

Where do we go from here?

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ICARP III has just finished resulting in a synthesis of hundreds of major knowledge gaps and key recommendations for future research in the Arctic. Where do we go from here? How can we try to avoid that we end up with the same list of recommendations in ten years' time for ICARP IV? Some of the challenges will of course remain, but how can we ensure that this list will be as short as possible?

The scale and complexity of the Arctic system requires international cooperation in identifying, understanding, predicting and managing environmental change. We need thematic networks and projects as well as networks of infrastructures that can host the thematic networks. As an example, we need thematic projects like DEFROST (Scandinavian top level initiative), PAGE21 (EU-funded project), ADAPT (Canadian project) and GRENE-TEA (Japanese project) that are all working together on issues related to permafrost in a changing world, to reduce the list of knowledge gaps identified by the "Permafrost Research Priorities" (<http://www.climate-cryosphere.org/activities/targeted/permafrost-research-priorities>). We need networks of infrastructures to host the thematic projects. An example of such a network is INTERACT that connects more than 70 terrestrial research stations in the Arctic and adjacent high alpine area. It builds significant capacity for research, monitoring and education. INTERACT provides transnational access which is centralised funding for researchers to visit stations outside the countries where they work. INTERACT's EU funding has been leveraged to gain funding in Canada and the US and researchers can apply to INTERACT for travel and subsistence to visit stations in all Arctic countries. The funds have been and will be used strategically to focus research on high priority knowledge gaps identified by e.g. ICARP III and to build international collaborations needed to make the list of knowledge gaps as short as possible.

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