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Media Release

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Ocean drilling looks for climate clues

A drilling expedition in the Bering Sea involving a scientist from Macquarie University could provide important clues to understanding ocean history and global climate change over the last five million years.

The Integrated Ocean Drilling Program (IODP) expedition, which begins in late July, will recover cores from the sea floor of the Bering Sea, helping scientists to build a picture of how this marginal sea may have affected North Pacific and global climate conditions.

On board for the nine-week expedition is Macquarie University scientist Dr Kelsie Dadd, who says it could provide important climate clues.

"Water circulation in the basin has been controlled in part by sea level so that, during periods of low sea level, much of the continental shelf is exposed and passages between islands are shallow and restrict water flow," she said.

"Our drilling will show the history of these changes as reflected in the type of sediment deposited, the amount of oxygenation of the bottom waters and the distribution of biogenic material."

Dr Dadd is one of a team of 50 scientists aboard the JOIDES Resolution, one of the ships of the IODP. The IODP is an international marine research program dedicated to advancing scientific understanding of the Earth through drilling, coring and monitoring the seafloor.

Scientists from Australia and New Zealand are involved in IODP through the Australian-New Zealand IODP Consortium (ANZIC). The Australian partnership is funded by the Australian Research Council, 14 universities and three government agencies. It is led in Australia by The Australian National University's Professor Neville Exon and is based at ANU in Canberra.

"The Bering Sea coring plan is essential to deciphering the history of the Bering Strait gateway and determining its impact on global and regional climatic and oceanic processes," said Professor Exon.

"New cores will help scientists understand the exchange of heat and chemical elements through the Bering Strait as sea level varied, and how those exchanges might have influenced Arctic and North Pacific environments. The cores will also help them understand how sea ice accelerates climate change, and how sub-polar ecosystems respond to climate change."

For more information about the IODP visit www.iodp.org.au (images of the ship are available at the website).

Media Interviews:

**Professor Neville Exon, (02) 6125 5131 or
Dr Kelsie Dadd aboard JOIDES Resolution, email jrs_dadd@ship.iodp.tamu.edu (phone contact between 9.30pm and 9.30am (AEST) can be arranged via email).**