

### GREENLAND CENTER OF HEALTH RESEARCH

Institute of Health and Nature
Ilisimatusarfik - University of Greenland

## ANNUAL REPORT



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## PREFACE FROM HEAD OF THE INSTITUTE

In 2023, the Institute of Health and Nature achieved a significant milestone with the finansing of the long-awaited biology program, SILA Bachelor in Biology, Grenland's first natural sciences education. This marks a historic year for the institute. Currently dedicated efforts are focused on developing a curriculum in order to welcome the first students in February 2025.

The Greenland Centre for Health Research remains a dynamic, innovative, and method-focused center committed to contributing valuable knowledge to Greenlandic society. Throughout this year, the center has progressed, fostering new collaborations both internally and externally, particularly in the realm of competence development for healthcare professionals and research initiatives. These partnerships aim to generate knowledge addressing health challenges in Greenland, considering local needs and adaptations.

It is my ambition to emphasize one of the fundamental reasons behind our work — to utilize research for positive change in the lives of the people of Greenland.

This year, I find satisfaction in supporting and observing interdisciplinary health promotion research, encompassing Inuit diets, local health initiatives, well-being activities, and educational developments for nursing students, aiming to address the shortage of nurses in Greenland.

Our ongoing projects are driven by the goal of respecting life in Greenland, encompassing both its people and nature. We are committed to developing knowledge on sustainable food practices, health promotion, and the study and work life in healthcare.

With warm regards,
Anna Kleist Egede, Head of the Institution, Institute of Health and Nature

## LETTER FROM THE CHAIR

Our vision at Greenland Center for Health Research is improving the health status in Greenland through initiation and coordination of health research. Building local capacity through PhD programs and mentoring is important. We do this in collaboration with other universities and our affiliated researchers, where we yearly organize PhD courses.

The vision for Greenland Center for Health Research will follow the key points from Greenland Research Strategy: Research must be anchored in Greenland, Research must support sustainable societal development, Research results must be easily accessible to all, and Research efforts must be at an international level.

Ilisimatusarfik is a U-Arctic partner, and our center is the host of the Thematic Network on Health and Well-being in the Arctic. Education and research are important in the network.

The next NUNAMED conference will take place in October 2025 and Greenland Center for Health Research is an important partner in the planning of this conference.

The Lancet Commission on Arctic Health: Urgently Accelerating Indigenous Health and Well-being. There was a consensus in the Commission to push working groups and individuals to conclude the report work for submission to Lancet by December 31, 2023. There will be plans for possible gatherings and/or venues for the launch of the report and generally on the "afterlife" of the report.

The center is active in teaching at all levels from classroom teaching of nursing students to supervision of PhD students. We plan for yearly PhD courses, including lectures from leading Arctic scientists.

In 2024 Greenland Center for Health Research will continue in collaboration with Greenland's healthcare system and communities to plan research important for Greenland, and in the planning phase also make a plan for the implementation of results and that research is focusing on topics and questions proposed by Greenland's healthcare system and communities.

Gert Mulvad, Chair, MD, GP Doctor h.c.

# THE HISTORY OF GREENLAND CENTER OF HEALTH RESEARCH

On the 28th of May 2008, Greenland's Centre for Health Research (GCHR) was established. Back then a number of research-interested professionals working in Greenland's health care system had been discussing how a health research institute physically placed in Greenland was lacking.

The ambition was that such an institute could facilitate the transfer of competencies to Greenland, be the base for PhD students, provide affiliated researchers with a Greenlandic identity for their international research network, and provide evidence-based content for the nursing education, health professionals' training and perhaps at some point Arctic MPH and PhD educations.

Since 2008, ten PhD students have graduated from the Centre and currently, fourteen PhD students are affiliated with the Centre. The GCHR is is organised within the Institute of Health and Nature at the University of Greenland.

#### **Our vision**

Improving the health status in Greenland through initiation and coordination of health research.

#### **Our mission**

- Increase coordination among research institutions
- Develop, exchanging, disseminating and applying scientific knowledge
- Create national and international networks
- Building local capacity through PhD programs and mentoring
- Improving community involvement and local partnerships

#### **Our objectives**

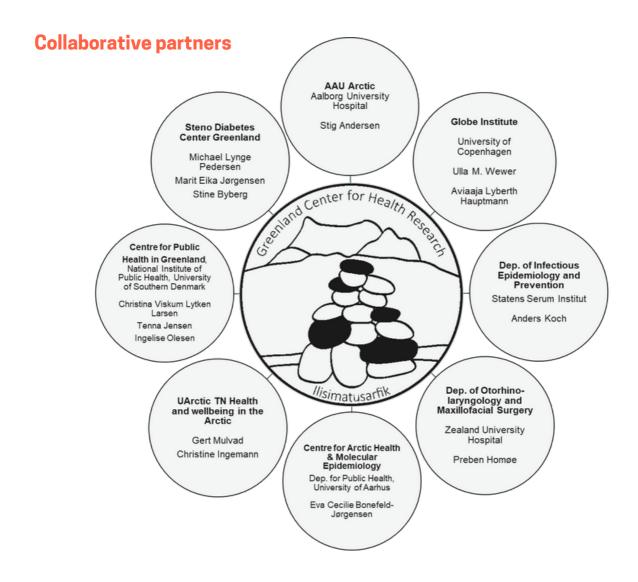
The aim of the Centre is to enhance cooperation between researchers from other countries and health professionals in Greenland, to facilitate research cooperation within Greenland, and to facilitate the interaction of researchers from other countries with the Greenland community at large. The Centre is active in teaching at all levels from classroom teaching of nursing students to supervision of PhD students. In a longer perspective, the Centre will work for the establishment of data archive and archive of specimens collected in Greenland.

## PARTNERSHIPS AND NETWORKS

The Centre works to forge links between research centers, independent scholars and students as well as health professionals in Greenland.

We collaborated with the Greenland Institute of Natural Resources on a building project for the Centre. The Centre has signed a Memorandum of Understanding with the Canadian Institute for Circumpolar Health in Yellowknife (North West Territories) and the UArctic.

The Centre cooperates with Centre for Care Research at the Arctic University of Norway (UiT), Arctic Transatlantic Telehealth Research Network Furthermore, GCHR is a coorganisation of NUNAMED, part of Thematic Network on Health and Well-being in the Arctic under the University of the Arctic, and a member of the Circumpolar Health Research Network.



