Internships - Connecting Education, Research, and Industry

~ Perspectives from Japan ~

Japan-Norway
Arctic Science Innovation Week 2016
Toshiaki Komatsu
Professor, Tokyo University
of Marine Science and Technology

Saltstraumen
Presentation Layout

- Approach to Internships, Perspectives from partners
- Collaboration between Academia & Industry
- Introducing Seafood Value Chain program
Approach to INTERNSHIPS

✓ Industry Perspective
✓ Student Perspective
✓ Academia Perspective
What INDUSTRY wants

- Need new ideas, Limited burden, Give feedback
- Sustainable program, Training & Hiring opportunity
- Human Resource Development, Social contribution
What PARTNER UNIVERSITY wants

✓ New dimension to Academia – Industry relationship
✓ Student & Researcher exchange opportunities
✓ Academic achievement leads to new opportunities
What LOCAL UNIVERSITY wants

- Student Mobility, Oversea experience, Safety & Cost control
- Match local requirements, Timing, Support, Promotions
- Create leverage, Faculty & Staff Development
Find “right” partners

Idea & Hard work is the key
This is the story of how new program was developed ....
✓ Right Strategy & Timing
✓ Imagine the Ripple effects
In collaboration with cermaq
Nord University
Tokyo University of Marine Science and Technology

SEAFOOD VALUE CHAIN PROGRAM
TUMSAT-NORD-CERMAQ
What does Cermaq do?

- **Employees:** 4100
- **Revenue (2014):** NOK 5.6bn
- **EBIT (2014):** NOK 428m
- **137 thousand tons gwe sold in 2014**

Cermaq is 100% owned by Mitsubishi Corporation and is the #2 global salmon farmer.

- **Canada**
- **Chile**
- **Norway** (Cermaq head office)
Program Structure – 6 months

June – August

JAPAN
- SAFETY TRAINING
- WORKING RELATIONS TRAINING
- CROSSCULTURAL TRAINING
- PRESENTATION TRAINING
- RESEARCH TRAINING
- BUSINESS MANNER TRAINING

NORWAY
- CERMAQ
- NORD UNIVERSITY

September

JAPAN
- MITSUBISHI GROUP
- TUMSAT

November
Program - Industry Education

• **Day 1: Head office, Oslo**
  - Introduction to Cermaq
  - Sustainability, risk & quality
  - Sales and logistics
  - R&D in Cermaq

• **Day 2-5: Value chain overview, Steigen/Bodø:**
  - Fish Health Management
  - Sustainability/OHS,
  - Genetic improvement (Nordnorsk stamfisk)
  - Freshwater production (site visit)
  - Saltwater production (site visit)
  - Processing and Quality (site visit)
WEEK 2 - NORD UNIVERSITY

Nord University - Faculty of Biosciences and Aquaculture, Bodø:

- Introduction to the University
  - Microbiota/ Prophylactic health management
  - Marine ecology – footprints of aquaculture
  - Water quality management

- Visit research and student groups with presentations and demonstrations within
  - Nutrition and feeding
  - Fish health
  - Reproduction and breeding
  - Marine genomics
  - Wet laboratory
Seafood Value Chain – Thailand program

NORWAY

THAILAND
Another example of Internship program ….
Professor Toshiaki Komatsu
Tokyo University of Marine Science and Technology (TUMSAT)
tkomat0@kaiyodai.ac.jp