

# Curriculum vitae with track record

## Personal information

First name, Surname:	Helene Reinertsen Langehaug		
Date of birth:	05.07.1983	Sex:	Female
Nationality:	Norwegian		
Researcher unique identifier(s):	<a href="https://orcid.org/0000-0001-9010-5401">https://orcid.org/0000-0001-9010-5401</a> , ResearcherID: A-2445-2015		
URL for personal website:	<a href="https://nersc.no/en/ansatt/helene-r-langehaug/">https://nersc.no/en/ansatt/helene-r-langehaug/</a>		

## Education

Year	Faculty/department - University/institution - Country
2011	Ph.D. in physical oceanography, <b>Disputation date: 09.12.2011</b> , Geophysical Institute, University of Bergen (UiB), Norway
2008	Master in physical oceanography, Geophysical Institute, UiB, Norway

## Positions - current and previous

Year	Job title – Employer - Country
2022-	Project Manager, Nansen Environmental and Remote Sensing Center (NERSC), Norway
2021-	Senior Researcher, NERSC, Norway
2021-	Adjunct associate professor, Geophysical Institute, UiB, Norway
2011-2020	Research scientist, NERSC, Norway
2008-2011	PhD candidate, NERSC, Norway
2005-2008	Meteorological assistant (25%), StormGeo, Bergen, Norway

## Career breaks

Year	Reason
2013/2014, 2016/2017	Maternity leave (8 months x 2)

## Project management experience

Year	Project owner - Project - Role - Funder
2026-	UiT, <b>Arctic Ocean 2050</b> , <b>Deputy leader and PI at NERSC</b> , RCN
2025-2027	Simula, <b>FAIR2Adapt</b> , Responsible for a use case on marine heatwaves, EU project

2023-	NORCE, <b>SFI Climate Futures, Leading an innovation area:</b> Sustainable food production - ocean, RCN
2023-2026	UiB, <b>ArMOC</b> – Overturning circulation in the new Arctic, RCN
2022-2025	UiB, <b>MAPARC</b> – Mechanism and prediction of the new Arctic climate system, <b>WP leader and PI at NERSC</b> , RCN
2020-2023	MPI, <b>ROADMAP</b> – The role of ocean dynamics and ocean-atmosphere interactions, <b>PI at NERSC</b> , JPI Climate
2018-2023	UiB, <b>BCPU</b> - Bjerknes Climate Prediction Unit, <b>Research Activity leader</b> , Trond Mohn Foundation
2018-2022	NERSC, <b>CAATEX</b> - Coordinated Arctic Acoustic Thermometry Experiment, <b>WP leader</b> , RCN
2016-2021	DMI, <b>Blue-Action</b> - Arctic Impact on Weather and Climate, <b>reporting milestone + deliverable</b> , EU project
2014-2018	NORCE, <b>VENTILATE</b> - Ventilation age and remineralisation rates in polar and sub-polar regions as indicators for climate change, <b>WP leader and PI at NERSC</b> , RCN
2014-2017	UiB, <b>EPOCASA</b> - Enhancing seasonal-to-decadal prediction of climate for the North Atlantic sector and Arctic, <b>WP co-leader</b> , RCN
2014-2017	UiB, <b>NORTH</b> - Northern constraints on the Atlantic thermohaline circulation, <b>WP leader</b> , RCN

### Supervision of students

Master's students	Ph.D. students	University/institution - Country
2	2	<b>PhDs:</b> main supervisor for 1 ongoing (2024-2026) and 1 completed (2019-2023), UiB. <b>Master:</b> co-supervisor (2021-2022) and main supervisor (2020-2022), UiB

### Teaching activities

Year	Description - Role
2021-	Lecturer in GEOF339: Advanced Dynamical Oceanography, Geophysical Institute, UiB

### Institutional responsibilities

Year	Description - Role
2021-2025	NERSC representative in the leader group of the Bjerknes Centre for Climate Research
2020-2021	Committee on gender equality at NERSC
2017-2021	Second deputy for the research group Climate Dynamics and Prediction at NERSC (interim research group leader in the period Oct 2020 – Jan 2021)
2017-2020	NERSC Relocation working group
2016-2019	Safety representative at NERSC
2014-2019	Representative for employees in the Working Environment Committee at NERSC

