

CV – Your Name

Year of birth: 09-07-1966

Degrees

M.Sc.,(biology), University of Copenhagen (1994), Ph.D. Roskilde University (2008)

Positions

Project Manager, consultant, Danish Institute for Fisheries Technology and Aquaculture (DIFTA), Aquaculture Department (1994-2000); Managing Director, Danish Trout Breeding (commercial fund founded by Association of Danish trout farmers) (2000-2003); PhD Scholarship, Danish Institute for Fisheries Research (2004-2007). Research assistant, Technical University of Denmark, National Institute of Aquatic Resources (DTU Aqua) (2007-2008); Research scientist, DTU Aqua, Section for Aquaculture, (2008-2011); Senior research scientist, DTU Aqua, Section for Aquaculture, DTU-Aqua (-since 2012)

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. Expertise on nutritional effects of substituting traditional feed ingredients with new alternative sustainable ingredients for fish feed. Expertise in Recirculation Aquaculture systems (RAS within technical and biological functioning.

Distinctions and awards

none

Memberships of scientific committees, 2016-present

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

Member of ICES Advice Drafting Group for Aquaculture Overviews since 2023

Web of Science publications: ISI journal publications: 45, Book chapters: 1 **Citations:**924; **H-index:**15 Reports: 30. (other reports before 2016: 45). **International conferences contributions (first author):** 11; **Invited:** 3. **Organizing role:** 2.

Evaluation tasks, 2016-present

Reviews for Norwegian and Polish Research Council; Ohio sea Grant College Program

Referee assignment for various (28) peer reviewed journals

a.o.. British Journal of Nutrition, Journal of Fish Biology, Aquaculture; Aquaculture International; Animal Feed science and Technology; Animal feeds; Aquaculture Nutrition; Scientific Reports; Journal of World Aquaculture society; Journal of Fish Physiol. and Biochemistry; Journal of fish Biology; Aquaculture Research; Aquaculture Reports; Comparative Biochemistry and Physiology, Aquacultural Engineering, Journal of Aquatic Living Resources, Journal of American Oil Chemist Society; Marine Drugs, Canadian Journal of Animal Science, Applied Animal Behaviour Science, Aquaculture and Fisheries; Metabolites, Sustainability; Frontiers in marine Science, AquacultureFish and Fisheries, Fishes; Journal of Applied Aquaculture.

Advisory tasks, 2016-present

Advisory tasks in ICES within Aquaculture. A few minor tasks for Danish Ministry of Food

Educational tasks, 2016-present

25305 Marine Aquaculture (responsible); 25321 Fish Nutrition & Bioenergetics (contributor)

Supervision, 2016-present

PhD students:

2 (main supervisor); 6 (co-supervisor). **Master students:** 4 (main supervisor); 2 (co-supervisor). **Postdocs:** 1. Chair for 2 Phd defences.

Phd supervisor course: Methods & Tools, 2019; Teaching Lab (UDTU1), January 2024

Grants, 2019-present

SUPIAF: Grant no: 34009-19-1544. SUPIAF: Sustainable Protein Ingredient for Animal feed, GUDP (Grønt Udvikling - og Demonstrations Program) GUDP. 2019-2024. Role: PI

ENV Foundation: Bestandsgenetablering af sort hummer i Nordvestvendsyssel, 2021-2023. Role: PI & Project consultant.

Teknologisamarbejde i Region Sjælland, DTU Link: Project 78003: Development of modern rearing facilities for sustainable commercial production of mudcrab, 2020-2021. Role: PI.

Inovation Fund Denmark: Innobooster: Innovativ UV-teknologi til bekæmpelse af afsmag i recirkuleret fiskeopdræt. .2020-2021. Role :PI:

E114944 AutoHatch, EU Framework Programme Horizon 2020, (EUROSTARS-2) and Innovation Fund Denmark. 2021-2023. The first ever automated hatchery solution to meet demand for high quality European lobster. Role:PI

GUDP: UVOXIRAS: Grant no.34009-21-1825. "UV-baseret avanceret oxidations teknologi til forbedring af vandkvalitet i Recirkuleret Akvakultur (UVOXiRAS)" (Grønt Udviklings- og Demonstrations Program). 2021-2024. Role: PI

Networking and workshop: European Lobster Centre of Excellence (ELCE) project (225)-2021-Lobster COE, 2021-2022. Nordic Minister Council; Nordic Working Group on Fisheries (AG Fisk)

HORIZON 2020 ERA-NET Cofund on Blue Bioeconomy – Unlocking the Potential of Aquatic Bioresources: Mussel Mitigation Feeds and Supply System Technological Development (MUMIFAST) ID 38 MuMI FaST. Role: PI. 2021-2024.

GUDP: Grant no: 34009-22-2077: Upcycling Food Waste to a High quality Protein for Feed and High Grade Bioethanol (G2BWBEP)" 2023-2025. Role: PI

EHFAF:C02 Fixeringspotentiale, ernæringsværdi og lønsomhed af mikroalger produceret i modulære, mobile foto-bioreaktorer /CO2fix), GOA-UDV-23-0014. Ordning: Grøn Omstilling i Akvakultur UDV. 2023-2026. Role: Project Co-ordinator.

Research collaboration with stakeholders, 2019-present

Several projects with private stakeholder participation:

a.o. Triple Nine A/S; Grintec A/S, Liqtech A/S; UltraAqua UV Desinfection systems, Eco Blue Seafood, Sparos, Aller Aqua, BioMar; AquaPri; Kalundborg Symbiosis, G2B, Algicel, Skagen Salmon, UniBio.

Some latest publications

Eggink, K.M., Aalto, S.L., Pedersen, P.B., Dalsgaard, J. (2025). Effects of dietary chitin on nutrient digestibility, cholesterol metabolism, digestive enzyme activity, and gut microbiome in rainbow trout. *Animal Feed Science and technology, ANIFEE-D-25-00262*.

Goncalves, R., Reis B, Perez J, Rodriguez C, Lund, I. (2025) Lipid Uptake and Fatty Acid Metabolism in European lobster (*Homarus gammarus*, L.): Insights from *in vivo* Incubation with ¹⁴C-labelled Fatty Acids, *Aquaculture, accepted*

Lund, I. (2025). Influence of phospholipid and LC- PUFA content in extruded micro diets on European lobster larval (*Homarus gammarus*) performance and nutritional composition. *Fisheries Research*, 281. <https://doi.org/10.1016/j.fishres.2024.107255>

Ofori-Darkwah, P., Adjei-Boateng, D, Edziyie, R.E., Agbo, N.W., Lund, I. (2025). Determining the best weaning age to dry feeds and the influence of phospholipids and long chain polyunsaturated fatty acids (LC-PUFA) on digestive enzyme activity and performance of African bony-tongue (*Heterotis niloticus*) fry. *Aquaculture Research*.

Goncalves, R., Pfalzgraff, T., Lund, I., (2024) Impact of live feed substitution with formulated diets on the development, digestive capacity, biochemical composition, and rearing water quality of European lobster (*Homarus gammarus*, L.) larvae. *Aquaculture*, <https://doi.org/10.1016/j.aquaculture.2024.740776>

Ofori-Darkwah, P., Adjei-Boateng, D, Edziyie, R.E., Agbo, N.W., Lund (2024). Early ontogeny of the African bony-tongue (*Heterotis niloticus*) and the effect of Artemia and rotifer live feeds on larval digestive enzyme activity and performance. *Frontiers in Aquaculture Volume 3 - 2024* | <https://doi.org/10.3389/faquc.2024.1310429>