

## Highlights from sessions on Indigenous knowledge at the 2018 Canadian Science Policy Conference

Summary prepared by:

Konstantin Petoukhov

Science Policy Analyst / Mitacs Science Policy Fellow

Indigenous Support and Awareness Office / Bureau de soutien et de sensibilisation des Autochtones

Science and Technology Branch / Direction générale des sciences et de la technologie

Agriculture and Agri-Food Canada / Agriculture et Agroalimentaire Canada

[konstantin.petoukhov@canada.ca](mailto:konstantin.petoukhov@canada.ca) / Tel: 613-773-2489 / TTY: 613-773-2600

Disclaimer: This document represents a summary of the proceedings of the Canadian Science Policy Conference. The author does not assume responsibility or liability for any errors or omissions in the information contained in this document. The views expressed in this documents are my own and do not necessarily represent the views or position of Agriculture and Agri-Food Canada.

The full conference program is available at <http://cspc2018.ca>.

At the session *Incorporating Indigenous Ways of Knowing into Applied Research*, Pitseolak Pfeifer (consultant, Arctic Governance), discussed how there is an increasing awareness of the power imbalances between Indigenous and non-Indigenous researchers, and the need to acknowledge and address them in the research process. Some of the questions raised by Pitseolak are, What are these power dimensions and what role does reconciliation play? In these power relations, how are the Inuit and non-Inuit perspectives and histories positioned? What are the laws around “life” and extinction? While Western knowledge follows the principles of “cause-effect-consequences,” Inuit knowledge is concerned with the communities’ relationships with animals, which involves the consideration of Inuit worldviews. Indigenous knowledge draws on the holistic approach to understanding the world, and builds intimate connections to the natural environment and the land. Western and Indigenous knowledge systems often work in isolation or “silos,” which he likened to “scientists standing in their corners,” while effective research partnerships will require active collaboration between Indigenous and non-Indigenous research paradigms that incorporate respectful relations and consideration of Indigenous worldviews.

Bronwyn Hancock (VP Research Development, Yukon College) spoke about Indigenous-settler research partnerships and observed that it is a complex relationship due to the self-governance agreement in the Yukon territory. When working with FN bands, one of the approaches is to impose no expectations on the research outcomes, but rather to allow the research process to evolve organically. Yukon College recognizes the need to build core competencies among its staff (including its “101”-level courses) by training sessions offered in collaboration with First Nations communities. When working with researchers, it is beneficial to recruit Indigenous liaisons to answer questions such as, “What things do the communities want us to honour?” Another strategy is to provide training to young people in Indigenous communities, which represents a “partnership in practice” model.

Some of the concrete ways of bridging Western and Indigenous research are:

- Enhancing community involvement (community approval process and community-based decision making and guidance);
- Decolonizing research through the removal of institutional barriers to research projects involving Indigenous communities (e.g. ethics boards that attempt to squeeze Indigenous

research into a Western institutional framework, that have not been sufficiently “indigenized,” and are not familiar with how Indigenous research paradigms operate). Too often academic institutions and their ethics boards require research projects involving Indigenous people to adhere to Western protocols of strict deadlines, financial accountability, consent process etc. It is inappropriate to ask Indigenous communities to conform to Western research traditions. This requires a shift in the regulatory process to accommodate Indigenous knowledge.

- Incorporating Indigenous languages, learning the cultural protocols of local communities, and developing strategies for communities to interpret the research findings.

Many research organizations are now using the OCAP principles (Ownership, Control, Access, and Possession) to protect and safeguard Indigenous knowledge derived from collaborative research projects.

Some speakers at this session used the metaphor “walking together” (from beginning to end) to denote the model for research partnerships between Indigenous and non-Indigenous communities that represents a complex journey that must address the question of how the data derived from research project will be used.

