



ERA-Can+

EU-Canada Roundtable on Arctic, Health and Wellness

July 6, 2015

CNRS Headquarters

3, rue Michel-Ange, 75794 Paris

Table of Contents

- 1 Objectives 3
- 2 Background and Challenges..... 3
- 3 Break-out sessions..... 6
 - 3.1 Mental Wellness and Suicide Prevention 6
 - 3.2 Environmental contaminants 8
 - 3.3 Climate Change and Health 11
- 4 Funding Structure 12
- 5 Perspective for the future and next steps for EU-Canada collaboration in the field of Arctic, Health and Wellness 13
- 6 ANNEXES..... 15
 - Agenda 15
 - List of Participants 17



1 Objectives

Xavier Morise, Director of the CNRS Office for North America (Washington DC, USA), and Martina Desole (APRE), ERA-Can+ coordinator, gave the opening remarks, introducing the ERA-Can+ project and the objectives of the roundtable meeting.

ERA-Can+ (<http://www.era-can.net>) is a Canada-EU project which promotes bilateral cooperation in Science, Technology and Innovation. One of its aims is to enrich the EU-Canada policy dialogue, in particular in areas of mutual interest. Within this framework, “Arctic, Health and Wellness” is recognized as a central cross-cutting area for potential EU-Canada collaborative actions.

The roundtable, the first ERA-Can+ event of this kind, should enable the EU and Canadian research communities to determine new areas of collaboration, as well as to outline potential joint endeavours to address the targeted challenges listed below. It also aimed to provide inputs for EU-Canada S&T policy dialogue, to allow the parties to align priorities, and to help identify opportunities, instruments and funding modalities that could be mobilized by the different stakeholders.

Targeted challenges:

- Impacts of climate change on health
- Environmental contaminants
- Mental wellness / suicide prevention

Each of these challenges should be discussed in the break-out sessions, co-chaired by one Canadian and one European expert.

2 Background and Challenges

A morning plenary session provided background information on the state of the art of the research on Arctic, Health and Wellness in Canada and in the European Union as well on the cooperation challenges from the European and Canadian perspectives.

The PPT presentations of the morning session are available [online](#) [ERA-Can+ ownCloud]:

- Health and wellness in the Arctic region - thoughts from the EU perspective
Tuomo Karjalainen, European Commission
- Cooperation's challenges with the EU on “Arctic, Health and Wellness” from a Canadian perspective - *Hélène Halatcheff, Embassy of Canada in France*
- Polar Knowledge Canada - *Alain Leclair, Polar Knowledge Canada*
- ArcRisk - *Janet Pawlak, AMAP Secretariat*
- EUPolarNet – *Denis Didier Rousseau, CNRS*
- The « Chantier Arctique in France » - *Denis Didier Rousseau, CNRS*

Background

Anthropogenic climate change is recognized as one of the biggest threats to human health this century (Costello et al., 2009), with wide-ranging impacts globally. Evidence indicates that there will be direct and indirect effects of climate change, stemming from increased severity and frequency of storms and severe weather events; long-term drought and chronic weather events; forest fires and floods; heat waves; and changes in ice regimes globally (Costello et al. 2009; IPCC, 2014; Watts et al. 2015). These health effects include:

- Increased frequency and distribution of foodborne, waterborne, vectorborne, and zoonotic diseases sensitive to weather and heat changes (AMAP 2015; CMA, 2010; Costello et al., 2009; Frumkin et al., 2008; IPCC, 2014; Parkinson et al., 2005);
- Decreased nutritional opportunities and food shortages (IPCC, 2014);
- Heat-related deaths and heat-related stress (CMA, 2010; Costello et al., 2009; Frumkin et al., 2008; Myers & Patz, 2009; St. Louis & Hess, 2008);
- Greater risks of injury, disease, and mortality from extreme weather events and respiratory and cardio-vascular challenges from changing air quality (CMA, 2010; Costello et al., 2009; Frumkin et al., 2008; Myers & Patz, 2009; St. Louis & Hess, 2008); and
- Challenges to mental health and wellness (Berry et al. 2010; Bourque & Cunsolo Willox, 2014; Cunsolo Willox et al. 2012, 2013a,b, 2014; Doherty & Clayton, 2011; Petrasek MacDonald et al. 2015; Swim et al. 2011).

