

PANDEMIC CENTRE

YEARLY REPORT 2023 / UNIVERSITY OF BERGEN

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THREE YEARS WITH THE PANDEMIC CENTRE

For the third consecutive year, the Pandemic Centre is proud to present its annual activity report for 2023. Over the past year, we expanded our research activity, welcoming a new postdoctoral researcher, a one-year visiting Fulbright student, and several master's students to the Centre. We increased our teaching activity through regular Research Catalyst meetings and offering our now well-established PhD course. We also worked to further disseminate knowledge, foster interdisciplinarity and increase preparedness awareness through monthly Pandemic Breakfasts, several workshops, and our annual research conference in October.

Following our strategy for 2023 to build bridges with international centers doing work similar to our own, we visited and have been visited by experts from the Netherlands to Nepal; as any center working on pandemics should be, we have propelled the Pandemic Centre to the international arena.

The following pages include more details about our activities, our fantastic and generous strategic group, efficient staff communicating with administration and our tireless PhD candidates. As the director of the Pandemic Centre, I am grateful to all of the people who make our work possible.

The Pandemic Centre envisions a society that is better prepared to predict and cope with future pandemics. Learning from the past four years, we know that important steps for preparedness must be taken now. In a world that is constantly moving from one crisis to the next, with competing priorities and interests, we ask: will Norway still have the time, energy and resources to learn from the COVID-19 pandemic?

The COVID-19 pandemic is now history; in a few years it will merely be a story. What will we tell our children and grandchildren? We will tell them bedtime stories that seem otherworldly: masked people who walked down deserted streets, remaining one meter away from all other humans they happened upon.

People who could not visit their families for Christmas or even attend funerals for their loved ones. Grateful to be unmasked and within a one-meter radius, our children will look at us with big, worried eyes. Some of them will ask if these stories may once again become reality.

We will have to answer honestly: "No" will not be an option, because we know that pandemics are inevitable. So, we will start with, "Yes, but..." The decisions we make today will determine how our answer ends. Will the answer be that of the giraffe – who demonstrates foresight, resilience, and perseverance – saying, "Yes, but we have learned a lot since COVID-19 and we will be better prepared if another pandemic strikes"? Or will the answer be that of the ostrich – who avoids problems but ultimately faces greater danger down the line – saying, "Yes, but we hope it does not happen for a long time. Just don't think about it"? Giraffe or ostrich? The choice is now. The Pandemic Centre will keep working for the giraffe's answer, despite the poor ostriches, as hiding their heads turns out to be a mirage of safety.

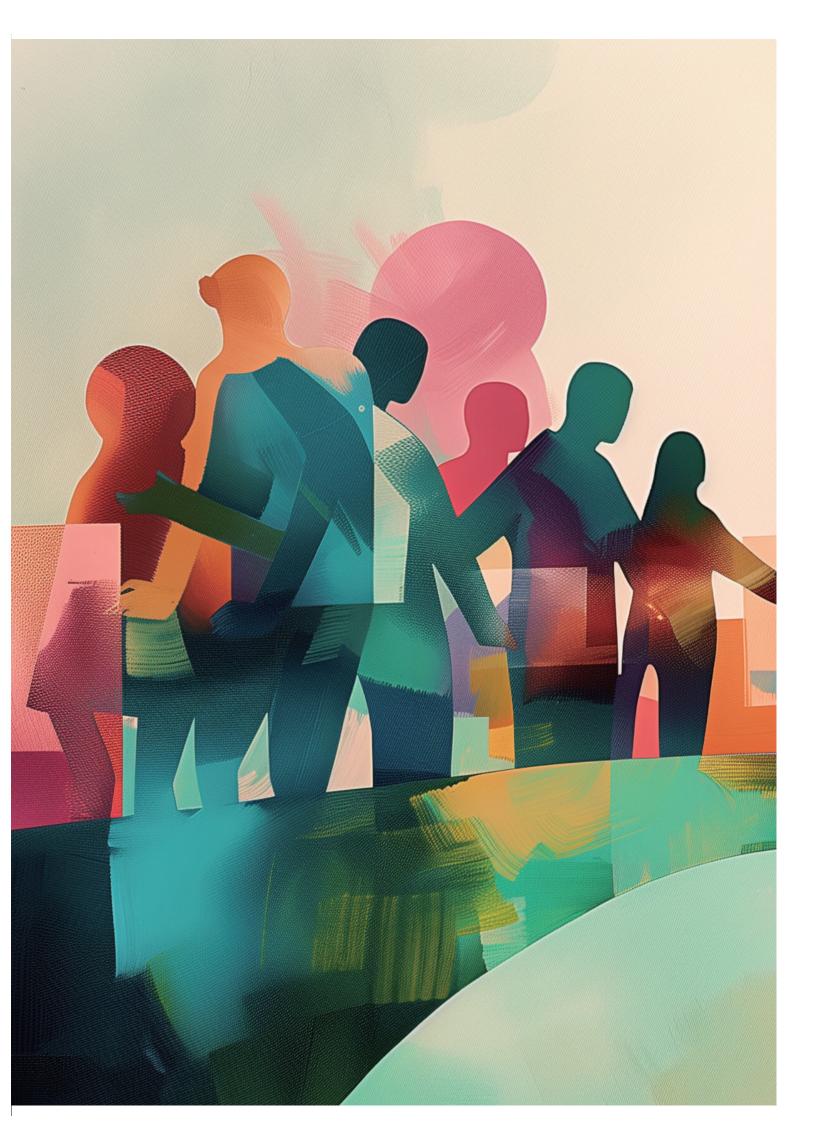
In this effort, we need all of you with us: academics who continue studying the pandemic's long-lasting impacts, healthcare providers who systematically review and update our preparedness plans, policymakers who prioritize their substituents, and society at large, which continues to understand and demonstrate the value of working together for a more resilient future. Let us become wiser and more prepared for health crises by collaborating and coordinating for years to come.