## Organisation of meetings

Year	Description - Role
2026	Co-organizing Arctic-Subarctic Ocean Fluxes (ASOF) workshop at UiB, Bergen
2023	Co-organizing Arctic CMIP6 workshop at NERSC, Bergen
2017-2022	Convener of the NERSC internal seminars (once every second week)
2019	Co-organizing climate prediction workshop, Bergen (by BCPU and EU Modelling Cluster)

## Commissions of trust in academic, public or private organisations

Year	Description - Role
2014-	Member of different committees at UiB (thesis evaluation, hiring new candidates)
2011-	Reviewer of scientific journals: Nature Geoscience, Geophysical Research Letters, Journal of Climate, Climate Dynamics, Ocean Dynamics, Advances in Atmospheric Sciences

## Memberships of academies/Scientific societies/Networks

Year	Description
2023-	Membership in the Norwegian Scientific Academy for Polar Research
2022-	Affiliated Membership of the WCRP Explaining and Predicting Earth System Change (EPESC) Lighthouse Activity

## Track record

The total number of publications in peer reviewed journals: 23.

- 1) Williams-Kerslake M, **Langehaug** HR, Samuelsen A, Keenlyside NS, Skogseth R, Nilsen F, Gonzalez S. *Characterising Marine Heatwaves in the Svalbard Archipelago and Surrounding Seas*, accepted, **2026**;
- 2) Devilliers M, Olsen SM, **Langehaug** HR, Guo C, Mahmood R, Tian T, Yang S. *Constraining CMIP6 simulations for Atlantic Water in the Arctic using an AMOC-SST index*, Front. Clim. **2025**;
- 3) Passos LG, **Langehaug** HR, Årthun M, Straneo F. *On the Relation between Thermohaline Anomalies and Water Mass Transformation in the Eastern Subpolar North Atlantic*. Journal of Climate. **2024**;
- 4) **Langehaug** HR, Sagen H, Stallemo A, Uotila P, Rautiainen L, Olsen SM, Devilliers M, et al. *Constraining CMIP6 estimates of Arctic Ocean temperature and salinity in 2025-2055*. Front. Mar. Sci. **2023**;
- 5) Passos LG, **Langehaug** HR, Årthun M, Eldevik T, Bethke I, Kimmritz M. *Impact of initialization methods on the predictive skill in NorCPM: an Arctic-Atlantic case study*. Climate Dynamics. **2022**;
- 6) **Langehaug** HR, Ortega P, Counillon FS, Matei D, Maroon EA, et al. *Propagation of Thermohaline Anomalies and their predictive potential along the Atlantic water pathway*. Journal of Climate. **2022**;
- 7) **Langehaug** HR, Sandø AB, Årthun M, Ilıcak M. *Variability along the Atlantic water pathway in the forced Norwegian Earth System Model*. Climate Dynamics. **2019**;
- 8) **Langehaug** HR, Matei D, Eldevik T, Lohmann K, Gao Y. *On model differences and skill in predicting sea surface temperature in the Nordic and Barents Seas*. Climate Dynamics. **2017**;48(3-4).
- 9) Sandø AB, Gao Y, **Langehaug** HR. *Poleward ocean heat transports, sea ice processes, and Arctic sea ice variability in NorESM1-M simulations*. Journal of Geophysical Research: Biogeosciences. **2014**;119(3).

- 10) **Langehaug HR**, Geyer F, Smedsrud LH, Gao Y. *Arctic sea ice decline and ice export in the CMIP5 historical simulations*. Ocean Modelling. **2013**;71.
- 11) **Langehaug HR**, Falck E. *Changes in the properties and distribution of the intermediate and deep waters in the Fram Strait*. Progress in Oceanography. **2012**;
- 12) **Langehaug HR**, Medhaug I, Eldevik T, Otterå OH. *Arctic/Atlantic exchanges via the Subpolar Gyre*. Journal of Climate. **2012**;25(7).

## INVITED PRESENTATIONS

- 2026 Invited talk to a seminar on 'Bærekraftig sjømat i et fremtidig endret klima', organized by the Directorate of Fisheries in Norway. Talk about marine heatwaves. Bergen, Mar 18.
- 2025 Invited talk to the Pharmaq conference on future fish health: 'Fremtidens fiskehelse: Innsikt, innovasjon og handling'. Talk about prediction of marine heatwaves in Norwegian waters. Trondheim, Aug 19, <https://pharmaq.com/no/pharmaq/arrangementer/pharmaqademy-2025>
- 2025 Invited talk to Stiim Aqua Cluster's Conference for aquaculture. Talk about increased temperatures and marine heatwaves. Sola, Jan 8, <http://bluetalk.no/>
- 2024 Invited talk to industry (Cargill Aqua Nutrition North Sea). Talk on 'Let's talk about Climate predictions and Marine heatwaves'. Bergen, Nov 22.
- 2018 Invited lecture to the Summer School 'Climate Teleconnections and Predictions: Past, Present and Future'. Norheimsund, Jul 5.
- 2015 Invited talk to fisheries ('Forecasting sea surface temperatures'), organised by Fish Pool. Bergen, Nov 25.

