**Kirstin Meyer-Kaiser**

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Assistant Scientist II, Biology Department, Woods Hole Oceanographic Institution

**Research interests**

Marine benthic ecology, larval biology, invertebrate zoology, Maritime Heritage Ecology

**Education**

University of Oregon, Oregon Institute of Marine Biology Biology PhD, 2016

Dissertation: Community assembly of benthic invertebrates on insular hard substrata Primary research advisor: Craig Young

Northern Michigan University Zoology BS, 2011 Summa Cum Laude; Full Honors; Outstanding Graduating Senior, Department of Biology; Outstanding Graduating Senior, Honors Program; Minors in German and Music

**Research positions and fellowships**

2023-Present Assistant Scientist II, Woods Hole Oceanographic Institution

2019-2022 Assistant Scientist I, Woods Hole Oceanographic Institution

2016-2018 Postdoctoral Scholar, Woods Hole Oceanographic Institution

2012-2016 NSF Graduate Research Fellowship, Oregon Institute of Marine Biology

2015 Fellowship Program for Studies in the High North, University Centre in Svalbard

2014-2015 NSF Graduate Research Opportunities Worldwide, International Research Institute of Stavanger, Stavanger, Norway

2011-2012 Fulbright Study-Research Grant, Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research, Bremerhaven, Germany

2010 NSF Research Experience for Undergraduates, Bodega Marine Laboratory

2008-2011 University Scholars Research Grant, Northern Michigan University

**Peer-reviewed publications** \*mentored or +co-mentored student or postdoc

**Meyer-Kaiser KS**, Schrage K\*, Bergmann M. 2025. Hard-bottom communities in the Fram Strait: patterns, processes, and looming questions. Deep-Sea Res II 222: 105506.

**Meyer-Kaiser KS**, Nuñez K\*, Soltwedel T, Bergmann M. 2025. Long-term changes in deep-sea megafauna community structure in the eastern Fram Strait (Arctic Ocean). Mar Ecol Prog Ser, in press.

Schrage K\*, **Meyer-Kaiser KS**. 2025. Larvae in the dark: evidence of diverse and functionally active meroplankton communities in an Arctic fjord during the polar night. Biol Bull 246:

**Meyer-Kaiser KS**, Mires CH, Sorset S, Jones D, Mather R. 2025. Structural drivers of biodiversity on shipwrecks and natural hard-bottom reefs in the mesophotic zone. Mar Ecol Prog Ser 755: 15-28

Grupstra CGB+, **Meyer-Kaiser KS**, Bennett M-J, Andres MO\*, Juszkiewicz DJ, Fifer JE, Da-Anoy JP, Gomez-Campo K, Martinez-Rugerio I, Aichelman HE, Huzar AK, Hughes AM, Rivera HE, Davies SW. 2024. Holobiont traits shape climate change responses in cryptic coral lineages. Global Change Biol 30: e17578

Bennett M-J, Grupstra CGB+, Da-Anoy J, Andres M\*, Holstein D, Rossin A, Davies SW, **Meyer-Kaiser KS**. 2024. Ex situ spawning, larval development, and settlement in massive reef-building *Porites* corals in Palau. Invert Biol e12447

Mires CH, Haskell B, **Meyer-Kaiser KS**. 2024. Multi-use and multi-vocal challenges of preserving underwater cultural heritage in Stellwagen Bank National Marine Sanctuary. In: Jarvis C (ed) Threats to our ocean heritage: bottom trawling. Springer, doi: 10.1007/978-3-031-57953-0

Grupstra CGB+, Gómez-Corrales M, Fifer J, Aichelman HE, **Meyer-Kaiser KS**, Prada C, Davies SW. 2023. Incorporating cryptic diversity into coral evolution, symbiosis, and conservation. Nature Ecol Evol 8: 622-636

Paxton AB, McGonigle C, Damour M, Holly G, Caporaso A, Campbell PB, **Meyer-Kaiser KS**, Hamdan LJ, Mires CH, Taylor JC. 2024. Shipwreck ecology: understanding the function and processes from microbes to megafauna. BioScience 74: 12-24

Schrage KR\*, **Meyer-Kaiser KS**. 2023. Fine resolution patterns of fouling community settlement, growth, and mortality using the CATAIN camera system. Mar Ecol Prog Ser 711: 17-29

**Meyer-Kaiser KS**, Schrage KR\*, Suman S, Bailey J, Girdhar Y. 2023. CATAIN: an underwater camera system for studying settlement in fouling communities at high temporal resolution. Limnol Oceanogr Methods 21: 345-355

