

Curriculum vitae with early achievements track record (for early career scientists)

PERSONAL INFORMATION

Family name, First name: Langbehn, Tom Jasper
Date of birth: 05.10.1988
Sex: Male
Nationality: German

Researcher unique identifier(s): ORCID: [0000-0003-1208-4793](https://orcid.org/0000-0003-1208-4793)

URL for personal web site: University profile: <http://bio.uib.no/te/tl/>
Google Scholar: <https://goo.gl/2CL4by>
Research Gate: <https://goo.gl/shkUMW>

EDUCATION

2016-19 **Research Fellow / Doctoral student (PhD)**

Faculty of Mathematics and Natural Sciences, Department of Biological Sciences, University of Bergen, Norway. Thesis: *Modelling limits to northward range shifts of marine organisms under climate warming* as part of MARmaED - MARine MANagement and Ecosystem Dynamics under Climate Change, a Marie Skłodowska-Curie European Training Network under Horizon 2020, supervised by Prof. PhD Christian Jørgensen (University of Bergen), Prof. PhD Øyvind Fiksen (University of Bergen) and Associate Prof. PhD Øystein Varpe (University Centre in Svalbard).

2013-16 **Graduate Programme Marine Biology (M.Sc.)**

Faculty 2 Biology/Chemistry, University of Bremen, Germany, Thesis: *Feeding success in an extreme light environment: modelling seasonal prey encounter of Arctic fish*, supervised by Prof. Dr. Wilhelm Hagen (University of Bremen) and Associate Prof. PhD Øystein Varpe (University Centre in Svalbard) – final mark “excellent”.

2009-13 **International Degree Course in Environmental and Industrial Biology (B.Sc.)**

Faculty 5 Nature and Engineering, University of Applied Sciences Bremen, Germany, Thesis: *Morphological diversity in parr of Atlantic salmon (Salmo salar L.) in Iceland*, supervised by Prof. Dr. Heiko Brunken (University of Applied Sciences Bremen) and Prof. PhD Guðrún Marteinsdóttir (University of Iceland) – final mark “excellent”.

CURRENT AND RELEVANT PREVIOUS POSITIONS

2019-to date **Postdoctoral Research Fellow**, Project: The fundamental role of mesopelagic fishes for the structure and change of Northeast Atlantic marine ecosystems, University of Bergen, Theoretical Ecology Group

2019-to date **Researcher** in the *Arven etter Nansen* (Nansen legacy) project, University Centre in Svalbard.

2014 **Research Assistant** for the Rügen Herring larvae survey, net and acoustic sampling during fisheries research cruises, Thuenen Institute of Baltic Sea Fisheries, Germany.

2012-14 **Freelance Ecological Consultant** contracted by BUND, Friends of the Earth Germany, Bremen, Germany, tasked to develop and evaluate nature friendly methods of ditch clearance in FFH sites of high importance for the aquatic fauna.

2013 **Freelance Ecological Consultant** contracted by EcoSURV.Hein - Angewandte Fisch- & Gewässerökologie, Germany, for electrofishing surveys.

- 2013 **Freelance Ecological Consultant** contracted by ÖKOLOGIS Umweltanalyse + Landschaftsplanung GmbH, Germany, to map selected breeding birds in the FFH-site Werderland.
- 2009-11 **Freelance Ecological Consultant** contracted by Bioconsult SH GmbH & Co. KG, Germany, for offshore seabird assessment and quantitative migratory bird counts for environmental impact assessments.
- 2008-09 **National Park Warden at the Schleswig-Holstein Wadden Sea National Park** as civilian service, Schutzstation-Wattenmeer e.V., Germany .

FELLOWSHIPS AND AWARDS

- 2019 *Best Presentation Award* at the ICES ASC 2019, Hamburg, Germany
- 2016 *MARUM Research Award for Marine Science*, awarded by the Center for Marine Environmental Sciences of the University of Bremen based on the quality of the master thesis.
- 2016 *Student choice and special mention poster award*, IMBER ClimEco5 Summer School
- 2016 *Best Poster Award*, YOUMARES 7 conference, German Society for Marine Research
- 2015 *Best Speaker Award*, YOUMARES 6 conference, German Society for Marine Research
- 2011 *Best Student Poster* at the Fisheries Ecology Summer School, University of Iceland

MOBILITY

- 2017 Centre for Ocean Life, National Institute of Aquatic Resources, Technical University of Denmark, Project: *Trophic eco-labelling of marine capture fisheries* (2 months)
- 2015 Department of Arctic Biology, University Centre in Svalbard, Norway, Project: *Feeding success in an extreme light environment: modelling seasonal prey encounter of Arctic fish* (8 months)
- 2012 Institute of Biology, University of Iceland, Project: *Impact of climate change on processes that influence survival of Atlantic cod eggs and larvae in Icelandic waters* (5 months)

TEACHING ACTIVITIES

- 2017 *Teaching assistant – AB-204 Arctic Ecology and Population Biology*, integrated module Teach2Learn as part of bioCEED a Centre of Excellence in Biology Education, University Centre in Svalbard, Norway
- 2015 *Teaching assistant – AB-202 Marine Arctic Biology*, responsible for seabird at sea census techniques and fisheries data sampling, University Centre in Svalbard, Norway
- 2010 *Teaching assistant – Math preparation course for BSc students*, University of Applied Sciences Bremen, Germany

ORGANISATION OF SCIENTIFIC MEETINGS

- 2017 Part of the organisation team for the annual marine conference 2017 of the Norwegian Association of Marine Scientists.
- 2016 Convenor at YOUMARES 7 chairing the session *DEEP / DARK / COLD - frontiers in polar and deep-sea research*.

