



# International Collaboration and Cooperation Opportunities

As one goal of the ASM3 is to increase opportunities for cooperation, coordination, and collaboration in international Arctic research. As part of the ASM3 process, the organizers asked participating countries and organizations for information that can assist researchers from other countries, international organizations, Indigenous Peoples and community members in getting involved with your projects. The information collected is summarized below broken down by country.

## Opportunities for international collaborators to participate in national activities

### Austria

- Austria has no research infrastructure in the Arctic. However, it can offer highly specialized lab and measurement infrastructure for international collaborators. Additionally, Austria is part of the EU which offers many opportunities for joint funding, exchange programs and international collaboration.

### Canada

- New Frontiers in Research Fund (NFRF): Although this fund is not specifically limited to Arctic research, international researchers are eligible to participate in Canadian-led research teams under the Transformation and Exploration Streams of the NFRF, administered by the Tri-agency Institutional Programs Secretariat at the Social Sciences and Humanities Research Council of Canada. Flexible funding approaches allow funds to be transferred from Canadian principle investigators to international co-principle investigators and co-applicants. Canadian researchers are eligible to apply for funding to participate in Horizon 2020 projects through the International Stream of the NFRF.
- The Social Sciences and Humanities Research Council of Canada permits international collaboration in research funded by its Partnership stream. Depending on the funding opportunity, the roles of internationally-based researchers or organizations can be co-applicants, collaborators, or partners.
- Polar Knowledge Canada (POLAR) has a mandate that includes strengthening Canada's leadership on Arctic issues and is committed to supporting international Arctic science collaboration, community engagement, and capacity building. In particular, POLAR welcomes collaboration with international researchers at the Canadian High Arctic Research Station (CHARS) Campus in Cambridge Bay, Nunavut in research areas of shared interest under POLAR's Science and Technology Framework 2020-2025.
- The Canadian Network of Northern Research Operators (CNNRO), represents Canada on the Forum of Arctic Research Operators, and offers an extensive network of research support facilities to Canadian and international researchers.
- The Polar Continental Shelf Program (PCSP) provides advice and logistics coordination and planning for eligible research initiatives in Canada's North. International researchers may apply for logistics coordination support that, if feasible, would be provided on a recoverable basis.
- Mitacs is a Canadian non-governmental not-for-profit that delivers research and training programs by funding research and innovation projects, fostering industry – post secondary partnerships, and facilitating international internships, although this initiative is not limited to the Arctic.

- As an active participant in the Belmont Forum, the Natural Sciences and Engineering Council (NSERC) has supported the 2019 call for applications, Resilience in Rapidly Changing Arctic Systems (CRA Arctic II) along with nine other funding partners.
- ArcticNet, a Canadian Network of Centres of Excellence which received renewed funding in 2019 until March 31, 2025, has launched a new North by North Program that provides funding support to northern Inuit and First Nations people to address priority issues facing northern communities. ArcticNet brings together scientists, engineers, and managers in the natural, human health and social sciences with their partners from Inuit organizations, northern communities, federal and provincial agencies and the private sector to study the impacts of climate change in the Canadian North. Over 175 ArcticNet researchers from 33 Canadian universities, 8 federal and 11 provincial agencies and departments collaborate with research teams in Denmark, Finland, France, Greenland, Japan, Norway, Poland, Russia, Spain, Sweden, the United Kingdom and the USA.
- The North by North Program includes the Inuit Nunangat Research Program, which funds Inuit-led research and knowledge holders to engage in studies that are relevant and prioritized for Inuit Nunangat. This program is led by the Inuvialuit Regional Corporation, Kativik Regional Government, Makivik Corporation, Nunatsiavut Government, and Nunavut Tunngavik Inc, with the support of Inuit Tapiriit Kanatami and Inuit Circumpolar Council.
- The Canadian Mountain Network (CMN), a Canadian Network of Centres of Excellence, was established in 2019 with funding until 2024 to support the resilience and health of Canada's mountain peoples and places through research partnerships based on Indigenous and Western ways of knowing that inform decision-making and action, which includes research undertaken in the Western Arctic and Northern Labrador
- The NSERC Permafrost Partnership Network for Canada (NSERC PermafrostNet) unites researchers from 11 universities, with partners in government agencies, industry and Indigenous communities, who share the common goal of boosting Canada's ability to monitor, predict and adapt to large-scale permafrost thaw and its consequences
- The National Eureka network allows international small and medium-sized enterprises (SMEs) to work together for research and innovation initiatives. The National Research Council is the Canadian portal for participation of Canadian SMEs.
- Global Affairs Canada is responsible for bilateral engagement in science, technology and innovation (STI) with sixteen priority international partners with whom we have an S&T agreement or arrangement. Arctic research cooperation is a key element of Canada's international engagement.
- The Canadian Coast Guard (Coast Guard) maintains a number of bilateral and multilateral relationships and memberships that provide opportunities for reciprocal collaboration and participation, including the Canada-US Joint Contingency Plan (JCP) for marine spills which encourages and welcomes participation in each other's training and incident responses, and the Canada-Norway Cooperation Agreement, designed to promote the sharing of information and the participation of visitors in host country training and incidents.

