

Dr. rer. nat. Martina H. Stiasny

Lecturer, University of Southampton
National Oceanography Centre Southampton, United Kingdom
m.h.stiasny@soton.ac.uk
www.martinastiasny.com

ORCID ID	0000-0001-6365-2610
Researcher ID	O-4988-2018
SCOPUS ID	57190967477
Publons ID	1528783

Education

- 2017 **Doctoral Degree (Dr. rer. nat.)** in Fish and Fisheries Biology
GEOMAR Helmholtz Centre for Ocean Research (working group Evolutionary Ecology of Marine Fishes) and the Christian-Albrechts-Universität Kiel
Dissertation completed with *magna cum laude* entitled „*Effects of Ocean Acidification on Atlantic Cod Larvae (Gadus morhua)*”,
supervisors: Prof. Dr. Thorsten Reusch, Prof. Dr. Martin Quaas, Dr. Catriona Clemmesen
- 2014 **Master of Science** in Biological Oceanography
GEOMAR Helmholtz Centre for Ocean Research and the Christian-Albrechts-Universität Kiel
Master Thesis: “*The Effect of Ocean Acidification and Warming on Survival and Growth of Atlantic Cod (Gadus morhua) Larvae*”,
supervisors: Prof. Dr. Ulf Riebesell, Dr. Catriona Clemmesen
- 2011 **Bachelor of Science** (Honours Program Marine Biology)
University of St Andrews, St Andrews, Scotland, UK
completed with distinction
- 2010 Sea Education Association (SEA), Woods Hole, MA, USA
Summer Semester, Class S-230
- 2008 **German Abitur**
St Joseph-Gymnasium, Rheinbach

Work Experience

- Since 04/2021 **Lecturer**
University of Southampton, National Oceanography Southampton, United Kingdom
- 10/2020 – 12/2020 **Postdoctoral Researcher**
German Centre for Integrative Biodiversity Research (iDiv), Leipzig, Germany, Biodiversity Economics Research Group
- 10/2018 – 09/2020 **Postdoctoral Researcher**
Institute of Marine Research, Bergen, Norway, Pelagic Fish Working Group
RECNOB Project ('Recruitment dynamics of Norwegian spring-spawning herring')
- 11/2017 – 09/2018 **Postdoctoral Researcher**
Christian-Albrechts-Universität zu Kiel, Working Group for Environmental, Resource and Ecological Economics, Department of Economics
EU BONUS Project BLUEWEBS ('Blue growth boundaries in novel Baltic food webs') working on including climate and food web effects in a multi-species bio-economic optimization model on cod, herring and sprat in the Baltic Sea
- 01 - 10/2017 and
01 - 08/2016 **Research Associate**
Christian-Albrechts-Universität zu Kiel, Working Group for Environmental, Resource and Ecological Economics, Department of Economics
BMBF-Project BIOAcid ('Biological Impacts of Ocean ACIDification')
- 09 – 12/2016 **Project Officer**
Executive Agency for Small- and Medium-sized Enterprises, Unit A3
(Implementation of the European Maritime and Fisheries Fund (EMFF)),
EU Commission, Brussels, Belgium
- 03 - 07/2016 **Blue Book Trainee**
(official traineeship program of the European Commission)
Executive Agency for Small- and Medium-sized Enterprises, Unit A3
(Implementation of the European Maritime and Fisheries Fund (EMFF)),
EU Commission, Brussels, Belgium
- 10/2014 - 09/2015 **Research Associate**
GEOMAR, Kiel and Landesamt für Umwelt, Naturschutz und Geologie
Mecklenburg-Vorpommern
project: „Zooplankton as a core indicator and its implications for the implementation of the marine strategy framework directive of the European Union in coastal waters of Mecklenburg-Vorpommern“
- 06/2011 - 12/2012 **Teaching Assistant**
Zoological Museum of the Christian-Albrechts-Universität zu Kiel

Research Visits

- 03 - 05/2017 Research stay at the Centre for Ecological and Evolutionary Synthesis (CEES), University Oslo, Norway
Prof. Dr. Nils-Christian Stenseth, Dr. Mia Eikeset, Dr. Andries Richter
- 03 - 05/2014 and
03 - 05/2015 Research stay at the Centre for Marine Aquaculture of *Nofima AS*, Tromsø Norway
- 04 - 06/2013 Research stay at the Sven Lovén Centre for Marine Infrastructure, University Gothenburg, Sweden

Awards and Funding

- 08/2017 Individual **Research Fellowship** of the German Research Foundation (DFG) for the project "*Evolutionary and ecological changes in the Northeast Arctic due to climate change and ocean acidification and their impacts on management and societies*", two-year scholarship to work at the Centre for Ecological and Evolutionary Synthesis at the University of Oslo
- 05/2017 **Travel Scholarship** from the International Council for the Exploration of the Sea and the North Pacific Marine Science Organization to attend the Early Career Scientists Conference in Busan, Korea
- 03/2017 Integrated School of Ocean Sciences of the Cluster of Excellence „The Future Ocean” , Mini-Proposal' for a research stay at the Centre for Ecological and Evolutionary Synthesis at the University of Oslo

