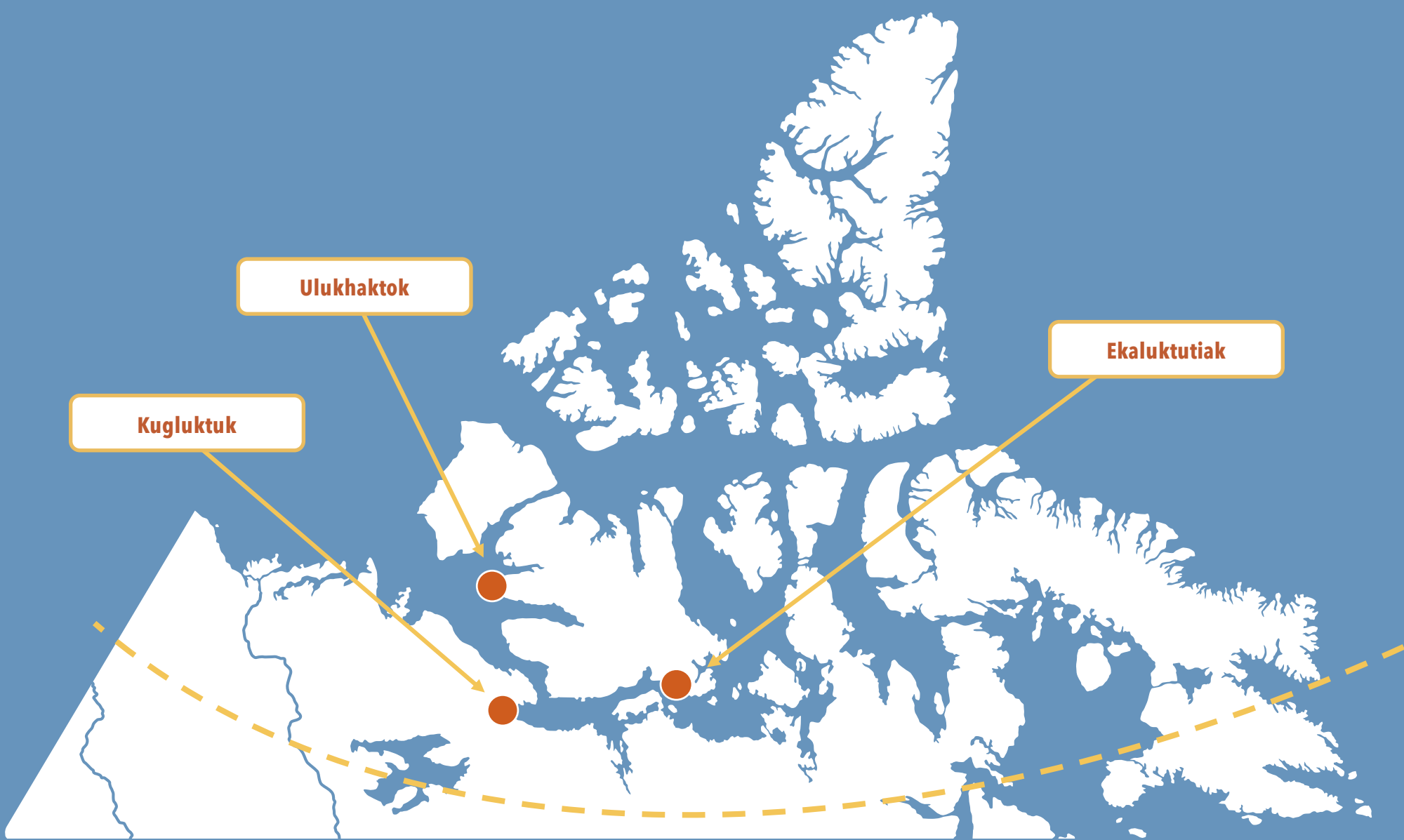


ArcticEID



Ekaluktutiak Hunters' and Trappers' Organization*, Kugluktuk Angoniattit Association*, Olokhtomiut Hunters' and Trappers' Committee*, Jordan Bertagnolli¹, Hui Xin Chan², Matt Fredlund³, Rita Henderson⁴, Naima Jutha⁵, Alexandra Kanter⁴, Lisa-Marie Leclerc³, Fabien Mavrot¹, Eric Morgan⁶, Sreejith Radhakrishnan⁷, Amélie Roberto-Charron³, Matilde Tomaselli⁸, Mohammad Misbah Uddin¹, McCaide Wooten¹, Taya Forde^{7*}, Susan Kutz^{1*}

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What is ArcticEID?

