



One Health, One Future

April 6-11, 2021



CENTER FOR
ONE HEALTH RESEARCH

University of Alaska Fairbanks



WELCOME TO ONE HEALTH, ONE FUTURE



I am pleased to welcome you to the University of Alaska Fairbanks and to the One Health, One Future 2021 conference. I acknowledge the Alaska Native nations upon whose traditional lands our campuses reside. In Fairbanks, our Troth Yeddha' Campus is located on the traditional lands of the Dena people of the lower Tanana River. I was thrilled to see the overwhelming amount of interest as the abstracts came in, as well as the scope of your research underway around the world. After seeing the submissions, we organized the sessions to accommodate as many presenters as possible and to provide even more opportunities for collaboration.

The Center for One Health Research is fairly new at UAF, although many of our faculty have been looking at animal, human, and environmental health for decades. The new center aims to take a holistic view of health and well-being, both for individuals and communities, to address some of our most pressing issues.

This One Health approach will help ensure a much better understanding of the root causes of the issues that challenge health and well-being across the human, animal and environmental health interface during a period of unprecedented change. It will also help us identify what makes our communities more resilient as we adapt to new realities.

We're pleased to partner with the U.S. State Department, and various Arctic Council groups, as we continue work that began during the past few years.

I'm looking forward to the robust discussions, emerging partnerships, and cultural celebrations that will undoubtedly be a part of the next five days as we explore One Health, One Future together.

Arleigh Reynolds, D.V.M., Ph.D., D.A.C.V.N.

Director of UAF's Center for One Health Research and professor of Veterinary Medicine



CHANCELLOR'S WELCOME



It is my pleasure to welcome you to the University of Alaska Fairbanks Troth Yeddha' campus for this week's One Health conference.

Our Center for One Health Research was designed to apply the collective expertise of UAF and our partners to solve some of the world's grand challenges—the integrated health of humans, animals and the environment in which we live. It is about all of us. The challenges in rural and urban environments are different, but the solutions are in the interconnectedness of the spectrum that exists between the two.

My hope is that connections are formed over the next few days that build long-term partnerships that lead to new research, educational and outreach programs around One Health. These ongoing and meaningful collaborations are key to interdisciplinary initiatives and research. Good luck and best wishes for a productive week.

Daniel M. White
UAF Chancellor



TUESDAY, APRIL 6, 2021

7:25 a.m.

Ceremonial Dance

Pavva Iñupiaq Dancers of Fairbanks

Opening remarks

Daniel M. White | Chancellor, UAF

Introduction to the Center for One Health Research

Arleigh Reynolds | Director, Center for One Health Research (COHR), UAF

7:45 a.m.

KEYNOTE

Pathways to Truly Two-eyed Seeing

Susan Kutz | professor, Department of Ecosystem and Public Health, University of Calgary Faculty of Veterinary Medicine

Jared Gonet | President of the Yukon Conservation Society and PhD Student

Experiential-based knowledge such as that of the northern Indigenous peoples, acquired through practice and over generations, has been central to human adaptation and survival for millennia. Combining this knowledge with scientific knowledge can lead to better-informed and more timely and effective decision-making for One Health issues facing communities in the Arctic.

8:45 a.m.

Break

9:00 a.m.

PANEL

One Health: Integrating Indigenous and Western Ways of Knowing in a Community Based Participatory Approach

- **Susan Kutz**, professor, Department of Ecosystem and Public Health, University of Calgary Faculty of Veterinary Medicine
- **Jared Gonet**, President of the Yukon Conservation Society and PhD Student
- **Michael Williams Sr.**, Elder and Chief of Akiak
- **Jessica Black**, Associate Professor, Department of Alaska Native Studies and Rural Development and Tribal Management
- **Jim Allen**, Professor, Memory Keepers Medical Discovery Team – Rural and American Indian Health Equity, University of Minnesota Medical School
- **Christina Viskum Lytken Larson**, Senior Advisor, Center Coordinator National Institute of Public Health, University of Southern Denmark
- **Ingelise Olesen**, Research Coordinator, Centre for Public Health in Greenland, National Institute of Public Health, University of Southern Denmark and University of Greenland

10:30 a.m.

Break

10:45 a.m.

PANEL

The Arctic Council and One Health: Advancing scientific cooperation via a diplomatic platform

U.S. Department of State.

This session will focus on the role of the Arctic Council in promoting circumpolar One Health cooperation. Senior representatives involved in the Council will discuss the value of this diplomatic forum for advancing cooperation on One Health training, research, and practice.