Mires CH, **Meyer-Kaiser KS**. 2023. A case study in maritime heritage ecology: understanding how structural changes to the 1898 shipwreck *Portland* affect biological diversity and colonization. J Maritime Archaeol 18: 197-218

Rivera HE\*, Cohen AL, Thompson JR, Baums IB, Fox M, **Meyer-Kaiser KS**. 2022. Palau’s warmest reefs harbor a thermally tolerant coral lineage that thrives across different habitats. Comm Bio 5: 1394

**Meyer-Kaiser KS,** Mires CH. 2022. Underwater cultural heritage is integral to marine ecosystems. Trends Ecol Evol 37: 815-818

**Meyer-Kaiser KS**, Mires CH, Kovacs M, Kovacs E, Haskell B. 2022. Structural factors driving benthic invertebrate community structure on historical shipwrecks in a large North Atlantic marine sanctuary. Mar Poll Bull 178: 113622

**Meyer-Kaiser KS**, Schrage KR\*, von Appen W-J, Hoppmann M, Lochthofen N, Sundfjord A, Soltwedel T. 2022. Larval dispersal and recruitment of benthic invertebrates in the Arctic Ocean. Prog Oceanogr 203: 102776

**Meyer-Kaiser KS**, Mires CH, Haskell B. 2022. Invertebrate communities on shipwrecks in Stellwagen Bank National Marine Sanctuary. Mar Ecol Prog Ser 685: 19-29

**Meyer-Kaiser KS**, Chen H, Liu X, Laney SR. 2021. Oceanographic influence on the early life-history stages of benthic invertebrates during the polar night. Polar Biol 44: 1781-1793

Mazurkiewicz M, **Meyer-Kaiser KS**, Sweetman AK, Renaud PE, Włodarska-Kowalczuk M. 2021. Megabenthic standing stocks and organic carbon demand in a warming Arctic. Progr Oceanogr 196: 102616

**Meyer-Kaiser KS**,Plowman CQ, Soltwedel T. 2021. Reproduction, recruitment, and growth of the Arctic deep-sea hydroid *Bouillonia cornucopia*. Invert Biol 140: e12332

**Meyer-Kaiser KS**, Smith A\*, Soltwedel T. 2021. Ontogenetic development of the crinoid *Poliometra prolixa* in the Arctic deep sea. Invert Biol 140: e12331

DiBenedetto MH, **Meyer-Kaiser KS**, Torjman B, Wheeler JD, Mullineaux LS. 2021. Departures from isotropy: the kinematics of a larval snail in response to food. J Exp Biol 224: jeb239178

Mires CH, Kovacs E, **Meyer-Kaiser KS**, Haskell B. 2020. Return to *Portland* 2019: Stellwagen Bank National Marine Sanctuary and Telepresence. 2020 Underwater Archaeol Proc: 101-109

**Meyer-Kaiser KS**. 2020. Carryover effects of brooding conditions on larvae in the slipper limpet, *Crepidula fornicata*. Mar Ecol Prog Ser 643: 87-97

Cunha MR, Génio L, Pradillon F, Clavel Henry M, Beaulieu S, Birch J, Campuzano FJ, Carretón M, De Leo F, Gula J, Laming S, Lindsay D, Matos FL, Metaxas A, **Meyer-Kaiser KS**, Mills S, Queiroga H, Rodrigues CF, Sarrazin J, Watanabe H, Young R, Young CM. 2020. Foresight workshop on advances in ocean biological observations: a sustained system for deep-sea meroplankton. Res Ideas Outcomes 6: e54284

**Meyer-Kaiser KS**, Houlihan EP, Wheeler JD, McCorkle DC, Mullineaux LS. 2019. Behavioral response of eastern oyster (*Crassostrea virginica*) larvae to chemical settlement cue is not impaired by low pH. Mar Ecol Prog Ser 623: 13-24

**Meyer-Kaiser KS**, Bergmann M, Soltwedel T, Klages M. 2019. Recruitment of Arctic deep-sea invertebrates: results from a long-term hard-substrate colonization experiment at the Long-Term Ecological Research observatory HAUSGARTEN. Limnol Oceanogr 64: 1924-1938

Maciejewski MF, **Meyer KS**, Wheeler JD, Anderson EJ, Pittoors NC\*, Mullineaux LS. 2019. Helical swimming as an exploratory behavior in competent larvae of the eastern oyster (*Crassostrea virginica*). J Exp Mar Biol Ecol 510: 86-94

