

Grant Cox



It is with great sadness that we write of the death of our colleague and cherished friend, Dr Grant Cox, who died unexpectedly at his home on 15 March 2011 at the age of 35. All who knew Grant would describe him as a kind and patient gentleman with a huge heart and cheery countenance.

Grant held a senior lectureship at the University of Wollongong and was respected for his productive work in different fields of applied mathematics, with 20 journal articles receiving over 90 citations. Grant was a member of the Australian Mathematical Society (AustMS) and its Australia and New Zealand Industrial and Applied Mathematics Division (ANZIAM). Just two weeks before his untimely death he was appointed as leader of the applied mathematics group within the University of Wollongong's Institute for Mathematics and Its Applications.

Grant grew up with his parents and five brothers on a farm near Bathurst. He came to the University of Wollongong in 1994 to start his Bachelor of Mathematics degree, which he completed in 1997 with first class honours. He then undertook a PhD in applied mathematics with Professor Jim Hill to investigate stress distributions beneath granular stockpiles and within stable ratholes. After completing his doctorate, Grant held a research position in the School of Mathematics and Applied Statistics at the University of Wollongong where he worked on modelling the flow and behaviour of granular materials using the theory of continuum mechanics. In 2003 he was awarded an ARC Australian Post-Doctoral Fellowship to work on the mathematical modelling of two-phase industrial granular flows, where flow of the solid granular material was influenced by either a gas phase or a fluid phase. In 2005 he became a permanent lecturer in the School.

Following his appointment as lecturer, Grant developed a new research interest in deriving analytical solutions to complex macroeconomic models. He also enabled numerical simulations of these models using MAPLE to obtain tractable results for

policy analysis and recommendations. He worked closely with Associate Professor Charles Harvie from the School of Economics at the University of Wollongong and their research resulted in a number of journal articles and conference papers, culminating in a publication in a leading economics journal *Energy Economics*. This paper developed, simulated and provided macroeconomic policy recommendations for natural resource producing economies such as Australia. Grant supervised many students, including six out of the eight Mathematical Economics Honours students at the University since 2007, four PhD students and numerous Masters students.

As a teacher, Grant mostly had an open-door policy and students would be lining up to see him whether or not it was his designated consultation time—and Grant was never one to turn them away. Grant made an enormous impact on the students with his knowledge and special traits of kindness, compassion and patience. For the last four years he was nominated by students for an Outstanding Teacher Award, although he never sanctioned the nominations. However, Grant's integral part in the Faculty of Informatics First Year Maths Team and his contribution to the review and development of the School's core first-year mathematics subjects was recognised when the team was recently awarded a Faculty OCTAL (Outstanding Contribution to Teaching and Learning) Award.

In his role as Senior Lecturer, Grant also went beyond the call of duty with the amount of administration he took on—he was chair of the School Education Committee and the School's representative on the Faculty Education Committee. He also coordinated large first-year classes and coordinated the School's seminars. However, Grant will be particularly remembered for his computer genius—whenever there was a computing problem, we all turned to Grant!

Outside of work Grant had a passion for sports—and he was good at them. He played a variety of sports with staff from the School including tennis, badminton and squash, and seemed to be master of them all.

Grant leaves behind a living legacy in his wife Anne and son Daniel, in the maths papers and documents he wrote, in the stories he told, and in the School he transformed. We at the School of Mathematics and Applied Statistics feel privileged, honoured and blessed to have been his friends.

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Addendum: Grant's wife Anne expresses her thanks to those that have contacted her with messages of sympathy, but requests that, at this time, no further such messages be sent.