Panel moderated by Pips Veazey | Project Director, EPSCoR, University of Alaska Fairbanks Deputy Director for Strategic Development, Alaska Center for Energy and Power





WEDNESDAY, APRIL 7, 2021

Holistic Health and Well-Being

7:30 a.m.

Opening Remarks

Arleigh Reynolds | Director, COHR, UAF

7:35 a.m.

Holistic Health and Well-Being

These sessions will discuss social, environmental, and cultural changes that have impacted the mental and behavioral health of people in the Circumpolar North, and how a holistic One Health approach may be used to address them.

KEYNOTE

One Arctic — One Health

Arja Rautio | University of Oulu, Finland

A review of various multidisciplinary projects that research the effects of climate change and permafrost thaw on Arctic populations, and include a One Health and a community-based participatory approach.

Preventing Suicide by Promoting Social Connectedness in
Alaska Native Communities through Culture

Georgianna Ningeulook | University of Alaska Fairbanks

Healing through Food and Culture – Incorporating
Sustainable Agriculture into Indigenous Food Systems

Eva Burk | University of Alaska Fairbanks

One Health in Sapmi: The Case of Suicide among
Reindeer Herding Sami in Sweden

Jon Petter Stoor | Umea University, Sweden

8:55 a.m.

Change over to Panel Discussion

9:00 a.m.

Plenary Panel with Speakers

-Arja Rautio

-Georgianna Ningeulook

-Eva Burk

-Jon Petter Stoor

10:00 a.m.

Networking or Break

10:30 a.m.

Poster Sessions





THURSDAY, APRIL 8, 2021

Zoonotic Diseases, Antimicrobial Resistance, COVID-19, & Emergency Preparedness

7:30 a.m.

Opening Remarks

Nettie La Belle-Hamer | Vice Chancellor of Research, UAF

7:35 a.m.

Zoonotic Diseases, Antimicrobial Resistance, COVID-19, & Emergency Preparedness

Climate change is a potential driver of zoonotic disease threats across the circumpolar North. The use of antimicrobials and the resultant development of resistance to them is becoming a global issue. This session will look at One Health approaches to prioritizing, understanding and managing these problems.

KEYNOTE

The Canadian Arctic One Health Network

Emily Jenkins | Department of Veterinary Microbiology, University of Saskatchewan, Canada

Strong connections among the land, wildlife and people in the North necessitate a One Health approach to address complex challenges at the interface of human, animal and ecosystem health. The North continues to face health disparities and food and water insecurity, and climate change at rates faster and greater than the global average. Infectious diseases will emerge in a future of climate change, and zoonoses continue to pose threats to wildlife and public health. Find out more about monitoring efforts, including for rabies, foodborne parasites, and vector-borne diseases.



Priority Zoonotic Diseases for One Health Collaboration in Alaska

Thomas Hennessy | University of Alaska Anchorage

Avian Influenza in a Changing Arctic Climate

Peter Rabinowitz | CHaNGE, University of Washington

COVID-19 & One Health: Zoonotic Diseases, Antimicrobial Resistance & Emergency Preparedness

Anne Zink | Chief Medical Officer, State of Alaska

8:55 a.m.

Change over to Panel Discussion

9:00 a.m.

Plenary Panel with Speakers

- Emily Jenkins
- Tom Hennessy
- Peter Rabinowitz
- Anne Zink

10:00 a.m.

Networking or Break

10:30 a.m.

Poster Sessions





FRIDAY, APRIL 9, 2021

Food Safety/Security/Sovereignty/Contaminant Monitoring

7:30 a.m.

Opening remarks

Arleigh Reynolds | Director, COHR, UAF

7:35 a.m.

Food Safety/Security/Sovereignty/Contamination Monitoring

Many if not most of the communities in the circumpolar North are at risk of being food insecure. This is true for both small isolated subsistence communities and larger urban areas. This session will examine these issues through a One Health lens to explore root causes and seek to develop sustainable solutions.

KEYNOTE

Food Sovereignty and Self-Governance: Inuit Role in Management

Carolina Behe | Indigenous Knowledge/Science Advisor, Inuit Circumpolar Council Alaska

Food, Culture, and Change in Environment

Gert Mulvad | University of Greenland
Greenland Center for Health Research

Contaminants in Arctic Human Populations and the Changing Climate

Khaled Abass | Arctic Health, University of Oulu, Finland

Environmental Contaminants: An Arctic Perspective of a Global Climate

Jim Berner | Former Science Director, Alaska Native Tribal Health Consortium



8:55 a.m.

