

Jane W. Behrens

Year of birth: 1971

ORCID

0000-0002-0136-9681

Degrees

MSc (Biology), Institute of Biological Sciences, University of Aarhus, Denmark (1999).

PhD, Marine Biological Laboratory, University of Copenhagen, Denmark (2007).

Positions

Research Assistant, University of Canterbury, Canterbury, UK (2000-2001).

Research Assistant, University of Aarhus, Aarhus, Denmark (2001-2002).

Research Assistant, School of Dentistry, Copenhagen, Denmark (2002-2003).

Postdoc, Gothenburg University/DTU Aqua, Technical University of Denmark (2009-2012).

Researcher, DTU Aqua, Technical University of Denmark (2012-2014).

Senior Researcher, Section for Marine Living Resources, DTU Aqua, Technical University of Denmark (2015-present), including being Head of Fish Biology Experimental Facility Lyngby (2017-) and Board member of the statutory DTU Aqua Animal Welfare Organ

Research area

Fish ecophysiology, involving experimental and field investigations of physiological and behavioural responses and adaptations to biotic and abiotic factors in the environment. Optimal behavioural strategies and habitat requirements, including internal and external drivers, bioenergetics, physiological requirements and constraints. Tolerances and thresholds for dispersal and establishment of invasive fish. Welfare in the fishery.

Memberships of scientific committees, last five years/

Member of EFARO Working Group on Welfare in Aquaculture and Fisheries (WGWAF) (2025-2026)

Co-chair for The Workshop on round goby and stickleback in the Baltic Sea (WKSTARGATE) (2022)

Member of ICES Working Group on Introduction and Transfers of Marine Organisms (WGITMO) (2020-)

Reviews

Review Editor of Fish Experimental Biology, Frontiers in Fish Science (2024-)

Advisory tasks

Giving advice to the ministry on welfare issues in fish and crustaceans

Web of Science publications: 56. **Citations:** 2053. **h-index:** 25. **Reports:** 15.

International conferences, last five years: Contributions as first author: 4. **Invited:** 3. **Organizing role:** 1.

Evaluation tasks and reviews, 2019-present

Member of referee panel assessing Researcher Projects for Scientific Renewal (topic 'Animal health and welfare') for the Research Council of Norway (2025)

Expert reviewer for the Latvian Science Council research projects (2023)

Member of Steering Group for the Swedish FORMAS project "Round goby – turning risk to resource" (2020-2025)

External examiner for doctoral thesis: Shao Zuo (Copenhagen University, 2019), Camila Håkonsrud Jensen (Bergen University, 2020), Marie Levet (Montreal University, 2025).

Reviewer for 10+ peer-reviewed international journals e.g. Journal of Experimental Biology, ICES Journal of Marine Science, Conservation Physiology, Marine Ecology Progress Series, Biological Invasions, Scientific Reports, Journal of Marine Systems, Fish Biology, Estuarine and Coastal Marine Science, Journal of Experimental Marine Biology and Ecology, Fisheries Research, Evolutionary Applications

Educational tasks at academical level, last five years

DTU course BSC: Experimental Aquatic Bioscience (co-responsible, start Jan 2026)

DTU course BSc: Oceanography (course responsible since 2019)

Guest lecturing in MSc course "Invasion biology" at Copenhagen University (yearly since 2019)

Supervision, ongoing or finished in last five years

PhD: Main supervisor for two at DTU Aqua (one finished in 2020, one ongoing), one new as main supervisor to start 2026; Co-supervisor of four (one finished at Gothenburg University 2020, one finished at DTU Aqua 2024, two ongoing at Uppsala University and Stockholm University)

Postdoc: Three as main supervisor

Innovation activities, last five years

Innovative collaboration with the processing industries and various companies in the Baltic Sea region focussing on product development of the invasive round goby in the BalticInterreg project Promoting commercial fishing of round goby in the Baltic Sea.

Collaboration with other stakeholders, ongoing or finished within the last five years

Collaboration with NGO Animal Welfare Denmark and fishery organisation the Danish Pelagic Producers Organisation (DPPO) in project on welfare in the pelagic fishery. Collaboration with Danish Fishers Producers Organization (DFPO) in MERTOR and TESLO projects, and with NGO The Danish Society for Nature Conservation (DN) in MERTOR. Collaboration with various stakeholders in the BalticInterreg project Promoting commercial fishing of round goby in the Baltic Sea.

