Health*. 2021;21(1):1618.

Baroudi M, Stoor J P, Blåhed H, Edin K, Hurtig A. *Men and sexual and reproductive healthcare in the Nordic countries: a scoping review*. *BMJ Open*. 2021;11(9):e052600.

Bengtsson A, Lindvall K, Norberg M, Fhärm E. *Increased knowledge makes a difference!—general practitioners' experiences of pictorial information about subclinical atherosclerosis for primary prevention: an interview study from the VIPVIZA trial*. *Scandinavian Journal of Primary Health Care*. 2021;39(1):77-84.

Bengtsson A, Norberg M, Ng N, Carlberg B, Grönlund C, Hultdin J, Lindahl B, Lindahl B, Nordin S, Nyman E, Wennberg P, Wester P, Näslund U. *The beneficial effect over 3 years by pictorial information to patients and their physician about subclinical atherosclerosis and cardiovascular risk: Results from the VIPVIZA randomized clinical trial*. *American Journal of Preventive Cardiology*. 2021;7:100199.

Bergmark M, Richter **Sundberg L**, Markström U, Rosenberg D. *Evidence-based Methods in Rural Areas – Knowledge and National Guideline Utilization in Mental Health Service Development*. *Journal of Evidence-Based Social Work*. 2021;1-24.

Birabwa C, Chemonges D, **Tetui M, Baroudi M, Namatovu F**, Akuze J, Makumbi F, Ssekamatte T, Atuyambe L, **Hernandez A**, Sewe M O. *Knowledge and Information Exposure About Family Planning Among Women of Reproductive Age in Informal Settlements of Kira Municipality, Wakiso District, Uganda*. *Frontiers in Global Women's Health*. 2021;2:650538.

Blåhed H, San Sebastian M. *“If the reindeer die, everything dies”*: The mental health of a Sámi community exposed to a mining project in Swedish Sápmi. *International Journal of Circumpolar Health*. 2021;80(1):1935132.

Blåhed H, San Sebastián M. *Health impact assessment of a mining project in Swedish Sápmi: lessons learned*. *Impact Assessment and Project Appraisal*. 2021;1-8.

Bortes C, **Ragnarsson S**, Strandh M, **Petersen S**. *The Bidirectional Relationship Between Subjective Well-Being and Academic Achievement in Adolescence*. *Journal of Youth and Adolescence*. 2021;50(5):992-1002.

Briones-Vozmediano E, Otero-García L, Gea-Sánchez M, **De Fuentes S**, García-Quinto M, Vives-Cases C, Maquibar A. *A qualitative content analysis of nurses' perceptions about readiness to manage intimate partner violence*. *Journal of Advanced Nursing*. 2021.

Bäckström Olofsson H. *Vänskap och gränser: Introduktion till avsnittets texter*. *Fronesis*. 2021;(70-71):167-180.

Candio P, Hill A J, Poupakis S, **Pulkki-Brännström A**, Bojke C, Gomes M. *Copula Models for Addressing Sample Selection in the Evaluation of Public Health Programmes: An Application to the Leeds Let's Get Active Study*. *Applied Health Economics and Health Policy*. 2021;19(3):305-312.

Carson D A, **Carson D B**, Lundström L. *Northern cities and urban-rural migration of university-qualified labour in Australia and Sweden: Spillovers, sponges, or disconnected city-hinterland geographies?*. *Geographical Research*. 2021;59(3):424-438.

Clancy I L, Jones R T, Power G M, Logan J G, Iriart J A, Massad E, **Kinsman J**. *Public health messages on arboviruses transmitted by Aedes aegypti in Brazil*. *BMC Public Health*. 2021;21(1):1362.

Cowan E, **D'Ambruso L**, van der Merwe M, Witter S, **Byass P**, Ameh S, **Wagner R G**, Twine R. *Understanding non-communicable diseases: combining health surveillance with local knowledge to improve rural primary health care in South Africa*. *Global Health Action*. 2021;14(1):1852781.

Cueva K, Rink E, Lavoie J G, **Stoor J P**, Healey Akearok G, Gladun E, Larsen C V L. *Diving below the surface: A framework for arctic health research to support thriving communities*. *Scandinavian Journal of Public Health*. 2021.

Degerlund Maldi K, Asellus P, Myléus A, **Norström F**. *Cost-utility analysis of esketamine and electroconvulsive therapy in adults with treatment-resistant depression*. *BMC Psychiatry*. 2021;21(1):610.

Dewi F S, Sitaresmi M N, Kusumaningrum F, Adhi W, **Ramadona A L**. *Health promotion using youtube: The experiences and preliminary findings from the indonesian inhealth channel*. *Open Access Macedonian Journal of Medical Sciences*. 2021;9(E):1596-1605.

Do N T, Vu H T, Nguyen C T, Punpuing S, Khan W A, Gyapong M, Asante K P, Munguambe K, Gómez-Olivé F X, John-Langba J, Tran T K, Sunpuwan M, Sevene E, Nguyen H H, Ho P D, Matin M A, Ahmed S, Karim M M, Cambaco O, Afari-Asiedu S, Boamah-Kaali E, Abdulai M A, Williams J, Asiamah S, Amankwah G, Agyekum M P, Wagner F, Ariana P, Sigauque B, Tollman S, van Doorn H R, Sankoh O, Duffy S W, Tabar L, Yen A M, Dean P B, Smith R A, **Jonsson H**, Tornberg S, Chiu S Y, Chen S L, Jen G H, Ku M M, Hsu C Y, Ahlgren J, Maroni R, Holmberg L, Chen T H. *Beneficial Effect of Consecutive Screening Mammography Examinations on Mortality from Breast Cancer: A Prospective Study*. *Radiology*. 2021;299(3):541-7.

Do NGA T T, Nguyen C T K, Punpuing S, **Kinsman J**, Wertheim H F L. *Community-based antibiotic access and use in six low-income and middle-income countries: a mixed-method approach*. *The Lancet Global Health*. 2021;9(5):e610-e619.

Dong X, Ng N. *Contribution of multiple pathways to the relationship between visual impairment and depression: Explaining mental health inequalities among older Chinese adults*. *Journal of Affective Disorders*. 2021;278:350-356.

Díaz-Sánchez A A, Hofmann-Lehmann R, Meli M L, Roblejo-Arias L, **Fonseca Rodriguez O**, Castillo A P, Cañizares E V, Rivero E L, Chilton N B, Corona-González B. *Molecular detection and characterization of Hepatozoon canis in stray dogs from Cuba*. *Parasitology international*. 2021;80:102200.

Edeby A, San Sebastian M. *Prevalence and sociogeographical inequalities of violence against women in Ecuador: a cross-sectional study*. *International Journal for Equity in Health*. 2021;20(1):130.