Sweetman AK, Smith CR, Shulse CN, Maillot B, Lindh M, Church MJ, **Meyer KS,** van Oevelen D, Stratmann T, Gooday AJ. 2018. Key role of bacteria in the short-term cycling of carbon at the abyssal seafloor in a low POC flux region of the eastern Pacific Ocean. Limnol Oceanogr 64: 694-713

**Meyer KS**, Wheeler JD, Houlihan EP, Mullineaux LS. 2018. Desperate planktotrophs: decreased settlement selectivity with age in competent eastern oyster (*Crassostrea virginica*) larvae. Mar Ecol Prog Ser 599: 93-106

**Meyer KS**, Li Y, Young CM. 2018. Oceanographic and biological influences on recruitment of benthic invertebrates to hard substrata on the Oregon shelf. Estuar Coast Shelf S 208: 1-8

**Meyer KS,** Sweetman AK, Kukliński P, Leopold P, Vogedes D, Berge J, Griffiths C, Young CM, Renaud PE. 2017. Recruitment of benthic invertebrates in high Arctic fjords: relation to temperature, depth, and season. Limnol Oceanogr 62: 2732-2744

**Meyer KS**, Brooke SD, Wolf M, Sweetman AK, Young CM. 2017. Invertebrate communities on historical shipwrecks in the western Atlantic: relation to islands. Mar Ecol Prog Ser 566: 17-29

Sweetman AK, Thurber AR, Smith CR, Levin LA, Mora C, Wei C-L, Gooday AJ, Jones DOB, Rex M, Yasuhara M, Ingels J, Ruhl HA, Frieder CA, Danovaro R, Würzberg L, Baco A, Grupe BM, Pasulka A, **Meyer KS**, Dunlop KM, Henry L-A, Roberts JM. 2017. Major impacts of climate change on deep-sea benthic ecosystems. Elem Sci Anth. 5:4

**Meyer KS**. 2017. Islands in a sea of mud: insights from terrestrial island theory for community assembly on insular marine habitats. Adv Mar Bio 76: 1-40

**Meyer KS**, Young CM, Sweetman AK, Bergmann M, Soltwedel T. 2016. Rocky islands in a sea of mud: biotic and abiotic factors structuring deep-sea dropstone communities. Mar Ecol Prog Ser 556: 45-57

**Meyer KS,** Wagner JKS, Ball B, Turner P, Young CM, Van Dover CL. 2016. *Hyalinoecia artifex*: field notes on a charismatic and abundant epifaunal polychaete on the US Atlantic continental margin. Invert Biol 135: 211-214

**Meyer KS,** Sweetman AK. 2015. Observation of a living macroalga at 166 m in a high Arctic fjord. Mar Biodiv Rec 8: e58

**Meyer KS,** Sweetman AK, Young CM, Renaud PE. 2015. Environmental factors structuring Arctic megabenthos – a case study from a shelf and two fjords. Front Mar Sci 2: 22

Soltwedel T, Bauerfeind E, Bergmann M, Bracher A, Budaeva N, Busch K, Cherkasheva A, Fahl K, Grzelak K, Hasemann C, Jacob M, Kraft A, Lalande C, Metfies K, Nöthig E-M, **Meyer KS**, Quéric N-V, Schewe I, Włodarska-Kowalczuk M, Klages M. 2015. Natural variability or anthropogenically-induced variation? Insights from 15 years of multidisciplinary observations at the Arctic marine LTER site HAUSGARTEN. Ecol Ind 65: 85-102

Cumberlidge N, Klaus S, **Meyer KS,** Koppin JC. 2015. New collections of freshwater crabs from northern Madagascar, with the description of a new species of *Foza* Reed & Cumberlidge, 2006 (Brachyura, Potamonautidae), and comments on their conservation status. European J Taxonomy 109: 1-15

**Meyer KS**, Soltwedel T, Bergmann M. 2014. High biodiversity on a deep-water reef in the eastern Fram Strait. PLoS ONE 9(8): e105424

Sanford E, Gaylord B, Hettinger A, Lenz EA, **Meyer KS**, Hill TM. 2014. Ocean acidification increases the vulnerability of native oysters to predation by invasive snails. Proc R Soc B 281: 20132681

**Meyer KS**, Cumberlidge N, Koppin JC. 2014. A new genus and species of freshwater crab from Madagascar (Decapoda, Brachyura, Potamoidea, Potamonautidae). Zootaxa 3884: 65-72

**Meyer KS**, Bergmann M, Soltwedel T. 2013. Interannual variation in the epibenthic megafauna at the shallowest station of the HAUSGARTEN observatory (79° N, 6° E).

