ESSAS 3rd Open Science Meeting
June 11-15, 2017
Tromsø, Norway

Keynote Speakers

Kick-Off: Dr. Mette Skern-Mauritzen

Dr. Skern-Mauritzen is head of the Ecosystem Processes Group at the Institute of Marine Research in Bergen, Norway. She works on marine ecosystem structure and functioning from plankton to marine mammals. She also has been involved in ecosystem based management and fisheries management issues, especially as they relate to Barents Sea.

Wrap-Up: Jason Link

Dr. Link works for NOAA Fisheries as Senior Scientist for Ecosystem Management out of Woods Hole in the USA. He is NOAA's senior authority on ecosystem science, conducting research and coordinating activities of NOAA Fisheries' science support for effective ecosystem-based management. He has expertise in food web dynamics, comparative ecosystem dynamics, applied ecological modelling, essential fish habitat, and developing resource management tools and systems with a strong ecological basis.

Theme Session Speakers

Paleoecology

Prof. Poul Holm (Ireland)

Dr. Holm is a professor of environmental history at Trinity College in Dublin, Ireland. His current research interest is North Atlantic fisheries c. 1400-1700, and more generally the interdisciplinary combination of marine science and history. He has published widely on medieval and early modern marine environment, coastal communities, and maritime culture with a special interest in Viking settlements in Ireland.

Advection and Mixing and their Ecosystem Impacts

Prof. Ichiro Yasuda (Japan)

Prof. Yasuda is a senior scientist at the Atmosphere and Ocean Research Institute, in the Department of Physical Oceanography, University of Tokyo. He is presently leading the Japanese Project on Ocean Mixing Processes (OMIX) and their impact on biogeochemistry, climate and the ecosystem. They are taking direct observations of vertical mixing over mm-scales and currents at the 10 m-scale.

Dr. Ryan Rykaczewski (USA)

Dr. Rykaczewski has a faculty position at the University of South Carolina. He has been investigating ecosystem changes and fisheries production in response to past and future climate variability and climate change. This includes biogeochemical changes based on atmosphere-ocean general circulation models. Some current areas of focus includelarge-scale changes in oceanic and atmospheric properties of the North Pacific and remote forcing of coastal conditions.

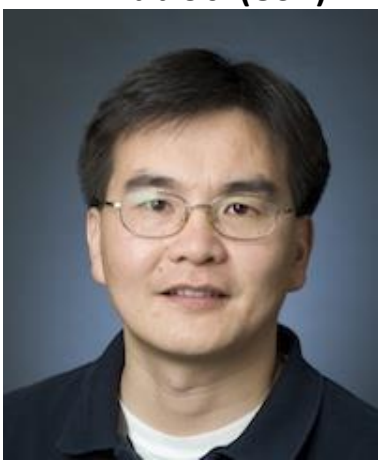
Timing/phenology and match-mismatch: are they critical issues?

Dr. Mariam Doyle (USA)

Dr. Doyle from the University of Washington has been studying reproductive strategies and early life history ecology of marine fish species to understanding recruitment processes and population fluctuations in response to environmental change, primarily in Alaskan waters. Recently she has been investigating early life history phenology among Gulf of Alaska fish species including implications for adaptation and response to environmental forcing.

Future Subarctic and Arctic Marine Ecosystems under Climate Change

Dr. Rubio Ji (USA)



Dr. Ji is a research scientist at the Woods Hole Oceanographic Institution. His research interests include Arctic oceanography and biological production using coupled biological-physical numerical models. He also works on food web dynamics in coastal oceans, plankton phenology and biogeography, zooplankton population dynamics, and metapopulation connectivity.

Shifting habitats, persistent hot spots, and the distribution of benthos, plankton, fish, seabirds and marine mammals

Dr. Jackie Grebmeier (USA)

Dr. Grebmeier works at the University of Maryland's Chesapeake Bay Laboratory and is a well-known expert in pelagic-benthic coupling, benthic community structure, and marine ecosystem dynamics. She has focussed much of her field research program in the Arctic and the Bering Sea to understand how water column processes influence biological productivity and sediments, how materials are exchanged between the sea bed and overlying waters, and documenting longer-term trends in ecosystem health of Arctic continental shelves.