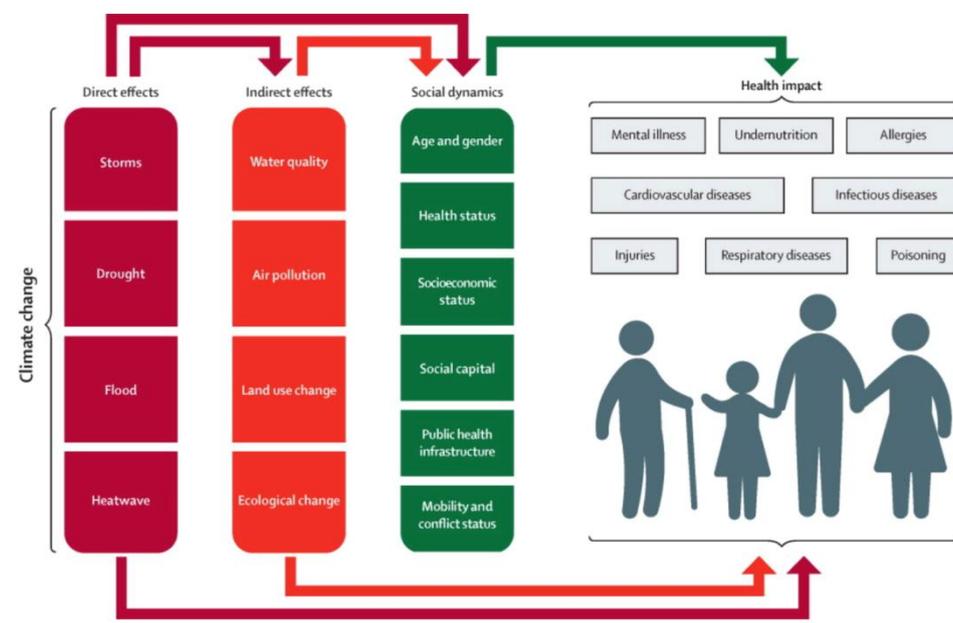


Figure 1: The direct and indirect health effects of climate change on health and wellbeing (from Watts et al. 2015).

The Circumpolar North is experiencing some of the most rapid changes in climate and environment in the world, with disruptions to sea ice regimes, including later formation and earlier break-up and decline in sea ice extent; increased surface air temperature; thawing permafrost; changes in weather and snow patterns; and disruptions to wildlife and vegetation (AMAP 2011; IPCC 2014).

These changes are currently disrupting the livelihoods and cultural practices of many Arctic peoples, particularly indigenous populations, leading to a range of climate-change-related health impacts (*Ford et al. 2010; Cunsolo Willox et al. 2014*). Similar to the global health impacts listed above, the current and projected health impacts across the Arctic include: increased death and injury from unstable ice conditions and unpredictable weather; increased risk, frequency, and distribution of foodborne, waterborne, and vectorborne disease; increased heat stress and sunburns; increased respiratory challenges from new allergens, dust, and forest fires; magnification of health impacts from anthropogenic environmental contaminants (*AMAP 2015*); displacement and forced relocation from sea level rise and coastal erosion, leading to emotional and mental distress; and mental health impacts from loss of place, changing cultural practices, and an inability to travel safely or reliably on the land or ice (*Cunsolo Willox et al. 2012, 2013, 2014; Ford et al. 2010; Harper et al. 2015; Petrasek MacDonald et al. 2015*).

Challenges

These climate-change-sensitive health impacts are a pressing priority across the Circumpolar North, yet are a newly-emerging area of study. As such, little is known about the range, scope, and severity of climate-change-related health impacts across the Circumpolar North, nor are there evidence-based strategies for mitigating and adapting to the impacts to support strong health outcomes. More resources are required to support multi- and interdisciplinary research that spans countries, disciplines, and methodological approaches, and unites researchers, policy makers, Indigenous communities and leaders, local, regional, national, and international governments, and funding organizations to:

- Find creative and innovative approaches to studying and understanding the health impacts of a changing climate and associated environmental changes in the Arctic;
- Find locally-appropriate and culturally-relevant strategies to mitigate and adapt to health challenges;
- Enhance the health and wellness of Arctic populations within a new climate and environmental reality.

