Transdisciplinarity and Training Engaged Researchers

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Introduction

The Arctic is currently the subject of considerable, perhaps unprecedented attention. To many, the explorer Artur Chilingarov’s planting of a Russian flag

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on the North Pole seabed in 2007 symbolized a coming race for territorial claims and natural resources. Melting sea ice has been linked to changes in faunal distribution and starving polar bears, but also to increased possibilities for natural resource exploitation, in addition to opening up new, commercially viable international shipping routes. The considerable recent political, economic, and scholarly interest in the Arctic has raised important questions concerning not only the relationship between knowledge and policy-making, but also the relationship between research conducted within and across traditional academic disciplines. The physical geographical changes that climate models predict may produce a range of political and economic outcomes. Assessments of future geopolitical developments are subject to even greater uncertainty than climate change assessments; as recent history so eloquently attests, global financial and political events remain impossible to predict with certainty. A more inclusive approach that incorporates perspectives on the Arctic from a wide range of disciplines, from managing traffic through the Northern Sea Route to assessing the impact of extractive industries upon indigenous and local populations, is increasingly considered desirable.

The Arctic Council has sponsored studies bringing together state-of-the-art knowledge from different fields, notably through the Arctic Climate Impact Assessment (2004), the Arctic Human Development Report (2004), and the Arctic Marine Shipping Assessment (2009). At the institutional level, long-standing organizations such as the Scott Polar Research Institute (est. 1920) and the Arctic Institute of North America (est. 1945), with broad disciplinary outlooks, have been joined by new institutions such as the Arctic Research Center at Umeå University, the University Center in Svalbard, and the Arctic Center at the University of Lapland. The annual Arctic Frontiers conference in Tromsø and the International Polar Year each capture the breadth of disciplinary perspectives that may productively be applied to Arctic research.

The motto of the 2012 International Polar Year conference in Montreal – “from knowledge to action” – can be understood as a call to the research community at large for practical outcomes. What qualities are important for making the connection between knowledge and action? The primary imperative to do so rests with the researcher, given that knowledge does not produce action simply by its existence; facts never speak for themselves. This requires both a mastery of specific findings and a more holistic grasp of the overall picture, locating results within relevant social and political contexts.