Dr David Griffin

David Griffin completed his PhD in physical oceanography at the University of New South Wales in 1986. He undertook postdoctoral research at Canada's University of British Columbia and Dalhousie University before returning to Australia in 1994 to join CSIRO in Hobart.
David's contributions to physical oceanography demonstrate a fundamental commitment to the idea that science should serve society. This ideal seems to galvanize him, and the benefits of his work have flowed to scientists, marine safety specialists, industry, marine archaeologists, recreational users of the marine environment and the Royal Australian Navy.

His contributions to Australian science are many and varied and have included:

- Research into the potential future of Australia's ocean renewable energy, including a fine resolution analysis of the wave energy resource off southern Australia;
- Leading CSIRO's Ocean Remote Sensing and Hindcasting team, including a significant contribution to the development of BLUElink;
- Assisting in the successful and high-profile searches for the World War 2 wrecks, HMAS Sydney and AHS Centaur; and
- Research into the 1995 mass mortality of Australian pilchards and the transport of the larvae of southern and western rock lobsters.

Biological oceanography provided the impetus for what is arguably David's major contribution to marine science. In 2001, to complement his paper on the influence of ocean currents on the larval phase of the western rock lobster (Panulirus cygnus) he prepared a CD and website with animations of satellite data and simulations of the dispersal of larvae by ocean currents. In 2004, as part of Bluelink, David and his team implemented a daily-updating version of the website. Now in 2012, his oceancurrent.imos.org.au website shows near real-time, high-resolution ocean surface currents for all Australian regions derived from satellite altimetry, sea surface temperatures as well as many of the data streams provided by the Integrated Marine Observing System.

The OceanCurrent web site provides information for users that include industry, individuals, government agencies, environmental protection agencies, transport departments, search and rescue operations, marine scientists and adventurers going to or from Australia in kayaks and rowboats. It is accessed by hundreds of people during events such as the Sydney to Hobart yacht race and provides a crucial service to rescue operations when vessels or people are lost at sea. This dynamic understanding of ocean physics also supports marine environmental research on ecological connectivity and biogeochemical cycling. The archives of imagery, technical and scientific explanations provide material for university lecturers and students.

Maintaining and improving the web service became a challenge for David in recent years, in terms of funding. Fortunately, support from the Integrated Marine Observing System (IMOS) was obtained in 2011, enabling David and his team to improve the site in many ways. This innovative tool continues to be a valuable resource for many thousands of people worldwide. It is testament to David Griffin's significant contribution to Australian marine science and his commitment to making science understandable and available to others.

David says that Marine Science is becoming increasingly important to Australia as we try to understand the mechanisms and impacts of climate change. These are complex questions that require an understanding of many fields as well as the strengths and weaknesses of various research techniques. It is important to choose a specialisation but it is equally important to be able to step well back from one's specialty in order to communicate effectively with specialists in other areas. A good way to develop a broad perspective is to let one's career take a few lateral jumps. David is a physicist but he has enjoyed tackling questions in ecology. Within physics at least, he urges students not to become exclusively observationalists, modellers or theoreticians.