

## International Scientific Advisory Committee

As of February 5, 2019

Advises OFI's Management Committee on scientific excellence, strategic focus and alignment of research projects with the mission, goals and deliverables with the [Canada First Research Excellence Fund](#).

Members are:

**Jake Rice (chair), former Chief Scientist for the Department of Fisheries and Oceans:**

Dr. Jake Rice was Chief Scientist for the Department of Fisheries and Oceans, Canada (2006-2016) and Director of Peer Review and Science Advice (1996-2006) He also held senior DFO Science positions in Pacific and Newfoundland Regions. He received a BSc. from Cornell University and a PhD from the University of Toronto. He has more than 300 publications in the scientific literature, primarily on the ecosystem approach to integrated marine resource management and the science-policy interface in natural resource management and conservation. In 2014 he co-edited *Governance of Marine Fisheries and Biodiversity Conservation* (Wiley). He co-chairs the Americas Regional Assessment for the Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES), co-leads the Ocean Chapter of United Nations Environment Program (UNEP) Global Environmental Outlook, was a member of the Group of Experts for the UN World Ocean Assessment and was a Lead Author for a chapter on mitigation for the Intergovernmental Panel on Climate Change (IPCC) 5<sup>th</sup> Assessment Report. He has been active as an expert or delegate to many UN meetings and agencies (Food and Agriculture Organization, Convention on Biological Diversity, Global Environment Facility, UNEP, UNESCO's Intergovernmental Oceanographic Commission. He has also served as Chief Scientist of International Council for the Exploration of the Sea, and on its Advisory Committees on Fisheries and Ecosystems.

**Malcolm Beveridge, Head of aquaculture, UN's Food and Agriculture Organization, Rome:**

Dr. Malcolm Beveridge has a BSc (Hons) in Zoology and a PhD in Ecology from the University of Glasgow, UK. He is currently Head of Aquaculture a.i. in the Fisheries Department of the UN's Food and Agricultural Organization (FAO) in Rome. Dr. Beveridge served as Director of Aquaculture and Genetics at WorldFish, 2006-2014, prior to which he was Director of the Scottish Government Fisheries Research Services Freshwater Laboratory, Pitlochry. Apart from a year as an FAO Andre Mayer Fellow at the College of Fisheries, University of the Philippines, he was a member of academic staff at the Institute of Aquaculture, University of Stirling, Scotland 1980 – 2001, where he was appointed Reader in Environmental Research in 2000. He was also a Visiting Research Fellow at Imperial College, University of London (2006-7) and is a Visiting Professor at the University of Stirling. Dr. Beveridge has written numerous articles and books, mainly on aquaculture and the environment, including three editions of the highly cited textbook, *Cage Aquaculture*.

**Frank Glöckner, Head of Microbial Genomics and Bioinformatics Research Group at the Max Planck Institute for Marine Microbiology:**

Prof. Dr. Frank Oliver Glöckner is Head of Microbial Genomics and Bioinformatics Research Group at the Max Planck Institute for Marine Microbiology in Bremen and Professor of Bioinformatics at Jacobs University Bremen, Germany. He has a strong background in molecular ecology, phylogeny, biodiversity, (meta)genomics and bioinformatics research with more than 20 years of experience and 200 papers published. He participated in and coordinated several EU-projects including the large scale 'Ocean of Tomorrow' project Micro B3 (Marine Microbial Biodiversity, Bioinformatics, Biotechnology) with 32 partners from all over Europe. He was chair of the European Science Foundation (ESF) working group MICROCEAN, member of the European Commission expert group on marine research infrastructure, chair of the EU-US workshop series on Marine Genomics of the EU-US Task Force on Biotechnology Research. Furthermore, he is a member of the executive board of the 'Genomic Standards Consortium', member of the Scientific Advisory Board of TARA-Oceans, EMBL-EBI/ENA, ERA-Net Marine Biotechnology and appointed member of the German 'Council for Scientific Information Infrastructures (RfII)' to advise the government on the development of information infrastructures in Germany. His research interests are to develop enabling technologies to transform the wealth of sequence- and metadata from the marine environment into biological knowledge.

