
“Population aging is one of the largest demographic megatrends affecting regional societies and economies, which can exert profound social consequences in this most desolate and least populated region in the world, such as the Arctic.”

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As a young researcher of the Arctic, demography and studies on human capital and wellbeing of the northern population is, to me, of high importance for the future of the Arctic development, similar to the studies on environmental and socioeconomic drivers of change. Local people can actively contribute to the further development, and should enjoy the empowering Arctic, staying healthy and productive as long as possible. My main research interests include spatial demography of the Arctic popu-



lation, in particular the Barents Region. I also explore issues of migration, health, well-being and ageing of northern people, and family and population aspects in regional policy implementation.

I hold academic degrees from the University of Oulu (Finland, MA and PhD in Health Sciences) and Northern Arctic Federal University (Russia, BA in Social Work). My theses focused on population ageing and older people in the Arctic. Population ageing is one of the largest demographic megatrends affecting regional societies and economies, which can exert profound social consequences in this most desolate and least populated region in the world. My theses and refereed articles have deepened the understanding of the causes and features of population ageing from national to the sub-national level of the eight Arctic countries in the period 1980/1990 to 2015. Alongside standard approaches to measuring ageing, based on “chronological” age, I have applied the alternative methodology based on “prospective age” that is the remaining lifespan of an individual at certain point of the lifetime. The “prospective” methodology takes into account the gains in life expectancy and improvements in population health that have been actively happening in the Arctic.

Recently, I have modelled the future of the Arctic population forward to 2050. For the first time, I have generated population projections for the majority of the sub-national territories in the Arctic (25) in addition to all Arctic countries (8). To add novelty and more socioeconomic relevance to our analysis, education was introduced into the cohort-component model of population projections. Calibrating the input data, I included differentials in local fertility and mortality, along with three specific education scenarios for the future. I believe factoring in the parameter of educational attainment is crucial since it represents a key human capital reserve. Human capital refers to the stock of educated adults (15+ years old) who have attained different levels of education. Depending on the share of the most educated (post-secondary/university level), the Arctic region might get a boost or dip in its future demographic and socioeconomic development.

Population growth in the Arctic is likely to remain fairly steady in the near future, varying between 9.6 (Arctic Dip) and 11.6 (Arctic Boost) million people in 2050, yet representing only a tiny share in their countries’ total population. The population of the North Atlantic and North American Arctic will grow faster than in the territories of the Russian and Fennoscandian Arctic. In education, the gender gap will increase further towards feminization of human capital, meaning less females than males in

the primary educational segment and more females than males in the post-secondary segment. One policy message here is to revise current programs and plan the future ones to meet the need for diverse educational opportunities at all levels within and between Arctic territories, in particular for rural, remote, and Indigenous areas.

Policy and population matters in the Russian Federation is another of my focus areas, one of the Arctic Eight countries with a substantial elderly population and low fertility rates. In close cooperation with the Northern Arctic Federal University, I have undertaken comprehensive analysis on the role of population policies in dealing with ageing in BRICS countries (Russian Federation Report). We analysed 59 indicators for the period of 1990 to 2017, in fields such as population size and growth, population age structure, fertility, reproductive health and family planning, health and mortality, spatial distribution and internal migration, and international migration.

Currently, I work at the University of the Arctic's (UArctic) Thematic Networks and Research Liaison Office (Thule Institute, University of Oulu). I am also involved as an author and researcher in more international projects related to the Arctic and Barents population health such as the EU Arctic Cluster Project "Nunataryuk", the Arctic Council "One Arctic – One Health", the Nordic Council of Ministers' funded project "Advancing Elderly People's Agency and Inclusion in the Changing Arctic and Nordic Welfare System", "Arctic Youth and Sustainable Futures". There we look at the different Arctic issues concerning elderly and young people, temporal trends in persistent organic pollutants and other contaminants in the Arctic locations, climate change driven infectious diseases, population diversification in demographics, health, and living environments.

I have been honoured to present some results of my studies as a keynote or plenary presenter at four conferences in 2017–2018 (Peace Symposium, Uusikaupunki Finland August 2017; Development of the UK-Russia Arctic Research and Collaboration Arkhangelsk Russia March 2018; Arctic Scientific Youth Conference Arkhangelsk Russia April 2018; International Congress of Circumpolar Health, August 2018). Working in the network of experts on population health, I have recently started to co-lead the UArctic Thematic Network on Arctic Health and Wellbeing. This is a creative place to contribute to more research and education activities in the area of health of the northern residents consequently contribute to finding ways and strategies for developing an ecologically democratic and sustainable future for the Arctic region.