AMSI News

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I write this report after returning from the 50th anniversary meeting of the Australian Mathematical Society, held at Macquarie University. In my opinion, this meeting and the previous annual meeting held at the University of Western Australia, were outstanding successes. I haven't attended other AustMS annual meetings this century but compared to those of last century, there are some notable developments.

More speakers develop interesting new mathematics around current applications. People will always have biases and tastes but there is an emerging professional profile of the "mathematical scientist" who is happy to develop or learn new mathematical theory and to apply it to other fields. It is not unnatural for an abstract thinker to have thoughts on concrete applications; neither is it unnatural for an applied scientist to be interested in deep foundations.

Annual conferences usually have associated public lectures, delivered after business hours by invited speakers who communicate well with heterogeneous audiences. Our relations with other disciplines and with the public at large are important for building support for mathematics. The public lectures are refreshing for most professional mathematicians because there is a strong chance that every detail can be understood in situ.

For a few years now, the annual meeting has run an Education Afternoon, which has gone from strength to strength. It is well attended by enthusiastic secondary school teachers. Our discipline relies on our teachers to inspire the next generation. It was heartening to see that even the latest Fields medallist provided some useful enrichment material for teachers. All academic and industrial mathematicians have a role to play in outreach.

Over the last five years, there has been increased government expenditure on full-time senior research fellowships and on research centres that employ full-time researchers. This concentration of resources continues to lead to some good research outcomes but there are some interesting secondary effects of moving our strong researchers away from teaching and service roles.

Our best researchers are no longer expected to provide research-inspired teaching or scholarly-informed administration, although some provide these things voluntarily. At the same time, the number of academic teaching staff is decreasing and class-room loads are rising. It is not uncommon for some mathematics lecturers in recognized universities to have 14 contact hours per week, something that was unheard of 20 years ago.

The full-time teachers are then exhorted by their institutions to apply for research grants, in competition with full-time researchers. The inevitable consequence is that the research-rich will become richer and the research-poor will become poorer. The looming Research Quality Framework is reinforcing this trend by encouraging universities to poach promising researchers by offering research-only positions. Some regard this as a good policy. It certainly needs to be openly discussed.

As well as acknowledging increasing government expenditure on some research concentrations, it is fair to add that there's a separate well-functioning support system for University Learning and Teaching through the Carrick Institute. The Carrick Institute has a number of interesting schemes and programs that have funded a number of projects in mathematics and

statistics education. A large AMSI-focussed group is committed to work on the disciplines-based initiative project, "Mathematics for 21st C Engineering Students". Within a year, we will be running a national workshop on this important topic.

We are hoping also to attract some interest from mathematicians and education faculty to design a project on mathematics curriculum for primary education students. AMSI and ICE-EM have international contacts to support such an initiative.

In conclusion, I would like to congratulate the AMSI Scientific Committee Chair, Peter Hall on his election as President of AustMS, and the AMSI Executive Officer Jan Thomas on being awarded life membership of the society.

For current events and developments, see the websites http://www.amsi.org.au and http://www.ice-em.org.au.

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