

Nordic Centre for Sustainable and Resilient Aquatic Production (SUREAQUA)



Nordic Centre for Sustainable and Resilient Aquatic Production (SUREAQUA) is multidisciplinary center which will provide competence, innovation and technology to ensure sustainability and resilience in aquatic and associated land-based value chains, to ultimately advance the bioeconomy transition in the Nordic region. SUREAQUA aims to make significant contributions to food and nutrient security, employment and efficient use of resources, in the context of forecasted global changes.

The center is led by Fiona Provan International Research Institute of Stavanger. The consortium composes of several research institutions, namely IRIS (NO), NMBU (NO), NOFIMA (NO), SNF-NHH (NO), UiS (NO), DTU Aqua (DK), DTU Nanotech (DK), UGOT (S), UEF (FI), Fiskaaling (FO), RORUM ehf (IS), UoI (IS) and ECEHH (UK). The center is also an important opening for the strategic emerging research area *Aquatic Research in Changing World* in the University of Eastern Finland (UEF), creating a novel multidisciplinary network and platform for larger European level research co-operation and funding. The direct UEF-contribution to the center is by three research groups at the Department of Environmental and Biological Sciences, led by Mikko Kolehmainen, Raine Kortet and Amit Bhatnagar.

In the beginning, we have focused in creating pilot sites for further research. Firstly, we have installed various types of photo-bioreactors which are being applied and optimized for the cultivation of microalgae in different types of wastewaters. The first results of this research have already been published in a journal (Bioresource Technology, Volume 255, May 2018, Pages 104-110). Secondly, we have participated in constructing a lab scale model freshwater aquaponics system, suitable for culturing simultaneously juvenile whitefish and different green edible plants. We have also participated in analysis of legal adaptive capacity for increasing sustainable fish aquaculture production in EU-Finland. Additionally, we have been active in the center for defining a corresponding salt water pilot site in the North Atlantic area connected to salmon production. Our special focus has been in defining the requirements for aquatic modeling to be carried out later in the project.

More information:

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More detailed information can be found at:

<https://www.nordforsk.org/en/programmes-and-projects/projects/nordic-centre-for-sustainable-and-resilient-aquatic-production-sureaqua>

and in the web pages of the center of excellence:

<http://www.sureaqua.no/>