## China

The Ministry of Science and Technology has many joint funding/exchange programs with other countries in terms of arctic research areas.

- The publication of "30m Image Mosaic of Greenland Using Landsat-8 OLI Images in 2014 and 2015" was a joint effort of both Chinese and Greenland researchers. In addition, drilling ice cores in eastern Greenland also creates opportunities for international partners to participate in the project.
- The Polar Research Institute of China is responsible for implementing the Chinese National Arctic Research Expedition (CHINARE) program which provides positions for international collaborators. With the launch of China's second icebreaker, we are planning more international cooperation opportunities.

- China is actively participating in the Year of Polar Prediction (YOPP) under The Polar Prediction Project (PPP). Those who are interest in participating in YOPP can contact: office@polarprediction.net.
- Pilot National Laboratory for Marine Science and Technology (Qingdao) and P.P.Shirshov Institute of Oceanology (Russia) are planning to co-fund a joint Arctic laboratory, in order to support Arctic research for scientists from both country. Scientists from other countries are also welcomed to join this laboratory. They are planning to launch International Cooperation Research Programs and International Big Science Research Plans which will provide research opportunities and support for international scientists.

## Czech Republic

The Czech Republic participates in the following international projects:

- 2021 – 2024: Co-ordinating and Co-designing the European Polar Research Area (EU-PolarNet 2). H2020-LC-CLA-2020-1
- 2020 – 2023: Polyphasic assessment of diversity of phototrophic microorganisms from cold environments and their bioprospection potential. CZECH-INDIANCOOPERATIVE SCIENTIFIC RESEARCH. Code 2019LTAN
- 2020 – 2024: INTERACT III- International Network for Terrestrial Research and Monitoring in the Arctic, Project number: 730938, EU HORIZON 2020 PROGRAMME.
- 2020 - 2022: ARCTOS MU - ARCTIC Centre for Human-to-Environment Oriented Studies: Impact of Climate Change and Human Activities in the Arctic.
- 2014 - 2021: EEA and NORWAY GRANTS, Fund for Bilateral Relations. ARCTIC FESTIVAL 2018, 2019 and 2020, Ministry of Foreign Affairs of the Czech Republic, the University of South Bohemia in .eské Bud.jovice and Jan Evangelista Purkyn. University in Ústí nad Labem, Czechia
- University Centre in Svalbard (UNIS) and Norwegian Polar Institute in Tromsø.

## Denmark

- Danish Centre for Marine Research (DCH) provides support for ship charter and for all marine research expeditions with the Royal Danish Navy. The purpose of DCH is to promote and strengthen Danish marine research. DCH has therefore no requirements as to the applicant's citizenship, the registered office of the research institution or to the geographical areas of research activities. Applications will be assessed on the basis of whether the project benefits Danish marine research.
- International Network Programme (INP) under UFM supports networking activities between Danish and international researchers. Grants may be awarded to projects between researchers from Denmark and one or more of the following selected countries: China (incl. Hong Kong), India, Israel, Japan, USA, Brazil, South Africa and the Republic of Korea. For applications with an Arctic focus, partner countries may also include Canada, Russia, Finland, Iceland, Norway, Sweden, Greenland and/or the Faroe Islands.
- UFM funds international networking projects under University of the Arctic (UArctic). The majority of the project partners will have to come from UArctic member organizations. All UArctic member regions will be considered an asset (North America, Nordic countries, Russia, Asia and Europe).
- To learn more about international opportunities within The Kingdom of Denmark please visit [www.isaaffik.org](http://www.isaaffik.org) and [ufm.dk](http://ufm.dk)