Esperanza Diaz

Leader of the Pandemic Centre

Leder Pandemisenteret





Leadership and Steering Committee



ESPERANZA DIAZLeder Pandemic Centre
Professor Faculty of Medicine



REBECCA COX BROKSTADProfessor
Representantative Faculty of
Medicine



TEEMU SAKARI RYYMINProfessor
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PREBEN AAVITSLANDProfessor II Pandemic Centre



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MAGNUS VOLLSET*Associate Professor
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KIM A. HAUGLANDPhD Candidate
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Natural Sciences



PIERINA BENAVENTE PhD Candidate Faculty of Medicine



PRABJHOT KOURPostdoctoral Fellow
Faculty of Medicine

Master's Students & others students affiliated with the Centre



MARTA-JOHANNE SVENDSENMaster's student at Faculty of
Psychology



TARTEEL ABDALLAHMaster's student at Faculty of Social Sciences



DOUA AHMEDMaster's Student at Centre of International Health



SAI HARISH ADARIMaster's Student at Centre of International Health



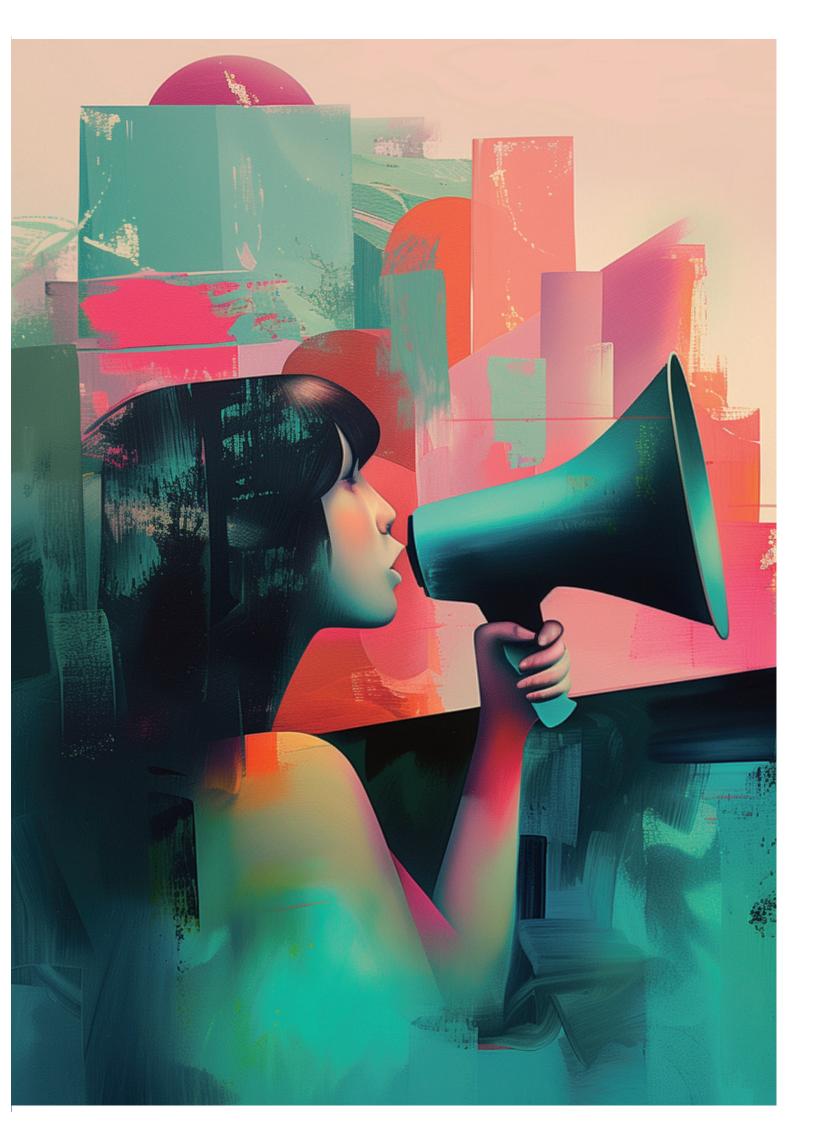
SOLVEIG VEDERHUS & EIRIK MYHREMedical Students, Faculty of
Medicine