Émilie Parent (Ph.D. candidate, Université de Montréal) emphasized the importance of developing research questions with community participation and to adjust the research process to their needs and to build innovative solutions, including adopting Western technology to solve existing problems in new ways.

At the *Supporting the Next Generation of Northern Scientists* session, Kelsey Wrightson (Dechinta Centre for Research and Learning) observed that there is an emerging trend to incorporate the RCAP recommendations, the TRC’s Calls to Action, and the UNDRIP into the research process. The co-development model is gaining traction in research projects with Indigenous people and can be broken down into three broad categories:

- Place-based ways of teaching and learning. This is an approach that incorporates courses that are co-taught with Indigenous faculty. It highlights the importance of respect for where knowledge comes from and who holds it. Collaboration with researchers is rooted in the environment where the research project is undertaken.
- Supporting future research and building capacity. This process is multigenerational, establishes “community of learning,” and values knowledge and culture.
- Who are the researchers? We need to be creative in our thinking about who researchers are and who can do research. This process involves articulating treaty rights and developing an ability to speak about issues like climate change through the lived experiences of community members.

David Silas (Selkirk First Nation) spoke at length about how the land has a story to tell and how research can be harnessed to help to tell that story. The issues in research with Indigenous communities has historically been non-involvement and exclusion. Now some communities have adopted the slogan “nothing about us without us.” First Nations in the Yukon have been concerned with climate change. IK is important insofar as it mobilizes local knowledge that has been generated over centuries. Indigenous communities typically employ the horizontal approach to government (Federal Centre of Excellence for Inuit Employment in Nunavut), there is respect for key Inuit values (NILFA 2018), and now there is a recognition that doing science (STEM) without prior involvement of Indigenous people is no longer acceptable.

At *Bridging Science & Indigenous Knowledge Systems*, Rachel Olsen, President of the Firelight Group noted that UNESCO recognizes that Indigenous knowledge comes from the interactions with the natural environment. It is not just about knowledge, but also about values and practices, and it is a system that is:

- Adaptive;
- Cumulative;
- Generational;
- Rooted in oral traditions;
- Experiential;
- Temporal;
- Inclusive of knowledge of the land and spatial-temporal interactions.
- Local and site-specific and draws on direct experiences of local populations.

In northern Canada, it is a requirement to consider Indigenous knowledge alongside Western knowledge. One of the complexities involved in working with Indigenous knowledge is that it is difficult to separate it from the research process.

Scot Nickels, Director of Inuit Qaujisarvingat spoke about his experience working with the Inuit and through his research partnerships he learned that the Inuit have a rich knowledge base about sea ice, weather patterns, etc., and we cannot discount this kind of knowledge. The report titled “National Inuit Strategy on Research” (published by ITK) advances the position that we need to incorporate previously marginalized Inuit populations.

Leah Braithwaite, of Arctic Net Inc., discussed the partnerships that her organization has established with the Inuit and highlighted the fact that in the north, projects are approved only if there is sufficient northern involvement. As a result, scientists are required to work with communities in order to secure funding. This approach:

- Has been effective in providing direction and guidance on Inuit priorities;
- Results in an increase in the institutional capacity to develop, participate, conduct, and manage research; and
- Contributes to meaningful engagement, incorporated Indigenous knowledge, and has prompted appropriate acknowledgement and validation;
- Generates questions developed by the Inuit;
- Is action oriented; and
- Integrates a knowledge mobilization process through involvement & control by Inuit partners.

Solange Nadeau (NRCan) emphasized the importance of oral traditions that are holistic and resist reductionism. It is not about adding Indigenous knowledge into our own frameworks but rather we need to redefine our assumptions. The approach that she advocates is one that aligns research programs with research questions developed by Indigenous communities, which involves consultations of local guides and protocols. Consultations would ideally take place in advance of the commencement of research projects. One of the systemic issues of mobilizing Indigenous knowledge in combination with Western knowledge is that it is the latter that is usually to verify and validate the former.