3 Break-out sessions

3.1 Mental Wellness and Suicide Prevention

Co-chairs: Kami Kandola, Arja Rautio

Rapporteur: Christina Viskum Lytken Larsen

Participants: Sylvie Blangy, Michael Jong, Xavier Morise, Natan Obed, Melanie Rüger, Jon Petter Stoor, Michèle Therrien

Regrets: Susan Chatwood

Participants had a common interest in research but with varying perspectives- clinical & public health physicians, social scientists, clinical psychologist, sleep expert, academic & community based researchers and a linguist.

Understanding

For certain regions such as Northern Canada/Greenland, there is sufficient epidemiological data to show that Inuit suicide rates are alarmingly high compared to other indigenous and mainstream populations. However, for the Sami in northern Norway, Sweden, Finland and Kola Peninsula of Russia, there is no ethnic specific data available. This is an identified research gap although anecdotally it appears that Sami suicide rates may be higher than the mainstream population despite similar socioeconomic determinants within the Scandinavian regions. However, while quantitative data may exist within Northern Canada, more qualitative assessments would be required to understand perceptions of suicide within Inuit society and why it may be normalized. The encroachment of southern-based settlers or industrial development near Arctic communities is another risk factor that would benefit from further study. Finally, the Inuit expressions for depression, sadness or other emotions have yet to be adequately appreciated or used within the formal medical encounter. As such, there is a sense that the healthcare provider does not truly understand what could be troubling the Inuit patient due to a chasm in basic linguistic knowledge. Further anthropological research taking into account narratives expressed in one's own language would be required on what would be a culturally safe environment to respond to mental health issues.

The group recommends that support be provided for ongoing time-sensitive suicide research focusing on quantitative and qualitative assessment of suicide to allow for a broader cultural understanding of suicide risk factors, ideation, perception and normalization within the indigenous Arctic populations.

Taking Action

The medical model by and large has been insufficient in responding to the suicide epidemics facing certain Arctic communities. A new approach is now being trialed to improve cultural connectivity both as a mental health resilience and suicide prevention tool- this intervention is on the land programs. There is sufficient research to show that intergenerational trauma, particularly sexual abuse is a significant risk factor for suicide later in life. Research trials around back to the land

programming are currently underway in Northern Canada. In Greenland, police have been trained to respond to family violence with a follow up visit the next day and appropriate referrals to the social and health authorities. Knowing the impacts of childhood trauma, any actions taken should also focus on early prevention by focusing on mental wellness as well as targeted suicide prevention for at risk youth.

The group recommends that support be provided for local action-oriented and community-led participatory interventions to respond to suicide in high-risk Arctic communities with involvement of local elders and leaders as well as the youth impacted both at an early prevention level as well direct targeting of high risk groups.

Learning

Evaluation of impact of interventions will be an important component for any mental wellness and suicide prevention initiatives. However, one must also be cognizant that each community is unique and thus may have a tailored response that may not be readily adaptable in other settings. Nonetheless, evaluation results would foster knowledge exchange between Europe and Canada since there are many similarities in certain risk factors such as cultural loss, intergenerational trauma, remote/isolated settings and lack of purpose within society that are similar between Sami and Inuit youth. Lessons learned can also be of relevance to the refugee/ immigrant situation within Europe especially among the disenfranchised youth.

Funding an Arctic research chair for Mental Wellness and Suicide Prevention is the best way to mitigate the impact of negative influences development in the Arctic. As a result of intrusion, the loss of culture, belonging, traditional values and lifestyle has contributed to the high level of suicidal ideation and suicides which in some parts of the Arctic is the most common cause of death for the Indigenous population. For a meaningful impact, the dedicated research chair must be in the Arctic and the research done with the people impacted.

The group underlines the importance of the evaluation of the impact of these interventions to feedback into further increasing knowledge and understanding of evidence-based policy and program planning for sustaining mental wellness and suicide prevention within the targeted communities. It also suggests the creation of an Arctic chair for Mental Wellness and Suicide Prevention, thus providing the leadership to foster a coordinated and collaborative evaluation approach.

