

TCU-Exeter Statistical Genetics Workshop

# Monday 6th Jan – Friday 10th Jan 2025

# Department of Biomedical Sciences and Engineering & Medical Informatics, Tzu Chi University

Day 1, Monday 6th Jan

# Session 1: Overview of Taiwan Statistical Genetics Workshop

**09:30 - 10:00** Welcome and plan for the workshop (*Prof. Hao-Jen Hsu* and *Dr. Harry Green*)

# 10:00 - 11:00 Introduction to UK Biobank (UKBB) and Statistical Genetics (GWAS + GRS + MR)

# 11:00 - 11:10 Coffee break

# 11:10 - 12:10 Seminar to UKBB and Statistical Genetics

# 12:10 - 13:30 Lunch break

**13:30 - 17:00**  **QC and exploration of GWAS data**

Day 2, Tuesday 7th Jan

# Session 2: Genome-wide-association study (GWAS)

**09:30 - 10:50** Introduction to Genome-Wide-Association Study (GWAS)

# 10:50 - 11:00 Coffee break

# 11:00 - 12:00 Seminar to GWAS study - *TBC*

# 12:00 - 13:30 Lunch break

**13:30 - 17:00** GWAS Practice

Day 3, Wednesday 8th Jan

# Session 3: Genetic Risk Scores (GRS/PRS)

**09:30 - 10:50** Introduction to Genetic Risk Scores (GRS/PRS)

# 10:50 - 11:00 Coffee break

# 11:00 - 12:00 Seminar to GRS study

# 12:00 - 13:30 Lunch break

**13:30 - 17:00** GRS Practical

Day 4, Thursday 9th Jan

# Session 4: Mendelian Randomisation (MR)

**09:30 - 10:50** Introduction to Mendelian Randomisation

# 10:50 - 11:00 Coffee break

# 11:00 - 12:00 Seminar to MR study

# 12:00 - 13:30 Lunch break

**13:30 - 17:00** MR Practice

Day 5, Friday 10th Jan

# Session 5: Taiwan Biobank and Taiwan Precision Medicine Initiative (TPMI) Discussion

**09:30 – 12:00** Seminar to TWB and TPMI, Discussion for research

# 12:00 - 13:30 Lunch break

**13:30 - 17:00** Meeting summary and closing