Change over to Panel Discussion

9:00 a.m.

Plenary Panel with Speakers

- Carolina Behe
- Gert Mulvad
- Khaled Abass
- Jim Berner

10:00 a.m.

Networking or Break

10:30 a.m.

Poster Sessions



7:30 a.m.

Opening Remarks

Anupma Prakash | Provost, University Alaska Fairbanks

Communication & Education

Education and communication is the foundation for development and success. Speakers will discuss how a One Health approach can be integrated into the K-12 and postsecondary education system to support students throughout the circumpolar North. Science communication doesn't stop in school, and scientists are often challenged to communicate their findings in ways that lay audiences can understand. Strategies for understanding the challenges and improving communication will be presented in this session.

KEYNOTE

Paddling Our Own Canoes: Intersections of Alaska Native Governance, Well-Being, and Health

Jessica Black | Associate Professor, Department of Alaska Native Studies and Rural Development and Tribal Management

Sustainable knowledge — Making Education Meaningful
for the Next Generation

Marit Honerød Hoveid | professor, Department of Education and Lifelong Learning, Norwegian University of Science and Technology, Norway
Halvor Hoveid | professor, Department of Teacher Education, Norwegian University of Science and Technology, Norway

The RASOR program: Launching Researchers on Homeshores

Ellen Chenoweth | University of Alaska Southeast

Data Management for One Health

Pips Veazey | University of Alaska Fairbanks

TBA

Amy Lovecraft | University of Alaska Fairbanks

9:10 a.m.

Change over to Panel Discussion

9:15 a.m.

Plenary Panel with Speakers

-Jessica Black

-Marit & Halvor Hoveid

- Ellen Chenoweth

-Pips Veazey

-Amy Lovecraft

10:15 a.m.

Networking or Break

10:45 a.m.

Poster Sessions

Policy & Data Management

Presentations within these two highly important and multidisciplinary areas show the common challenges as well as the opportunities unique within One Health. The way in which data is collected and managed will play a significant role in the development of One Health approaches particularly important and sensitive when data acquisition and policy formation involve community stakeholders





SUNDAY, APRIL 11, 2021

Climate Change & Built Infrastructure

7:30 a.m.

Opening Remarks

Arleigh Reynolds | Director, COHR, UAF

7:35 a.m.

Impacts of climate change on One Health Issues

The interdependence of human, animal and environmental health leads to all of these being significantly affected by climate change. This session will explore the impact of climate change on the people and animals of this region with an eye on mitigating problems and preparing adaptive responses to current trends.

KEYNOTE

Climate change in Alaska: Impacts on health

John Walsh | Chief Scientist, International Arctic Research Center, University of Alaska Fairbanks

Climate change has impacted Alaska in subtle ways, ranging from the state's vegetative landscape to patterns of land use and even land ownership. In this presentation, we will highlight several major climatic trends in Alaska over the past 50 years, including the trends of extreme events that are among the most consequential manifestations of climate change. The most notable impacts fall into several categories, including effects of warmer temperatures on invasive species and harmful algal blooms; effects of longer drier summers on air quality through wildfire smoke and road dust; and increases in hazards associated with thinning ice, thawing ground and flooding.

A Systematic Pan-Arctic Analysis of Rain on Snow and Extreme Precipitation Events and their Impacts on Human-Environment Systems

Matthew L. Druckenmiller | National Snow and Ice Data Center, University of Colorado Boulder

Vector-borne Nematodes in the Future Arctic

Antti Oksanen | Finnish Food Authority

Changing Climate, Changing Seasons

Rick Thoman Jr. | Alaska Center for Climate Assessment and Policy, University of Alaska Fairbanks

8:55 a.m.

Change over to Panels

9:00 a.m.

Plenary Panel with Speakers

-John Walsh

-Matthew Druckenmiller

-Antti Oksanen

-Rick Thoman Jr.

9:00 a.m. | Concurrent Session

PANEL

State Department-Next Steps to Arctic Council

U.S. Department of State.

This session will be a key opportunity to gather views about the work of the project so far, and next steps for sustainable circumpolar cooperation on One Health.

10:00 a.m.

Break

10:10 a.m.

Poster Sessions

12:20 p.m.

End of Conference





Sustainable Development
Working Group



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