20+ contributions within the last five years in newspapers, popular science magazines, trade magazines, television, radio ect – examples: NordsøPosten [Blot et lille fald i vandets iltindhold påvirker fisk som torsk negativt - NordsøPosten.dk](#) TV2Fyn about oxygen depletion and fish <https://www.tv2fyn.dk/fyn/eksperiment-med-iltsvind-her-skruer-forsker-ned-for-iltten-fisk-proever-at-flygte> TV2Bornholm about my comparative work on Åland cod and Bornholm Basin cod <https://www.tv2bornholm.dk/?newsID=262998> Fiskeritidende about the effects of liver worm in cod <https://fiskeritidende.dk/nyheder/fiskeri/2020/oktober/leverorm-giver-torsk- alvorlige-leverskader/> Magazine Dymano about the invasive round goby (page 11-13) https://issuu.com/dtudk/docs/dynamo_75

Grants (competitive), ongoing or finished in the last five years

BalticWaters, Sweden: Otolith chemistry of eastern Baltic cod (PI; 2024-2025; 178.000 SEK)

European Maritime and Fisheries Fund (EHFAF): Growth and natural mortality of cod; effects of seal, oxygen depletion and food quality, and implications for sustainable management (MERTOR) (Coordinator; 2023-2027; 657.718 Euro)

Interreg Baltic Sea Region: Promoting commercial fishing of round goby in the Baltic Sea (PI; 2023-2026; 2.973.587 Euro)

BalticWaters 2030, Sweden: Do parasites and hypoxia prevent a recovery of Eastern Baltic cod? (PI; 2023-2024; 1.000.000 SEK)

Espersens Foundation: Is there an association between liver index, liver worm load, and the capacity to mature in Eastern Baltic cod? (Coordinator; 2023-2024; 33.600 Euro)

Ministry of Food, Agriculture and Fisheries of Denmark: Extraction of omega-3 oils from invasive marine species by the use of green technology (GrExOmega) (PI; 2022-2024; 987.969 Euro)

Open Philanthropy: Humane Slaughter in Pelagic Fishery (PI; 2021-2023; 282.708 USD)

The European Climate, Infrastructure and Environment Executive Agency: Invasive species in the Baltic Sea and their impact on commercial fish stocks (PI; 2022-2024; 149.955 Euro)

European Maritime and Fisheries Fund (EMFF): Biological press factors limiting the growth of Eastern Baltic cod (TORVÆKST) (Coordinator; 2021-2023; 273.973 Euro)

Espersens Foundation: Cod liver worm: Status and monitoring (Coordinator; 2020; 33.600 Euro)

The Swedish Institute: Goby fishing; A new resource? Investigating potential of commercial fishing of round goby in the Baltic Sea (PI; 2019-2020; 46.500 EUR)

European Maritime and Fisheries Fund (EMFF): Seal-related liver worm in Eastern Baltic cod: Status, effects and biological input for management (TESLO) (Coordinator; 2018-2020; 209.232 Euro)

European Maritime and Fisheries Fund (EMFF): Effects of seal-related liverworm on growth and condition of Baltic cod (Coordinator; 2017-2019; 118.300 Euro)

H2020: PAradigm for New Dynamic Ocean Resource Assessments and exploitation (PANDORA) (PI; 2018-2022; 5.598.388 Euro)

Five selected publications

Tomás M, **Behrens JW**, Nielsen DB et al (2024) Investigating the effects of pelagic trawling on the welfare of Atlantic herring (*Clupea harengus*). Sci Rep 14, 17530 <https://doi.org/10.1038/s41598-024-68629-8>

Eero M, Brander K, Baranova T, Krumme U, Radtke K, **Behrens JW** (2023) New insights into the recent collapse of Eastern Baltic cod from historical data on stock health. PLoS ONE 18(5): e0286247 <https://doi.org/10.1371/journal.pone.0286247>.

Behrens JW, Ryberg MP, Eschbaum R, Florin A-B, Grygie W et al (2022) Seasonal depth distribution and thermal experience of the non-indigenous round goby *Neogobius melanostomus* in the Baltic Sea: implications to key trophic relations. Biol Inv 24: 527–541 <https://doi.org/10.1007/s10530-021-02662-w>

Christensen EAF, Norin T, Tabak I, van Deurs M & **Behrens JW** (2021). Effects of temperature on physiological performance and behavioral thermoregulation in an invasive fish, the round goby. J Exp Biol, 224 <https://doi.org/10.1242/jeb.237669>

Ryberg MP, Skov PV, Vendramin N, Buchmann K, Nielsen A & **Behrens JW** (2020). Physiological condition of Eastern Baltic cod, *Gadus morhua*, infected with the parasitic nematode *Contracaecum osculatum*. Conserv Physiol, 8 <https://doi.org/10.1093/conphys/coaa093>