SISG Module 15: Forensic Genetics

Instructors: Sanne Aalbers (she/her/hers), Michael Coble (he/him/his), and Bruce Weir (he/him/his)

Website: https://si.biostat.washington.edu/suminst/SISG2021/modules/SM2115

Slack: https://uwbiostatisticssisg.slack.com/channels/C0232TP4M8U

Zoom link: https://washington.zoom.us/j/96239240977

Overview

This module consists of a series of interactive lectures that will introduce you to the basic concepts of forensic genetics. You are welcome to download a copy of Evett and Weir's 1998 book: "Interpreting DNA Evidence" from the course website. Some of the material is dated, and some of the statistical treatment has been simplified since then, but the chapters 2 and 9 contain some good background writing by Ian Evett. The publisher returned the copyright to the authors.

Links to slides, Zoom sessions, and other course material will be available on the website and posted on Slack.

Monday, July 19 (US Pacific Time)

8:00-8:50	Topic 1	Course logistics. History of Identification.
8:50-9:05	Break	
9:05-9:55	Topic 2	STR Typing.
9:55-10:10	Break	
10:10-11:00	Topic 3a	Probability, Likelihood Ratios.
11:00-11:30	Break	
11:30-12:20	Topic 3b	Allelic Independence.
12:20-12:35	Break	
12:35-1:25	Topic 4	DNA interpretation and modeling.
1:25-1:40	Break	
1:40-2:30	Review	Topics 3 and 4 group work.

Tuesday, July 20 (US Pacific Time)

8:00-8:50	Topic 5	Population structure and relatedness.
8:50-9:05	Break	
9:05-9:55	Review	Topic 5 group work.
9:55-10:10	Break	
10:10-11:00	Topic 6	Reporting likelihood ratios.
11:00-11:30	Break	
11:30-12:20	Review	Topic 6 group work.
12:20-12:35	Break	
12:35-1:25	Topic 7	Y-STR profiles.
1:25-1:40	Break	
1:40-2:30	Topic 8	Incorporating relatives.

Wednesday, July 21 (US Pacific Time)

8:00-8:50	Review	Topics 7 and 8 group work.
8:50-9:05	Break	
9:05-9:55	Topic 9	NGS Data.
9:55-10:10	Break	
10:10-11:00	Review	Whole course.