Eklund K, Stålnacke B, Stenberg G, Enthoven P, Gerdle B, **Sahlen K**. *A cost-utility analysis of multimodal pain rehabilitation in primary healthcare*. *Scandinavian Journal of Pain*. 2021;1:48-58.

Eurenus E, Mohamed A F, **Lindkvist M**, **Ivarsson A**, Öhlund I, **Vaezghasemi M**. *Social-Emotional Problems Among 3-Year-Olds Are Associated With an Unhealthy Lifestyle: A Population-Based Study*. *Frontiers In Public Health*. 2021;9:694832.

Evengård B, Destouni G, Kalantari Z, Albihn A, Björkman C, Bylund H, Bylund H, Jenkins E, Koch A, Kukarenko N, Leibovici D, Lemmityinen J, Menshakova M, Mulvad G, **Nilsson Lena Maria**. Omazic A, Pshenichnaya N, Quegan S, Rautio A, Revich B, Rydén P, Sjöstedt A, Tokarevich N, Thierfelder T, Orlov D. *Healthy ecosystems for human and animal health: Science diplomacy for responsible development in the Arctic*. *Polar Record*. 2021;57:e39.

Fagrell Trygg N, **Månsdotter A**, **Gustafsson P E**. *Intersectional inequalities in mental health across multiple dimensions of inequality in the Swedish adult population*. *Social Science and Medicine*. 2021;283:114184.

Fares Z, **Al-Tammemi A B**, F. Gadelrab H, Lin C, Aljaberi M A, Alhuwailah A, Roubi M L. *Arabic COVID-19 Psychological Distress Scale: Development and initial validation*. *BMJ Open*. 2021;11(6):e046006.

Fernando E S, Headley T Y, Tissera H, **Wilder-Smith A**, De Silva A, Tozan Y. *Household and Hospitalization Costs of Pediatric Dengue Illness in Colombo, Sri Lanka*. *American Society of Tropical Medicine and Hygiene*; *American Journal of Tropical Medicine and Hygiene*. 2021;105(1):110-116.

Ferro E G, Abrahams-Gessel S, Jardim T V, **Wagner R G**, Gomez-Olive F X, Wade A N, Peters F, **Tollman S M**, Gaziano T A. *Echocardiographic and Electrocardiographic Abnormalities Among Elderly Adults With Cardiovascular Disease in Rural South Africa*. *NLM (Medline)*; *Circulation. Cardiovascular Quality and Outcomes*. 2021;14(11):1175-1186.

Flores Jimenez S E, **San Sebastian M**. *Assessing the impact of the 2008 health reform in Ecuador on the performance of primary health care services: an interrupted time series analysis*. *BioMed Central*; *International Journal for Equity in Health*. 2021;20(1):169.

Fonseca Rodriguez O, **San Sebastian M**. *"The devil is in the detail": geographical inequalities of femicides in Ecuador*. *International Journal for Equity in Health*. 2021;20(1):115.

Fonseca Rodriguez O, Sheridan S C, Häggström Lundevaller E, **Schumann B**. *Effect of extreme hot and cold weather on cause-specific hospitalizations in Sweden: A time series*

analysis. *Environmental Research*. 2021;193:110535.

Fonseca-Rodríguez O, **Gustafsson P E**, **San Sebastian M**, Connolly-Andersen A. *Spatial clustering and contextual factors associated with hospitalisation and deaths due to COVID-19 in Sweden: A geospatial nationwide ecological study*. *BMJ Global Health*. 2021;6(7):e006247.

Gani M S, Ahsan Ullah A K M, Subramaniam T, **Nyström L**, Chowdhury A M. *Reduction in lifetime fertility through MNCS in rural Bangladesh*. *Asia-Pacific Journal of Rural Development* 2021;1:23.

García-Quinto M, Briones-Vozmediano E, Otero-García L, **Goicolea I**, Vives-Cases C. *Social workers' perspectives on barriers and facilitators in responding to intimate partner violence in primary health care in Spain*. *Health & Social Care in the Community*. 2021.

Giorgi Rossi P, Lebeau A, Canelo-Aybar C, Saz-Parkinson Z, Quinn C, Langendam M, Mcgariggle H, Warman S, Rigau D, Alonso-Coello P, Broeders M, Graewingholt A, Posso M, Duffy S, Schünemann H J, Michael G, Autelitano M, Borisch B, Castells X, Colzani E, Daneš J, Fitzpatrick P, Giordano L, Hofvind S, Ioannidou-Mouzaka L, Knox S, **Nyström L**, Parmelli E, Perez E, Torresin A, Van Engen R, Van Landsveld-Verhoeven C, Young K. et al. *Recommendations from the European Commission Initiative on Breast Cancer for multigene testing to guide the use of adjuvant chemotherapy in patients with early breast cancer, hormone receptor positive, HER-2 negative*. *British Journal of Cancer*. 2021;124(9):1503-1512.

Stoor J P A, **San Sebastian M**, **Global Collective for Indigenous Adolescent Health and Evidence-Based Action**. *The health and wellbeing of Indigenous adolescents: a global collective for an equitable and sustainable future*. *The Lancet*. 2021.

Gotfredsen A, Enlund D, **Goicolea I**, Landstedt E. *Precarious leisure in a teenage wasteland?: Intertwining discourses on responsibility and girls' place-making in rural Northern Sweden*. *Journal of Youth Studies*. 2021.

Gothilander J, **Johansson H**. *School nurses' experiences and challenges of working with childhood obesity in Northern Sweden: A qualitative descriptive study*. *Nordic journal of nursing research*. 2021.

Gunnarsdóttir H, Hensing G, **Hammarström A**. *Poor school connectedness in adolescence and adulthood depressiveness: a longitudinal theory-driven study from the Northern Sweden Cohort*.

European Journal of Public Health. 2021;31(4):797-802.

Gustafsson P E, San Sebastian M, Fonseca Rodriguez O, Connolly-Andersen A. *Inequitable impact of infection : social gradients in severe COVID-19 outcomes among all confirmed SARS-CoV-2 cases during the first pandemic wave in Sweden.* Journal of Epidemiology and Community Health. 2021;jech-2021-216778.

Hambraeus J, Ehsanian R, Cheng D S, McKenna M J, McCormick Z L. *Inadequate Selection and Treatment Results in Poor Outcomes and Lack of Cost-Effectiveness.* Value in Health. 2021.

Hambraeus J, Pulkki-Brännström A, Lindholm L. *Cost-effectiveness of Radiofrequency Denervation for Zygopophyseal Joint Pain.* Pain Physician. 2021;24(8):E1205-E1218.

Hammarström A. *Commentary on Bishop & Almquist: Beyond a descriptive life-course epidemiology.* Addiction. 2021;116(3):641-642.

Hammarström A, Lundman B, Norberg A. *The importance of having a paid job: Gendered experiences of health and ill-health in daily life among middle-aged women and men.* BMC Public Health. 2021;21(1):2023.

