University of Bergen, Department of Biological Sciences



Building a Norway-Japan Partnership for Excellent Education and Research in Aquaculture

Ivar Rønnestad Professor in Fish Physiology





Norway-Japan Academic Network Seminar Organized by Japan Society for the Promotion of Science and Research Council of Norway 6. Febr, 2019

Why I chose to collaborate with Japan:

- Study tour to Japan in 1989 (an eye opener)
- Japan has cutting edge competence in aquaculture/fisheries and related basic sciences
- Excellent scientists and research teams- from top ranked groups
 - Work with the best
 - Complementary knowledge
- Start to search for collaboration possibilities and joint projects
- Recruit Japanese students to Norway
 - high level of knowledge, skills, motivation, and output
 - friendly, easy to collaborate with









Summary of main collaborations 1994-2015



Kyoto University (from 1994)

- Collaborating scientist: Prof. M. Tanaka- sensei
- MSc students exchange Kyodai and UiB (2x)
- PhD co-supervision at Kyodai
- Visiting professor at Kyodai (I. Rønnestad)
- Financing

- Scandinavia Japan Sasakawa foundation (initial study tour)
- Kyoto University Foundation, I. Rønnestad invited visiting professor
- RCN (Researchers projects and visiting scientist)
- JSPS

• National Research Institute of Aquaculture, Nansei, Mie (from 2007)

Collaborating scientist: Dr T. Kurokawa



- Short term research visit to Mie (I. Rønnestad)
- Postdoc stay at UiB 2 years (Dr. K. Murashita)
 - Financing
 - Scandinavia Japan Sasakawa foundation (study tour)
 - JSPS
 - RCN (Researchers projects and visiting scientist)



Summary of main collaborations 1994-2015

Status pr 2015:

Long-term collaborations with world leading research and educational institutions Mobility of Researchers Collaboration in research Shared supervision High output of publications (>26 joint papers in peer review journals)

But:

Depend on a person to person basis No robust longterm-funding

Task:

Build an institutionalized platform for collaboration Focus on aquaculture and fish biology

Why Aquaculture and Fish Biology?







ExcelAQUA- INTPART project, 2017-19



Aim: Establish a **collaborative platform** for **research**, **education** and **training** between partners in Bergen Marine Cluster and Japan in Sustainable **Aquaculture** and Integrated **Fish Biology**





NORWEGIAN CENTRE FOR INTERNATIONAL COOPERATION IN EDUCATION



ExcelAQUA- INTPART project, 2017-19





ExcelAQUA- Norwegian partners







Partner institution	Project manager
University of Bergen (Host) Department of Biological Sciences	Prof. Ivar Rønnestad (PM)
NORCE	Dr. Tom Ole Nilsen* (Vice PM)
BioCEED Center of Excellence in Teaching	Oddfrid Kårstad
ctrIAQUA Center of Excellence and innovation in Aquaculture	Sigurd Handeland
The Seafood innovation Cluster Center of Reseach-based Innovation	Tanja Hoel







ExcelAQUA- Japanese partners







Partner institution	Project manager
Hokkaido University Faculty of Fisheries Sciences	Prof. Munetaka Shimizu (Vice-PM)
Nagoya University Graduate School of Bioagricultural Sciences	Prof. Naoyuki Yamamoto
Japan Fisheries Research and Education Agency National Research Institute of Aquaculture	Dr. Koji Murashita
St. Marianna University School of Medicine	Assoc prof. Junya Hiroi
Miyagi University of Education Faculty of Science Education, Department of Biology	Prof. Arimune Munakata
The University of Tokyo AORI, Dept of Marine Bioscience	Prof. Yoshio Takei / Prof. Katsufumi Sato

ExcelAQUA- Work packages



- 1. Joint Aquaculture course (Annual Summer school)
- 2. Annual workshop with NCE/internship w/ TUMSAT
- 3. Shared Supervision-mobility
- 4. Establish Research metods and infrastructure
- 5. Transcultural teaching methods
- 6. Administration- Dissemination



ExcelAQUA- Summer School 2017 in Bergen





ExcelAQUA- Summer School 2018 in Japan





ExcelAQUA- Summer School 2018 in Japan



training, networking and cultural understanding

ExcelAQUA- Output and Dissemination (status)



Master thesis

- 3 Norwegian (finished)
- 2 Japanese (ongoing)

Mobility

- 2 Post docs Japanese (2 years; JSPS)
- 1 MSc. (1 month; JSPS)
- 2 BSc. (1 month; JSPS)

Summer School

• 2 cohorts (24 students)

Communications

- 4 papers (peer review)
- 4 poster abstracts, 4 lectures

New joint projects started

- 2 Japanese (JSPS)
- 1 Norwegian (RCN)



"Our Japanese colleagues appreciate that ExcelAQUA also gives them the opportunity to expand their network internally in Japan."

Summary





We have established a collaborative platform for research, education and training between partners in Bergen Marine Cluster and Japan in Sustainable Aquaculture and Integrated Fish Biology





Forskningsrådet Støttet av Norges forskningsråd