

Mary S. Wisz - Short CV

ORCID" 0000-0002-5357-6367

Degrees

- 2006: Ph.D. in biodiversity informatics (University of Cambridge)
- 1999: MSc Environmental Population and Organism Biology (University of Colorado at Boulder)
- 1993: Bsc Biology (University of Illinois at Chicago
- Leadersip training-Research Management, Modules 1-5. Copenhagen Business School 2023-2024
- Certificate in Advanced Pedagogical Training for University Teaching: UDTU Modules 1-4. Technical University of Denmark. 2018-2021

Positions

- 2015-Present : Senior Researcher Technical University of Denmark, DTU AQUA
- 2017-2025- Professor of Marine Science, World Maritime University of the International Maritime Organization, Malmø Sweden (on secondment from DTU)
- 2014-2015: Senior Ecosystem Scientist, DHI-Group, Denmark
- 2008-2014: Senior Scientist Dept Bioscience, Danish Centre for Environment and Energy, Aarhus University
- 2004-2008: Scientist, National Environmental Research Institute, Ministry of the Environment, Denmark

Research area

I am a marine spatial ecologist and use dynamic modelling tools with infromation coming from many branches of science to understand and forecast how biodiversity and ecosystems respond to environmental change in order to inform ecosystem based management

Memberships of scientific committees (last 5 years)

ICES working Groups (WGSHIP, WGFISHCARB, WKEDU)

Publications (all)

Type of publication:	Number
Number of peer reviewed publications	55
Citations (WOS) :	11837
h-index (WOS):	28

Evaluation tasks and reviews

Reviewer for international grants: ERC, German Research Council, Norwegian Research Council, etc.

Educational tasks at academical level

- Head of Ocean Sustainability Governance and Management MSc program, World Maritime University of the United Nations, Malmö Sweden (WMU) 2019-2021
- Teaching: Lead for MSC courses at WMU: Introduction to Ocean Science for Sustainable Devleopment 2017-2024- 4ECTS; Principles of Area Based Management 2018-2024 8 -ECTS, Human impacts on the marine environment (2017-2019) 8 ECTS, and with input to other courses



Student Supervision

MSc	25
PhD:	6
Postdoc:	7

Collaboration with other stakeholders, 2020-present

My research activities include collaboration with stakeholdes from the UN and its specialized agencies, international conventions, and their negotiators (e.g. CBD, BBNJ, IMO, IWC, Arctic Council, OSPAR) national governments and ministries (with an unusually strong network in the Global South), NGO's (environmental, and industry-facing) and industry (e.g. maritime, fisheries, finance, insurance).

Grants (competitive) (ongoing or finished within last 5 years)

- 2022-2027 OceanICU. Horizon Europe WP Lead 15.5 Million Euro total project. WP Lead- budget 550,000 Euro
- 2020-2024 MISSION ATLANTIC. H2020 11.9 million Euro total project Lead WP Lead- budget 200,000
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- 2019-2023: MEESO: Sustainable mesopelagic fisheries and biodiversity. H2020. 6.5 million Euro total project. WP Lead- budget 400,000 Euro
- 2017: Lead. "Coast Fish 3/KYSTFISK3: Biological connectivity and stock assessment of commercial fish
 in coastal areas", European Maritime Fisheries Fund, 3.4 million DKK

Select Publications- (*denotes researchers under MSW supervision) Link to complete list

- *Berzaghi, F., Pinti, J., Aumont, O., Maury, O., Wisz, M.S. Global distribution and valuation of the biological carbon pump. *Nature Climate Change.*, 15, pages 385–392 (2025) https://doi.org/10.1038/s41558-025-02295-0
- *Oostdijk M., *Elsler L., Van Deelen J., Auping W, Kwakkel J, Schadeberg A., Vastenhoud B.M.J., Nedelciu CE, *Berzaghi F., Prellezo R., Wisz M.S, 2024 Modelling fisheries and carbon ecosystem services under deep uncertainty in the ocean twilight zone. *Ambio* https://doi.org/10.1007/s13280-024-02044-1
- *Kelly, R., *Elsler, L. G., *Polejack, A., van der Linden, S., Tönnesson, K., Schoedinger, S. E., ... & Wisz, M. S. (2022). Empowering young people with climate and ocean science: Five strategies for adults to consider. *One Earth* 5(8), 861-874. DOI:https://doi.org/10.1016/j.oneear.2022.07.007
- Wisz, M.S., Broenimann, O., Grønkjær, P., Møller, P. R., Hedeholm, R. Olsen, S., Swingedouw, D., Nielsen, E. E., Guisan, A., Pellissier, L. 2015. Arctic warming will promote Atlantic-Pacific fish interchange. *Nature Climate Change 5: 261-265* https://www.nature.com/articles/nclimate2500
- *Pellissier, L.P., Leprieur, F., Paravicini, V., Cowaman, P., Kulbicki, M., Litsios, G., Olsen, S., Wisz., M.S., Bellwood., D. R., and Mouillot, D. 2014. Quaternary coral reef refugia preserved fish diversity. *Science* 344:1016-1019 (Highlighted in Nature, June 2014).https://www.science.org/doi/10.1126/science.1249853
- Bonanomi, S., *Pellissier, L., Therkildsen, N.O., Hedeholm, R.B., Retzel, A., Meldrup, D., Olsen, S.M., Nielsen, A., Grønkjær, P., Pampoulie, C., Hemmer-Hansen, J., Wisz, M.S., Nielsen, E.E. 2015.
 Archived DNA reveals fisheries and climate induced collapse of a major fishery. Scientific Reports- 5 https://www.nature.com/articles/srep15395
- Wisz, M.S., Pottier, J et.al. 2013. The role of biotic interactions in shaping spatial distributions and realised assemblages of species: implications for species distribution modelling. *Biological Reviews 88:* 15-30 https://doi.org/10.1111/j.1469-185X.2012.00235.x