



Report on Forum held at the Shine Dome, 7 February

An investment in Australia's future: Why the mathematical sciences matter

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A lively and well-attended forum was organised to coincide with the first week of Parliament, to publicise the case for the mathematical sciences in Australia, especially in the light of the findings of the National Strategic Review of Mathematical Sciences Research in Australia (<http://www.review.ms.unimelb.edu.au/>).

Jan Thomas, Peter Hall, Barry Hughes, Cathy Sage and Diana Wolfe did a splendid job of organising the event and we were delighted to see more than 100 participants, including a significant number of young people. A number of interviews in radio and the papers took place and some media attended, including a representative of the Financial Review and Win Television. Press coverage culminated in an excellent editorial in the Age 'Do the maths: neglect plus shortages equals crisis.'

The forum program included a wide cross section of representatives from education and training, industry and large government organisations. We also had two MPs, Pat Farmer (Parliamentary Secretary for Education, Science and Training) and Senator Kim Carr (Shadow Minister for Industry, Science and Innovation).



The Honourable Pat Farmer, MP

There were numerous excellent discussions — for instance Kim Carr spent about 15 minutes after his talk in dialogue with the audience. Peter Laver, Vice President of the Australian Academy of Technological Sciences and Engineering, and Kate Hurford, Director of Public Policy, Engineers Australia, reminded us of the crucial relationships between the mathematical sciences, engineering and industry and the necessity for us to communicate, lobby and publicise what we are doing which is of value to the community.

The utility of mathematics and statistics in biotechnology and medicine was discussed by Ian Marschner, head of biometrics at Pfizer and Melanie Bahlo from the Walter and Eliza Hall Institute of Medical Research. Ian was involved in setting up the biostatistics program, Biostatistics collaboration of Australia (<http://www.bca.edu.au>), which is a consortium of universities and several major pharmaceutical companies, to train people in an area of strong demand. Melanie discussed the challenges of an area where funding is uncertain and it is difficult to juggle career and family.

Peter Haggstrom from Deutsches Asset Management gave a stimulating presentation on the importance of mathematical thinking in investment decision-making and how ordinary people, and even financial planners, are missing out in this area. Frank de Hoog talked about successes in CSIRO stemming from the mathematical sciences, reflecting on his long and productive career. The acting chief statistician, Susan Linacre, and Jeff Kepert from the Bureau of Metereology talked about the key role of statistics and mathematical modelling in all aspects of their operations.

There was a very informative and interesting session on education, with Garth Gaudry talking on issues in school education and teacher training, John Rice as Chair of the Deans of Science discussing their reports on the shortage of qualified mathematics teachers and the difficulty of addressing this issue, John Vines from the Association of Professional Engineers and Managers talking about the general shortage of quantitatively trained people in Australian industry and William Dunsmuir talked about difficulties of university departments, especially in the area of statistics.

In the final session, Ian Sloan discussed the international concerns about what is happening in Australia to the mathematical sciences and Jonathan Manton showed that, from an ARC perspective, total funding in areas of research in the mathematical sciences is holding up reasonably well. Further details of the forum and summaries of some of the presentations are available from <http://www.review.ms.unimelb.edu.au/Forum.html>.

We were pleased with the interest from both sides of Parliament. Stephen Smith, Shadow Minister for Education and Training, met with several key people before the day commenced and apologised for not being able to stay. Pat Farmer arranged a meeting in his office after the Forum to hear about the day's discussion.

There have been several opportunities, since the forum, for us to put our case to Government. The current review of the discipline relative funding model will hopefully come up with some improvement in our situation and it is important that as many people as possible put in submissions to this.

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Senator Kim Carr



Hyam is Chair of the National Committee for Mathematical Sciences and was the Chair of the working party of the National Strategic Review of Mathematical Sciences Research which was completed during 2006. He is interested in geometric topology, differential geometry, shortest networks and has been at Melbourne University so long that he gets to walk behind the Chancellor at academic processions for graduation ceremonies.