Integrating and Translating ArcticNet Science for Sustainable Communities and National and Global Policy and Decision-Making

Summary

Project Leaders

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Ecological change, economic strain, cultural transformation and other factors are significant stressors for the Indigenous peoples of the Arctic. The best available information, based on contemporary science and community and traditional knowledge (TK), must be used to ensure that Inuit and all Canadians can benefit from policy decisions that contribute to sustainable development and the well-being of Arctic environments and peoples. This research project is comprised of a series of sub-projects or activities that examine aspects of the science-policy interface. The central focus is to enhance our understanding of the Arctic policy landscape and factors influencing the translation and transformation of research results into decision support at various levels. It aims to understand how ArcticNet science and IK/IQ (Inuit Knowledge) can, has and might better contribute to informing policies on critical issues such as climate and other forms of change in the future. It is expected that conclusions from the sub-projects will help ArcticNet address the most effective ways to use and translate its research results into 'action' or decision-making at the local, region, national or international levels. More generally, these results will contribute to the present knowledge on how to improve the use, translation and transformation of research results into sound policy or accessible and compelling information for informed decision making in the Arctic or elsewhere in Canada and beyond.

People

Network Investigators

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Collaborators & Research Associates

Bubela, Tania - University of Alberta
Kelley, Karen - Inuit Tapiriit Kanatami
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Sheldon, Tom - Nunatsiavut Department of Lands and Natural Resources

Post-Doctoral Fellows

Hirsch, Rachel - York University

Masters Students

Buckham, Meghan - Trent University
Durkalec, Agata - Trent University
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Partners

Aboriginal Affairs and Northern Development Canada - Northern Scientific Training Program
Arctic Institute of North America
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Resilience Alliance
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Publications

Articles Published in Refereed Publications

Buckham, M. Furgal, C., Sheldon, T., 2015, Barriers and Facilitators to Indigenous Knowledge Incorporation in Policy Making: the Case of Nunatsiavut's Environmental Protection Act (EPA)., in revision for submission, , Submitted

Buckham, M., Furgal, C., 2015, Indigenous Knowledge Incorporation in Policy Making: a framework tool for policy makers., in preparation to be submitted summer 2015, , Submitted

Furgal, C., Kivett Knight, J., Buckham, M., Kelly, K., Nickels, S. and Hik D.S., 2014, Participant and End User Perspectives on the ArcticNet Integrated Regional Impact Study (IRIS) as a Science to Policy Mechanism, Arctic Change 2014 Conference, Ottawa, Canada., 58-59, Published

Hik, D.S., 2011, Science as a stabilizing force in the Arctic Ocean., Environmental Security in the Arctic Ocean", NATO Advanced Research Series, , Submitted

Hik, D.S., Bubela, T., and Nicols, S., 2011, Respecting and aligning knowledge systems in northern Canada: beyond the International Polar Year, Respecting and Promoting Indigenous Rights and Traditional Knowledge: International Case Studies, ., Accepted

Hik, D.S., Bubela, T., and Nicols, S., 2012, Respecting and aligning knowledge systems in northern Canada: beyond the International Polar Year, Genetic Resources and Traditional Knowledge: Case Studies and Conflicting Interests, 310-335, Published

Hik, D.S., Bubela, T., Metcalf, C. and Nicols, S., 2011, Respecting, Promoting, and Protecting Traditional Knowledge: Lessons from Northern Canada, Respecting, Promoting, and Protecting Traditional Knowledge: A Comparative Case Study of Brazil, Kenya, and Northern Canada, , Submitted

Hirsch, R., Durdle, J., Edmunds-Potvin, S., Healey, G., Noah, J., Shirley, J., and Thomas, M. E., 2012, Sharing research findings in Nunavut: A tool to track the use and integration of community-based knowledge about food (in)security., Polar Geography, , Submitted

McGetrick JA, Bubela T, and Hik D., 2013, Expert Assessment of Geographic Information Science (GIS) for Health Communication in Natural Resource Development of the Canadian Arctic., 2013 Arctic Science Summit Week: The Arctic Hub Regional and Global Perspectives. Krakow, Poland. April 13-19, 2013, 1, Published

