



## **Michael Bevan**

I was raised on a sheep farm in New Zealand which was in an area of undisturbed natural beauty. My very early interest in natural science probably arose from these influences and was guided by excellent teachers at high school. I attended Auckland University in N.Z. between 1973 and 1975, studying for an MSc in biochemistry. Subsequently I travelled to the UK and obtained a PhD degree in Biochemistry from Cambridge University in 1979. It was my good fortune to attend early lectures on DNA sequencing and on the emerging use of the small nematode worm *C. elegans* as a model system, influences that have helped guide my long-term research interests.

Between 1980 and 1983 I was a post-doctoral Fellow at Washington University in St Louis, working in the laboratory of Mary-Dell Chilton on *Agrobacterium tumefaciens* genetics and crown gall tumour formation. These were among the most scientifically exciting and demanding times, because we were trying to understand how genes that originated from a bacterial plasmid were expressed in plants. Eventually this work led to the first expression of chimaeric genes in plants and the development of efficient binary transformation vectors for plant transformation. Our close association with Monsanto during the early 1980's added further excitement due to their work on developing transgene technology for crop improvement using *Agrobacterium* transformation methods. The knowledge gained from this early work laid the foundations for GM agriculture. I was awarded the Rank Prize for Nutrition for my contributions to this work in 1987.

Since returning to the UK I have worked essentially in the same job, although this has moved from the Plant Breeding Institute in Cambridge to the John Innes Centre in Norwich, and I have steadily accumulated a wider range of additional responsibilities and interests. In the past few years I led the first efforts to sequence the *Arabidopsis* genome, which was completed in 2000, and contributed with European colleagues to establish functional genomics resources. For this work I received the Kumho award in 2001.

My current research interests are in the genetic analysis of growth control and sugar signalling in *Arabidopsis*, in developing genomics resources for the new model grass *Brachypodium distachyon*, and in physical mapping of the wheat genome. My organisational interests, related to my job as Head of the Cell and Developmental Biology Department at the John Innes Centre, have arisen from genomics-related projects that required setting up international collaborations. I have been actively involved, as vice-chair of the European Plant Science Organisation, in promoting plant research in Europe and trying to raise its profile and funding. I do this because I believe that there is untapped potential in European plant science that must be effectively mobilised, at national and European levels, if we are to meet the challenges of sustainability, wealth creation and climate change. One example of these challenges is using our every increasing knowledge of plants to develop bioenergy crops as a sustainable and cost-effective source of transport fuel and other products.