## ADVISORY BOARD

- Gert Mulvad, MD, Dr. h.c. (Chairman)
- Anna Kleist Egede (Vice chairman) Head of institute -Institute of Health and Nature
- Aviaja Siegstad, Chief physician Board of Health and Prevention
- Henrik L. Hansen, National Doctor at the national doctor's Office
- Nike Berthelsen, Head of Department for Health
- Nuka Mette-Marie Larsen, Research coordinator at Department of Research
- Lene Seibæk, Professor Institute of Health and Nature
- Appointed: Michael L. Pedersen, MD, GP, PhD, Dr. Med. Greenland Centre for Health Research

## RESEARCHERS & PHD STUDENTS

#### Researchers

- Anders Koch, MD, PhD, Professor, MPH
- Anna Maria Anderson, MD, PhD
- Aviaaja L. Hauptmann, PhD, Assistant Professor
- Birgit Vollmer-Larsen Nicklasen, Assistant Professor
- Birgitte Hamann Laustsen, PhD
- Christina VL Larsen, PhD, cand.scient. soc., Professor
- Christine Ingemann, BScN & (Res)MSc Global Health, PhD, Assistant Professor
- Carsten Juul Jensen, PhD, Associate Professor
- Eva C. Bonefeld-Jørgensen, PhD, Professor
- Gert Mulvad, MD, GP, Doctor h.c.
- Ingelise Olesen, Research Coordinator
- Jette Marcussen, Postdoc, PhD
- Karen Bjørn Mortensen, MD, PhD
- Karsten Rex, MD, GP, PhD
- Lene Seibæk, PhD, RN, Professor
- Lise Hounsgaard, PhD, RN, Senior Researcher
- Marie Balslev Backe, PhD, Postdoc
- Marit E. Jørgensen, MD, PhD, Professor
- Michael Lynge Pedersen, MD, GP, PhD, Dr. Med., Professor
- Nils Skovgaard, PhD
- Ninna Senftleber, PhD, Postdoc
- Preben Homøe, MD, PhD, Dr. Med., Professor
- Ruth Montgomery-Andersen, DrPH
- Silvia Isidor, Assistant Professor
- Sonja Sørensen, Research Assistant
- Stig Andersen, MD, PhD, PGCME, Clinical Professor, Department Head
- Stine Byberg, PhD
- Tenna Jensen, PhD, Associate Professor
- Tine Aagaard, PhD, Senior Researcher
- Trine Jul Larsen, BScN & MSc Public Health, PhD
- Ulla Wever, Professor, DMSc

## RESEARCHERS & PHD STUDENTS

#### PhD students

- Hjalte Erichsen Larsen, MD
- Ivalu Katajavaara Seidler, Cand.Scient.San.Publ
- Julie Flyger Holflod, Cand.Scient.San.Publ
- Maja Hykkelbjerg Nielsen, MScPH / Cand.Scient.San.Publ
- Emma Vitale, MA Archaeology
- Mads Bjørn Bjørnsen, Cand. Scient. Biology
- Mads Mose Jensen, MD
- Mette M. Schlütter, MA Anthropology
- Mette Malene Motzfeldt Jensen, MD
- Mie Møller, MD
- Nadja Albertsen, MD
- Nathalie Demuth Fryd, MD
- Nick Duelund, MD
- Paneeraq Noahsen, MD

#### PhD enrolment at University of Greenland

The aim of the PhD education is to qualify students to perform research, development, and instructional tasks, and to transmit scientific problems and issues in the Arctic. The PhD School at Illisimatusarfik/University of Greenland offers international research education in three different programs:

1) Arctic Studies - Health and Social Conditions

- 2) Arctic Studies Pedagogy and the Science of Education
- 3) Arctic Studies Culture, Language and Social Conditions

All PhD students must be assigned to one of these programs. Further, it is possible to make partnership agreements between the PhD School and other research institutions and foreign universities e.g. regarding double enrolment (double /joint degree). The application rules and form to apply for enrolment as a PhD student at Ilisimatusarfik are available at the university website www.uni.al.

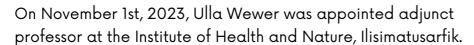
Please feel free to contact the PhD school at phd@uni.gl or chair of the PhD Committee, Institute for Health and Nature, at Ilisimatusarfik Lene Seibæk lese@uni.gl

#### **PhD Committee**

- Lene Seibæk, professor, PhD, Institute of Health and Nature, Ilisimatusarfik & senior researcher at Aarhus University Hospital (chair)
- Aviaja Lyberth Hauptmann, PhD, postdoc., Institute of Health and Nature, Ilisimatusarfik
- Bodil H Blix, professor, PhD, Department of Health and Care Sciences, The Arctic University of Norway (UiT)
- Stig Andersen, professor, PhD, senior consultant, Arctic Health Research Centre, Aalborg University & Greenland Centre for Health Research

## CENTRE ACTIVITIES IN 2023

#### Ulla M Wewer, new adjunct professor at Ilisimatusarfik





Ulla M. Wewer graduated from the University of Copenhagen as Medical Doctor (MD) in 1980 and obtained her scientific degree as Doctor of Medical Sciences in 1985 (DMSc). In 2000, she was appointed Professor in Experimental Pathology at the Faculty of Health and Medical Sciences, University of Copenhagen. Her honors include membership since 2010 of the Royal Danish Academy of Sciences and Letters (Det Kongelige Danske Videnskabernes Selskab) and the medal of the Knight of the 1st Class of Dannebrog (R.1) was conferred to her in 2021. In 2005, she was appointed as the Dean of the Faculty of Health and Medical Sciences and worked in that position until 2022. During her tenure as Dean, the Faculty further developed into a modern internationally recognized research institution. Key to the development, she argues, was the true involvement and passion of the scientists, students, administrative and technical staff as well as the extensive collaboration with the hospitals in The Capital Region and Region Zealand. Through generous funding and support from private and public foundations and agencies, it became possible to recruit additional top international scientists and staff and establish several new centers of excellence. Focus was on high-end technology/equipment, core facilities and biomedical data science as well as expansion and renovation of buildings and facilities. Importantly, the new Mærsk Building opened in 2017 in part funded by the A. P. Møller Foundation and has since proved to be a great success hosting both established institutes and new initiatives, receiving accolades from for the users as well as visitors.

Ulla M. Wewer says: "I am most honored to be appointed adjunct professor at the Institute of Health and Nature, Ilisimatusarfik. I am looking very much forward to be part of the confident and forward-looking collaboration between the Globe Institute, University of Copenhagen and our great colleagues in Greenland".

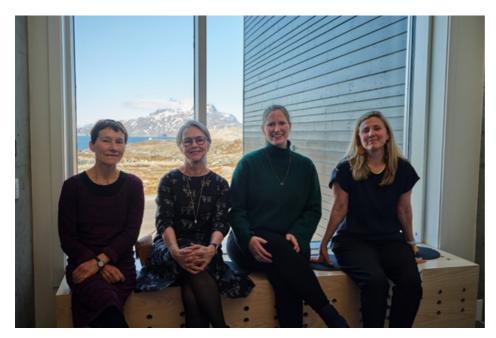
#### Awarded PhD dissertation in 2023

The 16th of June 2023, Christine Ingemann defended her PhD thesis with the title "Putting families and local professionals at the heart of implementation research: A qualitative implementation study on Greenland's universal parenting programme MANU 0-1 Year". She successfully defended her thesis and was awarded a joint degree from both the University of Greenland and the University of Southern Denmark. In her thesis, Christine investigated the local implementation of the parenting programme MANU and parents' experiences with the programme in regard to expectations, needs, culture and values. She concludes that by putting families and local professionals at the heart of implementation research, interventions will more likely be culturally sensitive and increasingly relevant to local contexts. Furthermore, potential barriers in implementation and adverse effects of an intervention could be addressed early on and likely prevented.