ArcticEID stands for "Arctic Emerging Infectious Diseases."

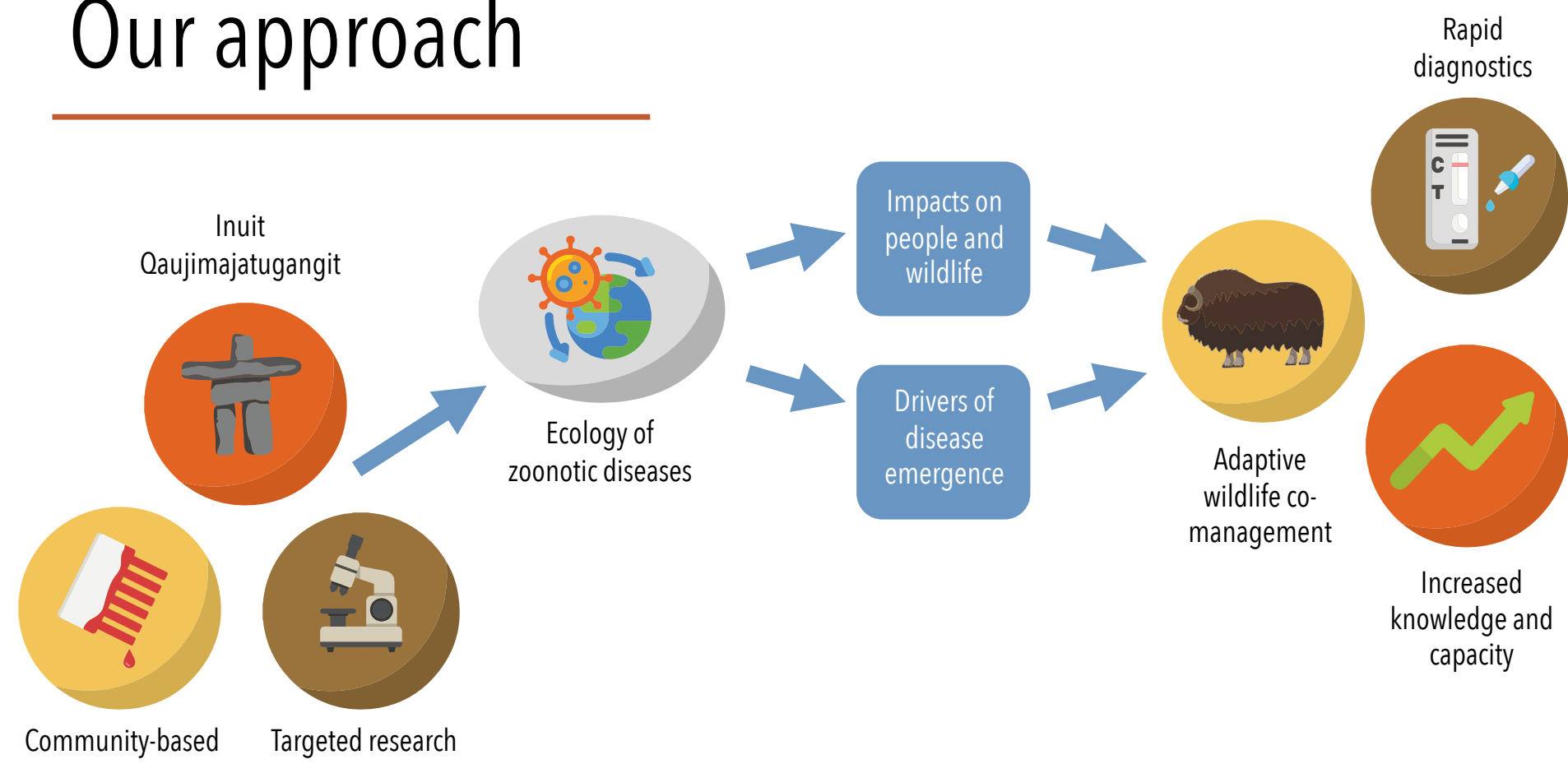
In partnership with Ekaluktutiak, Kugluktuk, and Ulukhaktok, we are studying two diseases that seem to be increasing in caribou and muskoxen in Arctic Canada:

