**Schedule. SISG Module 10: Genetic Epidemiology.**

**Zoom link to all lectures:** <https://washington.zoom.us/j/91765527355?pwd=ZlR0ZWN2NWNGSEMrblkvOXB1Qm94Zz09>

**Meeting ID:** 917 6552 7355

**Password:** MOD10

All materials available on the course website: https://si.biostat.washington.edu/suminst/SISG2021/modules/SM2110

\*Sessions will include either live breakout groups and/or hands-on exercises, as well as Zoom polls.

**Instructors:** Alie Fohner and Sara Lindström.

**Teaching Assistant:** Hanley Kingston

**Wednesday July 14 (all times in PT)**

**11.45-12.30** **Session 1.** Introductions/Logistics. **Sara and Alie**

**12.30-12.45** Break

**12.45-13.30** **Session 2.** Introduction to Genetic Epidemiology. **Sara.**

**13.30-13.45** Break

**13.45-14.30** **Session 3.** Types of genetic variation. Genotyping/Sequencing technologies. **Alie**

**Thursday July 15 (all times in PT)**

**8.30-9.15** **Session 4.** Hardy-Weinberg Equilibrium and Linkage Disequilibrium. **Alie.**

**9.15-9.30** Break

**9.30-10.15** **Session 5.** Population structure and admixture mapping. **Alie.**

**10.15-10.30** Break

**10.30-11.15** **Session 6.** Study designs and imputation. **Sara.**

**11.15-11.45** Lunch

**11.45-12.30** **Session 7.** Analysis of association studies. **Alie**.

**12.30-12.45** Break

**12.45-13.30** **Session 8.** Genome-wide association studies. **Sara.**

**13.30-13.45** Break

**13.45-14.30** Q&A

**Friday July 16 (all times in PT)**

**8.30-9.15** **Session 9.** Bioethics. **Alie.**

**9.15-9.30** Break

**9.30-10.15** **Session 10.** Rare variants. **Sara.**

**10.15-10.30** Break

**10.30-11.15** **Session 11.** Gene-Environment interactions. **Sara.**

**11.15-11.45** Lunch

**11.45-12.30** **Session 12.** Risk prediction and translational genetics. **Alie.**

**12.30-12.45** Break

**12.45-13.30** **Session 13.** Mendelian Randomization. **Sara.**

**13.30-13.45** Break

**13.45-14.30** Q&A