Main supervisor: Professor Christina VL Larsen (Ilisimatusarfik & SDU)

Co-supervisors: Professor Siv Kvernmo (UiT) & Professor Tine Tjørnhøj-Thomsen (SDU)

Assessment board: Charlotte Overgaard (chair, SDU), Gitte Adler Reimer (Ilisimatusarfik) & Susan Chatwood (University of Alberta)





#### Awarded PhD dissertation in 2023 (continued)

On 28th August 2023 Cand.med. Anna Maria Andersson defended her PhD with the title: Investigation of atopic dermatitis in Greenland; distinct genotypes, phenotypes and immunotypes. She received a joint PhD degree between Ilisimatusarfik and University of Copenhagen. The PhD defense was held at University of Copenhagen.

PhD supervisors: Jacob P. Thyssen, Anders Koch, Lone Skov

Assessment board: Simon Francis Thomsen, Christian Vestergaard and Julia-Tatjana Maul

#### PhD course on Sharing Circles, CBPR and Qualitative analysis

This year with financial support for Ilisimatusarfik we held a 2,5 day PhD course on qualitative methods and analysis. Five PhD students and one Master student attend the course and learned about Sharing Circles as a research method, applying a community-based participatory research method, and qualitative analyzes applied to their own research project.

Professor Christina VL Larsen led the course, and together with research coordinator Ingelise Olesen introduced students to Sharing Circles as a method and how it is applied in the Arctic context. Professor Siv Kvernmo taught on community-based participatory methods and gave examples on how the method is applied in research projects. Finally, Professor Tine Tjørnhøj-Thomsen gave a lecture on qualitative analysis and theory, and students had the opportunity to apply the analytical method I-poems on their own research data.



#### **NUNAMED** posters on tour

After the Greenlandic medical conference NUNAMED in 2022, the scientific posters left behind by researchers were gathered. In 2023, some of the posters were sent to the regional hospital in Qaqortoq and Aasiaat.

In Qaqortoq, the posters were hung different places in the hospital for everyone to see. The posters gave a breath of fresh air. They were interesting and it was especially smart when posters had a QR code, this way it was easy to find more information about the study.

#### **Arctic Circle Assembly 2023**

The 2023 Arctic Circle Assembly took place on October 19-21, 2023, in Harpa Concert Hall and Conference Centre, Reykjavík, Iceland. Over 2000 people from more than 70 countries participated in roughly 200 sessions.

Speakers included H.E. Lars Løkke Rasmussen, Minister for Foreign Affairs of Denmark; H.E. Dr. Sultan Ahmed Al Jaber, President-Designate of COP28; Senator Lisa Murkowski of the United States, H.E. Mariam Almheiri, Minister of Climate Change and Environment of the United Arab Emirates; Admiral Rob Bauer, Chair of the NATO Military Committee; and more.

Presentations from health researchers at Greenland Center for Health Research was also on the conference agenda. Some of the panel presentations were:

- One health, one Arctic, one community
- Youth networks through mental wellbeing projects
- Ileqqussaasut: an ethical framework for research in Greenland
- Indigenous health and well-being: The Lancet Commission on Arctic and northern health
- Knowledge as raw material Greenland's national research strategy 2022-2030
- Personal stories in science communication: a useful tool for scientists in Greenland





#### Greenland Science Week 2023

Motzfeldt Jensen

Greenland Science Week is a multi-disciplinary Arctic science platform for networking, cooperation & public outreach. Health Research had a big impact at the conference. Here is some of the presentations:

Keynote: Karsten Fleisher Rex, Queen Ingrid's Hospital

Gert Mulvad: The Vision for Health Research in relation to the Budget for Health Services Mads Mose Jensen: Sleep Apnea Among High Risk Groups in Greenland Mie Møller: Immune response to COVID-19 vaccination in Greenlanders Building the Future – Early Career Scholars Moderator: Nick Duelund, Ilisimatusarfik. Ivalo Adolfsen Arnfjord, Ivalu Katajavaara Seidler, Mads Bjørnsen, Mette Malene





Photo: Greenland Science Week

### Contaminants in Arctic wildlife and humans in the Arctic - cross-cutting issues; Workshop 23-25 May 2023, Sandbjerg, Denmark

This workshop was a part of a long-term process to develop more integrative activities among AMAP expert groups working on contaminants and their associated effects in wildlife and in humans. The objective of this activity is to bring together experts in relevant fields to provide input to assist the development of future work under AMAP with respect to contaminant / wildlife / human health monitoring and related assessment activities, and to work on specific cross-cutting topics.

There were established four cross cutting writing groups:

- 1. Zoonosis
- 2. PFAS-cases
- 3. Health effect
- 4. CEACs (Human exposure to chemicals of emerging Arctic concern). These wildlife-human cross-cutting writing group aims to write four cross-cutting manuscript during the next year (2023-2024).

### Lancet Commission Project – Informal side meeting at Arctic Circle Assembly, October 20, 2023

There was a consensus to push working groups and individuals to conclude the report work for submission to Lancet by December 31, 2023. This ambitious but necessary deadline will likely include the work of 2-4 individuals reviewing the draft report from Introduction to Conclusion for actual finalization.

This discussion was related to possible gatherings and/or venues for the launch of the report and generally on the "afterlife" of the Report. This led to reference of the following gatherings for potential launch events:

- UArctic; ICAS; and High Note combined in May 29-June 2 with meeting day before in DK or Norway.
- International Congress on Circumpolar Health in Yellowknife with a meeting day before or following June 18-20, 2024.
- Arctic Circle Assembly October 17-19, 2024 to launch and promote the report.

Review of the ACA 2023 panel and the order of speakers resulting in the format shown below. The well attended panel, held in a large room, included our presentations as well as comments and questions from the audience:

- WELCOME Lisa Adams and Dalee Sambo Dorough
- Lisa Adams, Dartmouth College, USA and Dean for Global Health, and Director of Dartmouth College Center for Health Equity: Connecting human, animal, and planetary health in the Arctic.
- Gert Mulvad, Greenland Center for Health Research, Institute of Health and Nature: Nature, nutrition, culture and wellbeing: one-health and mental health perspective.
- Christina Viskum Larsen, National Institute of Public Health, Denmark and Research
  Associate, Center for Health Research in Greenland: Transforming epidemiology to
  support Arctic communities to continue thriving.
- Gwen Akearok Healy, Director of the Qaujigiartiit Health Research Centre in Iqaluit: Taking action on Arctic indigenous people's health and wellbeing.
- Dalee Sambo Dorough, University of Alaska Anchorage, Senior Scholar, and Special Advisor on Arctic Indigenous Peoples: Arctic indigenous people: our integrity and wellbeing.