- 1 Brucellosis (caused by *Brucella suis* biovar 4)
- 2 Erysipelas (caused by *Erysipelothrix rhusiopathiae* – the "E-word")

Both diseases can affect animal and human health.

We're working to bring together Inuit Qaujimajatuqangit (IQ) and Western science to better understand these diseases in caribou and muskoxen, and how harvesters are making sure their meat is safe to eat (and can continue to do so).

Our approach



We bring together IQ, community-based wildlife health surveillance, and targeted research to understand the ecology of *Brucella* and *Erysipelothrix* in the Arctic.

This helps us understand what may cause these diseases to appear and how they impact people and animals. Then, we work together to explore ways to reduce their risk.

Our team



The ArcticEID team at the Canadian High Arctic Research Station in Cambridge Bay, Nunavut.

What's coming next

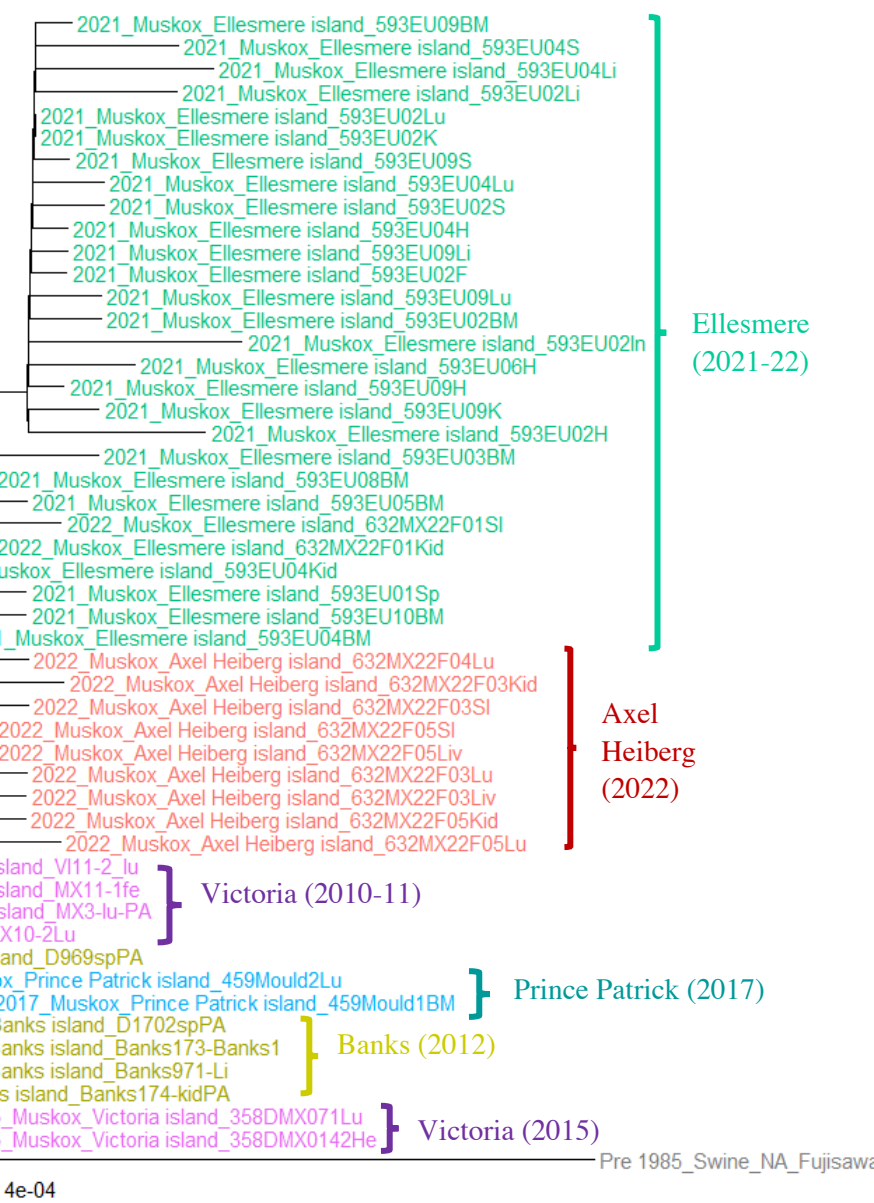
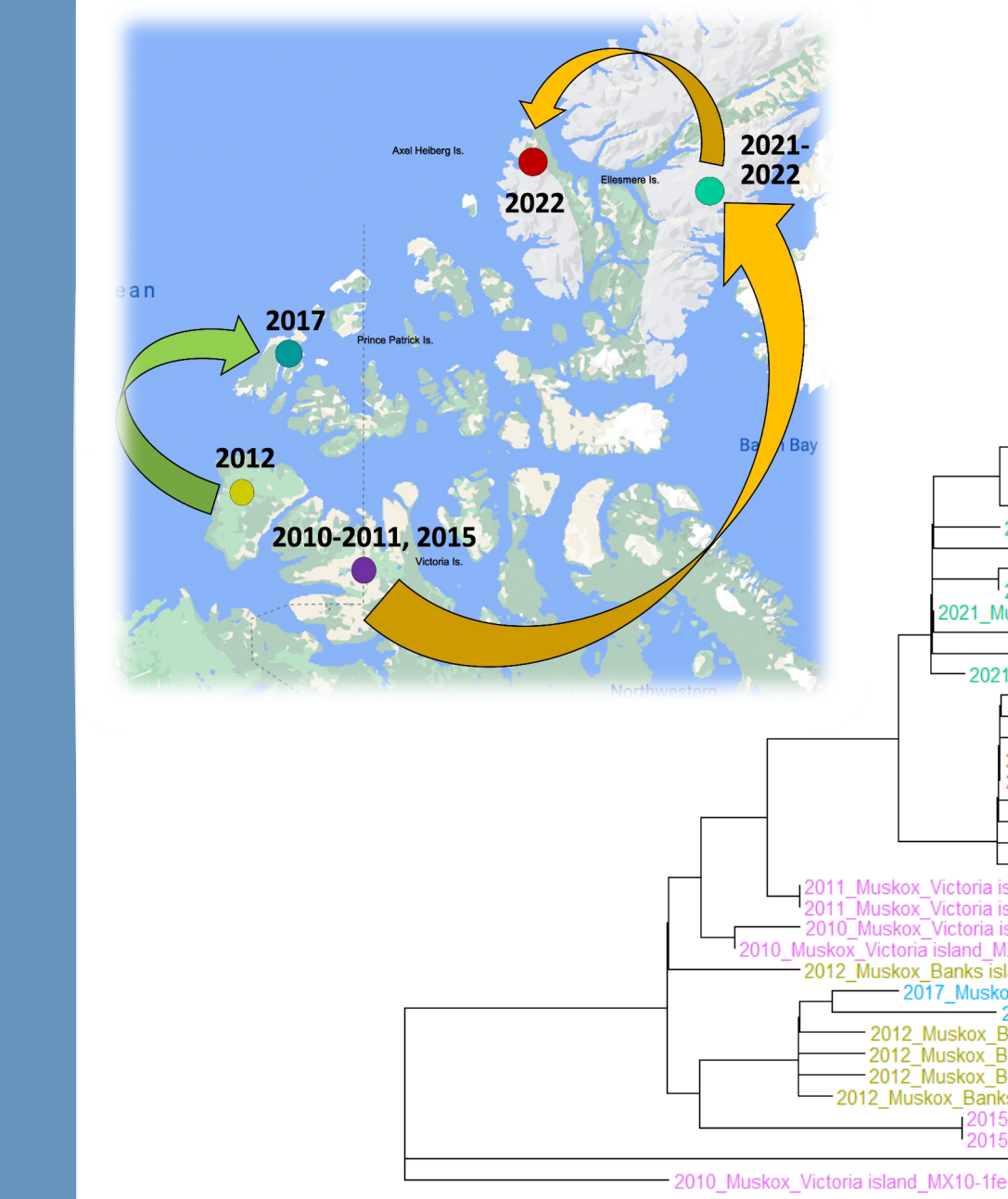
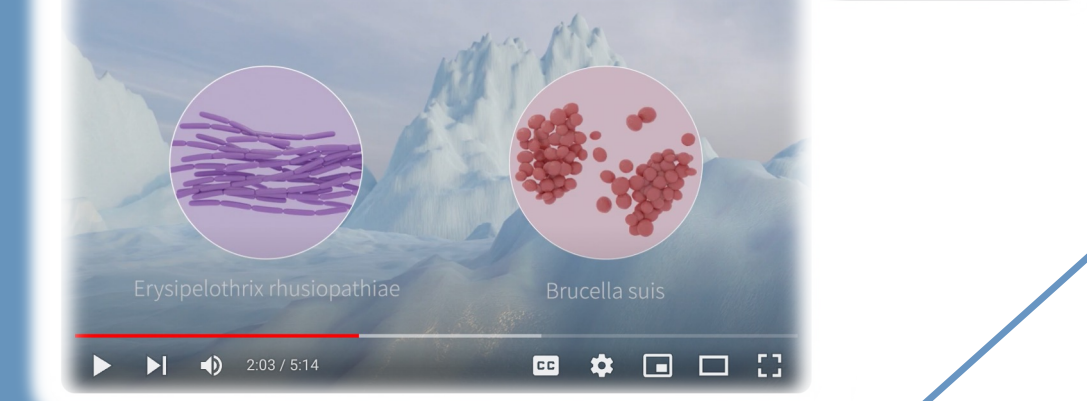