LEAH ELIZA BALTERFulbright-Student, Baltimore
USA



Researchers and administrators of the Pandemic Centre celebrating Christmas at the Department's Christmas Party.



PANDEMIC BREAKFAST

The Pandemic Centre organized a total of six breakfast meetings in 2023. In these monthly meetings taking place at Alrek Health Cluster, researchers studying themes related to pandemics present the findings of their projects in duets, combining different disciplines, from psychology to mathematics. The goal is to inspire collaboration and exchange between disciplines in order to understand pandemics from multiple perspectives. The research topics presented at the breakfast meetings were:

26th of January

How did VIZRT, Bergen based software company address the COVID-19 pandemic, Camilla Øyjordsbakken HR Business Partner I Vizrt

How well prepared the emergency medical services were to handle the COVID-19 pandemic, Vivian Midtbø, NORCE

23rd of February

How to communicate news related to the corona virus pandemic in Norwegian Sign Language, Casper Lund, Supervisuell AS

Navigating Crisis: Lessons from Norway's Response to COVID-19, Johannes Sandvik Førde UiB

23rd of March

Data-tool to have an overview of the infection control measures during the pandemic, Truc Trung Nguyen, Norwegian Institute of Public Health (FHI)

Emotional Eating and Changes in High-Sugar Food and Drink Consumption Linked to Psychological Distress and Worries: Elaheh Javadi Arjmandm, Department of Public Health and Primary Care

25th of May

How vaccine skepticism and hesitation can be reduced among various immigrant groups in Norway, Prabhjot Kour, Pandemic Centre

Counter-narratives about COVID-19, Tove Ingebjørg Fjell from the Faculty of Humanities at UiB

24th of August

How concern about climate change changed from January 2020 to January 2021, Thea Gregersen, NORCE

Sleep patterns among Norwegian nurses during the first and second waves of the pandemic, Siri Waage, Department of Social Psychology, UiB

7th of December

How knowledge-based artificial intelligence can be used to model "infodemics", Monica Patrascu, Center for Aging and Nursing Home Medicine (SEFAS)

"Bergen in Change" (BIE) study, Lars T. Fadnes, Department of Global Health and Public Health at UiB



Tove Ingebjørg Fjell (right) from the Faculty of Humanities and Prabjhot Kour, Postdoctoral Fellow at the Pandemic Centre



Elahah Javadi Arjmand at the Pandemic Breakfast on the 23rd of March 2023 at Alrek Helseklyngen.



Helen Koldal, Senior Advisor, Bergen Municipality "

It's really important to have a Pandemic Centre in Bergen. I was very inspired by attending the Pandemic Breakfast, and think that all good forces must join to learn from what must be improved. This is definitely something I would like to attend several times.

LONG-TERM CONSEQUENCES OF THE COVID-19 PANDEMIC ON SOCIETY

On the 27th of October 2023, the Pandemic Centre organized its 3rd annual conference at the Bergen Public Library. This was the first time the conference was set in an international context, with guests coming from both Norway and abroad. The topic for the conference was "Long term consequences of the COVID-19 pandemic on society".

A total 27 abstracts were submitted from countries including Norway, Italy, France, Nepal and Sri Lanka and were presented either as posters (6) or oral presentations (21).

A mixture of 70 researchers, members of civil society, policy makers, health care workers and students composed the audience.