Publications

- Tiedemann, M., Nash, R.D.M., Stenevik, E.K., **Stiasny, M.H.**, Slotte, A., Kjesbu, O.S. (2020) Environmental influences on Norwegian spring-spawning herring (*Clupea harengus* L.) larvae reveal recent constraints in recruitment success, *ICES Journal of Marine Science*, doi:10.1093/icesjms/fsaa072
- Hänsel, M.C., Schmidt, J.O., **Stiasny, M.H.**, Stöven, M.T., Voss, R., Quaas, M.F. (2020) Ocean warming and acidification may drag down the commercial Arctic cod fishery by 2100, *PLoS ONE*, 15(4): e0231589
- Mittermayer, F.H., **Stiasny, M.H.**, Clemmesen, C., Bayer, R., Jentoft, S., Puvanendran, V., Reusch, T.B.H. (2019) Transcriptome profiling reveals exposure to predicted end-of-century ocean acidification as a stealth stressor for Atlantic cod larvae, *Scientific Reports*, 9
- Voss, R., Quaas, M.F., **Stiasny, M.H.**, Hänsel, M., Stecher Justiniano Pinto, G., Lehmann, A., Reusch, T.B.H., Schmidt, J.O. (2019) Ecological-economic sustainability of the Baltic cod fisheries under ocean acidification and warming, *Journal for Environmental Management*, 238, 110-118pp. doi:10.1016/j.jenvman.2019.02.105
- Stiasny, M.H.**, Sswat, M., Mittermayer, F.H., Falk-Petersen, I.B., Schnell, N.K., Puvanendran, V., Mortensen, A., Reusch, T.B.H., Clemmesen, C. (2019) Divergent responses of Atlantic cod to ocean acidification and food limitation, *Global Change Biology*, 25 (3), 839-849pp. doi: 10.1111/gcb.14554

Stiasny, M.H., Mittermayer, F.H., Göttler, G., Bridges, C.R., Falk-Petersen, I.-B., Puvanendran, V., Mortensen, A., Reusch, T.B.H., Clemmesen, C. (2018) Effect of parental acclimation and energy limitation in response to ocean acidification in Atlantic cod, Scientific Reports, 8:8348, doi: 10.1038/s41598-018-26711-y

Sswat, M., **Stiasny, M.H.**, Taucher, J., Algueró-Muñiz, M., Bach, L.T., Jutfelt, F., Riebesell, U., Clemmesen, C., (2018) Food web changes under ocean acidification promote herring larvae survival, Nature Ecology and Evolution, 2, doi:10.1038/s41559-018-0514-6

Sswat, M., **Stiasny, M.H.**, Jutfelt, F., Riebesell, U., Clemmesen, C. (2018) Growth performance and survival of larval Atlantic herring, under the combined effects of elevated temperatures and CO₂, PLoS ONE, 13 (1), doi: 10.1371/journal.pone.0191947

Königstein, S., Dahlke, F.T., **Stiasny, M.H.**, Storch, D., Clemmesen, C., Pörtner, H.-O. (2018) Forecasting future recruitment success for Atlantic cod in the warming and acidifying Barents Sea, Global Change Biology, 24, 526-535 pp., doi: 10.1111/gcb.13848

Stiasny, M.H., Mittermayer, F.H., Sswat, M., Voss, R., Jutfelt, F., Chierici, M., Puvanendran, V., Mortensen, A., Reusch, T.B.H., Clemmesen, C. (2016) Ocean acidification effects on Atlantic cod larval survival and recruitment to the fished population, PLoS ONE, 11 (8), doi: 10.1371/journal.pone.0155448

Bach, L.T. *et al.* (2016) Influence of ocean acidification on a natural winter-to-summer plankton succession: First insights from a long-term mesocosm study draw attention to periods of low nutrient concentrations, PLoS ONE, 11 (8), doi: 10.1371/journal.pone.0159068

Other Publications

Hänzel, M.C., Schmidt, J.O, **Stiasny, M.H.**, Stöven, M.T., Voss, R., Quaas, M.F. (2017) Case Study: Ocean Services for the Barents Sea – Socio-Economic Effects of Ocean Warming and Acidification on the Northeast Arctic Cod Fishery, AMAP Arctic Ocean Acidification Assessment, Arctic Monitoring and Assessment Programme

Conference & Workshop Participation & Scientific Presentations

(selected, invited in bold)

05/2020 Session Co-Convenor, Session 10: Vulnerability of marine socio-ecological systems to climate change and anthropogenic pressures, MSEAS-2020 (Marine Socio-Ecological Systems), Yokohama, Japan

02/2019 **Meeting with Arctic Monitoring and Assessment Programme and Ola Elvestuen, (Norway's minister for climate and environment), Tromsø, Norway**
Presentation: Stiasny, M.H., Ocean services for the Barents Sea – Socio-economic effects of ocean warming and acidification on the Northeast Arctic cod fishery

09/2018 **Dalhousie University Biology Departmental Seminar, Halifax, Canada**
Presentation: Stiasny, M.H., The “so-what” of ocean acidification effects on commercial species in the North-East-Atlantic Ecosystem