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

- 2017-to date Member of the Norwegian Association of Ocean Researchers (Norske Havforskeres Forening)
- 2015-to date Member of the Association of Polar Early Career Scientists

REVIEW ACTIVITIES

Reviewer for *Global Change Biology*, *Marine Ecology Progress Series*, *Ecological Modelling*.

RESEARCH EXPEDITIONS

I have participated in **8 scientific research cruises** (>30 days at sea), both on research and commercial fishing vessels, within the North Sea, the Baltic Sea, Icelandic waters, Norwegian coastal waters, the Barents Sea and Arctic waters up to the marginal ice zone, including multiple day cruises up to >10 days.

EARLY ACHIEVEMENTS TRACK RECORD

I am a marine ecologist particularly interested in evolutionary biology and global change biology, i.e. how climate change and human activities such as fisheries shape biological interactions and processes across various levels of organisation. I aim to solve real-life problems by identifying and understanding fundamental mechanisms. I have published in peer-reviewed scientific journals and built an independent international academic network, with currently three co-authored publications without my supervisors in preparation.

During my career I have published a **total number of 7 publications**, thereof **6 publications in peer-reviewed scientific journals** and **1 peer-reviewed conference proceeding**. According to Google Scholar (effective 01.11.2019), these have been **cited a total of 28 times**, thereof 18 times within 2019.

List of peer-reviewed publications (number of citations/excluding self-citations):

Langbehn TJ, Aksnes DL, Kaartvedt S, Fiksen Ø, Jørgensen C (2019) Light comfort zone in a mesopelagic fish emerges from adaptive behaviour along a latitudinal gradient. *Mar Ecol Prog Ser*. doi: 10.3354/meps13024. (Citation 0/0)

Kaartvedt S, **Langbehn TJ**, Aksnes DL (2019). Enlightening the ocean's twilight zone. *ICES J. Mar. Sci.* 76, 803–812. (Citation 0/0)

Sguotti C, Otto SA, Frelat R, **Langbehn TJ**, Ryberg MP, Lindegren M, Durant JM, Stenseth NC, Möllmann C (2019) Catastrophic dynamics limit Atlantic cod recovery. *Proc R Soc B Biol Sci.* 286:20182877. (Citation 1/1)

Geoffroy M, Berge J, Majaneva S, Johnsen G, **Langbehn TJ**, Cottier F, Mogstad AA, Zolich A, Last K (2018). Increased occurrence of the jellyfish *Periphylla periphylla* in the European high Arctic. *Polar Biology*. (Citation 4/2)

Langbehn TJ, Varpe Ø (2017) Sea-ice loss boosts visual search: fish foraging and changing pelagic interactions in polar oceans. *Global Change Biology*, 23, 5318–5330. (Citation 11/4)
(The Ecological Society of America featured this article as a dispatch *Melting sea ice may open polar oceans to new predators* in *Frontiers in the Ecology and the Environment*.)

Langbehn TJ, Schoenle A (2016) Deep | Dark | Cold - Frontiers in Polar and Deep-Sea Research. In: *Youmares 7 Conference Proceedings* (eds Bode M, Jessen C, Golz V), pp. 59–68. German Society for Marine Research, Working Group on Studies and Education, Deutsche Gesellschaft für Meeresforschung (DGM) e.V. (Citation 0/0)

Katzenberger J, **Langbehn TJ**, Zacharias D (2013) Erstnachweis von *Hydrellia tarsata* (Diptera: Ephydriidae) für Bremen in Blüten von *Stratiotes aloides*. *Abhandlungen des Naturwissenschaftlichen Vereins zu Bremen*, 47, 193–195. (Citation 1/1)

List of awards:

2019	<i>Best Presentation Award</i> at the ICES ASC 2019, Hamburg, Germany
2016	<i>MARUM Research Award for Marine Science</i> , awarded by the Center for Marine Environmental Sciences of the University of Bremen based on the quality of the master thesis.
2016	<i>Student choice and special mention poster award</i> , IMBER ClimEco5 Summer School
2016	<i>Best Poster Award</i> , YOUMARES 7 conference, German Society for Marine Research
2015	<i>Best Speaker Award</i> , YOUMARES 6 conference, German Society for Marine Research
2011	<i>Best Student Poster</i> at the Fisheries Ecology Summer School, University of Iceland

List of conferences and workshops: (10 talks¹, 10 posters², 1 session³)

§ Invited talk

* Pecha-kucha is a presentation style in which 20 slides are shown for 20 seconds each before advancing automatically

2019

²**Langbehn TJ**, Aarflot JM & Varpe Ø. Sea-ice loss is bad news for large copepods, Nansen Legacy Annual Meeting 2019, 29.- 31. January, Oslo, Norway.