Biogeosciences 10: 3479- 3492

**Meyer KS,** Cumberlidge N. 2011. A revision of the freshwater crabs (Crustacea: Decapoda: Brachyura: Potamonautidae) of the Lake Kivu drainage basin in Central and East Africa. Zootaxa 3011: 45-58

Cumberlidge N, **Meyer KS**. 2011. The freshwater crabs of Lake Kivu (Crustacea: Decapoda: Brachyura: Potamonautidae). J Nat Hist 45: 1835-1857

Cumberlidge N, Ng PKL, Yeo DCJ, Naruse T, **Meyer KS,** Esser LJ. 2011. Diversity, endemism, and conservation of the freshwater crabs of China (Brachyura: Potamidae and Gecarcinucidae). Int Zool 6: 45-55

Cumberlidge N, **Meyer KS**. 2010. A new species of *Potamonautes* MacLeay, 1838, from southwestern Ethiopia (Decapoda, Brachyura, Potamoidea, Potamonautidae). In: Fransen CF, de Grave S, Ng PKL, editors. Studies on Malacostraca: Lipke Bijdeley Holthuis Memorial Volume. Crustaceana Monographs 14: 179-190

Cumberlidge N, **Meyer KS**. 2009. A new species of *Foza* Reed & Cumberlidge, 2006, from northern Madagascar (Decapoda, Brachyura, Potamoidea, Potamonautidae), with a redescription of *F. goudoti* (H. Milne Edwards, 1853) comb. n., and comments on *Skelosophusa prolixa* Ng & Takeda, 1994. In: Bruce N (Ed) Advances in the taxonomy and biogeography of Crustacea in the Southern Hemisphere. ZooKeys 18: 77–89

**Cruise and field experience**

2025 F/V *Kahuna*, Georges Bank, chief scientist

2025 Geodynamics course field trip, Patagonia, Chile, chief scientist

2024 F/V *Three Graces* and F/V *Kristen S.*, Georges Bank, chief scientist

2024 R/V *Polarstern*, HAUSGARTEN, Fram Strait, with ROV *Kiel 6000*

2023 Palau International Coral Reef Center, Koror, Palau, chief scientist

2023 Ny-Ålesund Research Station, Kongsfjorden, Svalbard, chief scientist

2022 Palau International Coral Reef Center, Koror, Palau, chief scientist

2022 M/V *Sea Scout*, Gulf of Mexico, with SeaRover ROV

2022 Palau International Coral Reef Center, Koror, Palau, chief scientist

2021 Palau International Coral Reef Center, Koror, Palau, chief scientist

2021 R/V *Polarstern*, HAUSGARTEN, Fram Strait, group leader

2020 R/V *Catapult*, Stellwagen Bank National Marine Sanctuary, with ROV *Pixel*, chief scientist

2020 Ny-Ålesund Research Station, Kongsfjorden, Svalbard, chief scientist

2019 R/V *Connecticut*, Stellwagen Bank National Marine Sanctuary, with ROV *Pixel* and telepresence outreach, chief scientist

