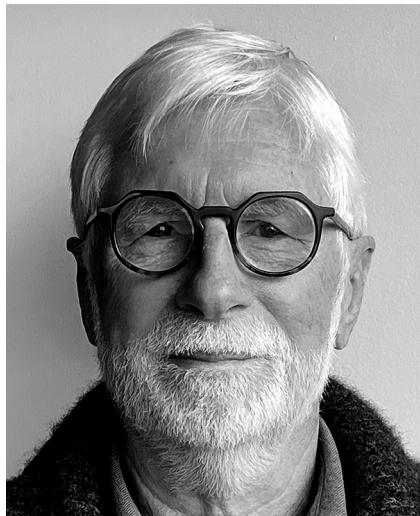


OBITUARY

Robert James McKinlay ("Mac") Gardner

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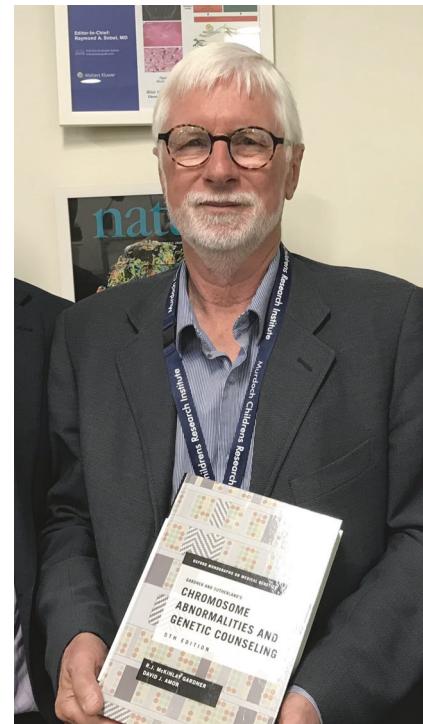
Professor Robert James McKinlay ("Mac") Gardner, clinical geneticist, and co-author of all six editions of the widely used textbook *Chromosome Abnormalities and Genetic Counselling* died recently aged 83 at his home in Dunedin, New Zealand.

Mac was the offspring of two teachers, one of whom (his father) was a Reader in History at the University of Canterbury, Christchurch, New Zealand. He was drawn to clinical genetics after graduating from the University of Otago in 1968 and being influenced by several thought-provoking interactions with patients with severe genetic conditions. Those experiences never left him and they seeded in him a questioning and humane approach to his clinical activity.

After stints as a junior doctor at Dunedin and Auckland Hospitals, Mac completed a Masterate at the University of Edinburgh and further sojourns (he would have approved of the use of that word) at the Institute for Child Health (London), the Hôpital Enfants-Malades (Paris), and the Hospital for Sick Children (Toronto) before returning to Dunedin to practice as a Clinical Geneticist (sometimes as New Zealand's sole) for 16 years.

It was over that time that the requirement to supervise and teach the small band of cytogeneticists at Dunedin Hospital catalysed what was to become the widely used and eminently readable *Chromosome Abnormalities and Genetic Counseling*, initially in partnership with Grant Sutherland (University of Adelaide) and more latterly Lisa Shaffer (University of Washington, 4th edition) and David Amor (Murdoch Children's Research Institute; 5th edition). Leading up to his death he was finessing the final preparatory steps for publication of the 6th edition with David. Over six editions, *Chromosome Abnormalities and Genetic Counseling* defined the discipline of "clinical chromosomology", documenting the wide

range of human chromosome abnormalities alongside the associated counselling issues. Yet, through his writing, Mac sought to go beyond the documentation of chromosome abnormalities, and took a holistic view of the ways in which people and families could come to terms with what he saw as the chromosomal cards Nature had dealt them. The book achieved a Highly Commended in the BMA book awards in 2019; its global reach and indispensability for anyone counselling a family with a chromosomal anomaly sets him as a true and enduring international citizen of the first rank in our profession.



In 1993, Mac and his wife Kelley moved to Australia, having been lured to Melbourne's Victorian Clinical Genetics Services by Professor David Danks, then Director of the Murdoch Children's Research Institute. There, his interests extended into familial cancer and neurogenetics, as he expanded genetic services into adult hospitals and regional centres.

Shortly after Mac settled into his new position, he crossed paths with Monash University adult neurologist, Elsdon Storey. Elsdon was fascinated by the genetic aspects of inherited neurological conditions and Mac was keen to provide the genetic analyses to document the various conditions they studied. Together they established neurogenetic clinics and developed what proved to be a most stimulating and productive clinical and research partnership. Together they accumulated considerable experience in hereditary ataxias, recognising and documenting five "new" ataxia syndromes, including spinocerebellar

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ataxia (SCA) types 15, 20, 25 and 30. The back stories to their SCA discoveries frequently involved “pedigree chases” through regional Australia to assess various affected kindreds.

Mac’s research interests extended far beyond his beloved chromosomes and ataxia syndromes, contributing to the characterisation of many monogenic syndromes including the identification of the genes for tuberous sclerosis complex and understanding the pathological mechanisms underpinning Wilms tumour. His broad reach across many domains of clinical practice underpinned his own whimsical, frequently repeated, definition of Clinical Genetics as “anything interesting”.

Mac returned to Dunedin in 2008 to be nearer family. His other interests (trains, trams, classical music, his construction of a stone “cottage” in the remote central Otago hills) occupied his time, but his involvement in genetics never fell away, and he was appointed to an Honorary Professorship within the Laboratory for Genomic Medicine at the University of Otago. He became a regular and colourful correspondent to the local newspaper; his political appetites even extended to him standing for Parliament at the last election as an Independent candidate. He took to lobbying the Government for what he considered to be their shortcomings, most notably through the use of large self-funded billboards mounted across the road from Parliament even after his cancer had taken hold.

Forever the teacher, his last poignant lesson to all was a personal appeal for an extension to New Zealand’s relatively

recent assisted dying legislation through the publication of an opinion piece in a national magazine just two weeks before his own departure. True to the steadfastness of his convictions, he chose his own passing at a time and place of his own selection to be a moment for reflection for others.

Always humble, constantly astute, incisive and interminably curious as well, he was the consummate academic. That did not inhibit the other side to his fun-loving personality—his frenetic dancing at scientific meetings of the Human Genetics Society of Australasia (most notably in 2007 when he was also the HGSA Orator) was legion. At the heart of his world was his family—his wife Kelley and his sons Tony, Nick and Danny and their children. We feel a loss with Mac’s passing that for them will be so very much greater.

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