

Hugh MacIntyre

Hugh MacIntyre is a professor in the Department of Oceanography at Dalhousie University. He worked previously at Bigelow Laboratory for Ocean Sciences (ME, USA), Horn Point Laboratory (MD, USA), and the Dauphin Island Sea Lab (AL USA), with stints as a visiting scientist at Plymouth Marine Lab (UK) and the Laboratoire d'Océanographie de Villefranche (France). His research has focused on physiological regulation of photosynthetic pathways; the use of bio-optical techniques to characterize the taxonomic affiliation, abundance, and physiological status of phytoplankton; models of phytoplankton productivity and growth in response to variations in temperature and the availability of light and nutrients; and the dynamics of several species that form Harmful Algal Blooms.

His current research program focuses on three areas: developing robust tests of viability in the phytoplankton, primarily for use in testing regulatory compliance with ballast water management systems; waste-water remediation coupled to production of high-value compounds by microalgae; and optical techniques for inexpensive, real-time detection of potentially-toxic cyanobacterial blooms. Dr. MacIntyre was an editor at Aquatic Microbial Ecology for 9 years and has served as a reviewer for more than 40 scientific journals and for funding agencies in the USA, UK, France, and Israel. He has served on scientific advisory panels for the Alliance for Coastal Technologies and the Gulf of Mexico Coastal Ocean Observing System (GCOOS) Harmful Algal Bloom Integrated Observing System (HABIOS). Dr. MacIntyre is the Academic Director for the Science Co-operative Education program at Dalhousie.