2019 R/V *Polarstern*, HAUSGARTEN, Fram Strait, with ROV *Phoca*

2019 R/V *Dawn Treader*, Stellwagen Bank National Marine Sanctuary, with ROV *Pixel*, chief scientist

2018 Palau International Coral Reef Center, Koror, Palau

2018 R/V *Dawn Treader*, chief scientist

2018 NSF Early Career Training program, McMurdo Station, Antarctica

2017 R/V *Polarstern*, HAUSGARTEN, Fram Strait, with ROV *Kiel 6000*

2015 R/V *Helmer Hanssen*, Svalbard waters

2015 R/V *Atlantis*, Mid-Atlantic Bight, with AUV *Sentry* and DSV *Alvin*

2015 R/V *Thomas G. Thompson*, Clarion-Clipperton Fracture Zone, with AUV *Remus 6000*

2015 R/V *Helmer Hanssen,* Svalbard waters and research station Ny-Ålesund

2014 R/V *Thomas G. Thompson*, Kermadec Trench, with HROV *Nereus*

2013 R/V *Endeavor*, Blake Ridge

2013 NOAA ship *Ronald H. Brown,* Mid-Atlantic Bight, with ROV *Jason II*

2012 NOAA ship *Nancy Foster,* Mid-Atlantic Bight, with ROV *Kraken II*

2012 R/V *Polarstern,* HAUSGARTEN, Fram Strait

2011 R/V *Polarstern*, HAUSGARTEN, Fram Strait, with ROV *Kiel 6000*

**Mentorship experience**

2025 Olivia Quintin Undergraduate WHIO Guest Student

2025 Will Dubreuil High School Falmouth Academy intern program

2025 Matthew Kellogg High School Falmouth Academy intern program

2024-5 Maggie McLean High School Falmouth High School internship

2024 Martyna Kowalska Undergraduate WHOI Summer Student Fellow

2024 Declan Lane High school Falmouth Academy intern program

2024 Yaz Aubrey High school Falmouth Academy intern program

2023-4 Hollis Holley High school Martha’s Viney. Charter School mentorship

2023- Nicole Pittoors PhD student Lehigh University, committee member

2023- Kate Lane PhD student MIT-WHOI Joint Prog., committee member

2023-5 Johanna Weston Postdoc WHOI Postdoctoral Scholar

2023 Maikani Andres Post-baccalaureate WHOI Guest Student

2022 Erik Gulmann High school Science fair mentor

2022 Kimberly Nuñez Undergraduate WHOI Summer Student Fellow

2022 Maikani Andres Undergraduate Palau International Coral Reef Center

2022-4 Carsten Grupstra Postdoc Boston University, co-mentor

2020-5 Kharis Schrage PhD student MIT-WHOI Joint Program in Bio Oceanogr

2018-21 Hanny Rivera Postdoc WHOI Postdoctoral Investigator

2020 Amelia Smith Undergraduate WHOI Summer Student Fellow

2020 Mateo Darack High school Falmouth Academy intern program

2020 Helen Sievert High school WHOI volunteer

2017 Sabine Angier Undergraduate WHOI volunteer

2017 Nicole Pittoors Post-baccalaureate WHOI Guest Student

2014 Ashely Hueckstaedt Undergraduate University of Oregon

2014 Jezzi Reynolds Undergraduate COSEE-Pacific Partnerships

**Teaching experience**

2025 Icebergs and the Southern Ocean, co-taught, WHOI Geodynamics program

2022 Polar Biology and Ecology, co-taught with Michelle Shero, MIT-WHOI Joint Program

2014 Invertebrate Zoology, teaching assistant, University of Oregon

2014 Marine Biology, teaching assistant, University of Oregon

2013 Marine Ecology, teaching assistant, University of Oregon

**Invited presentations, seminars, and workshops**

2025 Invited international scholar, International Conference on Underwater Cultural Heritage: Preserving and Sustaining our Common Memories, Kaohsiung, Taiwan

2025 Thursday Evening Club, Brookline, MA

2024 Invited speaker, Remembering the *Portland*: 125 Years of Legacy and Learning, Southern Maine Community College, Portland, ME

2023 Maritime Heritage Ecology workshop, **co-organizer and host**

2023 Invited virtual presentation, 5th International Marine Protected Area Congress (IMPAC5)

2022 Invited seminar, Thunder Bay National Marine Sanctuary, Alpena, MI

2022 Invited seminar, Boston Sea Rovers, Danvers, MA

2022 Departmental seminar, Woods Hole Oceanographic Institution, Woods Hole, MA

2021 Invited virtual seminar, University of New Brunswick, Canada

2021 Invited virtual panelist, Long-Term Ecological Research – Germany annual meeting

2021 Invited virtual seminar, Memorial University of Newfoundland, Canada

2021 Invited virtual panelist, “Shipwreck Ecology” forum, Society for Historical Archaeology

2020 Invited virtual presentation, Marine Research and Education conference, Moscow, Russia

2020 Invited seminar, Norwegian Polar Institute, Ny-Ålesund, Svalbard

2019 Invited workshop participant, “Advances in ocean observations – sustained system for deep-sea meroplankton,” University of Aveiro, Aveiro, Portugal

2019 Arctic Frontiers Emerging Leaders workshop, Norway

2019 Invited seminar, University of Oslo, Oslo, Norway

2018 Departmental seminar, Woods Hole Oceanographic Institution, Woods Hole, MA

2018 Invited seminar, The Marine Biological Laboratory, Woods Hole, MA

2017 Invited seminar, Bridgewater State University, Bridgewater, MA

2017 Departmental seminar, Woods Hole Oceanographic Institution, Woods Hole, MA

2016 Invited workshop participant, DESCEND-2, Cambridge, MA

2015 Invited seminar, Oregon Institute of Marine Biology, Charleston, OR

2014 Invited seminar, Oregon Institute of Marine Biology, Charleston, OR

2013 Invited participant in INDEEP workshop on deep-sea colonization, Southampton, UK

2012 Invited speaker, North Carolina State Museum of Natural Sciences

**Conference presentations \*presenting author**

Meyer-Kaiser KS\*, Mires CH (2025) Underwater cultural heritage is integral to marine ecosystems. Society for Historical Archaeology, New Orleans, LA. Oral presentation.

