



**QIMR Berghofer**  
Medical Research Institute

# **Interacting with a statistician**

# What is statistical consulting?

- One-to-one discussion between client and statistician
- Training courses, workshops and seminars on both method and practice of statistics
- Development of statistical resources for clients to help themselves
- Collaborative work on projects with substantive statistical issues
- Professional development for the statisticians

# Stages in statistical consultancy

- Research question, aims of study, relevant populations to formulate research grant and PhD proposals
- Study design, variables, measurement, population, sampling
- Data collection and management
- Formulation of plans for data analysis
- Advise on data analysis, interpretation and presentation of results
- Carry out statistical analysis
- Critical statistical review of manuscripts and grants prior to submission
- Response / rebuttal of reviewers' comments

# Structure of a consulting session

- Scope of the meeting
- Understanding the issues
- Identify and discuss options
- Give advice or explanation
- Conclusion and summary
- What happens next - who will do what and when?

# How to interact with a statistician

- **Talk to us early**
  - Help to formulate the problem and approach to it
  - Be prepared to explain the setting
  - Allow time for the statistician to think
  - Knowledge of basic statistical concepts and language improves communication
- **Design dictates the form of analysis**
  - Critical to get the design right before you collect data
  - Incorrect or inappropriate data collection cannot be rectified during the analysis phase
- **Take opportunities to improve your statistical literacy**

# How to contact the Statistics Unit

- **Email:**

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- **Location:**

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- **Website:**

<https://www.qimrberghofer.edu.au/our-research/scientific-services/qimr-berghofer-statistics-unit/>