- 07/2018** **International workshop on Ocean Ecosystem Services, German Federal Agency for Nature Conservation (BfN), Isle of Vilm, Germany**
Presentation: Quaas, M., Stiasny, M.H., Integrated ecological-economic fisheries models – Evaluation, review and challenges for implementation
- 06/2018 The Effects of Climate Change on the World's Oceans, 4th International Symposium, International Council for the Exploration of the Sea (ICES) and North Pacific Marine Science Organization (PICES), Washington, DC, USA
Presentation: **Stiasny, M.H.**, Winter, A.-M., Projecting the fate of fish stocks in a changing ocean – The future of Northeast Arctic cod under ocean acidification and warming
- 06/2017 United Nations Ocean Conference, United Nations Headquarters, New York, US
Scientific Observer
Presentation: Side Event 'Ocean Acidification – What can we do about it?': **Stiasny, M.H.**, "Do we have to take the bitter with the sour" – A next generation scientist's consideration of risk of ocean acidification on fish and fisheries and how these can be minimized
- 05/2017 Early Career Scientists Conference, International Council for the Exploration of the Sea (ICES) and North Pacific Marine Science Organization (PICES), Busan, South Korea,
Presentation: **Stiasny, M.H.**, Mittermayer, F.H., Sswat, M., Hänsel, M., Voss, R., Quaas, M., Reusch, T., Clemmesen, C., Cod and CO₂- So what? Climate Change Effects on Atlantic Cod Recruitment and Fisheries
- 12/2016 Workshop on Understanding the Impacts and Consequences of Ocean Acidification for Commercial Species and End-users (WKACIDUSE) of the International Council for the Exploration of the Sea, ICES Headquarters, Copenhagen, Denmark
Presentation: **Stiasny, M.H.**, Ocean Acidification and Commercial Species – the "So-what?"-Question, Climate Change impacts on Atlantic Cod
- 10/2016** **European Commission, DG Mare Lunchtime Conference Series, Brussels, Belgium**
Presentation: Stiasny, M.H., Sswat, M., Mittermayer, F.H., Hänsel, M., Voss, R., Reusch, T.B.H., Quaas, M., Clemmesen, C., Climate Change impacts on Atlantic cod
- 09/2015 International Council for the Exploration of the Sea, Annual Science Conference 2015, Copenhagen, Denmark
Presentation: **Stiasny, M.H.**, Sswat, M., Mittermayer, F.H., Voss, R., Jutfelt, F., Chierici, M., Puvanendran, V., Mortensen, A., Reusch, T.B.H., Clemmesen, C. Effects of end-of-the-century ocean acidification on Atlantic cod larvae of different populations in terms of survival, growth and recruitment to the fished stocks
- 07/2015 Moscow Summer Academy on Economic Growth and Governance of Natural Resources, Moscow State University, Moscow, Russia

Review Activities

Reviewer for the journals: 'Ecology and Evolution', 'Biology Letters', 'Fishes', 'Sustainability', 'Geosciences', 'Frontiers in Marine Science', 'Scientific Reports', 'Biology', 'Ecology and Evolution'

Reviewer for grant proposals for the National Science Foundation (NSF, USA)

Teaching Experience

spring semester 2019 **University of Bergen, guest lecturer,**
course: Marine Community Ecology, lectures and seminars on human impacts, postgraduate level

04/2018 **University Didactics Certificate,** Christian-Albrechts-Universität zu Kiel

06/2011 - 12/2012 **Christian-Albrechts-Universität zu Kiel, Zoological Museum, Teaching Assistant,**
topics: Zoology, Deep Sea Biology, History of Marine Research, Marine Mammal Ecology and Physiology, The Future Ocean,
under- and postgraduate level and public outreach

Student Supervision

2019 Master thesis, Bergen University, topic: 'mackerel predation on herring larvae'

Commissions of Trust

2020 **Co-lead of Working Group 5** on a *Sustainably Harvested Ocean* at the Regional North Atlantic Meeting for the United Nations Decade of Ocean Science for Sustainable Development, Halifax, Canada

2017 **Scientific Observer** to the United Nations Framework Convention on Climate Change, 23rd Conference of the Parties (COP23), 23th Meeting of the Parties to the 1997 Kyoto Protocol (CMP13), 2nd Meeting of the Parties to the Paris Agreement (CMA), Bonn, Germany

2017 **Scientific Observer** to the United Nations Ocean Conference, New York, USA

Language Skills

German (native speaker)
English (fluent, C2)
Norwegian (advanced, A2-B1)
French (advanced, B1)
Russian (beginner, A2)

PC Skills

MS Office, R, MatLab, SPSS, ArcGIS

Additional Qualifications

07/2011 International Diving Certificate, *Open Water Diver* and Nitrox qualification, SSI (Scuba Schools International)

03/2007 German Driving License B

Memberships

2017-2018 Associate Member of the Excellence Cluster "*The Future Ocean*"

Since 2018 ICES Working Group on Atlantic Larvae and Egg Surveys (WGALES)

Since 2019 ICES Working Group on Seasonal to Decadal Prediction of Marine Ecosystems (WGS2D)