Schrage K\*, Meyer-Kaiser KS (2025) Larvae in the dark: meroplankton diversity and ecology in the polar night. Society for Integrative and Comparative Biology, Atlanta, GA. Oral presentation.

Meyer-Kaiser KS\* (2024) Colonization and connectivity of island-like habitats. Ocean Outlook meeting, Bergen, Norway. Oral presentation.

Meyer-Kaiser KS\*, Mires CH (2024) Shipwrecks as models for understanding a changing ocean. Ocean Sciences Meeting, New Orleans, Louisiana. Oral presentation.

Schrage KR\*, Meyer-Kaiser KS (2024) Distribution and community assembly of meroplanktonic larvae throughout the Fram Strait. Ocean Sciences Meeting, New Orleans, Louisiana. Oral presentation.

Meyer-Kaiser KS\*, Schrage KR (2024) Impacts of glacier retreat on coastal seafloor communities in Kongsfjorden, Svalbard. Arctic Frontiers, Tromsø, Norway. Virtual oral presentation.

Grupstra CBG\*, Meyer-Kaiser KS, Bennett M-J, Andres M, Aichelmann H, Fifer J, Huzar A, Hughes A, Rivera HE, Davies SW (2022) Adaptation to thermal stress in cryptic coral lineages from marginal habitats. Society for Integrative and Comparative Biology, Austin, Texas. Oral presentation.

Mazurkiewicz M\*, Meyer-Kaiser KS, Sweetman AK, Renaud RE, Włodarska-Kowalczuk M (2022) Standing stock and functioning of benthic megafauna in a warming Arctic. European Marine Biology Symposium, Gdańsk, Poland. Poster presentation.

Meyer-Kaiser KS\*, Mires CH (2022) Shipwrecks in Stellwagen Bank National Marine Sanctuary. Benthic Ecology Meeting, Portsmouth, NH. Oral presentation.

Schrage KR\*, Meyer-Kaiser KS, Girdhar Y, Bailey J, Suman S (2022) CATAIN: a tool for quantifying settlement and post-settlement mortality. Benthic Ecology Meeting, Portsmouth, NH. Oral presentation.

Schrage KR\*, Meyer-Kaiser KS, von Appen W-J, Lochthofen N, Hoppmann M, Soltwedel T (2022) Larval dispersal in the Fram Strait, Arctic Ocean. Arctic Frontiers. Virtual presentation.

Whittaker M\*, Pires A, DiBenedetto M, Anderson A, Helfrich KR, Meyer-Kaiser KS, Mullineaux LS (2020) Metamorphosis of *Crepidula plana* in response to jet-stirred turbulence. Ocean Sciences Meeting, San Diego, CA. Poster presentation.

Sweetman AK\*, Smith CR, Shulse CN, Maillot B, Lindh M, Church M, Meyer-Kaiser K, van Oevelen D, Stratmann T, Gooday AJ (2020) In situ evidence highlighting the key role of bacteria in the short-term cycling of organic matter and dark inorganic carbon fixation at the abyssal seafloor in a low POC flux zone. Ocean Sciences Meeting, San Diego, CA. Oral presentation.

Mires CH\*, Meyer-Kaiser KS, Kovacs E, Haskell B (2019) Stellwagen Bank National Marine Sanctuary and telepresence: return to the *Portland*. Society for Historical Archaeology, Boston, MA. Oral presentation.

Meyer-Kaiser KS\*, Bergmann M, Soltwedel T (2018) Recruitment and growth of Arctic deep -sea invertebrates in a long-term (18-year) colonization experiment at the HAUSGARTEN observatory (Fram Strait, Arctic Ocean). Deep-Sea Biology Symposium, Monterey, CA. Oral presentation.

Torjman BZ\*, Mullineaux LS, Meyer KS, Wheeler JD, Pechenik J (2018) Food affects swimming behavior in *Crepidula fornicata*. Society for Integrative and Comparative Biology, San Francisco, CA. Oral presentation.