#### Nordic Conference of Nursing Research 2023

In 2023 the Institute of Health and Nature were attending the Nordic Conference of Nursing Research Jette Marcussen were involved in three presentations together with Silvia Isidor and Lene Seibæk.



## COMING ACTIVITIES IN 2024

#### **SAVE THE DATE!**

The Canadian Society for Circumpolar Health is hosting 18th International Congress on Circumpolar Health in Yellowknife from June 18-20th 2024.

Details about registration, program and schedule (including the call for abstracts, deadline March 15, 2024), sponsorship, travel information, and volunteer opportunities are posted on the website https://csch.ca/icch18/

NUNAMED conference 2025. The 12th Greenlandic medical conference NUNAMED will take place from the 3rd to 5th of October 2025.

Paasisavut, a competition for Ph.D. students conducting research in Greenland, will be held again in winter 2024. The competition is organized by Arctic Hub and Ilisimatusarfik. The winner of the competition receives a cash prize.



In 2023, Ph.D. student Nick Duelund won the competition with a presentation on his Ph.D. project focusing on vision screening for Greenlandic children. He presented his project, along with four other researchers, in a live show at Katuaq, which was broadcasted on KNR.

Further information on location, time, and registration will be posted soon on the website www.paasisavut.gl.

#### New grief counseling education

In 2024 at the Institute of Health and Nature Jette Marcussen and Anne Kleist Egede is involved in the planning of a new grief counseling education (diploma) to be held for the first time in the autumn. The education will be qualifying for working as a grief counselor in practice and having the knowledge to understand and support people in clinical practice having challenges with grief. The education will be developed in cooperation with the National Center of Grief.

#### PhD courses

A working group from GCHR is currently examining the opportunity to establish yearly/semi-yearly PhD courses at Ilisimatusarfik. The examination is in its early phase, and we are currently researching which topics to include as PhD courses, possible collaborators, and the format of the courses to ensure sustainability and local integration.

#### Arctic Medicine optional course for medical students

The Centre for Arctic Health and Molecular Epidemiology, Aarhus University will again run the course "Arctic Medicine optional course for medical students" being offered for more than 10 year – always filled up with the given limited number of students of 30 students. The course includes arctic experienced teachers from Greenland, Copenhagen, Aalborg and Aarhus.

#### Self-arranged clinic stays for medical students in Greenland and Nordic Countries, Aarhus University

For several years, The Centre for Arctic Health and Molecular Epidemiology, Aarhus University have coordinated the "Self-arranged clinic stays for medical Student in Greenland and Nordic Countries". In general, between 10-16 medical students plan to have a clinical stay in Greenland (most students) or Nordic Countries. The Centre coordinate the stay involving 1) stay description to obtain prior approval by the Board of Studies; 2) selection of external supervisors; 3) supervision during the clinical stay; 4) selection of co-assessor of the final clinical stay report: 5) assessment of final clinical report of the stay.

### NEWS FROM RESEARCHERS AND RESEARCH GROUPS

Associate Professor Carsten Juul Jensen, Institute of Health and Nature, Ilisimatusarfik

#### Development of Nursing Education

The Institute of Health and Nature has initiated two projects based on the insights gained from the "Well-being, Education, and Retention in the Nursing Profession" project (see Jette Marcussen)

These projects involve an action research design developed in collaboration with students, newly qualified nurses, and employees in the nursing education and healthcare system. Currently, the research team has conducted 115 hours of participant observations and 39 interviews with students and health professionals at hospitals, health centers, and stations in all five regions in Greenland.

The preliminary data reveal that everyone is diligently working to provide nursing care for patients despite challenges. However, there is a need for the development of activities that promote well-being among nursing students (see Jette Marcussen) and for the enhancement and revision of nursing education to better align with the conditions in the Greenlandic healthcare system. This ensures that newly qualified nurses are better prepared for a career in Greenland.

The existing data, along with current descriptions of working conditions in the healthcare system, will be analyzed with the aim of developing a desirable nursing education and identifying opportunities for feasible implementation within the existing framework for education and work life.

This project entails the production of a "Greenlandic textbook for nursing students" for which funding is secured by Ilisimatusarfik's Strategic Research & Development Pool. There is an urgent need to complement existing textbooks based on cases from nursing in Denmark, to which Greenlandic nursing students may feel alienated during clinical placements. Currently, authors are writing chapters for the book, estimated for publication in September 2024.

#### Jette Marcussen, postdoc, Institute of Health and Nature, Ilisimatusarfik

#### Well-being, education, and retention in the Greenlandic nursing profession

Since autumn 2022, the Institute of Health and Nature has been cooperation of two research projects lead by Jette Marcussen and Carsten Juul Jensen in cooperation with employed in the institute and at DIS to develop knowledge about well-being, education, and retention of the nursing profession. The lack of nurses and health professionals in the Greenlandic health care system is a multi-faceted problem, and the Greenlandic society needs education and retention of more nurses to promote the health in the entire country. This is also a target in the Greenlandic health conciliation 2023. Jette Marcussen have led one of the projects focusing on mental health and wellbeing challenges in students experiencing trauma, loss, and grief and need of support. The projects have developed knowledge through more than 20 interviews with nursing students and newly educated nurses and several hours of participant observations identifying knowledge of the impact of trauma, loss, and grief in students' daily life and wellbeing, resulting in their considerations and capabilities of retention in their education. The studies will be published in 2024.

Jette Marcussen, Carsten Juul Jensen, Anna Kleist Egede, Silvia Isidor, Lene Seibæk



The development, testing and evaluation of a well-being interventions target nursing students' well-being and retention in education

In 2023 we have started planning an intervention as a PhD study targeting well-being promotion of the nursing students, when they experience traumas, loss and grief impacts their wellbeing, retention, and education. The intervention will be developed through co-creation based on data from the above studies it will be inspired by the MRC framework of developing complex intervention. The intervention will be feasibility tested and evaluated. The project is planned to be developed and executed in cooperation between the Institute of Health and Nature, SDU and Aqqut.

Personal experiences of living with sucrose intolerance and attitudes towards genetic research in Greenland

In 2023 the Institute of Health and Nature in cooperation with Steno Greenland have finished a user study about Greenlanders experiences of living with sucrose intolerance and their attitudes towards genetic research. We identified that Greenlanders experience several physical symptoms of sucrose intolerance having impact on their emotional and social life. They lack more information and support from health professional. However, they are very open to research also, genetic research. They are motivated to be part of investigations by the need in Greenland of more knowledge, but also the possibility to meet a medical doctor. The results have been submitted for publication.