McGetrick, J.A., 2013, Logical Framework Analysis to Improve Health Communication for Natural Resource Development in Canada's Northern Territories, International Journal of Circumpolar Health, v.72, S.1, 1005-1007, Published

McGetrick, J.A., 2014, Geographic Information Systems as Communication Tools: Understanding Natural Resource Development Impacts on the Social Determinants of Health for Circumpolar Indigenous Peoples, Masters of Science Thesis, University of Alberta, 181, Published

McGetrick, J.A., Bubela, T. and Hik, D.S., 2015, Northern Indigenous Community Perspectives on Geographic Information Systems for Communicating Health Impacts of Development, Environmental Science and Policy, , Submitted

McGetrick, J.A., Bubela, T. and Hik, D.S., 2015, Health and Socio-economic Perspectives of Aboriginal Communities During Environmental Assessment in Northern Canada, Arctic Science, , Submitted

Pennesi, K., Arokium, J. and McBean, G., 2012, Integrating Local and Scientific Weather Knowledge as a Strategy for Adaptation to Climate Change in the Arctic, Mitigation and Adaptation Strategies for Global Change, ., Accepted

Rodgers, C. and McBean, G., 2012, Changing cold climate vulnerabilities: Northern Canada, IPCC Special Report on Climate Extremes, ., Accepted

Other Refereed Contributions

Hirsch, R., Healey, G., & Edmunds-Potvin, S., 2012, Beyond community engagement: Tracking a community-based research message from Iqaluit to Ottawa to evaluate success in knowledge translation., Manuscript submitted for review as part of the ArcticNet IRIS-2 Report. [Invited]., , Submitted

Non-Refereed Contributions

Buckham, M., Furgal, C. & Sheldon, T., 2012, Barriers and Facilitators to Indigenous Knowledge Integration in Environmental Policy and Decision-Making., Presented at the ArcticNet ASM, Vancouver, British Columbia, ., Published

Buckham, M., Furgal, C., & Sheldon, T., 2012, Barriers and Facilitators to Indigenous Knowledge Integration in Environmental Policy and Decision-Making., Presented at the IPY Knowledge to Action Conference, Montreal, Quebec., ., Published

Buckham, M., Furgal, C., Sheldon, T., 2013, Barriers and Facilitators to Indigenous Knowledge Incorporation in Policy-Making: The Nunatsiavut Case, Trent Northern Studies Colloquium, Peterborough, Canada April 2 2013, 1, Published

Furgal C., Buckham, M., Hik, D. Nickels, S., Meakin, S. , Moss-Davies, P., Braithwaite, L., 2013, Understanding Scientist and Decision Maker Perspectives on the Arctic Science-Policy Landscape, ArcticNet 2013 Annual Scientific Meeting. Halifax, Canada. December 9-13, 2013, 1, Published

Furgal C., Hik, D., Nickels, S., Meakin, S., Buckham, M., Kelley, K., Moss-Davies, P., Braithwaite, L., 2013, ArcticNet's IRIS Process as a Science-Policy Mechanism: A Case Study of IRIS 4 in Nunavik and Nunatsiavut, ArcticNet 2013 Annual Scientific Meeting. Halifax, Canada. December 9-13, 2013, 1, Published

Furgal, C, A. Durkalec, L. Braithwaite, D. Hik, S. Meakin, S. Nickels, P. Moss Davies and M. Buckham, 2013, Measuring the Impact of Science Activities and Products in the Canadian Arctic, ArcticNet 2013 Annual Scientific Meeting. Halifax, Canada. December 9-13, 2013, 1, Published

Furgal, Chris, D. Hik, S. Meakin,, S. Nickels, P. Moss-Davies and L. Braithwaite., 2012, INTEGRATING AND TRANSLATING ARCTIC SCIENCE AND INDIGENOUS KNOWLEDGE FOR INFORMED POLICY AND DECISION MAKING, ArcticNet Annual Scientific Meeting, December 2012, Vancouver BC., Poster, Published