**Eileen Hofmann, Professor of Oceanography at Old Dominion University:**

Dr. Eileen Hofmann is a Professor in the Department of Ocean, Earth and Atmospheric Sciences and a member of the Center for Coastal Physical Oceanography, both at Old Dominion University, Norfolk, VA. Her research interests are in the areas of physical-biological interactions in marine ecosystems, environmental control and transmission of marine diseases, descriptive physical oceanography, and mathematical modeling of marine ecosystems. She has worked in a variety of marine environments, most recently the continental shelves of the Ross Sea and the western Antarctic Peninsula, Delaware and Chesapeake Bays, and the Middle Atlantic Bight. Her contributions to modeling physical-biological interactions in marine systems were recognized by her election as 2013 Fellow of the American Geophysical Union (AGU). Eileen has been a member and/or chair of numerous international and national science advisory groups and steering committees. From 2010-2015, she served as Chair of the Integrated Marine Biogeochemistry and Ecosystem Research (IMBER), a global environmental change research program, and coordinated development of a new Science Plan and Implementation Strategy to guide the next decade of IMBER research. She is President of the Ocean Sciences section of the AGU. She has published extensively in marine ecosystem modeling and other areas of marine research, and co-edited nine special issues of journals and two books. She is a member of the editorial board for the Journal of Marine Research and is Co-Editor-in-Chief for the Journal of Marine Systems.

**Bonnie McCay, Distinguished Service Professor, Emerita, at Rutgers University:**

Bonnie McCay is a Distinguished Service Professor, Emerita, at Rutgers University, New Brunswick, in the Department of Human Ecology of the School of Environmental and Biological Sciences. Her graduate training was in environmental anthropology at Columbia University (PhD 1976), and her research and teaching have focused on challenges and policies for managing common pool resources such as fish and shellfish, with particular attention to intersections of ecology, community, and social institutions of science, law and property. She has done field research in Newfoundland and Nova Scotia, Canada, in the Middle Atlantic region of the U.S., and in Baja California, Mexico, with funding from the U.S. National Science Foundation, the Sea Grant College Program, the National Park Service, and the New Jersey Agricultural Experiment Station. Her books include "The Question of the Commons," "Oyster Wars and the Public Trust," and "Enclosing the Commons." She currently serves on numerous editorial boards and on committees of the U.S. National Academy of Science, to which she was elected in 2013. She was on the Scientific and Statistical Committee of the Mid-Atlantic Fisheries Management Council. Her graduate teaching and mentoring have been within the Anthropology, Geography, and Ecology & Evolution programs at Rutgers University."

**Katherine Richardson, Professor, Biological Oceanography and Vice Dean of Science at the University of Copenhagen:**

Katherine Richardson is a professor in biological oceanography at the University of Copenhagen and leader of the Sustainability Science Centre ([www.sustainability.ku.dk](http://www.sustainability.ku.dk)). She was Chairman of the Danish Commission on Climate Change Policy which reported in 2010 and presented a roadmap for how Denmark can become independent of fossil fuels by 2050. At present, she is a member of the Danish Climate Council and a member of the United Nations Scientific Panel to draft the Global Sustainable Development Report, published in 2019. Katherine is a principle investigator in the Center for Macroecology, Evolution and Climate ([www.macroecology.ku.dk](http://www.macroecology.ku.dk)) where her research focuses on the importance of biological processes in the ocean for the uptake of CO<sub>2</sub> from the atmosphere and how ocean biology, including diversity, contributes to ocean function in the Earth System. Katherine is also a core author on the Planetary Boundaries Initiative. She is Co-Editor in Chief of the Marine Ecology Progress Series and a member of the editorial board for Global Sustainability. Recent authorship of books includes Our Threatened Oceans (2008) with Stefan Rahmstorf and Climate Change: Global Risks, Challenges and Decisions (2014) together with Will Steffen, Diana Liverman and others. She has been active both as a member in and/or chairperson for a number of national and international research committee/ advisory boards and is currently chairperson of a group advising the Rector of the University of Gothenburg on issues relating to the university's strategy for marine research and teaching. Dr. Richardson has published more than 100 scientific papers and book chapters.

**Oscar Schofield, Professor, Biological Oceanography at Rutgers University**

Dr. Oscar Schofield is a Professor of Biological Oceanography at Rutgers University interested in how plankton dynamics structure marine food webs and feed-back on the ocean's biogeochemistry. His research focus has combined genetics and biochemistry with the development of new ocean observing technologies (satellites, radars, and autonomous underwater vehicles). He is co-Director and co-Founder of the Coastal Ocean Observation Laboratory (COOL), now called the Rutgers University Centre for Ocean Observing Leadership (RU COOL). RU COOL integrates across interdisciplinary scientific research, education and outreach using an operational ocean observing system. Faculty and students comprising the scientific teams participate in collaborative research programs in which academic, industry and government partnerships are forged between physicists and biologists, between scientists and engineers, and between observationalists and modelers. The education group is the focal point for outreach activities to the K-12 community and to non-science majors within Rutgers and schools/universities around the world. The Operations Center maintains a sustained coastal ocean observatory that provides real-time ocean data to the research and education groups and serves as the training ground for Operational Oceanography students. He is one of the principal investigators for a long-term US National Science Program studying ecosystem shifts associated with melting polar oceans. He has served as the science co-Chair for developing the Southern Ocean Observing System. He has been a leader in the United States Ocean Observing Initiative and the Integrated Ocean Observing System.