## MAJOR RESEARCH COMMUNICATION, DISSEMINATION OR OUTREACH ACTIVITIES

- 2026 Interview by NRK about record warm water in Norwegian waters in 2025: <https://www.nrk.no/vestland/rekordvarmt-i-sjoen-langs-norskekysten-i-2025-1.17711908>, Jan 5.
- 2025 Popular science article on **marine heatwaves**: <https://www.forskersonen.no/havet-hetebølge-meninger/hva-er-forskjellen-pa-en-hetebølge-pa-land-og-en-hetebølge-i-havet/2535359>, Jul 24.
- 2025 Contributed to a chapter on climate prediction in the report about climate in Norway: <https://klimaservicesenter.no/kss/rapporter/kin-2025>
- 2025 Interview by kyst.no about prediction of marine heatwaves: <http://www.kyst.no/barentshavet-nansensenteret-nord-norge/kan-gi-store-utfordringer-for-havbruket/1923890>, Apr 15.
- 2024 Popular science article on **marine heatwaves**: [www.forskersonen.no/dyreverden-havet-havforskning/hvorfor-er-det-sa-mye-ekstreme-temperaturer-i-nordsjoen/2385644](http://www.forskersonen.no/dyreverden-havet-havforskning/hvorfor-er-det-sa-mye-ekstreme-temperaturer-i-nordsjoen/2385644), Jul 4.
- 2024 Bjerknes fact sheet **marine heatwaves**: <https://www.bjerknes.uib.no/laer-om-klima-2/faktasider/marine-hetebølger>
- 2024 Visit by Norwegian Minister of Research and Higher Education to Bjerknes Centre for Climate Research, Talk about **marine heatwaves** in Norwegian and Arctic waters, Jun 6.
- 2023 **Havstrømmer og klima i et makroperspektiv**, Talk at a seminar organized by the Norwegian Scientific Academy for Polar Research, Svalbard, Nov 29, [www.polar-academy.com/events-list/draft-5pt3l](http://www.polar-academy.com/events-list/draft-5pt3l)

- 2023 **Framtidens polhav**, Talk at the climate festival in Bergen, Mar 17, [www.varmerevaterevillere.no/programoversikt-2023/kloden-rundt-med-klimaforskning](http://www.varmerevaterevillere.no/programoversikt-2023/kloden-rundt-med-klimaforskning)
- 2022 **Klimastatus: Hvordan står det til med områdene i Barentshavet og Arktis?**, Presentation at an event organized by Norwegian Society for the Conservation of Nature, Nov 3.
- 2022 **Klimavarsling**, Talk about climate prediction to the Norwegian Minister of Climate and Environment when visiting the Bjerknes Centre for Climate Research, Jan 31.
- 2022 **Klima i Arktis**, Presentation at NERSC for high school about Arctic climate, Jun 3.
- 2020 **Outreach on climate prediction**, [YouTube video](#)
- 2020 **Contributions to the Arctic Yearbook**, *Decadal Predictions to Climate Services: How Understanding Climate Change in the Arctic Can Support Climate Adaptation Decision-Making across the Northern Hemisphere*, <https://arcticyearbook.com/arctic-yearbook/2020>
- 2020 **Policy briefing to two members of the European Parliament** on Blue-Action research, Oct 14, <https://ebcd.org/events/online-event-tipping-points-extreme-events-and-uncertainty-how-can-studying-the-arctic-help-us-predict-future-european-climate-beyond-the-mean/>
- 2019 **The push for predicting the future climate**, [Bjerknes Centre Podcast](#), Aug 16.
- 2018 **Et hav av ulike vannmasser**, popular science article on water masses, *forskning.no*, Oct 7.
- 2017 **Klimamodellen er forskerens lego**, popular science article in a newspaper, about climate models, *Bergensavisen*, Oct 23.