

Sune Riis Sørensen

Year of birth - 1975

ORCID - <https://orcid.org/0000-0001-5981-1383>**Degrees**

2014	PhD, Technical University of Denmark, Denmark
2005	MSc, University of Copenhagen, Denmark
2001	BSc, University of Aarhus, Denmark

Positions

2022-present	Executive Officer, DTU Aqua, Technical University of Denmark, Denmark
2021-2022	Post-doctoral fellow, DTU Aqua, Technical University of Denmark, Denmark
2021	Consultant specialist, Danish Pelagic Producers Organisation, DPPO, Denmark
2018-2021	Industrial Researcher, ITS-EEL, Billund Aquaculture A/S
2017-present	Freelance nature photographer and wildlife presenter at TV2-Bornholm
2017-2018	Industrial Post-doctoral fellow, ITS-EEL, Billund Aquaculture
2015-2016	Post-doctoral fellow, EEL-HATCH, DTU Aqua, Technical University of Denmark, Denmark
2010-2014	PhD fellow, DTU Aqua - PRO-EEL
2005-2010	Research Assistant, DTU Aqua, REEL - Reproduction of European eel in aquaculture, ROE-III - Artificial Reproduction of European III, RESTOCK - Production of Baltic cod larvae for restocking.

Research area

Research experience encompasses various topics in culture-based reproduction of marine fish, including broodstock husbandry, maturation processes, RAS water quality parameters, and, notably, early life history culture involving embryo and larval rearing and feeding. Extensive expertise in the technical aspects of rearing systems is present, particularly in water recirculation technology, system construction, design, and optimization. Over approximately 15 years, contributions have been made toward establishing and improving rearing conditions for Baltic cod, turbot, and eel, with a focus on larviculture for eel and Baltic cod—two species not previously cultured in a hatchery setting. Experiences within leadership and economy through role as project leader within the Innovation fund Denmark project, ITS-EEL and before that work package and task-lead in several research projects.

Distinctions and awards

Personal acquired funds: 2014-Elisabeth and Knud Pedersens Fund (EKP-fund) 28.000DKK (video equipment for larval behavior studies); 2015: EKP-fund: 64,544 DKK (Laminar flow cabinet and bacteria quantification tool); 2018: EKP-fund 25.000DKK (photographic equipment)

Memberships of scientific committees, 2016-present List (most important)

None

Web of Science publications: 35. **Citations:** 685. **h-index:** 14. **Other peer review publications:** 0. **Books:** 0. **Book chapters:** 1. **Reports:** 4.

International conferences, 2016-present: Contributions as first author: 6. **Invited:** 0 **Organizing role:** 0.

Evaluation tasks, 2016-present

Reviews for peer review scientific journals: Aquaculture, Animals, Aquaculture Reports, Aquaculture Research, Journal of applied Aquaculture, Journal of Fish Biology, Fisheries Research, Fisheries Science, International Aquatic Research, The Science of Nature, Aquatic Living Resources, Theriogenology.

Advisory tasks, 2016-present: ReClara project consultancy project for Stol Seafarm, Merexo, Spain on artificial reproduction of European eel.

Educational tasks at academical level, 2016-present

Supervision, ongoing or finished in 2016 or later

MSc (1), Kolbrún Bjargmundsdóttir DTU Aqua, *Water quality and disinfection regime on early life stages of European eel*, 2016.

PhD (0)

Postdoc (0)

Innovation, Patents: number. Other innovation activities, 2016-present

Innovative collaboration with the Danish aquaculture sector in the EEL-HATCH and ITS-EEL projects. Technical manager of the EEL-HATCH research facility, Hirtshals, where research and innovation in the EEL-HATCH and ITS-EEL take place..

