

# 2008 Statistical Genetics Short Course featuring Mendel

## *First Notice*

**5-Day Intensive Course  
1-5 September 2008 (Monday-Friday)  
Coolangatta, Southern Queensland, Australia**

This intensive course will cover state-of-the-art statistical genetics methods for detection of genetic loci for complex traits, either qualitative or quantitative. Each day will include hands-on computer exercises using statistical genetics computer programs, especially Mendel, SimWalk, and FBAT. The course will cover the general theory behind the methods as well as emphasize the practical aspects needed to give the best chances of success. Topics will include:

- Study Design and other data issues
- Mistyping Detection
- Haplotyping
- Mapping Markers
- Analysis of **Qualitative** Traits including:
  - Parametric Linkage analysis
  - Non-Parametric Linkage (NPL)
  - Association Testing:
    - ◇ Family-based
    - ◇ Case/Control
- Analysis of **Quantitative** Traits including:
  - Variance Component Analysis
  - Association Testing

The course is designed to assist people who are actively studying the genetics of complex traits. It will cover both theoretical and practical gene mapping issues and will stress the interpretation of results.

- Instructors:** Professor Kenneth Lange and senior faculty from the Department of Human Genetics, University of California Los Angeles (UCLA)
- Participants:** No prior experience with these methods is required but participants should be "computer literate". Participants will be required to bring a laptop computer to run the analysis exercises.
- Price:** The course fee should be no higher than AUD1700 (approximately US\$1500) for participants from non-profit organisations. We hope to offer partial scholarships to all students.

**For further information please email**  
[stat-gen@unimelb.edu.au](mailto:stat-gen@unimelb.edu.au)

Organised by the Australian Twin Registry and The University of Melbourne

