

**Peter Ryan**

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My interest in science really began at high school when our family moved from Forbes, in country NSW, to Avoca Beach on the Central Coast. Being so close to the ocean stimulated a fascination in all things marine which I maintained throughout school. In 1983 I gained a B.Sc from Sydney University with majors in marine zoology and ecology. For reasons that are not entirely clear to me, I changed tack for my PhD. From the zoological bias of my undergraduate years I turned to plant physiology and examined the transport of ammonium in *Chara corallina* with N.A. Walker, also at Sydney University. Needless to say, this required a steep learning curve on my part and I remember some inauspicious lab chats during which I mispronounced most of the common physiological terms involved in my research. Fortunately, for much of that period I shared a lab with Rob Reid who was very helpful in pushing me up that curve.

Following a brief post-doc with Dr Ian Newman at the University of Tasmania, I received a CSIRO Travelling Research Fellowship - a wonderful program that, sadly, no longer exists. Any hopes of pursuing my early interests in marine biology were dashed when Peter Randall at CSIRO encouraged me to use the Fellowship to examine the problem of aluminium toxicity in crop plants. In 1990 I moved to the USA to work with Leon Kochian at the U.S. Plant, Soil and Nutrition Laboratory, Cornell University, and I have been working on various aspects of aluminium toxicity and tolerance ever since. Those two and half years in Ithaca proved to be pivotal for me. Not only did it provide me with an invaluable background into the physiology of metal-ion toxicity but it gave me the opportunity to interact with some remarkable researchers (including Tom Kinraide and Leon himself). I also met my future wife.

When I returned to CSIRO Canberra in 1993, Manny Delhaize had just identified a major mechanism for aluminium tolerance in wheat that involved an aluminium-activated efflux of malate from the roots. Much of our time since then has been spent characterising this mechanism and attempting to identify the gene(s) involved. It's been an exciting few years that have enabled me to dabble in a range of techniques and to initiate new collaborations. An ongoing project with Steve Tyerman has been particularly interesting and productive. Occasionally, I daydream about marine biology (coral atolls, lobster dinners and all that) but I have no regrets. I am painfully aware of how precarious a research career can be for young(ish) scientists and I'm the first to acknowledge that I have benefited from some lucky breaks along the way.