**Generalized Estimating Equations and Mixed-Effects Models   
for Longitudinal Data Analysis**

UW SISCER 2022

**Overview and Schedule**

\*All times are Pacific Daylight Time (PDT)

| **Time** | **Activity** | **Mode** |
| --- | --- | --- |
| **Day 1 (July 18): Introduction and Methods for Continuous Data** | | |
| 8:30 - 8:40 | Introductions and logistics | Live lecture |
| 8:40 - 9:30 | Introduction to longitudinal studies; case studies | Live lecture |
| 9:30 - 9:45 | Break |  |
| 9:45 - 10:30 | Methods for continuous data, part 1 | Live lecture |
| 10:30 - 10:45 | Break |  |
| 10:45 - 11:15 | Methods for continuous data, part 2 | Live lecture |
| 11:15 - 11:50 | Data analysis activity | Live lecture + activity |
| 11:50 - 12:00 | Discussion and questions | Live lecture |
| **Day 2 (July 19): Methods for Binary and Count Data** | | |
| 8:30 - 8:45 | Recap of Day 1 | Live lecture |
| 8:45 - 9:00 | Review of generalized linear models | Live lecture |
| 9:00 - 9:30 | Methods for binary and count data, part 1 | Live lecture |
| 9:30 - 9:45 | Break |  |
| 9:45 - 10:15 | Methods for binary and count data, part 2 | Live lecture |
| 10:15 - 10:45 | Special topics: missing data and time-dependent covariates | Live lecture |
| 10:45 - 11:00 | Break |  |
| 11:00 - 11:45 | Data analysis | Live lecture + activity |
| 11:45 - 12:00 | Discussion and questions | Live lecture |