Hik, D, Morris, K. and Bieber, M., 2013, How does ArcticNet research connect with decision-makers? Weak evidence for strong connections, ArcticNet 2013 Annual Scientific Meeting. Halifax, Canada. December 9-13, 2013, 1, Published

Hik, D., 2011, International Arctic Science in an Interconnected World, Presented at the 3rd Canadian Science Policy Conference, Ottawa, ., Published

Hik, D., 2011, Environmental Change and the Arctic, Presented to the NATO Parliamentary Assembly Sub-Committees on Energy and Environmental Security and Transatlantic Economic Relations, Edmonton, ., Published

Hik, D., 2011, Positioning Arctic Science to best take advantage of Canada's Chairmanship of the Arctic Council, Presented during the Arctic Science and Innovation Workshop aboard the CCGS Louis S St-Laurent, ., Published

Hik, D., 2012, Environmental Change and Development in the Canadian Arctic, Presented at the Resilience Alliance Science Meeting, Camargue, ., Published

Hik, D., 2012, Ecologies on the Edge: the View from the Arctic, Invited lecture to be presented at the 2012 AAAS Annual Meeting, Vancouver, ., Accepted

Hik, D., 2012, Integrating, Translating and Sustaining Arctic Science, Invited Lecture to be presented at the Arctic Center, Groningen University, Netherlands, ., Accepted

Hik, D., 2012, Challenges of Polar Research: Science, Policy and People, Invited Lecture to be presented at the Conference on German-Canadian Science and Research cooperation in the Arctic, Berlin, ., Accepted

Hirsch, R. A. & Healey, G., 2011, What happens after the research is done? Tracking knowledge about food security., A session to be co-led at Health Canada's Northern Canada Climate Change and Health Adaptation Program Pan-Arctic Results Workshop, Ottawa, Ontario., , Accepted

Hirsch, R. A., and Healey, G., 2011, Pushing research into action: A call to assess the integration of community-based knowledge in Arctic climate change policy communications., Faculty of Environmental Studies (FES) Research Day, York University., 1, Published

Hirsch, R., Durdle, J., Edmunds-Potvin, S., Healey, G., Noah, N., Shirley, J., & Thomas M.E, 2012, 'Real people experiencing real hunger': Tracking the exchange and use of a community-based research message from Iqaluit to Ottawa, Presented as part of the Labrador Institute Research Discussion Series, Goose Bay, Labrador., , Accepted

Hirsch, R., Durdle, J., Edmunds-Potvin, S., Healey, G., Noah, N., Shirley, J., & Thomas M.E., 2012,). 'Real people experiencing real hunger': Tracking the exchange and use of a community-based research message from Iqaluit to Ottawa., Presented at the workshop, "The Face of Change in the Arctic: Climate Change, Sovereignty, Impact", University of Vermont, Burlington. [Invited], , Accepted

Hirsch, R., Edmunds-Potvin, S., Durdle, J., Healey, G., Noah, J., Shirley, J., and Thomas M. E., 2011, Sharing research findings in Nunavut: A tool to track the use and integration of community-based knowledge about food (in)security., ELOKA Workshop: "Data Management and Local Knowledge: Building a Network to Support Community-Based Research and Monitoring.", 10, Published

Hirsch, R., Healey, G., Shirley, J., Durdle, J., Svoboda, M., Noah, J., & Edmunds-Potvin, S., 2012, A message from Nunavut: Tracking Arctic climate change research to policy integration from the bottom-up., Presented at the International Polar Year Conference, Montréal, Québec., , Accepted

McBean, G., 2011, How do we build resilient communities in the face of climate change?, Presented at the 3rd Canadian Science Policy Conference, Ottawa, ., Published

McGetrick JA, Bubela T, and Hik D,, 2013, Expert Assessment of Geographic Information Science (GIS) for Health Communication in Circumpolar Natural Resource Development, ArcticNet 2013 Annual Scientific Meeting. Halifax, Canada. December 9-13, 2013, 1, Published