The aim of the conference was to discuss both the long-term, complex consequences of the pandemic and the lessons we can learn for the future to raise awareness about preparedness for a future pandemic or crisis.

Dr. Sylvie Briand, Director of the Epidemic and Pandemic Preparedness and Prevention department (EPP) at the World Health Organization (WHO) and Dr. Erica Charters, Professor of the Global History of Medicine, University of Oxford were our two key-note speakers. In addition, the conference hosted several parallell sessions and panel debates.

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The Pandemic conference held in October at UiB Pandemic Centre has been a significant gathering of excellent experts coming from different fields who were truly contributing to the discussion. From history of medicine keynotes, to mathematical modeling experts, from epidemiologists to sociologists to veterinarians: the setting was open and truly interdisciplinary, fostering sharing of perspectives and experiences across the typical siloes of categorization of scientific disciplines. I feel grateful to have been part of such discussion with my experience of the last 3 years of work carried out in the Periscope H2020 project.



Enea Parimbelli, Assistant professor,
Department of Electrical, Computer and
Biomedical Engineering,
University of Pavia













The conference in numbers: 70 participants, 27 abstracts, 14 research institutions, 3 parallel sessions.

RESEARCH CATALYST

Once a month, master's students and PhD candidates have the opportunity to present their ongoing research projects and receive feedback from one another and senior researchers affiliated with the Pandemic Centre at the Research Catalyst.

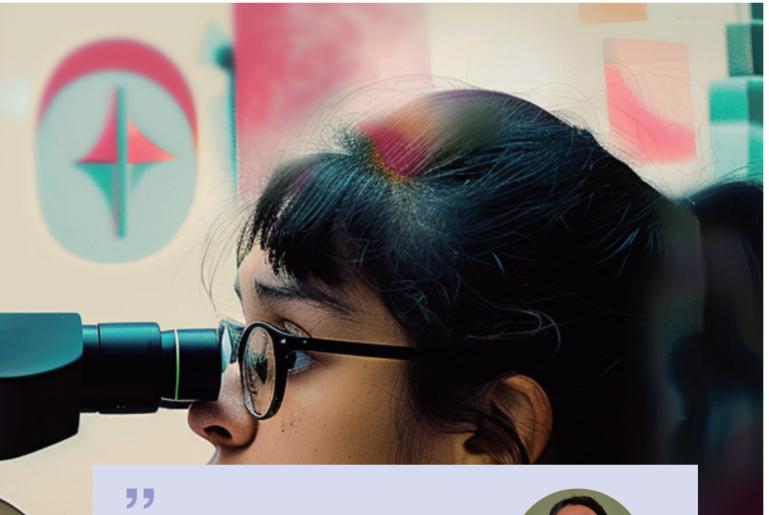
The Catalyst was going strong in 2023, and everything indicates that it will continue to do so in the new year.

During 2023, we had a total of 9 meetings, with topics ranging from vaccine hesitancy and attitudes towards government surveillance during the pandemic, to how a crisis such as COVID-19 can effect people's dietary choices. We also had presentations about general topics that are useful for any academic, such as best practices for conducting qualitative research, and how to improve PowerPoint presentations!

Our presenters have included master's students associated with the Pandemic Centre, PhD candidates from University of Oslo and academic staff from Western Norway University of Applied Sciences (HVL) and Arizona State University.



The Research Catalyst takes place once a month at Alrek Helseklyngen. All students from UiB are welcome to join to present their projects and receive feedback from their peers and the Pandemic Centre's researchers.



At the Research Catalyst, I gained a wealth of knowledge about tools essential for effective research dissemination. The sessions equipped me with valuable skills, such as crafting captivating PowerPoint presentations and effectively communicating key points to engage my audience. The constructive feedback I received on my research project has proven invaluable in refining and enhancing its quality. As I prepare to defend my PhD project, I can clearly recognize the significant benefits derived from my participation in the Catalyst, which has played a pivotal role in my academic journey.



Yeneabeba Sima, PhD Candidate

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The Pandemic Centre Research Catalyst has given me insight into different sides of research on pandemics that I would not have gotten otherwise, and it has given me invaluable experience when it comes to how to present mathematical models to non-mathematicians. Pandemics are a "wicked problem" that profoundly effect society in a multitude of ways. It has been an eye-opening experience to learn about them, and to reflect on the different ways that mathematical models can contribute.



Kim Haugland, PhD Candidate, The Pandemic Centre

INTERNATIONAL COLLABORATION

In 2023, The Pandemic Centre collaborated with several academic institutions outside of Norway.