¹**Langbehn TJ**, Aksnes DL, Kaartvedt S, Fiksen Ø & Jørgensen C. *Poleward distribution of mesopelagic fish is constrained by seasonality in light*, BIARRITZ workshop, 22.- 26. July, National Oceanography Centre, Southampton, UK.

²**Langbehn TJ**, Aksnes DL, Kaartvedt S, Fiksen Ø & Jørgensen C. *Poleward distribution of mesopelagic fish is constrained by seasonality in light*, BIARRITZ workshop, 22.- 26. July, National Oceanography Centre, Southampton, UK.

¹**Langbehn TJ**, Aksnes DL, Kaartvedt S, Fiksen Ø & Jørgensen C. *Poleward distribution of mesopelagic fish is constrained by seasonality in light*, ICES Symposium Challenging The Scientific Legacy Of Johan Hjort, 12.- 14. June, Bergen, Norway.

¹Jørgensen C, **Langbehn TJ**, Ljungström G, Andersen KH, Aksnes DL & Enberg K. *Can a food systems approach redefine ecosystem-based?*, MARmaED Symposium, 25.- 26. May, Palma de Mallorca, Spain.

¹**Langbehn TJ** & Varpe Ø. *Sea-ice loss boosts visual search: fish foraging and changing pelagic interactions in polar oceans*, UiB Polar Express, 15. May, Bergen, Norway.

^{1§}**Langbehn TJ**, Aksnes DL, Kaartvedt S, Fiksen Ø & Jørgensen C. *Light and the ecology of mesopelagic fish at high latitudes*, Ocean Outlook 2019, 8.- 10. May, Bergen, Norway.

^{1§}**Langbehn TJ**, Jørgensen C, Fiksen Ø, Varpe Ø, Aksnes DL & Kaartvedt S. *From light, to vision, to species distribution*, Biodagen at the University of Bergen, 15. March, Bergen, Norway.

2018

¹**Langbehn TJ**, Varpe Ø *Sea-ice loss boosts visual search: fish foraging and changing pelagic interactions in polar oceans*, ICES annual science conference, Hamburg, Germany 24-27 September 2018

¹**Langbehn TJ**, Fiksen Ø & Jørgensen C. *The deadly midnight sun: Visual predators and northern range limits in mesopelagic fish*, ICES annual science conference, Hamburg, Germany 24-27 September 2018

2017

²**Langbehn TJ**, Ljungström G, Fiksen Ø, Jørgensen C. *Introducing a new hypothesis: Southward shifts of species distributions under climate change?*, 3rd International Workshop on Trait-based Approaches to Ocean Life, Bergen, Norway, 23.- 24. March 2017

^{1*}**Langbehn TJ**. *Hunger games: can seasonality in light constrain northward range shifts?* Pecha Kucha presentation MARmaED workshop, Kristineberg, Sweden, 1.- 4. April 2017

²**Langbehn TJ**, Ljungström G, Aksnes DL, Andersen KH, Olsen Y & Jørgensen C. *Increasing marine food production through ecolableing*, Havforskermøtet, Bergen, Germany, 20.- 23. September 2017

2016

²**Langbehn TJ**. *Limits to northwards range shifts of fish stocks under climate warming - a fish can't eat food it can't find*, MARmaED workshop, Oslo, Norway, 11.-12.10.2017

²**Langbehn TJ** & Varpe Ø 2016. *Photoperiodic implications on visual foraging in polar marine ecosystems*, IMBER ClimEco5 Summer School, Natal, Brazil, 25. - 28. May 2016

²**Langbehn TJ** *Seasonal seas- limits to northward range shifts of marine organisms under climate warming*, MARmaED workshop, Banyuls sur mer, France, 28. July - 3. August 2016

^{1§*}**Langbehn TJ** *Abundance and productivity of mesopelagic fish* Ocean Conference as part of the naming ceremony for the new research vessel Dr. Fridtjof Nansen, Oslo, Norway, 2. August - 24. March 2016

- ²**Langbehn TJ** & Varpe Ø 2016. *Photoperiodic implications on visual foraging in polar marine ecosystems*, 16th Congress of the International Society for Behavioural Ecology, Exeter, UK, 11.- 13. September 2016
- ³**Langbehn TJ** & Schoenle A 2016. *Deep, Dark and Cold - Frontiers in polar and deep sea research*, 7th YOUMARES Conference, Hamburg, Germany, 11.- 13. November 2016
- ²**Langbehn TJ** & Varpe Ø 2016. *Photoperiodic implications on visual foraging in polar marine ecosystems*, 7th YOUMARES Conference, Hamburg, Germany, 11.- 13. November 2016

2015

- ²**Langbehn TJ**, Varpe Ø 2015. *Visual search as a trait: consequences of sea ice change in high latitude oceans*, 2nd International Workshop on Trait-based Approaches to Ocean Life, Waterville, New Hampshire, USA, 5.- 8. October 2015