Collaboration with other stakeholders, 2016-present

Close collaboration with the Danish aquaculture industry through the collaborative projects EEL-HATCH and ITS-EEL for innovative establishment of European eel hatchery technology to supply eel producers. Industrial post-doctoral fellow in EEL-HATCH, a cooperation between Billund Aquaculture and DTU Aqua. Since 2018 industrial researcher in ITS-EEL employed by Billund Aquaculture and guest researcher status at DTU Aqua. Assisting projectleader in ITS-EEL from January 2018 to May 2020 and project leader since May 2020. The interaction spans project partners Danish Aquaculture Association, STMI Aquasystems, Royal Danish Fish (Hanstholm), SPAROS (Portugal) and related collaborators e.g. the North Sea Science Park that administates the EEL-HATCH facility and DTU Environment (water quality management, CLEAN-EEL) and DTU ELECTRO (automatisation and sensor technique, new project application EEL-CYCLE) for industrial use in hatcheries.

CLEAN-EEL involved as research institutes the aquaculture section in DTU Aqua with expert in microbial communities, DTU Environment with experts in water quality characterisation and DTU Aqua with our rearing expertise within European eel early life stages. As industrial partners of the project Sani Membranes and Norlex Systems ensured technology and technical knowhow to new water quality application in aquaculture. New innovative fisheries project in collaboration with Bornholms Lakseklækkeri (COPE2) focusing on assessment of Plaice discard survival following fisheries and my role was system design and establishment in a Baltic Hatchery.

Grants (competitive), ongoing or finished in 2016 or later

2024-2027: Sustainable management of mackerel in the North Sea: Integration of new knowledge in stock assessment (MAKE IT), work package lead.

2024-2028: ReClara

2024-2027: MERTOR: Growth and natural mortality in cod; effects of seals, oxygen depletion and food quality, and implications for sustainable management, system setup and experiments.

2024-2025: Baltic cod larval physiology thresholds and optima: a Molecular Approach (BaCoLaMoIA), experimental setup.

2024: Reproductive Behaviour and success of Baltic Cod – does size matter? (ReBeBaCod), experimental setup.

2023-2025: Advancing tagging technology to discover the European eel spawning area (TAG-EEL), experimental setup and student supervision.

2020-2022: Enhance and Advance Survey Indices for Mackerel in the North Sea (EASIMACK). WP-contribution.

2020-2022: Future prospects for cod in the eastern Baltic Sea - stock development, fishing and management opportunities in a changing ecosystem (FREMOR), experimental system design

2020-2022 Caught and released: an Overview of fishes' sensitivity to being discarded as a tool to aid Pursuing Ecosystem-based management 2 (COPE2). EMFF and Danish Fisheries Agency, 2.7 M DKK. Project participation.

2020 WISE (*Water, Innovation, Small medium sized Enterprises*) project CLEAN-EEL: 1446 DTU research hours and 317.284 DKK. Project lead and coordinator.

2018-2021 Improve technology and scale-up production of offspring for European eel aquaculture (ITS-EEL). Innovation Fund Denmark, 28.2 M DKK. Project coordinator, Lead (from May 2020-end).

Selected publications

Tomkiewicz J, Politis SN, Sørensen SR, Butts IAE, Kottmann JS. (2019). European eel – an integrated approach to establish eel hatchery technology in Denmark. In (Eds. Don, A., Coulson, P.) *Eels - Biology, Monitoring, Management, Culture and Exploitation*. Sheffield: 5m Publishing. p. 340-374.

- Politis SN, Sørensen SR, Mazurais D, Servili A., Zambonino-Infante JL, Miest J, Clemmesen C, Tomkiewicz J, Butts IAE. (2018). Molecular ontogeny of first-feeding European eel larvae. *Frontiers in Physiology*, 9:1477.
- Sørensen SR, Butts IAE, Munk P, Tomkiewicz J. (2016). Effects of salinity and sea salt type on egg activation, fertilization, buoyancy and early embryology of European eel, *Anguilla anguilla*. *Zygote*, 24(1), 121-138.
- Sørensen SR, Tomkiewicz J, Munk P, Butts IAE, Nielsen A, Lauesen P, Graver C. (2016). Ontogeny and growth of early life stages of captive-bred European eel. *Aquaculture*, 456, 50-61.
- Sørensen SR, Skov PV, Lauesen P, Tomkiewicz J, Bossier P, De Schryver P. (2014). Microbial interference and potential control in culture of European eel (*Anguilla anguilla*) embryos and larvae. *Aquaculture*, 426, 1-8.