## European Union

- In the current EU Research Framework Programme, Horizon 2020 (H2020), International Cooperation is a cross-cutting priority and not a separate activity; in addition, part of Societal Challenge 6 focuses on specific international cooperation policy support activities. Horizon 2020 is fully open to the world, allowing researchers from all over the globe to take part in projects.

Furthermore, many calls particularly encourage the participation of organizations from specific partner countries that are not EU Member States or associated to the framework program.

- All funding opportunities can be found through the portal <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/programmes/h2020>.

## Faroe Islands

- The Faroe Islands in general support and encourage international cooperation though we do not have any specific international fellowships or joint funding programs. Faroese research institutions accept and embrace international collaborators to make agreements on participation in activities and projects.
- One important resource for international participants to know about is the new research vessel at the Faroe Marine Research Institute. The research vessel, Jákup Sverri, is equipped with numerous state-of-the-art equipment and facilities, including two wet and two dry labs. Further to this, the ship is a very advanced hydrographic surveying ship; and it is suitable for carrying out a variety of scientific operations in offshore and shelf locations.

## Finland

- Several science actors in Finland such as universities and research institutes offer possibilities for cooperation. Funding options are often available and negotiable. Top-down approach is usually not the way in Finland.
- Actors such as UArctic offer networking possibilities in many scientific disciplines
- Information platform of Research on Finland is found at <https://research.fi/en/>
- Information platform of Arctic Research in Finland is found at <https://www.arcticfinland.fi/EN/Research>

## France

- The French program "Make our Planet Great Again" offers opportunities to international researchers, CNRS facilitates collaborations through international labs or research groups and the French Polar Institutes welcomes foreign researchers to participate to its projects.

## Germany

- Germany's Arctic research program is internationally oriented and provides numerous opportunities for international collaborators. This includes several bilateral programs with North America, the Russian Federation, the UK and European countries. The research teams onboard the German icebreaker *Polarstern* are fully international and offer berths for researchers from many countries.
- In addition, the German Academic Exchange Service (DAAD, <https://www.daad.de/en/>) and the Alexander von Humboldt Foundation (<https://www.humboldt-foundation.de/web/humboldt-en.html>) provide resources for international researchers to apply for a short- or long-term stay at German research institutes or universities."

## Greenland

- At Ilisimatusarfik internationalization is a great priority. Therefore, international partnership-, network- and collaboration agreements are of great importance to us, and they also help to ensure the best professional framework for study mobility to and from Ilisimatusarfik and for our research work in general. Partnership agreements, with among others, universities in these countries: Aruba, Canada, Denmark, Finland, France, Faroe Islands, Germany, Iceland, Norway, Russia, South Korea, and Sweden.

- Network agreements with, among other, these networks: Erasmus+ (EU's mobility program, Network of Universities of Small Countries and Territories (NUSCT), Nordplus (Nordic mobility program, The University of the Arctic (UArctic - a cooperative network of universities).
- Educational and Research Institutions, Research Stations and vessels are all accessible to international students and researchers. International access is financed through external funds.
- The Ministry of Mineral Resources (MMR) has a team of geologists from Greenland, Denmark, Australia and Hungary. We carry out geological research and produce new geoscience data together with international research partners through scientific agreements. There is a possibility for funding of geology student masters, PhD and postdocs under scientific agreements if the research is relevant for mineral exploration in Greenland. Extra berths on research ships can be found on: [www.isaaffik.org](http://www.isaaffik.org)
- Asiaq have employees from 6 different countries and hires internationally experienced researchers.
- The Greenland Center for Health Research (GCHR) collaborates internationally, especially with researchers from the circumpolar region within health sciences. Through grants from UArctic we have been able to organize PhD courses and research seminars the past years, and again in 2020. Furthermore, every third year we host the Greenlandic medical conference NUNAMED, and are also active in various commissions (e.g. Lancet Commission) and networks (e.g. UArctic thematic network).
- Nunatta Katersugaasivia Allagaateqarfialu (the Greenland National Museum and Archives or NKA) is currently co-running and participating in several interdisciplinary Arctic research projects with international partners. The NKA has a long history of cost-sharing expenses associated with logistics and transport to remote locations for research with international partners and colleagues working in Greenland.

