

CENTREFOLD

Iain Raeburn



Iain Raeburn was born and went to school in Edinburgh (the Scottish one). Then he did what young Scots did in those days: he went to the nearest university to study the thing he was best at in school. He found he liked maths just fine, and especially when it got more abstract: he has always found maths much more satisfactory when he knows exactly what everything means. He enjoyed university, and when he finished his honours it seemed natural to go on for a bit longer. After a brief spell at Cambridge (like many Scots, then and now, he didn't find the posher bits of England much to his taste!) he went back to do a PhD at Aberdeen.

Just one year into his PhD at Aberdeen, he attended a three-week NATO summer school on "Algebras in Analysis" in Birmingham. There he was very fortunate to get talking with one of the main lecturers, Joe Taylor. They found they got along really well, and after a few pints one night Joe invited Iain to visit him in Utah for a

year. The next morning Joe called Utah and arranged a Teaching Fellowship for Iain. It never crossed Iain's mind not to take it—even though he had only the vaguest idea of where Salt Lake City was, and no idea of what went on there.

But it all turned out remarkably well. Mathematically, it was a revelation. Joe expected Iain to know or learn all sorts of things he had never heard of, and Iain rose to the challenge. (Iain says “I must have been a wee bit quicker in those days...”) Socially it was great too: the mathematics department at Utah was growing and had a large number of enthusiastic young people, both students and faculty. Many of them enjoyed the outdoor life, and Utah was ideal for that. At that time, for example, Utah had four new, undeveloped National Parks. Iain is forever grateful that he saw them before they became famous and busy.

After finishing his thesis, Iain was invited to stay on for a year at Utah, and this gave him a chance to establish his own research program while talking regularly with a friendly and knowledgeable mentor. (Today, there have been some small steps toward filling the post-thesis gap. The more programs the better.) Then he took up a postdoc at Dalhousie in Canada. Nominally, Iain was working with Peter Fillmore, who was developing a strong group in operator theory, but in practice he worked mostly with John Phillips, who had just been appointed to his first permanent position. Again, Iain and John got along very well, and started a fruitful collaboration that continued for 20 years.

Then, almost out of the blue, Iain got a phone call offering him a lectureship at the University of New South Wales in Sydney. He was a little better informed this time: geography in Scottish schools was still focused on the pink parts of the map. Again he was lucky to have a good mentor; Gavin Brown, his Head of Department, pushed and prodded Iain to apply for grants and use them well. Indeed, he and Gavin were among the first pure mathematicians to get national funding for their research. As a result, he was able to sustain his ongoing collaborations, develop new ones, and, most importantly, change direction. He firmly believes that taking on new challenges in new areas helps keep the subject interesting.

After 12 good years at UNSW, Iain belatedly realised that he had chosen a career. It took a perceptive student to tell him this: she was agonising over her many career options, and got frustrated with Iain's blinkered advice, telling him: “It's alright for you. You have a career.” Iain started applying for more senior positions, and in 1991, took up the Chair in Mathematics at the University of Newcastle. There he built up a strong group of researchers with interests across a broad range of modern analysis. The group attracted some very talented students and postdocs, who are now spread all over the world. But success in teaching and research is not enough in the modern university: you've got to get lots of bums on seats and keep them there. Over a decade of formula-based funding, the maths department at Newcastle got badly run down, and eventually Iain and three of his colleagues moved to Wollongong.

Iain came to Otago in 2010, after his partner Astrid an Huef was appointed to the Chair in Pure Mathematics there, and they offered Iain a job too. They both like the university and their work. Otago is a destination university: the majority of students come from out of town, and many of them are very good students. They give the town a lively vibe (and, to be honest, it's then a bit dead when they're not around). So Astrid and Iain have already found good students, and they have a lively and friendly research group which enjoys its work.

When not working, Iain enjoys walking and running. Dunedin has some lovely places to run, though one has to work to find places which are not too steep. Since Dunedin was designed (yes, really!) in the days when walking was normal, it has lots of alleyways and staircases which make walking fun and interesting. As a result the family car gets driven so little it has battery problems. He really likes New Zealand, Dunedin in particular, and the locals have been very friendly and welcoming. Already it feels like home.

Now the serious bit:

Iain Raeburn is a Mathematician who specialises in functional analysis and its applications to other parts of mathematics, including algebraic topology, dynamical systems, number theory, algebra and harmonic analysis. He studied in the UK and the USA, obtaining his PhD from the University of Utah in 1976, and held positions in Canada and Australia before taking up a research chair at the University of Otago in 2010.

Raeburn has done pioneering work in several areas, and has written several papers which have fuelled new areas of interaction between disciplines. His work has therefore been highly influential, and he has been on Thomson ISI's list of Highly Cited researchers for over 10 years. He has supervised numerous students and postdocs, many of whom are now respected researchers holding chairs at major research universities.

Lisa Orloff Clark