Pandemic and Disaster Preparedness Center (PDPC)/The Netherlands

In January, the Pandemic Centre was visited by Linda Jansen (Project Manager) and Jeanette de Boer (Head of Education PDPC Academy) from the Pandemic and Disaster Preparedness Center in the Netherlands.

The PDPC is a joint collaboration of Erasmus MC, Delft University of Technology, Erasmus University Rotterdam and Gemeente Rotterdam. Its mission is to prepare society for future pandemics and disasters, reduce vulnerabilities and risks and build resilience through effective disaster prevention, preparedness and recovery measures.

During the week, the representatives of PDPC attended parts of the Pandemic Centre's interdisciplinary PhD course and discussed future collaborations and partnerships with the Centre.



From left to right: Linda Jansen, Andrea Magugliani, Jeanette de Boer and Esperanza Diaz

PERISCOPE/Belgium

In the first week of March, a group of representatives from the Pandemic Centre visited UiB's offices in Brussels. During the visit, the Pandemic Centre met Prof. Enea Parimbelli (University of Pavia), Laure Guillevac (FEAM) from the Pan-European Response to the Impacts of COVID-19 and future Pandemics and Epidemics (PERISCOPE) project and Siri Hauge, Policy officer in DG HERA - Health Emergency Preparedness and Response Authority, European Commission.

PERISCOPE is a Horizon2020-financed project investigating the broad socio-economic and behavioural impacts of the COVID-19 pandemic, with the goal of making Europe more resilient and prepared for future large-scale risks.

Dhulikhel University Hospital/Nepal

In late March, the Pandemic Centre joined a Norwegian academic delegation to Nepal to discuss ways of furthering academic collaboration between Norway and Nepal. Esperanza Diaz presented the Pandemic Centre and its vision for an interdisciplinary approach to pandemics and disaster pre-

paredness on several occasions.



During the visit, Esperanza Diaz, on behalf of the Pandemic Centre, signed a Memorandum of Understanding with the Centre for Pandemic Preparedness and Response at Dhulikhel Hospital. The Centre took part in the "Women's Careers and Empowerment in Global Health" conference, visited the Institute of Medicine at Katmandu University and organized several events and workshops.

INTERSOS/Greece

As part as our collaboration for capacity building in preparedness, the Pandemic Centre was in Athens for two days in December. On the first day, Esperanza Diaz and Prabhjot Kour participated in a round table discussion entitled "Strengthening the capacity and ensuring the protection of vulnerable migrants, asylum seekers and refugees", organized by INTERSOS Hellas in partnership with the Pandemic Centre at UiB through a project Funded by $\Sigma O\Lambda$ Crowe, Human Rights 360.

Representatives from civil society organizations (e.g. NGOs), international organizations, academia, healthcare and funding agencies attended this discussion on lessons learned in Greece and Norway from the pandemic to enhance support for asylum seekers and refugees during health crises.

RESEARCH & EDUCATION

In 2023 the Pandemic Centre continued arranging its interdisciplinary PhD-course and research catalyst meetings where different topics related to pandemics are presented. In addition, 6 master's students (see page 6) were connected to the Pandemic Centre during 2023.

PhD Course

The Pandemic Centre has organized a yearly two-week course aimed at PhD students from all disciplines. The course covers medical themes related to vaccines and experiences from pandemics in a historical perspective, as well as social, legal and ethical discussions. Our interdisciplinary PhD course was held twice in 2023, first in January in a two-week format and then

in October in a shortened, one week format linked to our international conference.

The instructors consisted of various experts from UiB, as well as other national and international professionals.

This year's student group consisted of individuals from countries including Chile, Jordan, Syria, Iran, Peru, Turkey, China and Malawi.

Among the lecturers participating, and who have participated before, are Henriette Sinding Aasen and Eirik Holmøyvik from the Pandemic Centre's strategic working group.

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It's rewarding to meet students from different countries and academic disciplines. They ask good questions. The legal challenge of how we can manage a dangerous pandemic without forsaking the rule of law and human rights was also shared.

It's important to have arenas where we can meet to discuss these questions across backgrounds and disciplines.



Eirik Holmoyvik, Professor, Faculty of Law

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It's always enjoyable to teach this PhD course and meet students with different backgrounds and from various academic disciplines.

It's challenging to convey central legal principles in a understandable way within a short time frame, but as a researcher and educator, it's also an interesting and important challenge.