Helldén D, **Andersson C, Nilsson M,** Ebi K L, Friberg P, Alfvén T. *Climate change and child health: a scoping review and an expanded conceptual framework.* The Lancet Planetary Health. 2021;5(3):e164-e175.

Hess Engström A, Bohm-Starke N, Kullinger M, Hesselman S, **Högberg U,** Buhrman M, Skalkidou A. *Internet-based Treatment for Vulvodynia (EMBLA) – A Randomized Controlled Study.* Journal of Sexual Medicine. 2021.

Houle B, Gaziano T A, Angotti N, Mojola S A, Kabudula C W, **Tollman S M,** Gomez-Olive F X. *Hypertension incidence among middle-aged and older adults: findings from a 5-year prospective study in rural South Africa, 2010-2015.* BMJ Open. 2021;11(12):e049621.

Hove J, **D'Ambruoso L,** Twine R, Mabetha D, van der Merwe M, Mtungwa I, Khoza S, **Kahn K.** *Developing stakeholder participation to address lack of safe water as a community health concern in a rural province in South Africa.* Global Health Action. 2021;14(1):1973715.

Högberg B, Lindgren J, Johansson K, Strandh M, **Petersen S.** *Consequences of school grading systems on adolescent health: evidence from a*

Swedish school reform. Journal of education policy. 2021;36(1):84-106.

Högberg B, **Petersen S,** Strandh M, Johansson K. *Determinants of Declining School Belonging 2000–2018: The Case of Sweden.* Social Indicators Research. 2021;157(2):783-802.

Högberg U, Thiblin I. *Rib fractures in infancy, case-series and register case-control study from Sweden.* Journal of Pediatric Endocrinology & Metabolism (JPEM). 2021;34(3):363-372.

Ipekci A M, Buitrago-Garcia D, **Meili K W,** Krauer F, Prajapati N, Thapa S, Wildisen L, Araujo-Chaveron L, Baumann L, Shah S, Whiteley T, Solís-García G, Tsotra F, Zhelyazkov I, Imeri H, Low N, Counotte M J. *Outbreaks of publications about emerging infectious diseases: the case of SARS-CoV-2 and Zika virus.* BMC Medical Research Methodology. 2021;21(1):50.

Jalloh M F, **Kinsman J,** Conteh J, Kaiser R, Jambai A, Ekström A M, Bunnell R E, Nordenstedt H. *Barriers and facilitators to reporting deaths following Ebola surveillance in Sierra Leone: implications for sustainable mortality surveillance based on an exploratory qualitative assessment.* BMJ Open. 2021;11(5):e042976.

Johansson E, **Jonsson F,** Rapo E, Lundgren A S, Hörnsten Å, Nilsson I. *Let's Try Social Prescribing in Sweden (SPiS): an Interventional Project Targeting Loneliness among Older Adults Using a Model for Integrated Care: A Research Protocol.* International Journal of Integrated Care. 2021;21(2):33.

Jonsson F, Carson D B, **Goicolea I, Hurtig A.** *Strengthening Community Health Systems Through Novel eHealth Initiatives? Commencing a Realist Study of the Virtual Health Rooms in Rural Northern Sweden.* International Journal of Health Policy and Management. 2021.

Jonsson F, Christianson M, Wiklund M, **Hurtig A, Goicolea I.** *Collective imaginaries of caring landscapes for rural youth: a concept mapping study in northern Sweden.* BMC Public Health. 2021;21:2191.

Jonsson K, Brulin C, Härgestam M, **Lindkvist M,** Hultin M. *Do team and task performance improve after training situation awareness?: A randomized controlled study of interprofessional intensive care teams.* Scandinavian Journal of Trauma, Resuscitation and Emergency Medicine. 2021;29(1):73.

Junkka J, Lena K, Lundevaller E, **Schumann B.** *Climate vulnerability of Swedish newborns: Gender differences and time trends of temperature-related neonatal mortality, 1880–1950.* Environmental Research. 2021;192:110400.

Karlsson L, Junkka J, Häggström Lundevaller E, **Schumann B**. *Ambient Temperature And Stillbirth Risks In Northern Sweden, 1880–1950*. Environmental Epidemiology. 2021;5(6):e176.

Karlsson L, Junkka J, **Schumann B**, Häggström Lundevaller E. *Socioeconomic disparities in climate vulnerability: neonatal mortality in northern Sweden, 1880–1950*. Population and environment. 2021;43(2):149-180.

Leddy A M, Neilands T B, Twine R, **Kahn K**, Ahern J, Pettifor A, Lippman S A. *Examining Mediators of the Relationship Between Community Mobilization and HIV Incidence Among Young South African Women Participating in the HPTN 068 Study Cohort*. Aids and Behavior. 2021.

Leddy A M, Selin A, Lippman S A, Kimaru L J, Twine R, Gómez-Olivé X, **Kahn K**, Pettifor A. *Emotional Violence is Associated with Increased HIV Risk Behavior Among South African Adolescent Girls and Young Women in the HPTN 068 Cohort*. Aids and Behavior. 2021.

Lestari S K, de Luna X, Eriksson M, Malmberg G, **Ng N**. *A longitudinal study on social support, social participation, and older Europeans' quality of life*. SSM - Population Health. 2021;13:100747.

Li X, Peng Y, Li Z, Christensen B, Heckmann A B, Lagerqvist C, **Stenlund H**, Lönnerdal B, Hernell O, West C E. *Serum cytokine patterns are modulated in infants fed formula with probiotics or milk fat globule membranes: A randomized controlled trial*. PLOS ONE. 2021;16:e0251293.

Linander I, **Goicolea I**, Wiklund M, **Gotfredsen A**, Strömbäck M. *Power and subjectivity: Making sense of sexual consent among adults living in Sweden*. NORA: Nordic Journal of Feminist and Gender Research. 2021;29(2):110-123.

Linander I, Lauri M, Alm E, **Goicolea I**. *Two Steps Forward, One Step Back: A Policy Analysis of the Swedish Guidelines for Trans-Specific Healthcare*. Sexuality Research & Social Policy. 2021;18(2):309-320.

Linander I, Lauri M, Lauri J. *Mindre rum, nya gränser och kollektivets underminering : Det nazistiska hotet mot HBTQ-rörelsen*. Tidskrift för Genusvetenskap. 2021;42(2-3):108-128.

Lindvall K, **Vaezghasemi M**, **Feldman I**, **Ivarsson A**, Stevens K J, **Petersen S**. *Feasibility, reliability and validity of the health-related quality of life instrument Child Health Utility 9D (CHU9D) among school-aged children and adolescents in Sweden*. Health and Quality of Life Outcomes. 2021;19(1):193.

Liu Z, Tian J, Wang Y, Li Y, **Liu-Helmerson J**, Mishra S, Wagner A L, Lu Y, Wang W. *The burden of hand, foot, and mouth disease among children under different vaccination scenarios in China: a dynamic modelling study*. BMC Infectious Diseases. 2021;21(1):650.

