

The Third International Conference of Quantitative Genetics

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The third International Conference of Quantitative Genetics was held at Zhejiang University, Hangzhou, China from August 18 to 24, 2007. The papers of invited speakers at the conference comprise this issue of *Genetica*.

The first ICQG was held in Ames, Iowa in 1976 and the second in Raleigh, North Carolina in 1987. Since the conference in Raleigh statistical techniques then in their infancy, such as QTL mapping and MCMC analysis, have become standard but still developing practices. New molecular techniques have enabled individual genes contributing to variation in quantitative traits to be identified. The new technologies of genomics and gene expression arrays provide new opportunities to understand the genetic basis of quantitative characters, but also new problems in statistical inference. The application of quantitative genetics has broadened from primarily animal and plant breeding into the genetics of human disease and the analyses of natural populations and their evolution. Indeed, it is now often termed the genetics of complex traits, in recognition of the fact that most diseases, for example, are not

determined by just one or a handful of genes. The death of quantitative genetics has been forecast for 40 years or more; but it lives on, strongly.

The wide range of topics and methods discussed in these papers show the diversity of applications of quantitative genetics and of the technologies employed. The conference was run as a single session in order to foster interactions and exchange of ideas and problems among those working on these different systems, species and technologies. In addition a number of selected short papers were presented in the oral sessions and others as posters. There were a total of 201 delegates at the conference, including 129 from outside the home country, who had opportunity to see and hear about research in quantitative genetics in China.

Zhejiang University is one of the five most highly ranked research institutions in China, and arose from the merger of four specialist universities in the city. A new campus is being built and part of the University is already on that site. The City of Hangzhou is one of the seven ancient capital cities of China, and has many attractive features, including the famed West Lake. It is the capital city of Zhejiang province and has a population of nearly 4 million.

Participants in Hangzhou considered intervals of 10 or 20 years far too long to enable adequate discussion and review of a changing subject, and that 5 years should be aimed for. Accordingly, the fourth conference will be held in Edinburgh in 2012.

Those from outside the University are grateful to Jun Zhu and to the large team of staff and students at Zhejiang University led by Longjian Fan who undertook all the work and were exposed to the stresses and strains of managing a successful large conference. The conference and social events were excellent and provided many visitors their first exposure to Chinese culture. We are also grateful to Ron

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Bruce Weir (Raleigh) and Bill Hill (Edinburgh) (Chairs, Program Committee)

Jun Zhu (Hangzhou) and Zhao-Bang Zeng (Raleigh) (Chairs, Organising Committee)