

Working together for a green Europe

LUNCHSEMINAR

Lecture by prof. Ian Mayer

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Visiting Professor at CENAKVA, Faculty of Fisheries and Protection Waters

"Challenges facing the Norwegian Salmon Industry"



Challenges facing the Norway is by far the biggest aquaculture producer in Europe, exceeding the EU in both volume and value. According to the Norwegian Seafood Council, Norway exported 1.3 million tonnes of farmed fish with a value of NOK 111.3 billion in 2022. Atlantic salmon accounts for over 95% of aquaculture production. To continue the strong growth and to be able to meet the increasing global demands, the Norway's salmon industry must respond to the following challenges, 1) limited access to new locations for production, 2) fish health and fish welfare; and 3) the effects on the environment (e.g. fish escapes, waste and the environmental footprint of fish feed and transport). In order to meet these challenges the Norwegian salmon industry is adopting a number of technological innovations aimed at reducing both sea lice levels and the number of escaped fish, which together continues to have a serious impact on wild salmon populations. Salmon farming is now encompassing new production strategies, involving both offshore production units and closed land-based units employing RAS (Recirculating Aquaculture Systems) technologies. As a consequence of these new production regimes salmon farmers are now reporting an increased incidence of salmon stunts following seawater transfer. The occurrence of stunts is both a major economic and welfare issue to the salmon industry. Evidence indicates that stunting is due to impaired smolt quality, with stocked fish displaying poor seawater tolerance. We report our latest research indicating the involvement of the thyroid axis in the occurrence of stunting.

CV- MAYER

PERSONAL INFORMATION

Family name, First name: MAYER, IAN

Sex: Male

Nationality: British

EDUCATION

1987 PhD: **Disputation date:** 10.05.1987

Department of Zoology, University of Wales, UK

1982 Master Degree

Department of Oceanography, Southampton University, UK

CURRENT AND PREVIOUS POSITIONS

2008-present Professor

Faculty of Veterinary Medicine, Department of Production Animal Clinical Sciences,

Norwegian University of Life Sciences (NMBU), Norway

2003-2008 Professor

Department of Biology, University of Bergen, Norway.

1991-2003 Assistant Professor

Department of Zoology, University of Stockholm.

FELLOWSHIPS AND AWARDS

1987-1989 Royal Society of London European Postdoctoral Fellowship.

Department of Zoology, Stockholm University, Sweden.

MOBILITY

1995 Guest Professor, Muséum National d'Histoire Naturelle, Paris.

1991 NSERC Visiting Postdoctoral Fellow

Div. of Biotechnology, Genetics and Nutrition, Fisheries & Oceans,

West Vancouver Laboratory, Vancouver, B.C., Canada

SUPERVISION OF GRADUATE STUDENTS AND RESEARCH FELLOWS

In addition to supervising Master students, I have been the supervisor for the following PhD students:

Department of Zoology, Stockholm University (1991-2003)

Efi Antonopoulou (defended 1998)

Staffan Jakobsson (defended 1999)

Cecilia Bornestaf (defended 2000)

Anna Hellqvist (defended 2003)

Miklós Páll (defended 2003)

Helena Elofsson (defended 2005)

Department of Biology, University of Bergen (2003-2011)

Cécile Jolly (defended 2007)

Anne-Laure Groison (defended 2010)

Anne-Grethe Gamst Moen (defended 2010)

Ole Fredrik Skulstad (defended 2011)

Anne Christine Knag (defended 2013)

Norwegian University of Life Sciences (2008 - present)

Thomas William Fraser (defended 2013)

Daan Mes (defended 2018) PhD position fully funded by EU ITN project IMPRESS

Carlos Espirito Santo (2016-2018). Co-supervisor. Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB), Germany.

Kristine von Krogh (Thesis defence in Aug. 2020). NMBU (co-supervisor)