Silvia Isidor, Ninna Senftleber, Marit Eika Jørgensen, Lene Seibæk, Jette Marcussen

#### Lene Seibæk, PhD, RN, Professor, Institute of Health and Nature, Ilisimatusarfik

Involved in the following ongoing studies:

- Children with otitis media and their parents Improving treatment efforts through parental involvement. Project group; Monica Nedergaard Ejsing, Malene Nøhr Demant, Preben Homøe, Jette Marcussen, Carsten Juul-Jensen, Ramon Gordon Jensen & Lene Seibæk (head of project). Project period; 2021-2024
- Living with Uncertainty in Old Age. Ageing in Uummannaq, Greenland. Project group; Mette Schlütter, Tenna Jensen, Janne Flora, Lene Seibæk (main supervisor). Project period; 2024
- Patient education in Greenland: Development and feasibility testing of an intervention to patients with diabetes and chronic obstructive pulmonary disease.
   Project group; Maja Hykkelbjerg Nielsen, Annesofie Lunde Jensen, Michael Lynge Pedersen, Lene Seibæk (main supervisor). Project period; 2022-2026
- Retention of nurses in education and working life. Project group; Carsten Juul-Jensen, Jette Marcussen, Anna Kleist Egede, Lene Seibæk (project responsible).
   Project period; 2022-2025
- Mental well-being in education support for nursing students who experience loss, grief and trauma. Project group; Jette Marcussen, Carsten Juul-Jensen, Anna Kleist Egede, Lene Seibæk (project responsible). Project period; 2022-2025
- Mapping and needs analysis of prevention, detection and treatment of tuberculosis among socially vulnerable population - groups in Greenland. Project group; Christine Ingemann, Anna Kleist Egede, Lene Seibæk (project responsible). Project period; 2024-2025

#### Steno Diabetes Center Greenland (SDCG)

#### Activities in 2023

- Data collection as part of the POLAR (The imPact of seasonal and secular climate
  variations and short-term cOLd exposure on cardiometabolic risk markers in ARctic Inuit)
  project is underway: The first participants have undergone PET scans before and after
  cold exposure, successfully demonstrating the activation of brown fat. Qualitative data
  has been collected from hunters and fishermen regarding perceptions of cold, weather,
  and light for health. Meteorological data has been linked to metabolic data from
  population studies, analyzed, and the first conference abstract has been submitted.
- Planning for a high-intensity training study in carriers and non-carriers of a diabetes variant in the TBC1D4 gene is complete, and the study will commence in Nuuk in February 2024.
- A project has been initiated to explore the development of overweight and obesity in Greenland, including their causes and disease burden
- Data collection for the sleep apnea study, SLEAP, has been completed in Nuuk.
   Preliminary results show a high prevalence of sleep apnea among patients with diabetes and severe obesity. Diagnosis and treatment are implementable, and the project continues in Ilulissat among the same patient categories, with data collection initiated in the fall of 23 and continuing in 2024.
- As part of a PhD study on peripheral and cardiac autonomic neuropathy in Greenland, it
  has been demonstrated that a high Inuit genetic admixture increases the risk of these
  conditions. However, the study cannot clarify whether the underlying explanation is
  genetic or related to lifestyle factors.
- Registry studies have shown that the prevalence in Greenland of asthma and COPD is low but likely underdiagnosed. The same applies to kidney disease.
- Projects about patient education have shown that patients with type 2 diabetes and COPD experience a high self-perceived disease burden and stigma. The CAT symptom score for use in COPD treatment has been validated, providing valuable groundwork for organizing patient education in SDCG.
- Finally, a registry study has documented that the quality of diabetes treatment in Greenland is high and increasing after the establishment of SDCG compared to 2018. However, there are significant geographical differences, with generally lower quality in smaller towns compared to regional centers. This suggests that successful regionalization of healthcare in Greenland requires special efforts to address decentralized treatment facilities.

#### Conferences and Outreach

Researchers from SDCG presented results at various national and international conferences in 2023, including meetings of the Greenland Medical Society, Greenland Science Week, the European Diabetes Epidemiology Group Annual Meeting (EDEG, Holland), the European Association for the Study of Diabetes (EASD, Hamburg), and the Danish Oto-rhino-laryngologists' Annual Meeting. Greenland Science Week featured presentations by all SDCG researchers, and an "Open House for Health Research" was organized in Katuaq, where approximately 100 Nuuk residents participated in lectures and had the opportunity to "try out" research methods from the center's studies. Ongoing research dissemination occurs through SDCG's website and social media, and in 2023, SDCG hosted two podcasts on sleep apnea and screening for diabetic eye disease through Diabetes Researchers.





#### Data transfer to Greenland

Since 2021, SDCG has aimed to take home Greenlandic research data collected in the Greenlandic Population Studies for a PhD study on time trends in obesity in Greenland. A data transfer agreement has been prepared by the University of Southern Denmark, awaiting approval from Greenland Statistics. Data documentation is in progress and is managed by a local statistical consultant, ensuring a complete dataset upon retrieval, including survey data for >5000 adult Greenlanders collected over 25 years.

#### Positions of Trust

SDCG employees hold several national and international positions of trust. Marit Eika Jørgensen is a member of the advisory board for the German Diabetes Academy (DZD), a member of the Scientific Committee for EASD (The European Association for the Study of Diabetes) 2024 in Madrid, and vice-chair of EDEG (European Diabetes Epidemiology Group). Michael Lynge Pedersen is a member of the board for the local branch of the Greenland Medical Society.

#### Centre for Arctic Health & Molecular Epidemiology University of Aarhus

Center researchers: Professor Eva Cecilie Bonefeld-Jørgensen, Associated Professor Manhai Long, Assistant Professor Maria Wielsøe, Scientific Assistant Jesper Schmidt Pedersen

During year 2023 we have finished three Greenlandic research projects:

#### Biomonitoring and health for ACCEPT children and parents: cohort following up - BioSund-ACCEPT

The project BioSund-ACCEPT Phase 1 and 2 is a follow-up biomonitoring of ACCEPT Inuit women included during their pregnancy in the period 2013-15, the father and the ACCEPT child (age 3-5 years). In Phase 1 of BioSund-ACCEPT 2018-2020, data were collected from 101 families including 101 ACCEPT mothers, their child (102) and the father (76); 69 from Nuuk, 11 from Ilulissat and 21 from Sisimiut (1 family with 2 children). BioSund-ACCEPT has the following specific purposes: 1. POP biomonitoring of ACCEPT parents by blood tests and the child by bloodspot and hair analyses; 2. Interview follow-up of the ACCEPT mother and father for overall characteristics (age, BMI, smoking, number of births, breastfeeding periods, diet and lifestyle changes, etc.); 3. Interview of the parents about the child's development and health (age 3-5). The BioSund-ACCEPT Phase 1 and 2 project contributes to continued temporal and geographical POP biomonitoring in Greenland of both sexes and children as well as their diet and health. In the long term, these data can form the basis of a valuable source for elucidating and understanding the role of exposure sources, lifestyle factors and trends over time on the health of women and their children in Greenland.