Liyanage P, Rocklöv J, Tissera H A. *The impact of COVID-19 lockdown on dengue transmission in Sri Lanka: A natural experiment for understanding the influence of human mobility*. PLoS Neglected Tropical Diseases. 2021;15(6):e0009420.

Lu S S, Mohammed Z, Häggström C, Myte R, Lindquist E, Gylfe Å, van Guelpen B, Harlid S. *Antibiotics Use and Subsequent Risk of Colorectal Cancer: A Swedish Nationwide Population-Based Study*. Journal of the National Cancer Institute. 2021;djab125.

Lukyamuzi Z, Etajak S, Katairo T, Mukunya D, **Tetui M**, Ssenyonjo A, Wanyenze R K. *Effect and implementation experience of intensive adherence counseling in a public HIV care center in Uganda: a mixed-methods study*. BMC Infectious Diseases. 2021;21(1):1168.

Lukyamuzi Z, **Tetui M**, **Fonseca Rodriguez O**, Atuyambe L, Makumbi F E, **Baroudi M**. *Quality of Care in Family Planning Services: Differences Between Formal and Informal Settlements of Kira Municipality, Uganda*. Frontiers in Global Women's Health. 2021;2:656616.

Lämås K, Bölenius K, Sandman P, **Lindkvist M**, Edvardsson D. *Effects of a person-centred and health-promoting intervention in home care services – a non-randomized controlled trial*. BMC Geriatrics. 2021;21(1):720.

Mao Z, **Nyström L**, **Jonsson H**. *Breast cancer screening with mammography in women aged 40-49 years: impact of length of screening interval on effectiveness of the program*. Journal of Medical Screening. 2021;28(2):200-206. :0969141320918283.

Mao Z, Aglago E K, Zhao Z, Schalkwijk C, Jiao L, Freisling H, Weiderpass E, Hughes D J, Eriksen A K, Tjønneland A, **Johansson I**, Perez-Cornago A, Jenab M, Fediroko V. *Dietary intake of advanced glycation end products (Ages) and mortality among individuals with colorectal cancer*. Nutrients. 2021;13(12):4435.

Mathias K, Corcoran D, Pillai P, Deshpande S, **San Sebastian M**. *The effectiveness of a multi-pronged psycho-social intervention among people with mental health and epilepsy problems: a pre-post prospective cohort study set in North India*. International Journal of Health Policy and Management. 2021;10(9):546-553.

Meheretu Y, **Granberg Å**, Berhane G, Khalil H, Lwande O W, Mitiku M, Welegerima K, de Bellocq J G, Bryja J, Abreha H, Leirs H, Ecke F, Evander M. *Prevalence of orthohantavirus-reactive antibodies in humans and peri-domestic rodents in northern Ethiopia*. *Viruses*. 2021;13(6):1054.

Meili K W, **Jonsson H**, **Lindholm L**, **Månsdotter A**. *Perceived changes in capability during the COVID-19 pandemic: A Swedish cross-sectional study from June 2020*. *Scandinavian Journal of Public Health*. 2021.

Mkoba E M, Sundelin G, **Sahlen K**, Sörlin A. *The characteristics of stroke and its rehabilitation in Northern Tanzania*. *Global Health Action*. 2021;14(1):1927507.

Moshi H I, Sundelin G G, **Sahlen K-G**, Sörlin A V. *A one-year prospective study on the occurrence of traumatic spinal cord injury and clinical complications during hospitalisation in north-east Tanzania*. *African Health Sciences*. 2021;21(2):788-794.

Moshi H, Sundelin G, **Sahlén K**, Sörlin A. *Quality of life of persons with traumatic spinal cord injury in rural Kilimanjaro, Tanzania: a community survey*. *Disability and Rehabilitation*. 2021;43(20):2838-2845.

Mosquera P A, **San Sebastian M**, Burström B, **Hurtig A**, **Gustafsson P E**. *Performing Through Privatization: An Ecological Natural Experiment of the Impact of the Swedish Free Choice Reform on Ambulatory Care Sensitive Conditions*. *Frontiers In Public Health*. 2021;9:504998.

Mulubwa C, Munakampe M N, Namakula H, **Hernandez A**, Ssekamate T, Atuyambe L M, Birabwa C, Chemonges D, **Namatovu F**, Makumbi F, **Tetui M**. *Framing Contraceptive Use Motivations Among Adolescents and Young Adults Living in Informal Settlements in Kira Municipality, Wakiso District, Uganda*. *Frontiers in global women's health*. 2021;2:658515.

Namatovu F, Häggström Lundevaller E, Vikström L. *The relationship between disability and parental status: a register study of the 1968 to 1970 birth cohorts*. *BMC Public Health*. 2021;21(1):343.

Newberry Le Vay J, Fraser A, **Byass P**, Tollman S, Kahn K, **D'Ambruoso L**, Davies J I. *Mortality trends and access to care for cardiovascular diseases in Agincourt, rural South Africa: A mixed-methods analysis of verbal autopsy data*. *BMJ Open*. 2021;11(6):e048592.

Ng N, Eriksson M, Guerrero E, Gustafsson C, **Kinsman J**, Lindberg J, Lindgren H, **Lindvall K**, Lundgren A S, **Lönnberg G**, **Sahlen K-G**,

Santosa A, **Richter Sundberg L**, **Weinehall L**, Wennberg P. *Sustainable Behavior Change for Health Supported by Person-Tailored, Adaptive, Risk-Aware Digital Coaching in a Social Context: Study Protocol for the STAR-C Research Programme*. *Frontiers In Public Health*. 2021;9:593453.

Ngan T T, **Quynh Mai V**, Minh H V, Donnelly M, O'Neill C. *Health-related quality of life among breast cancer patients compared to cancer survivors and age-matched women in the general population in Vietnam*. *Quality of Life Research*. 2021.

Nilsson M. *Klimatförändringen utmanar den globala hälsan och hotar särskilt sårbara grupper*. *Socialmedicinsk Tidskrift*. 2021;98(2):267-275.

Nilsson M, Ebi K L, Campbell-Lendrum D, Kone B, Friberg P. *Covid-19: a rehearsal to build a greener and healthier society*. *BMJ. British Medical Journal*. 2021;372:n127.

Nilsson S, Mattson J, Berghammer M, Brorsson A, Forsner M, Jenholt Nolbris M, Kull I, Lindholm Olinde A, **Ragnarsson S**, Rullander A-C, Rydström L-L, Andréia Garcia de Avila M, Olaya-Contreras P. *To be or not to be vaccinated against COVID-19 - the adolescents' perspective: a mixed-methods study in Sweden*. *Vaccine: X*. 2021;9:100117.

