# Weaving science and Inuit knowledge in contaminants research: engaging Inuit youth and communities through school workshops

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## INTRODUCTION

- Contaminant bioaccumulation in Arctic wildlife is a cause of concern for the health of northerners who consume country foods.
- Since the 1990s, researchers have studied



## METHODS

- Between 2016 and 2018, we conducted ringed seal workshops in four northern schools.
- Workshops took place in three communities that participate in contaminants monitoring in ringed seals: Resolute Bay, Sachs Harbour, and Arviat.

contaminants in ringed seals (Pusa hispida) with support from the Northern Contaminants Program.

• Inuit hunters from Sachs Harbour, Resolute Bay, Arviat and Nain have played key roles in this long-term monitoring program by collecting ringed seal samples and reporting data from harvested seals.



• Our next workshop will take place in Nain in 2022.

**WORKSHOP OBJECTIVE Engage Inuit youth and communities in research on** contaminants and ringed seals

- ✓ Around **300** northern students between 4 and 16 years old involved. ✓ Around **50** northern community members engaged.
- $\checkmark$  7 instructors, including 2 northern college students and 1 early career researcher.
- ✓ 15 interactive educational activities developed.
- ✓ 6 large posters and 1 activity booklet created.







Workshops are conducted in

schools across Inuit Nunangat.

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"I have always believed that Inuit should be included in any studies conducted by researchers in the Arctic. It makes me happy to see that this was a part of this workshop."

"I think overall programs like this do a lot to strengthen the relationship and trust between [northern] communities and researchers."

– Workshop instructor, Sachs Harbour, 2018 – Workshop instructor, Resolute Bay, 2016

Peter Amarualik Sr. showing students from Resolute Bay how to butcher a seal.

College student) leading a Inuktitut lesson with students traditional knowledge survey in from Arviat.

Students from Sachs Harbour observing daphnids with help from Mick Appaqaq.

Students from Arviat learning about contaminant biomagnification through games with Michael Salomonie (Arctic College student).

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#### **BENEFITS FOR...**

#### **STUDENTS**

- Connect to science through hands-on activities.
- Acquire knowledge on ringed seal ecology and contaminants.

#### NORTHERNERS

• Be informed about the latest research on contaminants.

- See their knowledge valued and promoted.

#### RESEARCHERS

Sachs Harbour.

WHAT WE HAVE LEARNED

- Learn from Inuit Knowledge.
- Develop science communication skills.
- Identify appropriate practices for engaging and



### **BEST PRACTICES IDENTIFIED**

✓ Involve community partners in workshop planning.

- Learn from Inuit Elders and hunters.
- Strengthen Inuktitut skills. Meet "real scientists" and break stereotypes.

"You've prepared so many fun activities, we didn't even realize we were learning. You may have inspired career paths!"

– School teacher, Sachs Harbour, 2018

#### Drawings: © Martin Patenaude-Monette

 Become engaged in contaminants research. • Share knowledge across generations.

 Train the next generation of northern environmental leaders.

 Strengthen relationships with researchers.

communicating with Inuit youth. • Share information about their work with northern residents. • Network with other researchers and northern residents. • Learn about Inuit culture, realities and concerns.

- Strengthen relationships with northerners.
- ✓ Involve northern college students and early career researchers as workshop co-leaders.

 $\checkmark$  Have a flexible approach to workshop programming.

- ✓ Alternate short presentations with interactive hands-on activities.
- ✓ Adapt to audience diversity (age, language and group) size).
- ✓ Leave educational material with teachers.

 $\checkmark$  Ensure adequate training for workshop instructors.

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