The current BioSund-ACCEPT research results have contributed to the following conclusions:

- Grouleff et al. 2021. IJCH 2021, VOL. 80; https://doi.org/10.1080/22423982.2021.1954382.
   Children of mothers smoking during pregnancy have higher hip circumference, lower waist/hip ratio and higher diastolic blood pressure. The prevalence of overweight and obesity was higher than previously reported and maternal smoking during pregnancy affected the child data.
- Kornvig et al 2021. Scientific Reports 2021, 11:22182; https://doi.org/10.1038/s41598-021-01580-0. Prenatal organochlorine pesticide exposure associated significantly with problematic behaviour.
- Wielsøe et al. 2022. Science of the Total Environment 827 (2022), 154270; http://dx.doi.org/10.1016/j.scitotenv.2022.154270. The mothers' POP concentrations from inclusion to follow-up (3–5 years later) decreased, POPs were higher in fathers than in mothers; POP differed by residential town with concentrations Ilulissat > Sisimiut and Nuuk; very low concentrations of halogenated flame retardants.
- Wielsøe et al. 2023 (submitted). The mothers metal concentrations changed from inclusion at pregnancy to follow-up (3-5 years later); increased (Fe, Mg, Se, Zn, As, Hg, and Pb) and decreased (Ca, Cu, Mn, Cd, Cr); some metals differed between mothers and fathers (Cu, Mg, Se, As, Cd, Hg). Traditional marine food intake associated positively with Se, As, and Hg and inversely for Zn. A high percentage (25-45%) exceeded the international guidance values for Hg.

Wielsøe et al. 2024 (in preparation): Child follow-up at 3-5 years. POP exposure can increase
the risk for referral of the child to a psychologist; exposure to heavy metals (As, Pb, Hg) can
cause later physical ability of the child to start standing; exposure to Hg can lower the child's
diastolic blood pressure.

#### Levels and Temporal Trend of Phthalates in the Greenlandic Population (manuscript in preparation; Long, Wielsøe, Bonefeld-Jørgensen)

Project aim: evaluates the levels and temporal trend of phthalate exposure in adult Greenlanders by measuring the urinary concentrations of phthalate metabolites.

Background: Phthalates are plasticizers in daily life products. Human are exposed to phthalates through food, air dust, water, personal care products and medical devices. Phthalates are reproductive and developmental toxicants and can elicit adverse health effects in humans. As far we know, there are no reports on urinary concentrations and the temporal trend of phthalates in Greenlanders. The project includes 602 adults across Greenland during 2000-2019.

Results & conclusions: We observed varying trends in urinary concentrations of phthalate metabolites in relation to demographic and lifestyle. Generally, urinary concentrations of phthalate metabolites tended to be higher at older age, women, overweight & obese, and high marine fatty acid and lower education level. Smoking may influence certain phthalates. The concentrations of phthalate metabolites differed among the regions; east participants had higher levels. Among women, pregnant women had lower urinary concentrations for most phthalates metabolites. Parity influenced the urinary concentrations of some phthalate metabolites.

## Does exposure to persistent environmental contaminants (POP) pose a risk of developing allergies and respiratory diseases? (manuscript in preparation; Wielsøe, Bønløkke, Rasmussen, Sigsgaard, Ebbehøj, Bonefeld-Jørgensen)

Project aim: investigate the connection between exposure to POP and risk of allergy and respiratory diseases among 365 Greenlandic adults (16-68 years old) being seafood processing workers.

Results & conclusions: The POPs levels are higher in men than women and increase with age and serum selenium. The POP concentrations differed significantly with the ethnic background of the participants, and only the Inuit population were included in the final analyses. The working place was also a determinant of the PFAS concentrations, but not for the lipophilic POPs. The PFAS concentration were to some degree associated with lung function, but not with asthma and atopy.

#### New researcher

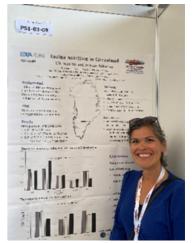
March the 1st 2023 scientific assistant Jesper Schmidt Pedersen was employed for three years to develop SPE-HPLC methods for determining the actual effect on cellular mechanisms of POP mixtures in tissue and blood.

#### Collaborations with Arctic Health Research Centre in Aalborg 2023

The past year of collaboration with Aalborg University has focussed on arrythmia of the heart, iodine nutrition, balance, and we have seen the emergence of data collection of brown adipose tissue: "Fat that burns Fat" to quote Mette Motzfeldt conducting the study.

The collaborative PhD-students at Ilisimatusarfik and Aalborg University have once again contributed interesting research and reports to our community:

1) **Paneeraq Noahsen** reported an unprecedented low occurrence of thyroid autoimmunity among Greenlanders last year extending her findings of a thyroid disease pattern suggesting a need for higher iodine intake levels. The pivotal question pertains to the iodine intake, which was presented in Milan by Paneerag (picture right).



- 2) Nadja Albertsen published an additional two papers on cardiac arrhythmias in Greenland in Stroke and J Clin Med on stroke among young Greenlanders and an evaluation of Holter monitoring of stoke patients at DIH. The analysis of population-based data collected in 2022 were finalised and the fifth paper submitted to support her joint PhD at Ilisimatusarfik and Aalborg University in collaboration with the Department of Internal Medicine at Queen Ingrid's Hospital and the Clinic for General Medicine in Nuuk. Her thesis has been submitted for evaluation with an expected defence in 2024.
- 3) **Jacob & Mads** collected data on balance and muscle strength under the hypothesis that wandering the vast moorlands and peaks of Greenland requires or develops an extraordinary capability and balance. How does this come about? And can we measure and assess these peculiarities? We'll se in the year to come! Their Master thesis has been submitted for defence in January 2024 and scientific reporting of the data is well underway as well.



4) Mette Motzfeldt Jensen raised the public awareness at Greenland Science Week that BAT is not an animal, but rather another human peculiarity that is indeed convenient to host when living in Greenland. Her presentation added to the recruitment of participants for the study of activity of Brown Adipose Tissue, 'the fat that burns fat', as she puts it. The data collection is logistically and technically complex, and the late nights in the PET cellar with cooling, biopsies, tissue meddling in



fluid nitrogen, and timed blood samplings is like watching a symphonic orchestra playing a piece on Greenlanders and Caucasian Danes in the hospital crypts.



5) **Karsten Rex** continues his efforts to improve understanding and treatment of hepatitis B virus infection among populations in Greenland in addition to his strong and steady clinical commitment to improve health in Greenland. The report on inflammation as a contributor to differences in lifespan depending on HBV exposure in collaboration with Henrik Krarup at the Department of Molecular Diagnostics in Aalborg was just a stepping-stone for future reports on health in Greenland.

Should the Faroe Islands be part of, or partners with the Arctic? The Faroese share dietary peculiarities with similar influence on iodine nutrition as shown in a paper published in 2023. Moreover, the changes in nutrition with fading intake of local foods pose parallel challenges to the Faroese society as to that of Greenland. These shared questions and challenges

contributed to the discussions at the Iodine Global Network meeting and the Annual Meeting of European Thyroid Association in Milan in September 2023



In conclusion, everyday health issues and puzzling observations inform the research questions and collaborative research that is a hallmark of Arctic Health Research Centre in Aalborg. This dedication spans over 25 years of research and search for answers to improve health and health-education in Greenland, giving promises for continuing intriguing investigations in 2024.

