### SISG Module 16: Forensic Genetics

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

Website: https://si.biostat.washington.edu/suminst/sisg2020/modules/SM2016

**Slack:** sisgforensicgenetics.slack.com

Ian Evett Op-Ed: 11:10am US Pacific Time, Monday July 27.

https://washington.zoom.us/j/99465746411

#### Overview

This module consists of a series of pre-recorded lectures that will introduce you to the basic concepts of forensic genetics. The slides and video presentations of the lectures with audio transcripts are available for you to watch on your own and will be followed by live Zoom sessions in which we will go over any questions that you have.

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.

Link to lectures, Zoom sessions, software and data will be emailed to participants ("Welcome to SISG Module 16") and posted on Slack.

### Monday, July 27 (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 3	Probability, Independence, Likelihood Ratios.
11:00-11:30	Break	
(11:10-11:25)	Op-Ed	Ian Evett: "Foundations of Evidence Evaluation."
11:30-12:20	Review	Topic 3 group work.
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	Topic 4 group work.

# Tuesday, July 28 (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 29 (US Pacific Time)

8:00-8:50	Topic 9	Topics arising from Days 1 and 2.
8:50-9:05	Break	
9:05-9:55	Topic 10	NGS Data.
9:55-10:10	Break	
10:10-11:00	Review	Whole course.