## Iceland

- Iceland contributes to the Horizon Europe and Nordforsk research programs both of which offer some opportunities for international Arctic Research cooperation. Iceland and Norway have a bilateral arrangement under the Arctic Research and Studies Fund with the objective to encourage scientific cooperation between higher education institutions and research organizations in Norway and Iceland in the field of Arctic research. For further information: (<https://en.rannis.is/>).

## India

- The Indian Ministry of Earth Sciences has signed MoUs with the Norwegian Polar Institute, National Institute of Polar Research (Japan) and Polar Knowledge Canada for taking up joint research projects in the Arctic regions, including capacity building activities. In the forthcoming field season (also considering the aftermath of COVID-19), NCPOR/MoES intends to take up research cruises in the coastal Svalbard with logistic support from SIOS where berths will be available for international participants. Details on our activities can be found in [www.ncpor.res.in](http://www.ncpor.res.in).

## Italy

- Dirigibile Italia is included in the Transnational Access Programme INTERACT and also offers resources for applicants to the SIOS access program. Physical, remote and virtual access modes have been implemented.
- Executive Programmes for Scientific and Technological Cooperation are signed and supported by the Foreign Ministry (MAECI) on a three-year basis. The Executive Protocols offer two instruments: "Researcher Mobility Projects" and "Projects of Major Importance" ([https://www.esteri.it/mae/en/politica\\_estera/cooperscientificatecnologica/programmiesecutivi/](https://www.esteri.it/mae/en/politica_estera/cooperscientificatecnologica/programmiesecutivi/)). In this context, relevant Protocols are those with QUEBEC, KOREA, JAPAN, POLAND, USA, SWEDEN.
- CNR offers a program for short term mobility (<https://www.cnr.it/en/short-term-mobility>).

- CNR signs and implements Bilateral Agreements on Scientific and Technological Cooperation with corresponding foreign Research Organizations (<https://www.cnr.it/en/current-agreements-list>) for the joint financing of: (i) joint research projects; (ii) individual exchanges; (iii) bilateral seminars.
- CNR has a special agreement with RFBR for co-funded three-year Major Important projects (up to 10). Cfr. <https://www.cnr.it/en/bilateral-agreements/agreement/46/rfbr-russian-foundation-for-basic-research> for details.

## Japan

- The observation bases, research vessels, satellite data, Arctic Data Archive System (ADS), etc. operated by Japan referred in Appendix 1 are also available to overseas researchers. The ArCS project implemented up to March, 2020, has been promoting the dispatch of 52 Japanese young researchers to Arctic research institutes and international meetings at overseas. The ArCS II project, which has started in June 2020, also promotes human resource development.

## Republic of Korea

- As an advocate of international cooperation in Arctic research, the government of the Republic of Korea supports international fellowship programs in an effort to promote research collaboration, and to provide future generation polar researchers with networking opportunities by making use of its infrastructure and capacity.
- For example, the Asian Polar Science Fellowship aims to support Asian polar scientists to join either Korea Polar Research Institute (KOPRI) headquarters or KOPRI-organized field research program in the Arctic or Antarctic. The Institute Visiting Program offers office space and/or laboratory access within the KOPRI facilities lasting up to a 3-month period, while the Field Research Program offers logistics support for conducting field research using KOPRI facilities, i.e. Arctic/Antarctic Research Stations and IBRV Araon. For further information: <https://www.kopri.re.kr/eng/html/edu/040401.html>.