Stig Andersen MD, PhD, PGCME, Professor, Head of Department, Aalborg University Hospital;

AAU Arctic & Ilisimatusarfik

### **NEWS FROM PHD STUDENTS**

#### Ivalu Katajavaara Seidler

Risk factors, protective factors, and risk patterns for suicide in Greenland - A systematic approach based on registers and existing knowledge

I am in the final stages of my Ph.D. process and published the first two of three papers during 2023. Much of my time has been spend disseminating and sharing the knowledge from my research to fellow researchers, organizations, the media, and laymen. The results of the first two studies have been included in the National Suicide Prevention strategy Qamani, and I have participated in the working group during the development of the strategy and as part of the implementation by participating in the steering committee meetings. Further I have been appointed to represent Ilisimatusarfik (chair) in the National Alcohol and Drug Advisory Committee.

#### Hjalte Erichsen Larsen

Heart Failure among the Greenlandic population

The PhD project investigating heart failure and cardiovascular disease among Greenlanders is nearing completion. In 2023, progress was made with the final two studies of the program. Firstly, an analysis of registered diagnoses from 1994 to 2021 in the electronic medical records revealed the incidence rates of various cardiovascular diseases, including ischemic heart disease, myocardial infarction, stroke, heart failure, and atrial fibrillation/flutter. Notably, the incidence of registered stroke diagnoses is high, and there is an increasing trend in atrial fibrillation/flutter diagnoses. Additionally, the frequency of myocardial infarction among men has risen compared to previous years. Except for heart failure, all unadjusted incidence rates have risen.

This study has been submitted for publication.

The second study involved genetic screening of Greenlanders with heart failure, focusing on genes associated with dilated cardiomyopathy (DCM). Preliminary results suggest a low prevalence of DCM-associated genetic variants, suggesting to a distinct genetic predisposition for DCM in the Greenlandic population. This paper is currently being prepared for submission.

The PhD project is scheduled to conclude on January 12, 2024.

#### Mads Mose Jensen

#### Sleep apnea in Greenland

In the past year, inclusion for my PhD project focusing on the diagnosis and treatment of sleep apnea has made significant progress. Although I was on paternity leave from April to July, we managed to continue enrollments with the help of a medical student. We have successfully enrolled 220 participants and have recently moved enrollment to Ilulissat. We anticipate that inclusion will end in the first quarter of 2024, where we hope to reach close to 300 participants. Preliminary results show that around one-third of participants are in need of CPAP treatment, which correlates well with our expectations. We have received positive feedback from both participants and the public, where many people are interested in participating, highlighting the need for development in this field in Greenland.

#### Maja Hykkelbjerg Nielsen

Patient education in Greenland: Development and feasibility testing of an intervention to patients with diabetes and chronic obstructive pulmonary disease

Maja Hykkelbjerg Nielsen, a PhD student at Steno Diabetes Center Greenland, Ilisimatusarfik and Aarhus University, is on maternity leave. She will return to her PhD project during the summer of 2024.

In her PhD project, Maja investigates what living with a chronic disease is like and what knowledge you need. Furthermore, the project will examine healthcare professionals' experiences with patient education and include perspectives from clinical practice. In the final part of the project, a patient-educating intervention will be developed with people with type 2 diabetes or chronic obstructive pulmonary disease, which will be tested on a group of people with type 2 diabetes or chronic obstructive pulmonary disease.

In May and June 2023, Maja visited UiT, The Arctic University of Norway, in Tromsø on her research stay. Maja was inspired in several ways by how the patient-educating intervention could be organized here.

#### Julie Flyger Holflod

Evaluation of the implementation and effects of the national treatment service for alcohol and other addictions, Allorfik

In 2023, Julie has been working to finalize her last PhD articles and the last sub-study. In the final sub-study, Julie collaborated with Greenland's Statistics and investigated the mortality among individuals who have been in treatment for substance abuse issues from 2012-2022. In October, this study was completed, and Julie submitted her PhD thesis on November 1st.

#### Nadja Albertsen

#### Cardiac Arrhythmias in Greenland

2023 has marked both the end of the clinical study of my PhD ("Cardiac Arrhythmias in Greenland") and my somewhat unusual study abroad, which brought me to the Geographic South Pole (on skis) as part of the Inspire22 Research Expedition. Additionally, paper 3 "Is the Pattern Changing? Atrial Fibrillation and Screening with Holter Electrocardiograms among Ischemic Stroke Patients in Greenland from 2016 to 2021" was published in Journal of Clinical Medicine in August, and paper 4 "Ischemic Strokes are Common Among Young Greenlanders" was published in Stroke in October. Both papers are based on a data set from ischemic stroke patients discharged from Queen Ingrid's Hospital between 2016 and 2021, and the results indicate that ischemic strokes are still quite common in Greenland, and that the patients are young compared to patients in Denmark. In addition, atrial fibrillation is seemingly less common among this group of patients than previously, but there may be some level of underdiagnosis.

Now, I am finishing paper 5, which concludes the clinical study and describes the prevalence of atrial fibrillation among the population aged 50 years and older in Nuuk. And, perhaps most important, I am writing my thesis, which will be handed in at the end of the year as the grand finale, marking the near end of three years full of learning and developing as a researcher.

#### Mie Møller

#### Aspects of the COVID-19 pandemic in Greenland

In 2023, upon returning from maternity leave, I spent most of my time finalizing two studies on the COVID-19 vaccine-induced immune response in Greenlanders and long-COVID (a collaboration with my colleague, Trine Abelsen) in Greenland, respectively. The results revealed that Greenlanders exhibited a robust and long-lasting immune response following vaccination against COVID-19, similar to other populations. Additionally, when the Greenlandic population was infected with COVID-19, they experienced a mild acute course, with over 50% fully recovering within four weeks after infection. There appears to be a slightly increased risk of experiencing long-COVID symptoms such as fatigue and mental exhaustion up to 12 months post-infection. Both studies support the general assumption that Greenland had a relatively mild experience with the pandemic and that interventions implemented by the authorities, such as vaccinations, protected the population against severe COVID-19 disease. The first article is currently under peer review, and the second is submitted.

Furthermore, I moved back to Nuuk with my family after an exciting year at Statens Serum Institute. I am now halfway through my project and planning on completing the last two studies, which are based on health registries. One study is evaluating the effectiveness of the COVID-19 pre-travel screening program, and the other is investigating the impact of the pandemic on the prevalence of other respiratory infections in Greenland.

