



Progress on Genetic Analyses from MAS and OATS

Karen Mather
School of Psychiatry, UNSW
Karen.mather@unsw.edu.au



MAS

- DNA extracted ~ $n = 974$
- APOE
- Genome Wide Association Study (GWAS)

Genome Wide Association Study

- Affymetrix 6.0 Array >1.8 million genetic markers
 - > 900,000 single nucleotide polymorphisms (SNPs)
 - Copy number variants ~900,000





Genome Wide Association Study

- Data Analyses
 - GWAS – non-hypothesis driven
 - Selecting **genes** of interest from prior studies or from known or postulated biological pathways
- Replication samples – potential collaborations?
 - SNPs identified as having strong/suggestive signals → test in replication samples



OATS

- To date DNA has been extracted $\sim n = 202$ from NSW & Victoria (23), QLD $n = 92$
 - To date, total ~ 294
- APOE – plan to do next
- Zygoty testing
 - 34 individuals from Vic & NSW confirmed by QLD