3.2 Environmental contaminants

Co-Chairs: Crispin Halsall, Laurie Chan

Participants: Eva Cecilie Bonefeld-Jørgensen, Aurélien Dommergue, Tuomo Karjalainen
Mélanie Lemire, Jean Thèves

The group identified four priority areas that have high potential for research partnership between Arctic scientists in the EU and Canada.

Human health & contaminant exposure

There are ongoing *biomonitoring programmes and health assessments* in Canada and Europe/Scandinavia. To maximize the effectiveness of these programmes and assessments and to allow true pan-Arctic assessments of contaminant trends and health impacts, then *better harmonization is required both in study design, bio-banking and in data archiving protocols.*

The diet of indigenous peoples is changing with, in general, a reduction in consumption of country-foods and an increase in processed or store-bought foodstuffs. This change in diet will affect contaminant exposure in both quantity and composition (environmental chemicals as well as food additives). *Comprehensive risk-benefit assessment of this diet shift is critical.*

Seasonal changes in country-food diets occur depending on species availability, migration patterns, hunting practices etc. Seasonal changes in diet, may, for example, see the *switch from marine biota to freshwater fish* as lakes located close to Arctic communities become ice free following summer thaw. Arctic people also traditionally prefer to catch fish and hunt animals at the time of year when the species in question is plentiful and has highest body mass and vitality. Seasonal changes in diet, may, for example, see the switch from marine biota to freshwater fish as lakes located close to Arctic communities become ice free following summer thaw. Diets may also differ across relatively small geographical areas depending on cultural preferences and food abundance. *These issues have not been studied with regards to nutrient and contaminant exposure. Seasonal changes in diet and country-food consumption practices may have a profound effect on contaminant exposure. Climate change might also impact these seasonal natural cycles and alter species availability, diversity, abundance and access.*

Exposure and uptake of contaminants from the indoor environment within Arctic settlements is poorly studied and exposure to certain chemicals like flame retardants, plasticizers, chemicals in surface-coatings, personal care products etc. could be an important and growing exposure pathway via the indoor environment, particularly in the case of overcrowded houses with increasing demographics, urbanization and industrialization. Exposure to molds and radon (the latter in uranium -rich areas) are also issues which warrant research. Exposure to particulate matter and associated combustion-derived pollutants (e.g. PAHs) in the ambient atmosphere, through the increase in seasonal forest fires in sub-Arctic regions (both frequency and areal extent) (see section 4.2, below), and the general increase in urbanization/industrialization in some Arctic communities should be the focus of a new scientific assessment.

The health impacts of exposure to multiple contaminants ('cocktail effect') both 'legacy' chemicals and newer, 'emerging' contaminants such as perfluorinated compounds is an ongoing concern and a focus of AMAP's Health Assessment Working Group. However, multiple contaminant approaches pose great methodological and statistical challenges. *Successful and innovative approaches should be further shared between Arctic scientists in the EU and Canada to optimize outreach and regional/national comparisons.*

Sources & pathways

Long-term monitoring programmes exist across Arctic Canada and Scandinavia and to a lesser extent in Russia/Siberia (e.g. the atmosphere is a key route of entry for a variety of metals and organic pollutants into the Arctic). *There is a need to maintain and re-inforce the monitoring initiative of air quality and deposition in the Arctic.* The growing list of priority substances means that many 'emerging' contaminants are not always included in these abiotic programmes (e.g. per/polyfluorinated substances, current-use pesticides, siloxanes, chlorinated paraffin etc.). *New initiatives are now required to undertake initial broad screening of environmental and biological matrices in these programmes.* This would utilize recent improvements of bench-top analytical instrumentation, including, for example, GC and LC-TOF-MS or MS/MS capabilities to allow relatively low-cost qualitative screening for a broad array of chemicals. This could be followed by quantitative analysis depending on contaminants detected.

