

Association mapping case study: schedule
SISG, module 12

Instruction team:

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| Mariaelisa (Misa) Graff | migraff@email.unc.edu |
| Kari North | kari_north@unc.edu |
| Tamar Sofer | tsofer@uw.edu |

Wednesday, July 19

| Time | Topic |
|-------------------------------|---|
| 1:30-2:30 Overview (Tamar) | Slide set 1: Overview of module, installing software, downloading datasets. |
| 2:30-3:00 The HCHS/SOL (Kari) | Slide set 2: Overview of the HCHS/SOL. |
| 3:00-3:30 Break | |
| 3:30-4:00 The HCHS/SOL (Kari) | Slide set 2: Overview of the HCHS/SOL, continued. |
| 4:00-5:00 Data sets (Tamar) | Slide set 3: The simulated data sets. (R packages) |

5:00-6:00 Networking event

Thursday, July 20

| Time | Topic |
|-------------------------------------|--|
| 8:30-10:00 Linear models (Tamar) | Slide set 4: The Quantitative trait GWAS (linear mixed models, R packages). |
| 10:00-10:30 Break | |
| 10:30-11:30 Logistic models (Tamar) | Slide set 5: Disease traits GWAS (logistic mixed models, R packages). |
| 11:30-12:00 SUGEN intro (Misa) | Slide set 6: Introduction to SUGEN. |
| 12:00-1:30 Lunch | |
| 1:30-3:00 Heterogeneity (Tamar) | Slide set 7: Handling with study heterogeneity: heterogeneous variances, stratified analysis. (R packages) |
| 3:00-3:30 Break | |
| 3:30-5:00 SUGEN analyses (Misa) | Slide set 8: Linear and logistic models in SUGEN, heterogeneity, stratified analysis. |

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Friday, July 21

| Time | Topic |
|---------------------------------------|---|
| 8:30-9:00 Comparisons (Kari) | Slide set 9: SUGEN – GENESIS comparisons |
| 9:00 – 10:00 Generalization (Tamar) | Slide set 10: Generalization testing of previously known associations. (R packages) |
| 10:00-10:30 Break | |
| 10:30-12:00 Admixture mapping (Tamar) | Slide set 11: Admixture mapping in admixed populations. (R packages) |
| 12:00-1:30 Lunch | |
| 1:30-2:00 GxE (Kari) | Slide set 12: Motivation and background to GxE interaction analysis. |
| 2:00-3:00 GxE (Tamar) | Slide set 13: GxE interaction GWAS (R packages). |
| 3:00-3:30 Break | |
| 3:30-5:00 SUGEN GxE (Misa) | Slide set 14: GxE interaction GWAS (SUGEN) |