Nkulu-Kalengayi F K, Jonzon R, Deogan C, **Hurtig A**. *Evidence and gaps in the literature on HIV/STI prevention interventions targeting migrants in receiving countries: a scoping review*. *Global Health Action*. 2021;14(1):1962039.

Norberg E, Biberg E, **Zingmark M**. *Exploring reach and experiences of participation in health-promoting senior meetings in a municipality context*. *Journal of Public Health*. 2021;29:641-651.

Norström F, Myléus A, **Nordyke K**, Carlsson A, Högberg L, **Sandström O**, Stenhammar L, **Ivarsson A**, **Lindholm L**. *Is mass screening for coeliac disease a wise use of resources? A health economic evaluation*. *BMC Gastroenterology*. 2021;21(1):159.

Norström F, **Namatovu F**, Carlsson A, Högberg L, **Ivarsson A**, **Myléus A**. *Family socio-economic status and childhood coeliac disease seem to be unrelated: a cross-sectional screening study*. *Acta Paediatrica*. 2021;110(4):1346-1352.

Nyamhanga T M, Frumence G, **Hurtig A**. *Facilitators and barriers to effective supervision of maternal and newborn care: a qualitative*

study from Shinyanga region, Tanzania. *Global Health Action*. 2021;14(1):1927330.

Nystrand C, Sampaio F, Hoch J S, Osman F, **Feldman I**. *The cost-effectiveness of a culturally tailored parenting program: estimating the value of multiple outcomes*. *Cost Effectiveness and Resource Allocation*. 2021;19(1):23.

Nyström M E, Tolf S, Strehlenert H. *Sense-making, mutual learning and cognitive shifts when applying systems thinking in public health – examples from Sweden: Comment on “what can policy-makers get out of systems thinking? Policy partners’ experiences of a systems-focused research collaboration in preventive health”*. *International Journal of Health Policy and Management*. 2021;10(6):338-342.

Papaioannou K, Nilsson A, **Nilsson L M**, Kadi F. *Healthy eating is associated with sarcopenia risk in physically active older adults*. *Nutrients*. 2021;13(8):2813.

Pat P, Richter-Sundberg L, Jegannathan B, **Edin K, San Sebastian M**. *Mental health problems and suicidal expressions among young male prisoners in Cambodia: a cross-sectional study*. *Global Health Action*. 2021;14(1):1985229.

Petrie S, **Carson D B**, Peters P, **Hurtig A**, LeBlanc M, Simpson H, Barnabe J, Young M, Ostafichuk M, Hodge H, Gladman J, Smale M, **Gonzalez G**. *What a Pandemic Has Taught Us About the Potential for Innovation in Rural Health: Commencing an Ethnography in Canada, the United States, Sweden, and Australia*. *Frontiers In Public Health*. 2021;9:768624.

Pettersson C, **Zingmark M**, Haak M. *Enabling social participation for older people: The content of reablement by age, gender, and level of functioning in occupational therapists’ interventions*. *Scandinavian Journal of Occupational Therapy*. 2021.

Pulkki-Brännström A, Galanti M R, **Nilsson M**. *Protocol for the evaluation of cost-effectiveness and health equity impact of a school-based tobacco prevention programme in a cluster randomised controlled trial (the TOPAS study)*. *BMJ Open*. 2021;11(8):e045476.

Pulkki-Brännström A, Haghparast-Bidgoli H, Batura N, Colbourn T, Azad K, Banda F, Banda L, Borghi J, Fottrell E, Kim S, Makwenda C, Ojha A K, Prost A, Rosato M, Shaha S K, Sinha R, Costello A, Skordis J. *Participatory learning and action cycles with women’s groups to prevent neonatal death in low-resource settings: A multi-country comparison of cost-effectiveness and affordability*. *Health Policy and Planning*. 2021;16(35):czaa081.

Rae D E, Tomaz S A, Jones R A, Hinkley T, Twine R, **Kahn K**, Norris S A, Draper C E. *Sleep and BMI in South African urban and rural, high and low-income preschool children*. *BMC Public Health*. 2021;21(1):571.

Ragnarsson S, Johansson K, Bergström E, Sjöberg G, **Hurtig A, Petersen S**. *Perceived problems with academic achievement in school-aged children with recurrent pain - a longitudinal study*. *Scandinavian Journal of Public Health*. 2021;49(5):1403494819889260.

Richardsen Moberg K, Sovacool B K, Goritz A, Hinojosa G M, Aall C, **Nilsson M**. *Barriers, emotions, and motivational levers for lifestyle transformation in Norwegian household decarbonization pathways*. *Climatic Change*. 2021;165:3.

Richter Sundberg L, Christianson M, Wiklund M, **Hurtig A, Goicolea I**. *How can we strengthen mental health services in Swedish youth clinics? A health policy and systems study protocol*. *BMJ Open*. 2021;11(10):e048922-e048922.

Rodríguez Eguizabal E, Gil de Gómez M J, **San Sebastian M**, Oliván-Blázquez B, Coronado Vázquez V, Sánchez Calavera M A, Magallón Botaya R. *Capacidad de respuesta del sistema de salud en atención primaria valorada por pacientes con enfermedades crónicas*. *Gaceta Sanitaria*. 2021.

Romanello M, McGushin A, Di Napoli C, Drummond P, Hughes N, Jamart L,.....**Nilsson M**,.....Hamilton I. *The 2021 report of the Lancet Countdown on health and climate change: code red for a healthy future*. *The Lancet*. 2021;398(10311):1619-1662.

Romanello M, van Daalen K, Anto J M, Dasandi N, Drummond P, Hamilton I G, Jankin S, Kendrovski V, Lowe R, Rocklöv J, Schmoll O, Semenza J C, Tonne C, **Nilsson M**. *Tracking progress on health and climate change in Europe*. *The Lancet Public Health*. 2021;6(11):e858-e865.

Rowe K, Buiydaite R, Heinsohn T, Rahimzadeh M, **Wagner R G**, Scerif G, Stein A. *Executive function in HIV-affected children and adolescents: a systematic review and meta-analyses*. *AIDS Care*. 2021;33(7):833-857.

Rowe K, Duta M, Demeyere N, **Wagner R G**, Pettifor A, **Kahn K, Tollman S**, Scerif G, Stein A. *The relationship between executive function, risky behaviour and HIV in young women from the HPTN 068 study in rural South Africa*. *AIDS Care*. 2021;33(5):682-692.

Sampaio F, **Feldman I**, Lavelle T A, Skokauskas N. *The cost-effectiveness of treatments for*

attention deficit-hyperactivity disorder and autism spectrum disorder in children and adolescents: a systematic review. *European Child and Adolescent Psychiatry*. 2021.

San Sebastian M, Vives-Cases C, **Goicolea I**. "Closer to the Unfair Reality": Magnitude and Spatial Analysis of Femicides in Ecuador. *Journal of Interpersonal Violence*. 2021;36(17-18):NP9982-NP9993.