New environmental matrices should be considered for inclusion in long-term monitoring efforts across the Arctic, including surface seawater, given the rise in 'water-transported' contaminants in the Arctic, as well as the exploitation of snow and ice cores. The latter will provide long-term (multi-decadal) accumulation time-series for contaminants not currently included in current air monitoring efforts, or for which there are only very short time-series of observations in Arctic air.

Contaminants arising within Arctic settlements or through local infrastructure (dump sites, waste water disposal) are not well characterized. Dumpsites in the Arctic pose a hazard to human and wildlife health, via the presence of multiple contaminants and different pathways of exposure (e.g. ingestion, inhalation, dermal absorption). Recycling is not possible in many Arctic regions due to the high removal/transport costs and yet, conversely, waste sites are frequently visited in order to salvage materials for re-use and are often accompanied by unregulated burning. Environmental change such as diminishing permafrost may exacerbate contaminant release processes associated with long-term dump sites. *Untreated wastewater disposal associated with larger Arctic settlements or shipping (tourist vessels) are likely to be significant sources of contaminants to coastal waters, for which there is very little research.*

The health impacts of exposure to multiple contaminants ('cocktail effect') both 'legacy' chemicals and newer emerging contaminants should be undertaken on indigenous people, particularly infants and pregnant women.

Public health policy

Research into contaminants exposure via foodstuffs should be incorporated into overall food security/safety and sustainability, whereby an ecological approach to food security and sustainability is taken. In the case of certain regions of Greenland¹, communities work alongside ecologists to ensure that marine/country food advisory guidelines mesh with species conservation and the seasonal abundance of certain species (i.e. those deemed safe to eat). Also, *guidelines with regards to type and quantity of foodstuffs* (i.e. those foodstuffs recommended) *to be avoided* to reduce exposure to certain contaminants, tie to the diversity of diets found in communities, particularly to seasonal excesses (large catches), fads or seasonal changes in country food availability. *Current dynamics in food distribution within and between Arctic communities* are not taken into account in health policy guidelines. This is an *area of research that could incorporate the knowledge of, and be led by, community groups*.

Studies into the *health effects of contaminants in indigenous communities should be incorporated into more 'holistic' study frameworks*, which examine lifestyles, community aspirations and practices. *Studies and interventions with younger people that also involve older people* - that represent a reliance on country foods as well as their medicinal properties in the main - *should be undertaken*.

Contaminants and climate change (joint discussion with the Climate change/Health group)

With the development and expansion of oil and gas extraction activities, commercial shipping and mining, then *new 'within-Arctic' sources of contaminants are present and need to be assessed*.

The increase incidences of forest fires in sub-Arctic regions is a concern. *The transport, fate and impact of combustion derived pollution and the effects of black carbon (and associated contaminants) in the Arctic need to be studied*. The effects of black carbon on the Arctic climate and the direct and indirect human and ecological health implications are not well known.

There is clear interaction between climate change and chemical sources/pathways in the Arctic. For example, the rate of methylation of mercury and its bioavailability in the Arctic ecosystem will be affected by climate change. *Coordinated efforts are needed to study the impact of predicted climate in the future on the bioavailability of contaminants like mercury in the Arctic ecosystem and human diet*.

Human and biota exposure to contaminants is likely to change against the backdrop of a changing Arctic. Perturbations in physical and biological systems in a warmer Arctic will affect the timing and extent of biological uptake of contaminants from the abiotic environment. *Exposure of contaminants to sentinel organisms as well as the base of food webs* may be diminished or exacerbated *in a warming Arctic* and *studies are required to investigate this change in both terrestrial and marine environments* and also with respect to species diversity and abundance as food sources central to indigenous culture and food security in the Arctic.

¹ It is a focus issue for the Greenlandic government that diet recommendations are given to the population and especially to the pregnant women

3.3 Climate Change and Health

Co-chairs: Ashlee Cunsolo Willox, Janet Pawlak

Participants : Thierry Boulinier, Martina Desole, Audrey Gahéry, Alain Leclair, Aurélie Pachkoff-Singh, Denis Didier Rousseau

Food and Water Security

Climate change is anticipated to have far-reaching consequences for food and water security in the Arctic, including, for example: changes in nutritional intake due to shifting patterns in animal migrations or changing ice and snow conditions disrupting the ability to hunt and harvest for wild foods, leading to an increased reliance on store-bought food, with impacts to physical and mental health (including diabetes, obesity, and other food-related challenges); increased water contamination from surface run-off from heavy storms; warming temperatures leading to changes in disease patterns in animals, affecting meat quality; changing weather patterns and warming disrupting traditional methods of processing and storing foods; and warming temperatures leading to increased waterborne disease.