Meyer KS, Pittoors NC\*, Mullineaux LS (2018) Interactive effects of temperature and biotic interactions influence succession in subtidal fouling communities. Society for Integrative and Comparative Biology, San Francisco, CA. Oral presentation.

Meyer KS\*, Bergmann M, Soltwedel T, Young CM (2015) Habitat mapping of deep-sea dropstones. GeoHab, Salvador, Brazil. Oral presentation. Awarded full travel scholarship.

Meyer KS\*, Bergmann M, Soltwedel T, Young CM (2015) Deep-sea dropstones as a testing ground for classic island hypotheses. Deep-Sea Biology Symposium, Aveiro, Portugal. Poster presentation.

Bergmann M\*, Taylor J, Meyer K (2014) Use of BIIGLE and iSIS to analyze time-series image data from the HAUSGARTEN observatory. Marine Imaging Workshop, Southampton, UK. Oral presentation.

Bauerfeind E\*, Bergmann M, Boetius A, Beszczynska-Möller A, Hasemann C, Jacob M, Klages M, Kraft A, Lalande C, Meyer K, Nöthig E-M, Schewe I, Soltwedel T (2013) [HAUSGARTEN: The Arctic Long-Term Deep Sea Observatory in eastern Fram Strait at 79° N/4° E-An overview and highlights from multidisciplinary research activities](https://epic.awi.de/id/eprint/34545/). LTER Europe, Rome, Italy. Oral presentation.

Meyer KS\*, Bergmann M, Soltwedel T (2012) High biodiversity on a deepwater reef in the Fram Strait. Deep-Sea Biology Symposium, Wellington, New Zealand. Poster presentation.

Meyer KS\*, Cumberlidge N (2010) The freshwater crabs of Lake Kivu with comparisons to the fauna of other central African Rift Valley lakes. International Conference on Biology of Freshwater Decapods, Frankfurt, Germany. Oral presentation.

**Public outreach and education**

2014-present Meyer-Kaiser lab: researching larval dispersal and seafloor communities from the tropics to the poles. Blog: kirstinmeyer.blogspot.com

2023 “Discovering the *Portland* through music,” collaboration with Sound Explorations to teach Maritime Heritage Ecology concepts to blind or neurodivergent K-12 students using music. https://vimeo.com/842533494

2022 “Found Color” class using art and science to teach conservation at the Palau International Coral Reef Center, Koror, Palau. Collaboration with artist Kimberly Collins Jermain.

2022 Telepresence outreach discussion Gulf of Mexico shipwrecks with classrooms across US. Four broadcasts reached 650 students.

2020 Telepresence outreach featuring live video from ROV *Pixel*. Eight broadcasts reached 27,000 viewers online.

2020 “Exploring the depths of Stellwagen Bank National Marine Sanctuary” webinar through Exploring by the Seat of Your Pants. [www.youtube.com/watch?v=tVQja6gMvD4](https://www.youtube.com/watch?v=tVQja6gMvD4&t=3260s)

2020 “The science of shipwrecks” webinar through Woods Hole Oceanographic Institution’s Ocean Encounters virtual event series. [www.youtube.com/watch?v=R44tKAPpKOM](https://www.youtube.com/watch?v=R44tKAPpKOM)

2020 Two virtual presentations to middle school science classes. Teacher: Susan Walker, Stamford, CT

2019 Developed series of lesson plans on shipwreck biology for middle and high school levels. https://tinyurl.com/tmwwx5u, https://tinyurl.com/rtgbote

2019 Telepresence outreach from R/V *Connecticut*. Nine direct interactions reached 1,415 students in 28 schools, and four public broadcasts reached 647 people in 21 venues, with 9,400 additional viewers joining online.

**Media coverage and public interviews**

2024 Geist, Gilda. “Sunken shipwrecks attract marine debris. Now a robot could be used to clean them up.” WCAI. https://tinyurl.com/ytdvvp4f

2024 Carley, Kathryn. “MA scientists tackle marine debris harming historical sites, critical habitats.” Public News Service. https://tinyurl.com/4wnrsfdr

2024 Ebersole, Rene. “The quest to find and identify missing persons.” Undark Magazine. https://undark.org/2024/04/10/edna-missing-soldiers/

2024 “OSM24: Using shipwrecks to explore changing coasts and oceans.” Media roundtable, Ocean Sciences Meeting, New Orleans, Louisiana. https://www.youtube.com/watch?v=EwCLClH-bEs