Sandström G, Namatovu F, Ineland J, Larsson D, **Ng N**, Stattin M. *The Persistence of High Levels of Living Alone Among Adults with Disabilities in Sweden, 1993–2011*. *Population: Research and Policy Review*. 2021;40(2):163-185.

Sandström O, **Norström F**, Carlsson A, Högberg L, van der Pals M, Stenhammar L, Webb C, **Ivarsson A**, Myléus A. *Five-year follow-up of new cases after a coeliac disease mass screening*. *Archives of Disease in Childhood*. 2021.

Schröders J, Nichter M, **San Sebastian M**, **Nilsson M**, Dewi F S. "The Devil's Company": A Grounded Theory Study on Aging, Loneliness and Social Change Among 'Older Adult Children' in Rural Indonesia. *Frontiers in Sociology*. 2021;6:659285.

Schulz P J, Lindahl B, Hartung U, Näslund U, **Norberg M**, Nordin S. *The right pick: Does a self-assessment measurement tool correctly identify health care consumers with inadequate health literacy?*. *Patient Education and Counseling*. 2021.

Schulz P J, Andersson E M, Bizzotto N, **Norberg M**. *Using Ecological Momentary Assessment to Study the Development of COVID-19 Worries in Sweden: Longitudinal Study*. *Journal of Medical Internet Research*. 2021;23(11):e26743.

Septiono W, Kuipers M A, **Ng N**, Kunst A E. *Self-reported exposure of Indonesian adolescents to online and offline tobacco advertising, promotion and sponsorship (TAPS)*. *Tobacco Control*. 2021;tobaccocontrol-2020-056080.

Septiono W, Kuipers M A, **Ng N**, Kunst A E. *The Mediating Role of Parental Factors in the Social Patterning of Smoking among Adolescents in Urban Indonesia*. *Asian Pacific Journal of Cancer Prevention*. 2021;22(10):3127-3135.

Shimanda P P, Shumba T W, Brunström M, Söderberg S, **Lindholm L**, Iiping S N, **Norström F**. *Preventive interventions to reduce the burden of rheumatic heart disease in populations at risk: a systematic review protocol*. *Systematic Reviews*. 2021;10(1):200.

Sirili N, Simba D, Zulu J M, Frumence G, **Tetui M**. *Accommodate or Reject: The Role of Local*

Communities in the Retention of Health Workers in Rural Tanzania. *International Journal of Health Policy and Management*. 2021.

Sjölander M, Carlberg B, Norberg M, Näslund U, **Ng N**. *Prescription of Lipid-Lowering and Antihypertensive Drugs following Pictorial Information about Subclinical Atherosclerosis: A Secondary Outcome of a Randomized Clinical Trial*. *JAMA Network Open*. 2021;4(8):e21683.

Ssekamatte T, Kibira S P, **Tetui M**, Isunju J B, Mugambe R K, Wafula S T, Buregyeya E, Nalwadda C K, Bukenya J N, Wanyenze R K. *Do sexual expectancies and inhibitions predict high-risk sexual behaviours? Evidence from a cross-sectional survey among young psychoactive substance users in informal settlements in Kampala, Uganda*. *BMC Public Health*. 2021;21(1):1506.

Stoner M C, Edwards J K, Westreich D, Kilburn K, Ahern J, Lippman S A, Gomez-Olive F X, **Kahn K**, Pettifor A. *Modeling Cash Plus Other Psychosocial and Structural Interventions to Prevent HIV Among Adolescent Girls and Young Women in South Africa (HPTN 068)*. *Aids and Behavior*. 2021;25:133-143.

Stoner M C, Westreich D, Ahern J, Edwards J, Gómez-Olivé F X, Tollman S M, Lippman S, **Kahn K**, Pettifor A. *Modeling Combination Interventions to Prevent Human Immunodeficiency Virus in Adolescent Girls and Young Women in South Africa (HIV Prevention Trials Network 068)*. *Clinical Infectious Diseases*. 2021;73(7):e1911-e1918.

Stoor J P, Eriksen H A, Silviken A C. "Mapping suicide prevention initiatives targeting Indigenous Sámi in Nordic countries". *BMC Public Health*. 2021;21(1):2035.

Tabar L, Chen T H, Yen A M, Dean P B, Smith R A, **Jonsson H**, Tornberg S, Chen S L, Chiu S Y, Fann J C, Ku M M, Wu W Y, Hsu C Y, Chen Y C, Svane G, Azavedo E, Grundstrom H, Sunden P, Leifland K, Frodis E, Ramos J, Epstein B, Akerlund A, Sundbom A, Bordas P, Wallin H, Starck L, Björkgren A, Carlson S, Fredriksson I, Ahlgren J, Ohman D, Holmberg L, Duffy S W. *Early detection of breast cancer rectifies inequality of breast cancer outcomes*. *Journal of Medical Screening*. 2021;28(1):34-8.

Teni F S, Gerdtham U, Leidl R, Henriksson M, Åström M, **Sun S**, Burström K. *Inequality and heterogeneity in health-related quality of life: findings based on a large sample of cross-sectional EQ-5D-5L data from the Swedish general population*. *Quality of Life Research*. 2021.