The group recommends to carry out international comparisons across countries, jurisdictions, and boundaries, and deemed this topic as essential to moving forward with Canada-European research collaborations.

Disease Distribution and Risk (Infectious, Vectorborne, Zoonotic)

Another key priority identified was understanding the changing patterns, distribution, frequencies, and risk levels of a variety of diseases, including infectious, vectorborne, and zoonotic. As weather patterns and seasonal temperatures shift, the range and distribution of disease is spreading, bringing new infectious, vectorborne, and zoonotic diseases to the Arctic. Of particular relevance in the Circumpolar North were E.coli, campylobacteriosis, giardiasis, botulism, and rabies, as well as increased rates of diarrhea and acute gastrointestinal illness. The most common zoonotic infections are caused by three types of bacteria – Brucella, Toxoplasma, and Coxiella – which are found in marine mammals, terrestrial mammals, birds and many other animals throughout the circumpolar north. These diseases have far-reaching consequences for individuals and communities across the North, and also transcend country boundaries. Furthermore, high tissue levels of some anthropogenic immunosuppressive contaminants in some Arctic Indigenous populations may increase the risk of active microbial infections.

The group recommends to find ways to support Canada-European international partnerships to study and track disease changes across the North was considered an important research focus.

Mental Wellness and Culture

Finally, the last thematic area of importance identified was the multiple ways in which a changing climate negatively impacts on mental health and wellbeing. While this is a new topic, it is considered, globally, an emerging priority, with the impacts anticipated to be widespread, profound, and cumulative. Research in the Circumpolar North is indicating that climate change is already a priority for many Indigenous peoples, with negative impacts identified from: strong emotional responses (fear, sadness, anger, frustration, stress, anxiety, grief, and mourning) related to a changed climate and its impacts on culture, livelihoods, and the environment; potential increase in drug and alcohol usage, stemming from an inability to access the land regularly to hunt, trap, fish, and forage, and the resulting emotional pain and 'empty time'; potential increases in suicide ideation from loss of cultural identity, time on the land, and the emotional coping mechanisms from leading a land-based life; and the magnification of already-present and previous trauma, due to an inability to go off on the land to heal, refresh, recharge, and cope with mental health challenges. It is also anticipated there will be mental health impacts related to damage to infrastructure from thawing permafrost, sea level rise, and coastal erosion, as well as from impacts to physical health.

The group emphasizes that more research across the Circumpolar North, through integrated partnerships across disciplines and with Indigenous leadership, is essential to understanding and supporting climate-change-sensitive mental health impacts.

4 Funding Structure

In addition to the thematic topics, the group also discussed the *need for moving beyond current strategies for funding grants, and enter into a new and innovative approach to funding multi-country, multi-disciplinary teams*. One such approach would be to have a *two-tiered funding structure*, where the first round supported the creation of teams that were reflective of multiple disciplinary backgrounds, including researchers, community leaders, policy makers, government representatives, with an emphasis on Indigenous leadership and Indigenous priorities. Teams would be funded to come together and *develop an integrated, interdisciplinary, innovative, and mixed-methods program of research that would serve the needs and priorities of Arctic populations around climate change and health*. Once established, the teams would apply to the second stage to access full funds to conduct the research program.

5 Perspective for the future and next steps for EU-Canada collaboration in the field of Arctic, Health and Wellness

Jon Petter STOOR

Sámi Norwegian National Advisory Board on Mental Health and Substance Abuse, Norway

Natan OBED

Department of Social and Cultural Development, Nunavut Tunngavik Incorporated

Besides of the presentation of the break-out session' key recommendations, the afternoon plenary session was an opportunity to put into perspectives those challenges from the Inuit and the Saami points of view.

