KARIN MEYER

Originally from Germany, Karin completed her training in quantitative genetics with a PhD program at the University of Edinburgh. It would be difficult find three more outstanding people to have had as supervisors in one place than hers of Bill Hill, Alan Robertson and Robin Thompson. Her studies there sparked her lifelong interest in characterising genetic variation.

A series of short-term post-doctoral appointments in Australia, Canada and Edinburgh followed. These appointments generally focussed on specific problems. Indeed, her outstanding ability to assess a task, prepare and analyse the data and, most importantly, complete the study by publication in a scientific journal was recognised widely and her talents were in high demand. Eventually Karin settled into a full time position at AGBU where she still plies her craft.

Estimating variance components for unbalanced data and writing software to do so are the centre pieces of her career. Her work generally involved examining alternative models methods for the analysis of very large sets of data. Generally it required writing the software to complete the analysis as 'off the shelf' programs were unavailable. While at AGBU her primary focus has been the analysis of Beef cattle data, and a seminal paper describing a series of alternative models for analysing data with maternal effects is still cited today. She is, and has been, a key player in the team at AGBU involved with the development of its beef (BREEDPLAN) genetic evaluation system. Her theoretical and practical contributions to characterising genetic variation in livestock have also been appreciated by evolutionary biologists and the plant breeding community where she has made regular contributions over the last 15 years.

Providing software was essentially a 'spinoff' of having solved her own problems but for colleagues, it was often their introduction to Karin and her methods. She was in the vanguard when sire models were replaced by animal models. With DFREML, she played the central part in providing the animal breeding community with the tool they needed. The early 1990s saw new algorithms for maximising likelihoods – some developed by Karin herself – which were quickly incorporated into DFREML. In the late 1990s a new method for analysing longitudinal data – random regression – was added to DFREML. Karin has always been interested in getting the best out of the data. Advances in computing technology has meant that more difficult questions could be posed, but there has always been an underlying goal of having her programs run more quickly. Regular enhancements were made to DFREML and in 2006 Karin released a new incarnation called WOMBAT which she continues to enhance today.

By providing tools for the job, Karin has had an immeasurable impact on the animal breeding community and other related communities. Some indicators of her output include more than 21,000 downloads of WOMBAT since its release, over 90 refereed scientific articles with more than half as sole author, and 51 papers presented to the AAABG including a number of invited papers. Highlights of her career to date were the award of a D.Sc for her contributions to the estimation of variance components by the University of Edinburgh in 2002, her addition to the list of highly cited researchers in 2004 and her elevation to Professor in 2013. Her ability to focus on a task until it is completed with one or more publications is an example to all young scientists.