- Tetui M**, Ssekamate T*, Akilimali P, Sirike J, **Fonseca-Rodríguez O**, Atuyambe L, Makumbi F E. *Geospatial Distribution of Family Planning Services in Kira Municipality, Wakiso District, Uganda*. *Frontiers in Global Women's Health*. 2021;1(28).
- Tetui M**, **Baroudi M**, Ssekamate T, Birabwa C, Kibira S P, Atuyambe L, Delamou A, Makumbi F E. *Total Demand, Use and Unmet Need for Modern Contraceptives Among Women Living in Informal Settlements in Kira Municipality, Wakiso District, Uganda: Implications for Urban Health*. *Frontiers in Global Women's Health*. 2021;2:655413.
- Thiblin I, Andersson J, Wester K, Högberg G, **Högberg U**. *How do we know that infant abusive head trauma has occurred?*. *Acta Paediatrica*. 2021.
- Thiblin I, Andersson J, Wester K, Högberg G, **Högberg U**. *Retinal haemorrhage in infants investigated for suspected maltreatment is strongly correlated with intracranial pathology*. *Acta Paediatrica*. 2021.
- Tietjen A K, Ghandour R, Mikki N, Jerdén L, Eriksson J W, **Norberg M**, Hussein A. *Quality of life of type 2 diabetes mellitus patients in Ramallah and al-Bireh Governorate–Palestine: a part of the Palestinian diabetes complications and control study (PDCCS)*. *Quality of Life Research*. 2021;30(5):1407-1416.
- Tollman S M, **Byass P**, Waiswa P, Blencowe H, Yargawa J, Lawn J E. *Count Every Newborn: EN-INDEPTH study to improve pregnancy outcome measurement in population-based surveys*. *Population Health Metrics*. 2021;19:5.
- Törmä J, Lundqvist R, Eliasson M, **Nilsson L M**, Oskarsson V, Wennberg M. *Comparison of dietary trends between two counties with and without a cardiovascular prevention program: A population-based cross-sectional study in northern Sweden*. *Public Health Nutrition*. 2021.
- Usher-Smith J A, Häggström C, Wennberg P, **Lindvall K**, Strelitz J, Sharp S J, Griffin S J. *Impact of achievement and change in achievement of lifestyle recommendations in middle-age on risk of the most common potentially preventable cancers*. *Preventive Medicine*. 2021;153:106712.
- van der Merwe M, **D'Ambruoso L**, Witter S, Twine R, Mabetha D, Hove J, **Byass P**, **Tollman S M**, **Kahn K**. *Collective reflections on the first cycle of a collaborative learning platform to strengthen rural primary healthcare in Mpumalanga, South Africa*. *Health Research Policy and Systems*. 2021;19(1):66.
- Velickovic V M, Lembelembe J P, Cegri F, Binic I, Abdelaziz A B, **Sun S**, Niki B, Dawn S, Rippon M G, Abreha S K, Sturges J. *Superabsorbent Wound Dressing for Management of Patients With Moderate-to-Highly Exuding Chronic Leg Ulcers: An Early Stage Model-Based Benefit–Harm Assessment*. *International Journal of Lower Extremity Wounds*. 2021.
- Virtanen P, Hammarström A, **Janlert U**. *Locked in Permanent Employment: Longitudinal Associations With Depressive and Functional Somatic Symptoms*. *Journal of Occupational and Environmental Medicine*. 2021;63(7):588-593.
- Vu Thi Quynh M**, Giang K B, Minh H V, **Lindholm L**, **Sun S**, **Sahlen K**. *Reference data among general population and known-groups validity among hypertensive population of the EQ-5D-5L in Vietnam*. *Quality of Life Research*. 2021.
- Wade A N, Crowther N J, Abrahams-Gessel S, Berkman L, George J A, Gómez-Olivé F X, Manne-Goehler J, Salomon J A, Wagner R G, Gaziano T A, **Tollman S M**, Cappola A R. *Concordance between fasting plasma glucose and HbA1c in the diagnosis of diabetes in black South African adults: A cross-sectional study*. *BMJ Open*. 2021;11(6):e046060.
- Wagner R G, Crowther N J, Micklesfield L K, Boua P R, Nonterah E A, Mashinya F, Mohamed S F, Asiki G, **Tollman S M**, Ramsey M, Davies J I. *Estimating the burden of cardiovascular risk in community dwellers over 40 years old in South Africa, Kenya, Burkina Faso and Ghana*. *BMJ Global Health*. 2021;6(1):e003499.
- Wagner R G**, **Norström F**, Bertram M Y, **Tollman S M**, Forsgren L, Newton C R, **Lindholm L**. *Community health workers to improve adherence to anti-seizure medication in rural South Africa: Is it cost-effective?*. *Epilepsia*. 2021;62(1):98-106.
- Wahlberg M, **Zingmark M**, Stenberg G, Munkholm M. *Rasch analysis of the EQ-5D-3L and the EQ-5D-5L in persons with back and neck pain receiving physiotherapy in a primary care context*. *European Journal of Physiotherapy*. 2021;23(2):102-109.
- Wall S**, Emmelin M, **Krantz I**, **Nilsson M**, **Norström F**, **Schröders J**, **Stewart Williams J**, Östergren P O. *Global Health Action at 15 – revisiting its rationale*. *Global Health Action*. 2021;14(1):1965863.
- Watts N, Amann M, Arnell N, Ayeb-Karlsson S, Beagley J, Belesova K, **Nilsson M**, **Sewe M O**, Costello A. *The 2020 report of The Lancet Countdown on health and climate*

change: responding to converging crises. *The Lancet*. 2021;397(10269):129-170.

Westergren A, **Edin K**, Christianson M. *Reproducing normative femininity: Women's evaluations of their birth experiences analysed by means of word frequency and thematic analysis*. *BMC Pregnancy and Childbirth*. 2021;21(1):300.

Westergren A, **Edin K**, **Lindkvist M**, Christianson M. *Exploring the medicalisation of childbirth through women's preferences for and use of pain relief*. *Women and Birth*. 2021;:e118-e127.

Westerlund A, **Ivarsson A**, **Richter Sundberg L**. *Evidence-based practice in child and adolescent mental health services: The challenge of implementing national guidelines for treatment of depression and anxiety*. *Scandinavian Journal of Caring Sciences*. 2021;35(2):476-484.

Westerlund A, Sparring V, Hasson H, **Weinehall L**, **Nyström M E**. *Working with national quality registries in older people care: A qualitative study of perceived impact on assistant nurses' work situation*. *Nursing Open*. 2021;8(1):130-139.

Wijana M B, **Feldman I**, Ssegonja R, Enebrink P, Ghaderi A. *A pilot study of the impact of an integrated individual- and family therapy model for self-harming adolescents on overall healthcare consumption*. *BMC Psychiatry*. 2021;21(1):374.

Wood A M, **Jonsson H**, Nagel G, Haggstrom C, Manjer J, Ulmer H, Engeland A, Zitt E, Jochems S H J, Ghaderi S, Stattin P, Bjorge T, Stocks T. *The Inverse Association of Body Mass Index with Lung Cancer: Exploring Residual Confounding, Metabolic Aberrations and Within-Person Variability in Smoking*. *Cancer Epidemiology Biomarkers and Preventions*. 2021;30(8):1489-97.

Ziaei S, **Hammarström A**. *What social determinants outside paid work are related to development of mental health during life? An integrative review of results from the Northern Swedish Cohort*. *BMC Public Health*. 2021;21(1):2190.

Zingmark M, Ankre R, Wall-Reinius S. *Promoting outdoor recreation among older adults in Sweden – a theoretical and empirical foundation for the development of an intervention*. *Archives of Public Health*. 2021;79(1):232.

Zingmark M, **Norström F**. *Transitions between levels of dependency among older people receiving social care: a retrospective longitudinal*

cohort study in a Swedish municipality. *BMC Geriatrics*. 2021;21(1):342.

Other Publications

Carson D A, **Carson D B**. Opportunities and barriers for degrowth in remote tourism destinations: overcoming regional inequalities?. In: *Degrowth and tourism: new perspectives on tourism entrepreneurship, destinations and policy*. Milton Park: Routledge; 2021. p. 100-115. Contemporary geographies of leisure, tourism and mobility.

European Academies' Science Advisory Council (EASAC). *Decarbonisation of buildings: for climate, health and jobs*. Teutschenthal, Germany: German National Academy of Sciences; 2021. EASAC policy report, 43.