Jon Petter Stoor pointed out that while he was not an official representative of the Saami council, he had been asked by the Saami council to speak on behalf of the Sami within the workshop context, to address the issues at hand, from a Sami perspective. In doing so he singled out four main challenges for successful “Arctic, Health and Wellness” research, including; *perspectives, priorities, ethics and registries*.

Mr. Stoor pointed out that a true Sami *perspective* only can be achieved through border-crossing research activities, reflecting that Sami inhabit all of Sápmi (land of the Sami), which stretches across four nation states. To achieve a vision where Sami have influence on research *priorities* it is necessary to improve cultural competency and from-within perspectives on all levels, including planning, funding, carrying out and reporting research. A central challenge is that throughout Sápmi there is a complete lack of *ethical* guidelines for research in Sami contexts, which results in different practices and low levels of structure and predictability. Therefore, good research ethics is often down to priorities and resources (including cultural competency) of individual researchers and Sami communities, which can account for considerable “research fatigue” among Sami. Finally, a key challenge to all health and wellness research among Sami is that the Nordic states does not allow for registries of ethnicity, which makes it very hard to track Sami health status, including evaluating impacts of societal changes.

In summing up, Sami welcomes more opportunities to meaningfully and equally put forth the Sami perspectives, Sami priorities and Sami ethics to solve the shared challenges of successful “Arctic health and wellness” research.

Natan Obed thanked the organizers for re-arranging the agenda to allow for his presentation despite his delay in arriving due to flight delays. As a representative of Canadian Inuit as the chair of the National Inuit Committee on Health, Mr. Obed emphasized the need to respect Inuit and Indigenous governance models when contemplating any research projects on Indigenous lands or concerning Indigenous-related topics. Respectful partnerships that are formed at the conception phase of the work are the only way to ensure the best results on any projects undertaken in the Arctic. For example, Inuit are governed internationally through the Inuit Circumpolar Council, and nationally in Canada through Inuit Tapiriit Kanatami. Respectful partnerships begin with outreach to institutions that represent Inuit.

Mr. Obed described some successful research partnerships between Inuit and the academic community, such as the Taima TB project that piloted innovative public health outreach campaigns in Nunavut to try to better understand how to prevent tuberculosis in Inuit communities. The 2007-08 Canadian Inuit Health Survey was undertaken in a partnership led by McGill University as the principal investigator and Nunavut Tunngavik Inc., the Nunatsiavut Government, and the Inuvialuit Regional Corporation as Inuit partners. Success was predicated on Inuit participation from the onset and a willingness to design the projects incorporating and melding Inuit and academic interests. Often, the difference between success and failure is dependent on the partner's willingness to work with Indigenous communities and organizations in meaningful ways throughout the lifespan of the research project.

Inuit would like to be a part of this process moving forward, and were thankful for the opportunity to participate in the Paris meeting.

6 ANNEXES

Agenda

8.30 – 9.00	WELCOMING COFFEE [SALLE ALFRED KASTLER]
	<p>OPENING REMARKS</p> <p>Welcome address (10') <i>Xavier Morise, Director of CNRS Office in Washington</i> <i>Martina Desole, ERA-Can+ coordinator</i></p> <p>Health and wellness in the Arctic region - thoughts from the EU perspective (10') <i>Tuomo Karjalainen, European Commission</i></p> <p>9.00 – 9.40 Cooperation's challenges with the EU on "Arctic, Health and Wellness" from a Canadian perspective (10') <i>Hélène Hallatcheff, Embassy of Canada in France</i></p> <p>Challenges of the "Arctic, Health and Wellness" research from a Saami/Inuit perspective (10') <i>Natan Obed, Nunavut Tunngavik</i> <i>Jon Petter Stoor, Sámi Norwegian National Advisory Board on Mental Health and Substance Abuse</i></p>
	<p>EXAMPLES OF COORDINATED COOPERATION</p> <p>9.40 – 10.10 The "Chantier Arctique" in France (10') <i>Denis-Didier Rousseau, CNRS</i></p> <p>ArcRisk and EU PolarNet (10') <i>Janet Pawlak, AMAP Secretariat</i> <i>Denis-Didier Rousseau, CNRS</i></p> <p>Polar Knowledge Canada (10') <i>Alain Leclair, Polar Knowledge Canada</i></p>
10.10 – 10.30	<p>Presentation of the break-out sessions and of the objectives <i>Jean Thèves, Deputy Director of the Americas, Research & International Cooperation Office, CNRS</i></p> <p>Tour de table <i>All participants</i></p>
10.30	COFFEE BREAK

