

Short CV – Ivan Lund

Degrees

- PhD, Roskilde University (2008).
- MSc (Biology), University of Copenhagen (1994).

Positions

- Senior Researcher, DTU Aqua, Technical University of Denmark (2012-present).
- Researcher, DTU Aqua (2008-2011).
- Research Assistant, DTU Aqua (2007-2008).
- PhD Scholarship, Danish Institute for Fisheries Research (DIFRES) (2004-2007).
- Managing Director, Danish Trout Breeding (commercial fund founded by Association of Danish Trout Farmers) (2000-2003).
- Project Manager, Consultant, Aquaculture Department, Danish Institute for Fisheries Technology and Aquaculture (DIFTA), (1994-2000).

Research area

Fish physiology in relation to lipid nutrition and fatty acids with specific reference to the importance of LC-PUFAs (long chain polyunsaturated fatty acids) on nutrient quality, ontogenic development and short and long term physiological responses in fish larvae, juvenile fish and crustaceans. In specific expertise regarding the influence of dietary lipid content and its fatty acid composition for conversion and deposition in various tissues. Research involves alternative lipids and fatty acids from plants in order to minimize the usage of traditional marine fish oils in aquatic feeds for conventional and organic fish farming.

Memberships of scientific committees, 2011-present

Member of the board in ELCE network (European Lobster Centre of Excellence) since 2014.

Review, 2011-present

Referee assignment for a large number of peer reviewed journals e.g. Journal of Fish Biology, Journal of Aquaculture, Journal of Aquaculture Nutrition, Journal of Aquaculture Research, Journal of Ichthyology, Journal of World Aquaculture Society, Journal of Comparative Biochemistry, Animal, Aquacultural Engineering, Journal of Aquatic Living Resources, Journal of American Oil Chemist Society, Peer J.

Peer reviewed publications: 21. **Books and book chapters:** 1. **Reports:** 45. **International conferences:** 5.

Educational tasks, 2011-present

DTU courses: 25305 Marine Aquaculture (Responsible); 25321 Fish Nutrition and Bioenergetics (Contributor).

Supervision, 2011-present

PhD students: 1 (Co-supervisor). **Master students:** 1 (Main Supervisor).

Grants, 2011-present

- Danida Fellowship Centre (DFC file No. 11-PO2-VIE): Better use of nutritional resources for sustaining aquaculture production in Central Vietnam under climate change conditions (2012-2016, Assigned Project Leader).
- EU FP7 (7FP-KBBE-2013): Enhancing the European aquaculture production by removing production bottlenecks of emerging species, producing new products and accessing new markets (DIVERSIFY) (2013-2018, PI, WP Leader).
- GUDP: Development of filtering technologies for microalgae and sustainable high quality feed for fry (FIMAFY) (2013-2017, PI, WP Leader).
- Nordic Solved (P13045): Landbased aquaculture of European lobster (2014-2017, PI, WP Leader).
- GUDP/ICROFS: New possibilities for growth and robustness in organic aquaculture (RobustFish) (2014-2017, WP Leader).

Research collaboration with stakeholders, 2011-present

Many research projects with private stakeholder participation.

Five selected publications

- Lazado CC, Lund I, Pedersen PB, Nguyen HQ. (2015). Humoral and mucosal defense molecules rhythmically oscillate during a light–dark cycle in permit, *Trachinotus falcatus*. *Fish and Shellfish Immunology*, 47(2), 902-912.
- Suhr KI, Letelier-Gordo CO, Lund I. (2015). Anaerobic digestion of solid waste in RAS: Effect of reactor type on the biochemical acidogenic potential (BAP) and assessment of the biochemical methane potential (BMP) by a batch assay. *Aquacultural Engineering*, 65, 65-71.
- Skov P, Lund I, Pargana AM. (2015). No evidence for a bioenergetic advantage from forced swimming in rainbow trout under a restrictive feeding regime. *Frontiers in Physiology*, 6, 31.
- Lund I, Høglund E, Ebbesson LO, Skov PV. (2014) . Dietary LC-PUFA deficiency early in ontogeny induces behavioural changes in pike perch (*Sander lucioperca*) larvae and fry. *Aquaculture*, 432, 453–461.
- Lund I, Dalsgaard J, Hansen JH, Jacobsen C, Holm J, Jokumsen A. (2013). Effects of substituting fish oil with organic plant oils and the role of mild oxidation on nutrient utilization in juvenile rainbow trout (*Oncorhynchus mykiss*). *Animal* 7, 394-403.