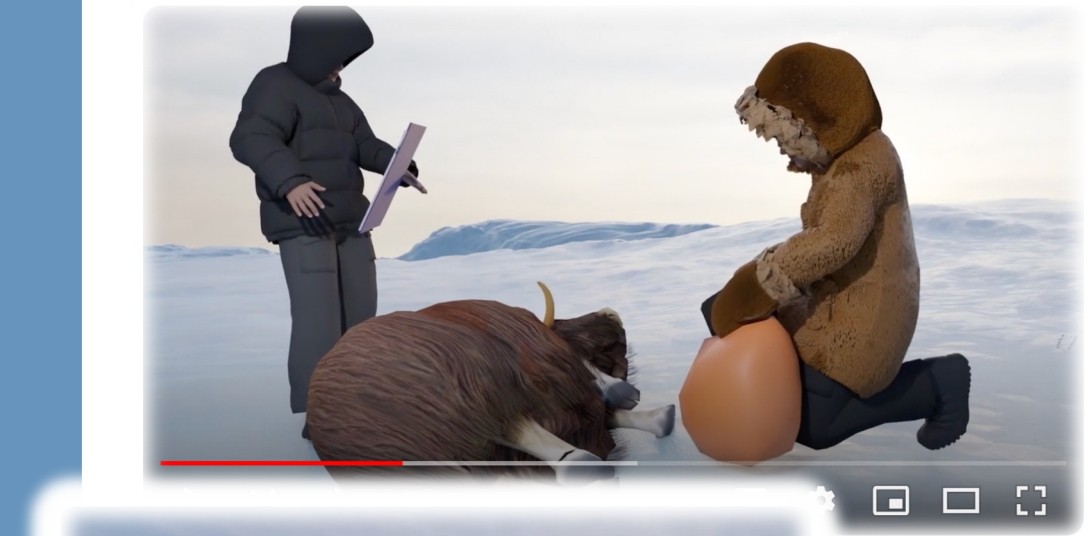
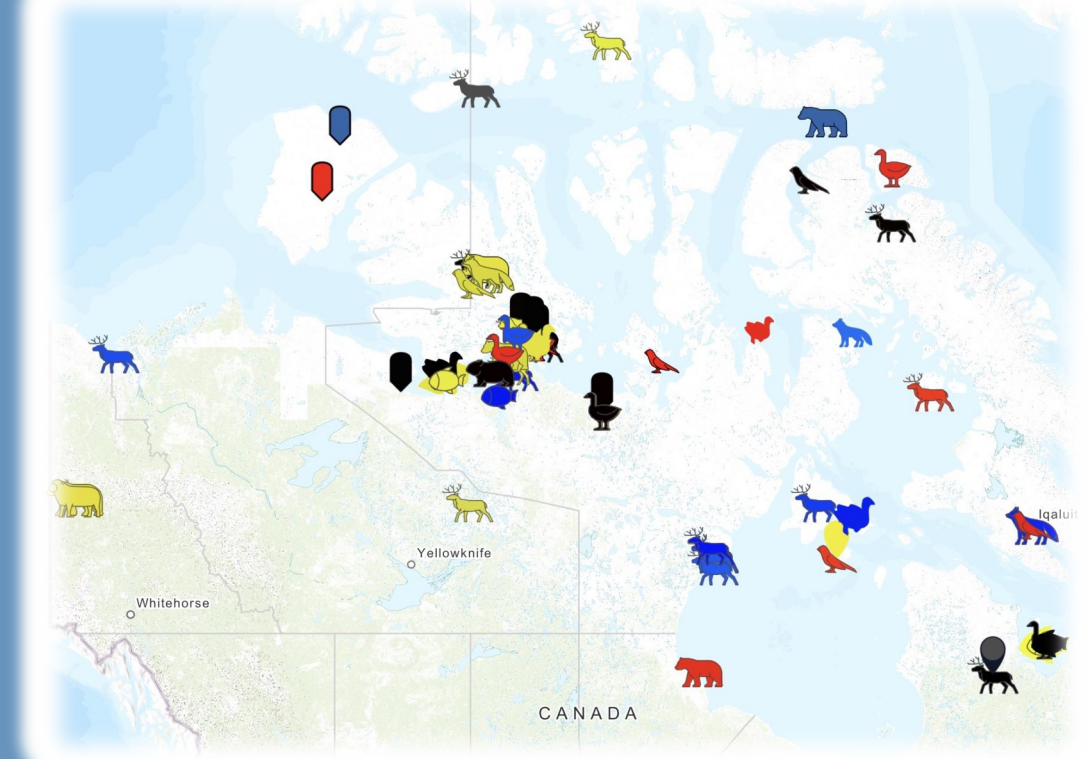
- Documenting IQ on butchering and safe meat handling
- Survey of community observations of unusual wildlife events on the land
- Testing samples from community kits, other suspect species, and Ellesmere / Axel Heiberg outbreaks

What we've been working on

- Sampling for both diseases with all 3 communities
- Investigating a new *Erysipelothrix* outbreak on Ellesmere and Axel Heiberg Islands
- Survey of unusual wildlife observations from researchers, to help understand other places these diseases might be
- Pocket guides for safe animal harvesting, butchering, and consumption
- Animation video about *Brucella*, *Erysipelothrix*, and the ArcticEID project
- Literature review to help understand *Brucella* tissue distribution
- Genetic studies to understand *Erysipelothrix* spread
- Community workshops and wildlife sampling



Brucella in a muskox leg



Working through the ecology of Erysipelothrix

