## Derek Richard Robinson 1947–2021

Derek Robinson, who died on 25<sup>th</sup> July 2021, had retired from his full-time post at Sussex University in 2007, gaining emeritus status, but that retirement was no more than partial. Progressing through a succession of part-time appointments, he continued a high level of teaching and research in the Mathematics Department for 14 more years, fully retiring only in autumn 2020. He regularly taught two courses, no light load, and won two teaching awards, both gained when he was already emeritus. As a practicing Chartered Statistician, actively collaborating with medical practitioners, in particular heart specialists, he was able through the Medical Statistics course that he created to expose students to data of life or death importance. Students appreciated that and the course as an option was always well subscribed despite never being reputed soft. Derek made a point in his courses of introducing the software package SAS, enabling his students to conduct a small project on a recent article in a medical journal. Familiarity with SAS gave them three advantages: experience with industry-standard software, an excellent line to insert into their CVs, and a head start in any firm that used SAS and employed them having read that line in the CV.

Derek's Sussex DPhil was in Optimal Control and his research in that field continued for some years, involving consultancies with Ricardo Consulting Engineers in Shoreham and Daimler-Benz in Stuttgart. A theoretician when he took up employment at Sussex in 1989, he changed field and made himself an expert in the statistical analysis of medical data, embarking on a remarkable series of collaborations with clinicians, gaining consultancies with the Trafford Centre and the Royal Sussex County Hospital, Harefield and Royal Brompton Hospitals, and the Clinic for Heart Surgery of the Medical University of Lübeck in Germany. Derek's first medical publication appeared in The Lancet in 1992, co-authored with heart surgeon Sir Magdi Yacoub and others. A number of further papers up to 2013 concerned the Ross operation or Ross-Yacoub procedure, some of them jointly with its originator D. N. Ross. Work on survival after coronary operations continued up to the present, discussing a wide variety of interventions, devices (such as stents and artificial valves), therapies and monitoring techniques. Around 50 research papers co-authored with medical colleagues resulted, including three appearing as recently as 2021. One piece of work was included in the impact statement for Sussex's Mathematics Department in the last REF. The published papers form only the core of his work in the area, as he was much relied upon for statistical advice and freely gave it, well beyond formal collaboration.

Derek was born on 21<sup>st</sup> June 1947 in Cleethorpes on the Lincolnshire coast, and grew up with an older half-brother, Maurice, who was their mother's son by her first husband who had died in the war. Derek's father, a fishmonger, came from a family in the Grimsby area who were mostly in the fish trade, while his mother was working as a court usher when she retired. From Clee Humberstone Foundation School, a boys' grammar, Derek was the first in his family to attend university, winning an Exhibition (£40) to read Mathematics at Queens' College, Cambridge. There he led an active undergraduate life, active in the Cambridge Union and Arnold Society and in his college's Student Representative Council

His first exposure to teaching was two terms as a 'temporary unqualified assistant master' at his own primary school, while waiting to go up to Cambridge. Following graduation in 1969 he worked for three years as a Computer Systems Analyst with the then British Leyland

motor company in Oxford. There he met Stephanie Eldridge who was working in a market research company, and they married in 1973. Sussex University offered an MSc in Statistics at that time, and Derek came south to take that course after which he stayed on as a research student with Professor John Bather. Completing his DPhil in three years, Derek was appointed a Lecturer at the University of Manchester, where he stayed 9 years. Here he quickly established himself as a key player in the teaching of Statistics within and beyond the Mathematics Department. His skill as a teacher and his interest in technology combined when he joined a nationally funded project to create 'computer illustrated texts'. This combination of printed text and accompanying software to create dynamic graphics was at the forefront of developments in this area at the time. He was co-author with Adrian Bowman on three of these texts, *Introduction to Probability* (1986), *Introduction to Statistics* (1987) and *Regression and Analysis of Variance* (1990). Derek and family had meanwhile in 1985 moved south again for him to take up a post at Brighton Polytechnic (later Brighton University). In 1989 he returned as a Lecturer to Sussex University where he had gained his postgraduate degrees, and stayed until retirement, being promoted to Senior Lecturer in 1999.

Derek joined the Royal Statistical Society in 1977 and served on the Professional Affairs Committee (2008–2010) and the Examinations Board as a Senior Examiner (1995–2000) and Assessor (2000–2006). He was also an Examiner for the RSS Graduate Diploma for the periods 1981–1995 and 2006–2015. He acted as External Assessor for RSS-accredited courses offered by Anglia Ruskin University and the RSS Centre for Statistical Education.

An unfailingly cheerful presence in the Sussex pre-Covid Mathematics Department and generally, Derek was well and active, planning post-lockdown travel and activities, until his sudden stroke. His untimely death was a huge loss to his family and his many friends and colleagues, including his medical contacts with whom he constantly corresponded.

Derek is survived by Stephanie, their son Tim and daughter Elizabeth, and three grandchildren, their younger son Richard having predeceased him.