

Obituary

Dame Patricia Rose Bergquist

Dame Professor Patricia Rose Bergquist DBE, MSc, PhD (NZ), DSc, FRSNZ, who died 9 September 2009, was an internationally respected authority on anatomy, taxonomy and marine zoology, especially of the Phylum Porifera (sponges). Born Patricia Smyth in Auckland on 10 March 1933, she attended Takapuna Grammar School and then the University of Auckland, where she graduated MSc Honours before going on to obtain her PhD in 1961, a year before the university gained its independence from the University of New Zealand. Following her doctorate, she studied overseas at Yale University, where she broadened her systematics expertise.

Pat's particular interest in marine sponges led to a benchmark series of publications, starting with an overview of the behaviour of intertidal sponges published in the *NZ Journal of Marine and Freshwater Research* in 1967 and continuing with a series of definitive publications on the Demospongiae in the NZ Oceanographic Institute's memoir series on the Marine Fauna of New Zealand. Her book *Sponges*, published in 1978, remains the only definitive textbook in this area and is a prescribed text throughout the world. Pat felt that a stable framework of higher-level classification which would permit recognition of generic relationships and facilitate descriptions of new species; she played an enormous role in establishing this. In her research she turned increasingly to using chemical attributes to provide systematic comparisons, and became one of very few people who combine a high level of expertise in sponge taxonomy worldwide with a broad interest in marine natural product chemistry and a knowledge of sponge histology and developmental biology. For three decades she put this knowledge to practical use as a collaborator with the Roche Research Institute for Marine Pharmacology, well before university technology transfer offices came into being. She was instrumental in the monitoring survey prior to the establishment of the Maui oil field and her studies saw her work throughout the world including the Mediterranean, New Caledonia, Antarctica, North America, Australia (especially the Barrier Reef) and many offshore islands around New Zealand in addition to our main coastline.

Pat was an innovative educator and researcher on a wide range of topics related to anatomy and development. She was the second woman to receive a Personal Chair at the University of Auckland, awarded in Zoology for her contributions to marine sciences, and she remained with the university until retiring in 1999. She then moved 'up the hill' to the Faculty of Medical and Health Sciences as Emeritus Professor of Zoology and Honorary Professor of Anatomy at the University of Auckland. She worked there until the time of her death. Many of her postgraduate research students, who remember her fondly as PRB, went on to senior positions throughout the world in universities, museums, the marine industry and marine research institutes such as NIWA and the Australian Institute of Marine Science. Pat was for a long time Assistant Vice-Chancellor at the University of Auckland. She served one term as Deputy Vice-Chancellor, and was on just about every vice-chancellor's committee within the University. At various times she was on the University Council, Research Committee, and Finance Committee. As a member of the Appointments Committee and Promotions Advisory Committee she played a critical role in making appointments (including Chairs) across the whole of the University.

Pat Bergquist was elected a Fellow of The Royal Society of New Zealand in 1982. She was awarded the Hector Medal and Prize of the Royal Society of New Zealand for distinguished contributions to research in 1989 and the NZ Marine Sciences Society Prize for distinguished contributions to Marine Biology in 1990. She was also involved in the Hauraki Gulf Maritime Parks Board and was a founding Member of the Board of the Foundation for Research, Science and Technology. In 1994 she was on the review panel set up to examine the quality and quantity of research at Te Papa, and their report, *An Agenda for Scholarship*, went a long way towards meeting the challenges of the future for scholarship and research at Te Papa. In 1993 Pat was made a Dame Commander of the Order of the British Empire for her contributions to science.

Dame Professor Patricia Bergquist was a very strong, intelligent and forceful personality within New Zealand academia but perhaps her greatest tribute is the legacy she leaves, seen in those working in marine biology. She is renowned for her academic work, and tributes have flowed in from colleagues and past students from across the world. But perhaps the last word is best said by a PhD student at Dalhousie University, Canada, as it so typifies the legacy she leaves – 'I have never met you, but your book was instrumental in fostering my fascination with sponges as an undergraduate, and my subsequent PhD work and advocacy to protect deep-water sponges'.

(Collated with thanks to Associate Professor Louise Nicholson and Professor Colin Green, University of Auckland)