10:45 – 12:15	BREAK-OUT SESSIONS [H206 & Salle du Conseil]
	<p><i>Session 1 : Environmental Contaminants</i> <i>Facilitators:</i> <i>Laurie Chan, University of Ottawa, Canada</i> <i>Crispin Halsall, Lancaster University, United Kingdom</i></p>
	<p><i>Session 2 : Mental Wellness/Suicide Prevention</i> <i>Facilitators:</i> <i>Susan Chatwood, University of Toronto, Canada</i> <i>Arja Rautio, University of Oulu, Finland</i></p>
	<p><i>Session 3 : Impact of Climate Change on Health</i> <i>Facilitators:</i> <i>Ashlee Cunsolo-Wilcox, Cape Breton University, Canada</i> <i>Janet Pawlak, AMAP Secretariat, Norway</i></p>
12.15	LUNCH BREAK
	PLENARY SESSION [Salle Alfred Kastler]
13.45 – 14.45	<p>Report on break-out sessions discussion One rapporteur from each small group will report back to all the participants and share the outcomes of break-out sessions <i>Break out sessions' facilitators</i></p>
14.45 – 15.45	<p>Next steps An open discussion/ brainstorming session about potential next steps, based on ideas raised in brain-storming sessions <i>All participants</i></p>
15.45 – 16.00	<p>Perspectives for EU-Canada future cooperation in Arctic, Health and Wellness and concluding remarks <i>Xavier Morise, CNRS</i></p>

List of Participants

EUROPEANS

Marcel BABIN

Takuvik, Joint University Laval-CNRS Laboratory

Sylvie BLANGY

Centre d'Ecologie Fonctionnelle et Evolutive, Université Paul Valéry Montpellier, France

Eva Cecilie BONEFELD-JØRGENSEN

Centre for Arctic Research, Aarhus University, Denmark

Thierry BOULINIER

Ecologie spatiale des populations, Centre d'écologie fonctionnelle et évolutive, France

Aurélien DOMMERGUE

Laboratoire de Glaciologie et Géophysique de l'environnement, Université Joseph Fourier, France

Crispin HALSALL

Lancaster Environment Centre, Lancaster University, United Kingdom

Tuomo KARJALAINEN

Directorate General for Research and Innovation, European Commission

Christina Viskum Lytken LARSEN

National Institute of Public Health, University of Southern Denmark

Janet PAWLAK

AMAP Secretariat, Norway

Arja RAUTIO

Centre for Arctic Medicine, Oulu University, Finland

Denis Didier Rousseau

CNRS, France

Melanie RÜGER

Valkee Oy, Germany

Jon Petter STOOR

Sámi Norwegian National Advisory Board on Mental Health and Substance Abuse, Norway

Michèle THERRIEN

Centre d'étude et de recherche sur les littératures et oralités, INALCO, France

CANADIANS

Laurie CHAN

Center for Advanced Research in Environmental Genomics, University of Ottawa

Ashlee CUNSOLO-WILLOX

Department of Nursing & Indigenous Studies, Cape Breton University

Hélène HALLATCHEFF

Embassy of Canada in France

Michael JONG

Labrador Health Centre, Memorial University of Newfoundland

Kami KANDOLA

Canadian Society for Circumpolar Health

Alain LECLAIR

Polar Knowledge Canada

Melanie LEMIRE

Centre de recherche CHU de Québec, Université Laval

Natan OBED

Department of Social and Cultural Development, Nunavut Tunngavik Incorporated

ERA-CAN+ PARTNERS

Martina DESOLE, APRE

Audrey GAHERY, CNRS

Claire GIRAUD, CNRS

Xavier MORISE, CNRS

Aurélie PACHKOFF –SINGH, APRE

Jean THEVES, CNRS

REGRETS

Susan CHATWOOD

Institute for Circumpolar Health Research, University of Toronto