McGetrick JA, Bubela T, and Hik D., 2013, Balancing Traditional Knowledge with Scientific Evidence: Multi-stakeholder Consideration of Health Impacts in the Co-Management Setting., ArcticNet 2013 Annual Scientific Meeting. Halifax, Canada. December 9-13, 2013, 1, Published

McGetrick, J.A., 2012, Communication for Natural Resource Development in the Canadian Arctic, University of Alberta Political Science Graduate Students' Association Sixth Annual Research Days 2012, ., Published

McGetrick, J.A., T. Bubela, & D. Hik., 2012, Logical Framework Analysis: the case for Geographic Information Systems in Northern risk communication., Paper presented at the 15th International Congress on Circumpolar Health. Fairbanks, Alaska., ., Published

McGetrick, J.A., T. Bubela, & D. Hik. ., 2012, Logical Framework Analysis: the case for Geographic Information Systems in Northern risk communication, Poster presented at the18th International Symposium on Society and Resource Management (ISSRM 2012). Edmonton, Alberta., ., Published

Morris, D.W., Beaulieu, M.S., Hamilton, S., Hik, D.S., Lemelin, R.H., Moses, M.M., Müller, D.K., Smith M.A. and Smol, J.P., 2013, The Lakehead Manifesto: Principles for research and development in the North, Arctic, v.66, no.2, iii-iv, Published

Pearce, T, Ford, J, Duerden, F, Furgal, C, Dawson, J, Smit, B., 2013, IRIS 1: Climate change policy responses for Canada's Inuit Population, ArcticNet 2013 Annual Scientific Meeting. Halifax, Canada. December 9-13, 2013, 1, Published

Specialized Publications

Buckham, M., 2013, Barriers and Facilitators to Indigenous Knowledge Incorporation in Policy-Making the Nunatsiavut Case, Ubpublished Master's Thesis, 212, Published

Buckham, M., 2014, Inuit Knowledge and Nunatsiavut's Environmental Protection Act (EPA): Project Report and Final Results, Presented to the Nunatsiavut Government, 12, Published

Hik, D.S., 2012, Current issues and future directions in Arctic reserach., Arctic Institute of North America Visioning Workshop, University of Calgary, Calgary [invited], ., Published

Hik, D.S., 2012, The challenges of Arctic research: looking beyond the International Polar Year., 10th Conference of Parliamentarians of the Arctic Region, Akureryi, Iceland [invited], ., Published

Hik, D.S., 2012, Connecting community-based and regional scientific observing systems., Global Change in the Arctic and Co-production of Knowledge, Paris, France [invited], ., Published

Hik, D.S., 2013, Science-policy in northern Canada: lessons from the past 10 years., Yukon Science Policy Forum, Whitehorse [invited], ., Published

Hik, D.S., 2013, Linking Science and Policy in the Arctic: Lessons from ArcticNet and IPY., EcoLogic Institute, Berlin [invited], ., Submitted

Hirsch, R. A. and Healey, G., 2011, What happens after the research is done? Tracking knowledge about food security, A co-led session at Health Canada's Northern Canada Climate Change and Health Adaptation Program Pan-Arctic Results Workshop, 1, Published

Hirsch, R., Durdle, J., Edmunds-Potvin, S., Healey, G., Noah, N., Shirley, J., & Thomas M.E., 2013, A guide to knowledge tracking using Netdraw: What happens after the research is done?, Undergoing Peer Review., , Submitted

Johnson, N, 2011, Big Thinking Series: How do we build resilient communities in the face of climate change?, Canadian Congress 2011 of the Humanities and Social Sciences, 1, Published

Johnson, N, 2011, From Clyde River to Copenhagen: An ethnographic approach to the study of climate change knowledge, Food Security Knowledge Tracking Workshop, 1, Published

Perkins, E., Hirsch, R., and Konsmo, E, 2011, Climate Justice: Perspectives from the Margins, Faculty of Environmental Studies (FES) Lecture Series, York University,, 1, Published