2024 Seynsche, Monika. “Gletcherschmelze: Veränderte Nahrungsgrundlage im Ozean.” Forschung Aktuell, Deutschlandfunk (German public radio). http://tinyurl.com/3srfx3d5

2023 Levin, David. “Filming in the Arctic night.” Oceanus Magazine. https://tinyurl.com/yckspnea

2023 John Rogers, Lisa. “Tracing for human remains on shipwrecks with environmental DNA.” Great Lakes Now. https://tinyurl.com/2a4ze434

2023 Trethewey, Laura. “Loose lips save sunken ships.” Hakai Magazine. https://hakaimagazine.com/features/loose-lips-save-sunken-ships/

2023 Featured scientist on “Life in the dark: the polar night,” an episode of *Changing Seas*, produced by South Florida PBS. https://www.youtube.com/watch?v=rAS0osFsneI

*Awarded Suncoast Regional Emmy, 2023*

2023 Invited guest on “Berius el Chais” (“Ecological Hour”), Palau Wave Radio, Koror, Palau. https://www.youtube.com/watch?v=KzOazI1rk2Y

2023 Invited guest on Below the Tide, podcast hosted by Liz Rohlicek. https://link.chtbl.com/belowthetide

2022 “Palau’s Rock Islands harbor heat-resistant corals.” Covered by ScienceX, Environmental News Network, UltraMarine, Nature World News, and ECO Magazine. https://tinyurl.com/yvx3zh54

2022 Invited guest on Hits FM radio, Alpena, MI

2022 Invited guest on episode of Genetics Unzipped, the Genetic Society podcast. https://geneticsunzipped.com/blog/01/12/2022/bats-bodies-environmental-dna

2022 Marcus, Amy. “How ‘eDNA’ might transform the search for missing service members.” Wall Street Journal. https://tinyurl.com/meazstjv

2022 Southern, Kieran. “Search for missing personnel gets a high-tech boost.” The Times, London. https://tinyurl.com/4wnp8r4e

2022 Joosse, Tess. “A somber search: can sophisticated research tools, such as plucking DNA from water and the seafloor, speed the recovery of long-missing service members?” Science 377(6610). https://tinyurl.com/5ettxrvj

2022 Invited guest on “Women wavemakers” episode of The American Blue Economy Podcast, hosted by Admiral Tim Gallaudet. https://tinyurl.com/4cmksbs9

2022 Lubofsky, Evan. “Can environmental DNA help us find lost US service members?” Oceanus Magazine. tinyurl.com/449tz69h

2020 Exploration of shipwrecks in Stellwagen Bank National Marine Sanctuary covered by WCAI, WBUR, WBZ, Portland Patriot Ledger, and Mental Floss.

2019 Cherryhomes, Ellie. “Scientists document historic shipwrecks in Stellwagen Bank National Marine Sanctuary.” https://tinyurl.com/volmtj4

2019 Exploration of the steamship *Portland* wreck covered by Cape Cod Today, the Cape Cod Times, Professional Mariner, the Portland Press Herald, and Ocean News & Technology

2019 Sweeney, Emily. “Exploring the wreck of the steamship *Portland*, ‘the *Titanic* of New England.’ Boston Globe. https://tinyurl.com/y2wnqtlw

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2019 “Arctic deep-sea colonization can take decades, reveals novel 18-year study.” ECO Magazine. http://tinyurl.com/y6taykxf

2017 LeCapra, Véronique. “Who grows there? Scientist take a closer look at biofouling marine life.” Oceanus Magazine 53: 26-27.

2015 Special guest on Jefferson Public Radio (NPR). http://tinyurl.com/oukysao

2015 DeMarco, Emily. “Arctic fjord harbors surprising inhabitants.” Science magazine. https://tinyurl.com/lu35wkv

**Other professional activities**

AAUS Scientific Diver, certified lead diver to 30 m

Closed-circuit rebreather diver (JJ and X-CCR), Cave diver, Trimix diver to 60 m depth

Association for the Sciences of Limnology and Oceanography member

Reviewer for National Science Foundation Biological Oceanography program, NSF Arctic Natural Sciences program, Swiss National Science Foundation, Polish National Science Centre, *Limnology and Oceanography*, *Marine Ecology Progress Series*, *Oceanography*, *Oikos*, *Global Change Biology*, *Marine Ecology*, *Estuarine Coastal and Shelf Science*, *Journal of Experimental Marine Biology and Ecology*, *Arctic*, *Frontiers in Marine Science*