Henriette Sinding Aasen, Professor, Faculty of Law







9 9

It was an inspiring and informative educational week that I spent in the Pandemic Centre in Bergen. I gained a more holistic view on the pandemic itself, as well as the approaches that human society has adopted, or should consider adopting for future challenges like Disease X.

The course was very interactive, which meant that not only did we receive scientific perspectives from the lecturers, but also we felt empowered to express our ideas based on individual experiences, together creating a broader spectrum of interdisciplinary and cross-contextual practice.

As a junior researcher, the interdisciplinary approach of the Pandemic Centre has sown a seed in my future research journey, reminding me to incorporate new perspectives, seek out new collaborations, and strive for collective achievements.



Ping Ping Song,
PhD candidate at Erasmus MC
Public Health Department

PUBLICATIONS

Scientific Articles

Amato E, Hyllestad S, Heradstveit P, Langlete P, Moen LV, Rohringer A, Pires J, Lomba JAB, Bragstad K, Feruglio SL, **Aavitsland P,** Madslien EH. Evaluation of the pilot wastewater surveillance for SARS-CoV-2 in Norway, 1 June 2022 – March 2023. BMC Publ Health 2023: 23: 1714. (https://pubmed.ncbi.nlm.nih.gov/37667223/)

Elgersma IH, Fretheim A, Elstrøm P, **Aavitsland P.** Association between face mask use and the risk of infection with SARS-CoV-2 in the community – a cross-sectional study. Epidemiol Infect 2023;. (https://doi.org/10.1017/S0950268823001826)

Ahmed D, Benavente P, Diaz E. Food insecurity among international migrants during the COVID-19 pandemic: A scoping review. International Journal of Environmental Research and Public Health. 2023. (https://pubmed.ncbi.nlm.nih.gov/37047889/)

Kumar BN, Jamtvedt G, **Diaz E.** Declaration. The road from knowledge to change – pandemics, diversity \and social inequality declaration, Bergen 2022. Scand J Public Health. 2023. (https://journals.sagepub.com/eprint/EYIGFKFHNTSAPKHXSAYF/full)

Kumar BN, Eikemo TA, **Diaz E**. Migration and Health: Time for a new research agenda. Scandinavian Journal of Public Health. 2023;51:309-11. (https://journals.sagepub.com/doi/full/10.1177/140349482 31172320)

Czapka E, Ortiz-Barreda G, Herrero-Arias R, Haj-Youne J, Møen KA, Hasha W, **et al**., "Who is telling the truth?" Migrants' experiences with COVID-19 related information in Norway– a qualitative study. Scandinavian Journal of Public Health. 2022. (https://www.ncbi.nlm.ni

Reports

Aavitsland P, Forsyth A, Damon IK, Abdelaziz MAA, Al-Nsour M, Celigueta CA, Bisasor-McKenzie J, Carmo EH, Eltoum AA, Liu Y, Moussif M, Rahman M, Rees H, Sahukhan A, Saito T, Samarasekera SD, Smolensky V, Sreedharan S, Tomori O, Zambon M. Report of the Review Committee regarding standing recommendations for mpox. Geneva: World Health Organization, 2023. (https://www.who.int/publications/m/item/report-of-the-review-committee-regarding-standing-recommendations-for-mpox)

Aavitsland P, Forsyth A, Celigueta CA, Abdelaziz MAA, Al-Nsour M, Bisasor-McKenzie J, Carmo EH, Damon IK, Eltoum AA, Liu Y, Moussif M, Rahman M, Rees H, Sahukhan A, Saito T, Samarasekera SD, Smolensky V, Sreedharan S, Tomori O, Zambon M. Report of the Review Committee regarding standing recommendations for COVID-19. Geneva: World Health Organization, 2023. (https://www.who.int/publications/m/item/report-of-the-review-committee-regarding-standing-recommendations-for-covid-19)

Newspaper Chronicles

Aavitsland P. Et samlet smittevern for bedre beredskap. Dagens perspektiv 1. mars 2023. https://epidemi.no/?p=2881

Aavitsland P. Den verste sykdommen. Fædrelandsvennen 3. mars 2023. https://epidemi. no/?p=2889

Aavitsland P. En syk svale gjør ingen pandemi. Fædrelandsvennen 13. april 2023. https://epidemi. no/?p=2928

Aavitsland P. Skal WHO styre verden? Fædrelandsvennen 27. oktober 2023. https://epidemi. no/?p=2969

Aavitsland P. Den nye helseberedskapen. Fædrelandsvennen 1. desember 2023. https://epidemi. no/?p=2979





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