Harryson L, Lundberg C, Elwér S, **Weinehall L**, **Höög E**, **Johansson H**. *Örat mot marken, blicken mot horisonten: Västerbottensmodell för samordning avregionalt och lokalt folkhälsoarbete*. Umeå: Länsstyrelsen Västerbotten; 2021.

Hossain K, **Nilsson L M**, Herrmann T M, editors. *Food security in the High North: contemporary challenges across the circumpolar region*. Abingdon: Routledge; 2021. Routledge Research in Polar Regions.

Hossain K, **Nilsson L M**, Herrmann T M. Introduction: conceptualizing food (in)security in the High North. In: *Food Security in the High North: contemporary challenges across the circumpolar region*. Abingdon: Routledge; 2021. p. 1-12. Routledge Research in Polar Regions.

Namatovu F, Ineland J, Lövgren V. The perspectives of professionals on providing services to women with disabilities that experience intimate-partner violence. Umeå universitet; 2021. CEDAR Working Papers, 2021:7.

Nilsson L M. Some reflections on Swedish food strategies from a Sami and an Arctic perspective. In: *Food Security in the High North: contemporary challenges across the circumpolar region*. Abingdon: Routledge; 2021. p. 203-218. Routledge Research in Polar Regions.

Stoor J P, Lantto P, Össbo Å. Inledning. In: *Psykisk hälsa och välmående på svensk sida av Sápmi: en antologi*. Umeå: Vårdduo-Centrum för samisk forskning, Umeå universitet; 2021. p. 1-5. Skrifter från Centrum för samisk forskning, 28.

Stoor J P, **San Sebastian M**. Sametingets individuella analys för nationell strategi psykisk hälsa och suicidprevention : slutredovisning av regeringsuppdrag S2018/O4669/FS (delvis),

S2018/06126/FS (delvis), S2020/06171/FS (delvis). Umeå: Institutionen för epidemiologi och global hälsa, Umeå universitet; 2021.

Vikström L, Junkka J, **Namatovu F**, Håggström Lundevall E, Karhina K. A longitudinal study of how disability affects mortality in Swedish Populations from the 1800s, 1900s and 2000s. Umeå: Umeå University; 2021. CEDAR Working Papers, 18.

Doctoral Theses

Schröders, J. *Diversity, dynamics and deficits: the role of social networks for the health of aging populations in Indonesia* [PhD dissertation]. [Umeå]: Umeå universitet; 2021. (Umeå University medical dissertations).

Gotfredsen, A. *Carving out collective spaces: Exploring the complexities of gender and everyday stressors within rural youth leisure* [PhD dissertation]. [Umeå]: Umeå University; 2020. (Umeå University medical dissertations).

Bengtsson, A. *Health for future: self-rated health and social status among adolescents* [PhD dissertation]. [Umeå]: Umeå universitet; 2021. (Umeå University medical dissertations).

Ramadona, A L. *Spatiotemporal prediction of arbovirus outbreak risk: the role of weather and population mobility* [PhD dissertation]. [Umeå]: Umeå universitet; 2021. (Umeå University medical dissertations).

Master of Public Health Theses

2021:01 **Nehemiah Katantazi.** Cost-effectiveness analysis of group lifestyle intervention for HIV adults with cardiovascular disease risks in Uganda. Using Markov Model. *Master thesis in public health.* Umeå International School of Public Health, Department of Epidemiology and Global Health, Umeå University 2021. (DiVA)

2021:02 **Obinna Princewill Anyatonwu.** Rural-urban disparities in postpartum contraceptive use among women in Nigeria - A decomposition analysis. *Master thesis in public health.* Umeå International School of Public Health, Department of Epidemiology and Global Health, Umeå University 2021. (DiVA)

2021:03 **Ndey Fatou Sallah.** Cost Effectiveness of Human Papillomavirus Vaccination Programme in The Gambia. A Markov model. *Master thesis in public health.* Umeå International School of Public Health, Department of Epidemiology and Global Health, Umeå University 2021. (DiVA)

2021:04 **Shahid Malik.** Screening for Chronic Kidney Disease (CKD) among adults in Sweden. A cost-effectiveness analysis using Markov modelling. *Master thesis in public health.* Umeå International School of Public Health, Department of Epidemiology and Global Health, Umeå University 2021. (DiVA)

2021:05 **Sergio Enmanuel Flores Jimenez.** Measuring the performance of health systems in Latin America. A Data Envelopment Analysis and Malmquist Productivity Index Application. *Master thesis in public health.* Umeå International School of Public Health, Department of Epidemiology and Global Health, Umeå University 2021. (DiVA)

2021:06 **Sulayman Sanyang.** Cost Effectiveness of Intermittent Preventive Treatment Using Sulphadoxine Pyramethamine in the Control of Malaria in Pregnancy, the Gambia: Study Protocol. *Master thesis in public health.* Umeå International School of Public Health, Department of Epidemiology and Global Health, Umeå University 2021. (DiVA)

2021:07 **Famata Colley.** Cost-Effectiveness of Breast Cancer Screening in the Gambia. Markov Simulation of Population-Based Mammography Screening in the Early Detection of Breast Cancer. *Master thesis in public health.* Umeå International School of Public Health, Department of Epidemiology and Global Health, Umeå University 2021. (DiVA)

2021:08 **Min Wai Lwin.** Modelling the cost-effectiveness of lifestyle intervention for reducing obesity attributable colorectal cancers. *Master thesis in public health.* Umeå International School of Public Health, Department of Epidemiology and Global Health, Umeå University 2021. (DiVA)

2021:09 **Kumba Sowe.** Urban-Rural disparities in Antenatal Care Utilization in The Gambia: a decomposition analysis using data from 2018 Multiple Indicator Cluster Survey. *Master thesis in public health.* Umeå International School of Public Health, Department of Epidemiology and Global Health, Umeå University 2021. (DiVA)

2021:10 **Mary Preyanka.** Experiences of accessing menstrual hygiene materials: A qualitative study in a rural village in Bangladesh. *Master thesis in public health.* Umeå International School of Public Health, Department of Epidemiology and Global Health, Umeå University 2021. (DiVA)

2021:11 **Hong Hanh Hoang.** Self-reported sexually transmitted infections and associated risk factors among transgender women in Ho Chi Minh City, Vietnam: A cross-sectional study. *Master thesis in public health.* Umeå International School of Public Health, Department of Epidemiology and Global Health, Umeå University 2021. (DiVA)

- 2021:12 **Victor Eseoghene Adams.** Tobacco use in Nigeria: Exploring regional differences and determinants. *Master thesis in public health.* Umeå International School of Public Health, Department of Epidemiology and Global Health, Umeå University 2021. (DiVA)
- 2021:13 **Ebrima Barrow.** Problems to health care utilization among women of reproductive age in The Gambia: A cross sectional study. *Master thesis in public health.* Umeå International School of Public Health, Department of Epidemiology and Global Health, Umeå University 2021. (DiVA)
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