#### **Nick Duelund**

#### Vision Screening in Greenlandic Children

Nick Duelund is in his third year of his PhD project 'Vision Screening of Greenlandic Children'. The project comprises three parts:

- 1) 'Visual Acuity and Refraction of Schoolchildren in Greenland'. This part is ready to be submitted to a scientific paper.
- 2) 'Vision Screening of Preschool Children'. The data collection for this segment was conducted in six cities in Greenland. The results are nearly complete and will propose a new method for vision screening of preschool children in Greenland.
- 3) 'Quality Assurance of Vision Screening of Schoolchildren in Greenland'. Data from this project will give an overview of the current vision screening program. In 2023, Nick presented results from the second part of his project at the World Society of Paediatric Ophthalmology and Strabismus subspeciality day in Vienna. Nick won the research dissemination competition 'Paasisavut' for best presentation of his

Nick won the research dissemination competition 'Paasisavut' for best presentation of his project. Nick is double enrolled at Ilisimatusarfik and the University of Copenhagen and is currently based at the University of Copenhagen. He is expected to complete his project in 2024 with the publication of his thesis. The PhD defence is scheduled to take place at Ilisimatusarfik in Nuuk at the end of the summer.

#### **Upcoming PhD-projects**

#### Evaluation of the Eczema School in Greenland

Skin disease in the Greenlandic population constitutes around 25% of all inquiries with the healthcare system. Approximately 30% of Greenlandic children have or have had

problems with atopic dermatitis. Therefore, Lone Storgaard Hove and her team have developed an Eczema School. The school is rooted in Greenland and will teach parents, daycare staff, and healthcare professionals throughout Greenland about atopic dermatitis. An evaluation of the Eczema School aims to ensure that the initiative is beneficial for Greenland. The school will be evaluated in a respectful and reciprocal partnership between Greenland and Denmark, in a pilot project over three months by



Casper Milde Khatib and his supervisors Kristina Ibler from the Bispebjerg University Hospital Department of Dermatology and Lone Storgaard Hove from Dronning Ingridip Peqqissaaviat Department of Dermatology. During Casper's work with the Eczema School, he will be working on a protocol for a future PhD project planned to be carried out in the Greenlandic and Danish partnership.

#### Obesity in Greenland

In 2024, **Helene Nielsen**, will initiate a PhD project focused on obesity in Greenland.

With an MSc in Public Health Science, Helene have an academic background in health with a focus on disease prevention and understanding how individual and societal determinants affect disease development. Obesity is an increasing and major public health concern in Greenland. The forthcoming Ph.D. project will address obesity by investigating the temporal trends, risk factors, and comorbidities associated with obesity. By providing a nuanced understanding of obesity specific to the Greenlandic population, we hope that the project provides important knowledge relevant to the Greenlandic healthcare system, policymakers, and public health



experts. The PhD project is a collaboration between a cross-disciplinary group of researchers from Ilisimatusarfik, Steno Diabetes Center Greenland and the University of Copenhagen.

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#### **Posters**

 Albertsen N. Atrial fibrillation among ischemic stroke patients in Greenland from 2016-2021. DCAcademy Summer Meeting 2023, Nyborg, DK.

#### Oral presentations

- I. K. Seidler. 'Mental health among Inuit Youth in Greenland', online guest lecture at McMaster University course on Circumpolar health, January 2023.
- I. K. Seidler. 'Risk factors and protective factors for suicide and suicidal behavior in Greenland', presentation at the Social Conference in Nuuk, November 2023.
- I. K. Seidler. 'Suicide in Greenland', Greenland Science Week, Nuuk, November 2023.
- I. K. Seidler. 'Mental health and suicide among youth in Greenland', talk for Foreningen Grønlandske Børn, May 2023.
- I. K. Seidler. 'Mental health and youth in Greenland', presentation for the Danish Youth Organization as preparation for their Kingdom of Denmark seminar on well-being in the member states, June 2023.
- I. K. Seidler. 'Risk factors and protective factors for suicide and suicidal behavior in Greenland', presentation to update the Greenland Department of Health, June 2023.
- I. K. Seidler. 'Suicide in Greenland', invited speaker Greenland Science week, November 2023.
- I. K. Seidler. 'Suicide in Greenland what do we know and how can we prevent it', public talk at Katuaq as part of Greenland Science week, November 2023.
- I. K. Seidler. 'Risk factors and protective factors for suicide and suicidal behavior in Greenland', presentation to update the Health Clinic at Dronning Ingrids Hospital, November 2023.
- I. K. Seidler. 'Risk factors and protective factors for suicide and suicidal behavior in Greenland', oral presentation Socialt Topmøde II, November 2023.
- I. K. Seidler. 'Mental health and suicide among youth in Greenland', talk for Det Grønlandske Selskabs Studenterforum, November 2023.
- I. K. Seidler. 'Mental health and suicide among youth in Greenland', talk for the public and Grønlands Medicinsk Selskab, November 2023.
- Albertsen N. Keynote: Inspire22 South Pole Research Expedition. World Extreme Medicine Conference, Edinburgh, UK, November 2023.

- Møller, M. Immune response to COVID-19 vaccination in Greenlanders, Greenland Science Week, Nuuk, November 2023.
- Jensen, CJ. 2023 "Advancing the Greenlandic nursing education to conform with the needs of the population (and healthcare system)". Collaborative Action Research Network Conference, 16.
- Nordic Nursing Research Conference, Reykjavik, 2023: Monica Nedergaard Ejsing, Carsten Juul Jensen, Jette Marcussen, Malene Nøhr Demant Preben Homøe; Ramon G Jensen, Lene Seibæk. Children with otitis media in Greenland – A qualitative study of parents' experiences
- Nordic Nursing Research Conference, Reykjavik, 2023: Jette Marcussen Carsten Juul
  Jensen, Anna Kleist Egede, Silvia Isidor, Naduk Eriksen, Pauline Olesen, Annette Maahr
  Hansen, Louise Lennert Olsen, Lene Seibæk. Well-being, education, and retention in the
  Greenlandic nursing profession.
- Nordic Nursing Research Conference, Reykjavik, 2023: Silvia Isidor, Lene Seibæk, Marit Eika Jørgensen, Cecilie Jørgensen, Ninna Senfleber, Jette Marcussen. Personal experiences of sucrose intolerance in every-day life and their thoughts of participation in health research.
- CARN 2022, Dublin: Carsten Juul Jensen, Jette Marcussen; Anna Kleist Egede; Pauline Olesen; Silvia Isidor; Naduk Eriksen; Annette Maahr Hansen; Louise Lennert Olsen; Lene Seibæk. Project development: Well-being, education, and retention in the nursing profession of Greenland
- ISOM 2023, Milwaukee, USA: Monica Nedergaard Ejsing, Preben Homøe, Malene Nøhr Demant, Ramon Gordon Jensen, Jette Marcussen, Carsten Juul Jensen, Lene Seibæk: A qualitative study of parental experiences and perceptions of otitis media treatment in Greenland
- ICN 2023, Montreal Canada: Carsten Juul Jensen, Jette Marcussen, Anna Kleist Egede, Louise Lennert Olsen, Naduk Eriksen, Pauline Olesen, Annette Maahr Hansen, Silvia Isidor, Lene Seibæk: Research on developing education and retention promoting activities in the nurse profession in Greenland.