Multiple Stressors

Dr. Howard Browman (Norway)

Dr. Browman works at the Institute of Marine Research in Bergen His interests cover a broad range of subject areas, including zooplankton and ichthyoplankton behaviour and ecology; sensory ecology; host-finding in fish parasites; effects of solar ultraviolet radiation, ocean acidification and temperature change on aquatic organisms and ecosystems; ecosystem-based management; critically evaluating how scholarly performance is measured; characterizing the bureaucratisation of scholarly institutions and its impacts; and issues in scientific publishing.

Ocean Acidification

Dr. Peter Thor (Norway)

Dr. Thor works at the Norwegian Polar Institute in Tromsø, Norway. His research has focused upon trophodynamics among phytoplankton, microzooplankton, and mesozooplankton. He takes an organism-view to plankton ecology, and investigates the possibility for physiological explanations to observed variations in the trophic transport of energy. He is presently studying physiological and evolutionary effects of ocean acidification in zooplankton populations.

Dr. Jessica Cross (USA)

Dr. Cross works for NOAA at the Alaska Fisheries Science Centre in Seattle. Her research centers on complex carbonate biogeochemistry, with particular interest in the use of interdisciplinary approaches to differentiate and quantify variable drivers of carbonate system variability, and in the synergistic interactions between sources of natural variability and anthropogenic stressors. Her main geographic focus has been in the Arctic and sub-Arctic and has been examining the downstream impacts of biogeochemical preconditioning over sub-Arctic shelves.

Dr. Agneta Fransson (Norway)

Dr. Fransson works at the Norwegian Polar Institute in Tromsø. Her research interests are on the polar ocean carbonate system, CO_2 fluxes and biogeochemical processes in sea ice and seawater

with a focus on ocean acidification and the processes responsible for its seasonal and inter-annual variability. Main studies are on the effect of ice formation and ice melt from sea ice and glacier on surface water CO 2 and calcium carbonate saturation state, which is a measure on chemical stability of calcium carbonate. Processes within the sea ice and the exchange at air-ice-water interface are part of my research.

Science, Policy, and Management

Dr. Richard Merrick (USA)

Dr. Merrick, as Chief Science Advisor for NOAA Fisheries is at the forefront of Science-Policy-Management issues. He has worked to ensure that NOAA science is directly connected to its conservation mandates. He has been leading efforts to meet the challenges of climate changes and developing ways to provide climate science advice to management including the effort to anticipate and plan for a future warmer Arctic.

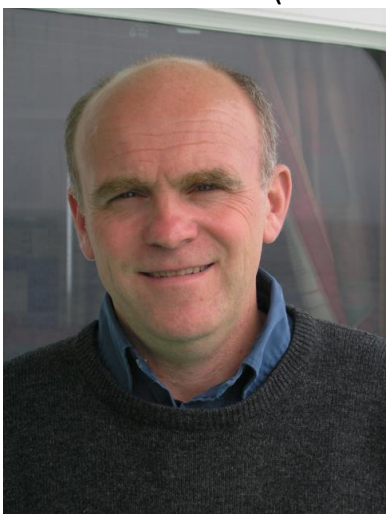
Dr. Christine Brusendorf

Dr. Brusendorf is the ICES General Secretary. She studied Maritime and Environmental Law at the University of Copenhagen and London School of Economics and Political Science, before completing

her PhD in International Law of the Sea and International Environmental Law at the University of Copenhagen. Earlier focusing on the Baltic region, she is presently promoting integrated ecosystem understanding, with the aim to develop integrated ecosystem assessment in regional seas, as a link between ecosystem science and the advice required in applying an ecosystem approach. This necessitates a strong connection between data and information, science and advice.

Open Session

Dr. Stein Kaartvedt (Norway)



Dr. Kaartvedt works in the Department of Biosciences at the University of Oslo. His research group studies the distribution, behavior, mortality and feeding of zooplankton. He has been assessing feeding using molecular methods and examining swimming behavior in relation to time of day and feeding mode to evaluate implications for encounters with predators. To further understand the biology of zooplankton, he also has been investigating their predators, including studies on the distribution, feeding and swimming behavior of planktivorous fish.