

Karelian Research Centre RAS (UArctic member)

Karelian Research Centre RAS has a team of nearly 400 scientists working in 7 research institutes. The study of the Arctic and Subarctic is the main Centre's priority.

Karelian biologists and their Norwegian colleagues from the University Centre in Svalbard, Tromsø University and Research Centre "Akvaplan-Niva" revealed the physiological and biochemical mechanisms of the reproductive cycle adaptation by Arctic fish species. Our Centre also investigates the impact of oil pollution using sensitive physiological and biochemical indicators of bivalve mollusks in the Arctic and Subarctic seas.

Parasitologists conducted monitoring and analysis of environmental factors determining diversity of parasites and the level of fish contamination. The salmon parasites atlas was created, including fish from rivers and the Barents and White Seas' coasts.

Centre's scientists also work in the field of human medicine in the North. The molecular biophysicists study structural organization of human red blood cells membranes and hemoglobin autoxidation in the Northern conditions.

Experts from the Forest Institute study forest stands at the northern limit of their distribution. Soil scientists are known for their research on the soils functioning in Arctic and Subarctic ecosystems and their anthropogenic impacts.

Northern Water Problems Institute researches major water bodies of the North, such as the White Sea, Ladoga and Onega Lakes, studying climate change and anthropogenic impacts on waters at high latitudes.

Institute of Economics researches the climate change impact on the Arctic region economic development. Economists also study urbanization challenges and sustainable socio-economic development in rural areas. Humanitarian issues in the Barents region, studies of man's place in the socio-cultural Arctic dimension are the topics of interest for Institute of Language, Literature and History. The Institute's research priorities are Northern European culture and its modernization processes, ethnic and cultural history of Sami, Norwegian and Russian Finns, their linguistic and cultural contacts.

On the Centre's base also was created the "North-Centre", the partnership platform for science, non-profit sector, business and government. Currently, the "North-Centre" is implementing projects on rural development, social innovations and green economy.

Karelian Research Centre is highly interested in cooperation with UArctic partners on such science fields as stability of natural ecosystems, food security, medicine, Arctic geology, environmental education and bioeconomy. Karelian scientists, developing fruitful contacts with colleagues from more than 20 countries, find extremely important to achieve synergies in research between Russian and international partners for the global Arctic benefit.

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