## The Netherlands

- The Netherlands Polar Programme encourages international collaboration on the project level via its calls-for-proposal. Our Memoranda of Understanding with the British Antarctic Survey (UK) and Alfred Wegener Institute (Germany) govern close cooperation both top-down and bottom-up. The Netherlands Polar Programme bureau also acts as a go-to contact point for potential future high-level research partners.
- The Dutch Research Council has a Money follows Cooperation scheme that allows researchers from almost all countries to act as co-applicants for half the project budget, if her/his skills and expertise are not available in the Netherlands. These conditions do not apply to Norway and Switzerland, with which we have special agreements since 2019 and 2020 respectively. International collaborators are frequently listed as project partners in our polar project teams.
- Most international collaboration is conducted through researchers' own thorough, professional networks. Polar research is largely decentralized at circa 10 universities and institutes. This set-up requires research units to invest in their own international networks. "



## Norway

- The Research Council of Norway (RCN) has a dedicated Polar Research Programme with annual calls.
- International research organizations can be project partners in these calls and financially be supported by RCN.
- RCN has specific fellowships for visiting researchers to Norway and for Norwegian researcher stays abroad. These fellowships can be supported for a maximum of 12 months.
- RCN can also provide fellowships directed towards specific countries. Such fellowships are specifically announced on the RCN website and includes which countries are included.
- All fellowships are announced on [www.rcn.no](http://www.rcn.no).
- At Svalbard, Ny Ålesund is a Norwegian platform for international cooperation in world-class natural sciences research.

## Poland

- We encourage international collaborations via international projects (NCN, e.g. GRIEG and others) and joint use of facilities (e.g. our research vessel Oceania). Poland provides scholarship programs (PASIFIC - PAN) and PhD and post-doc positions are internationally presented for open competition. Additionally, there is a pool of PhD scholarships offered by International Environmental Doctoral School associated with the Centre for Polar Studies at the University of Silesia in Katowice (IEDS) focused on Arctic research (<https://www.mssd.us.edu.pl/en/>).

## Portugal

- The Foundation for Science and Technology (FCT) supports the scientific community in Portugal (PT) through a range of funding schemes, tailored for individual scientists, research teams or R&D centers. Through its funding schemes, FCT supports graduate education, research and development, establishment and access to research infrastructures, networking and international collaborations, conferences and meetings, science communication and interactions with industry. Scientists from all nationalities, and in any research area, may apply to FCT for funding.
- In what concerns, specifically, international cooperation, FCT/PT ensures the representation of the country/institution in the relevant research and innovation fora of the European Union and the European Research Area and in relevant international science and technology policy fora and in international research and innovation cooperation organizations; proposes, negotiates and operationalizes bilateral and multilateral agreements, instruments and initiatives for international cooperation in research and innovation at European and extra-European level; supports the participation of the scientific community in: a) international organizations; b) multilateral programs and scientific networks; c) joint projects or initiatives integrated in scientific and technological cooperation agreements; and d) bilateral agreements of science and technology between Portugal and other countries or institutions.
- URL: <https://www.fct.pt/>

## Singapore

- Our research institutions remain open to international collaboration on Arctic projects. The Sea Level Group (led by Prof Horton) in NTU is also seeking a Research Fellow with a PhD degree, who should have some experience in paleo sea-level reconstruction and can perform labor intensive field work in polar/high-latitude region. (<https://earthobservatory.sg/about/careers>). The National Sea Level Programme initiated by the Centre for Climate Research Singapore is coordinating funding for several local university projects, which will provide the opportunity to engage international collaborators (as part of these projects). Past examples can also be found in MFA's project submitted

for ASM2 and updated for ASM3 titled "Public Outreach Beyond the Arctic: Informing and Engaging the Tropics".

## Spain

- Spain by means of MoUs is ready for sharing projects and initiatives. Nowadays, Spain has an MoU signed for collaboration in polar/Arctic science with Japan, and is negotiating others with the Czech Republic and Turkey. We have been collaborating actively with Korea and Norway in the Arctic Region. Spain is always happy have collaboration in our polar research, sharing infrastructures, projects and capacity building. With researchers belonging to countries with signed MoUs the relationship is facilitated by the Spanish Polar Committee. With other researchers, interaction is more bottom-up.

