

Address from the funeral service for Richard,  
held in the Chapel of Gonville and Caius College  
on Tuesday 4 September 2018

Richard Gibbens arrived at Caius as a mathematics undergraduate in 1980 from his home and school in Enfield, North London. After his first degree he took the Diploma in Mathematical Statistics: that was where I first met him and the following year I had the privilege of becoming Richard's PhD supervisor. He was keen to work on problems with practical impact, and we quickly settled on a studentship partly funded by British Telecom to work on mathematical models of dynamic routing in telephony networks. It was an exciting time: technology was moving rapidly and throwing up new challenges and Richard was in the thick of it.

His doctoral thesis, on Dynamic Alternative Routing, was based on work performed in Cambridge and with David Songhurst and Peter Key at British Telecom's Laboratories at Martlesham. DAR provided a call-routing procedure in telephone networks for choosing alternative paths when the primary path between a source and destination was blocked. DAR's success led to implementation in the British Telecom network and Richard's work attracted international attention.

There followed a postdoctoral year at Bell Labs, in their Mathematics of Networks and Systems Research Department led by Debasis Mitra. This period was another key influence on his future work, an example being Richard's later important paper with Phil Hunt on effective bandwidths.

Richard was an early example of what we would now call a data scientist. In the statslab he was a tireless early advocate of first S-plus and then the R programming language for data analysis in research and teaching.

He was awarded a Royal Society University Research Fellowship in 1993 and became a University Lecturer in the Computer Laboratory and a Fellow of his beloved College, Caius, in 2001. His research interests extended from communication networks to road transport networks and energy networks.

Most recently he was working on a USA-UK initiative on robust communications, for example the connectivity of large-scale wireless networks, and an Alan Turing Institute project on the energy charging of electric vehicles. Richard published over 70 papers and held six patents. He collaborated widely with researchers around the world, and it has been striking to see the international reaction to his passing. He was a gentle and kind soul; with, as some of his American friends especially have noted, a wonderfully dry sense of humour.

Richard's own father died when he was 12, and it troubled him greatly in his final days that he would not be around for his children, William and Isabel. We have lost a friend, a collaborator, a teacher, a wise counsel. But our hearts go out for the loss borne by Helen and her children. I hope they will find some consolation to know that Richard was so well-respected and esteemed by fellow researchers around the world. He made many influential scientific contributions but will also be fondly remembered for his exceptional kindness and gentle demeanour.

Frank Kelly