## Sweden

- Swedish polar research is financed by the Swedish Research Council, and the Research Council Formas who both give grants to scientists active in Sweden. The logistics (vessels, research stations) are provided by the Swedish Polar Secretariat. The scientists can use the funds they receive in the way they feel most effective for the research they are performing, which includes international fellowships. All expeditions with research vessels are open to international researchers, and most expeditions are performed in cooperation with other countries.

## Switzerland

- In Switzerland, research funding is awarded on a competitive basis, according to qualitative assessment criteria. The Federal government provides funding through the federal agency Swiss National Science Foundation (SNSF) which grants subsidies on a peer-review basis. The government also provides funding to research institutes within the Domain of the Federal Institutes of Technology as well as to 30 other research institutes. The Swiss National Science Foundation attributes funding for collaboration with international partners in many of its funding schemes through dedicated bilateral or multilateral collaboration programs. It also funds scientific collaboration through schemes such as "Lead Agency" procedures.
- Switzerland is fully associated to Horizon 2020 and is linked to the climate and polar topics currently underway. Switzerland participates actively in a number of polar research projects funded by Horizon 2020. This applies to single grant projects (ERC), collaborative research (e.g. Beyond EPICA, CHARTER) but also Support actions (e.g. EU PolarNet I and II).
- The SPI (Swiss Polar Institute) offers funding to complement SNSF in covering logistics and fieldwork. SPI also funds Swiss involvement in international initiatives such as MOSAiC or ICE Memory. It also regularly organizes scientific expeditions with international participation. SPI also works closely with partner organizations to offer collaboration opportunities."

## Thailand

- Thailand does not have specific funding for international collaborators, but is keen to seek future collaborators.

## United Kingdom

As a non-Arctic state international research cooperation is particularly important. In a University of the Arctic study the UK was ranked 4th for the number of Arctic papers in peer-reviewed journals and two-thirds of the papers had international co-authors - more than the top three publishing countries.

- NERC Changing Arctic Ocean Programme (2017-22) - a jointly funded £20m UK-Germany program which supports 16 projects with 170 investigators from 32 different institutions across 17 different



countries. The program provided scientific cruises on the UK ice-strengthened research vessel, RRS James Clark Ross in 2017, 2018 & 2019.

- Natural Environment Research Council (NERC) and National Science Foundation (NSF) - a lead agency agreement to reduce administration for collaborative proposals which are an integrated UK-US effort to address a research topic of interest to both NERC and a relevant NSF division.
- Canada and Russia Arctic Science Bursaries Programmes - dedicated funding for UK-based researchers to join new teams and new collaboration.
- NERC Arctic Research Station, Svalbard – available to international researchers for joint projects with a UK partner, or to non-UK projects through INTERACT
- Resources and links: <https://www.arctic.ac.uk/>, <https://www.ukri.org/>, <https://nerc.ukri.org/>, <https://www.gov.uk/world/organisations/uk-science-and-innovation-network>

## United States of America

- International participation is welcome in research coordination activities through the U.S. Interagency Arctic Research Policy Committee (IARPC) Collaborations Portal, which provides an opportunity to strengthen coordination and collaboration on Arctic research.
- The Fulbright Arctic Initiative supports scholars, researchers and professionals from Arctic Council member countries to carry out collaborative research on public policy questions related to the unique challenges of the Arctic region.
- NASA provides opportunities for foreign participants on science teams on a no exchange of funds basis (proposals are typically required) and engages in joint missions with international partners.
- The Department of Interior has explicit efforts to enhance international collaborations in scientific understanding of circumpolar issues, data standardization, data sharing, and monitoring.
- NOAA has current personnel exchanges (weather forecasters and sea ice analysts) with the Finnish Met Institute and has had previous personnel exchanges with the Meteorological Service of Canada.
- The United States sponsors one Russian scientist annually to participate in pollock surveys in the eastern Bering Sea to promote collaboration on this cross-boundary stock.
- The Office of Naval Research–Global provides support to overseas researchers and coordinates the International Cooperative Engagement Program for Polar Research that facilitates research between military and government entities.

## Inuit Circumpolar Council

ICC works closely with Arctic countries, Permanent Participants, and observer countries/organizations in Arctic Council projects.