# Multi-omics Boot Camp
## Analysis of Omics Data for Research Studies

## Day 1: Wednesday Jan 18, 2023

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| **8:45 – 9:00 PT**<br>*11:45 – 12:00 ET* | *Login to Zoom* | |
| **9:00 – 9:45 PT**<br>*12:00 – 12:45 ET* | **Welcome and Introduction** | David Conti, PhD |
| **9:45 – 10:00 PT**<br>*12:45 – 1:00 ET* | *Break / One-on-one questions* | |
| **10:00 – 11:00 PT**<br>*1:00 – 2:00 ET* | **Session 1. Introduction to Observational Studies and Omic Data (Lecture)** | David Conti, PhD<br>*TA: Yinqi Zhao* |
| **11:00 – 11:15 PT**<br>*2:00 – 2:15 ET* | *Break / One-on-one questions* | |
| **11:15 – 12:00 PT**<br>*2:15 – 3:00 ET* | **Session 2. Polygenic Analyses and Summary Statistics (Lecture)** | Nicholas Mancuso PhD<br>*TA: Zeyun Lu* |
| **12:00 – 1:00 PT**<br>*3:00 – 4:00 ET* | *Networking Meal Break* | |
| **1:00 – 1:45 PT**<br>*4:00 – 4:45 ET* | **Session 3. Polygenic Analyses and Summary Statistics (Lab)** | Nicholas Mancuso, PhD<br>*TA: Zeyun Lu* |
| **1:45 – 2:00 PT**<br>*4:45 – 5:00 ET* | *Break / One-on-one questions* | |
| **2:00 – 3:00 PT**<br>*5:00 – 6:00 ET* | **Session 4. Advanced Polygenic analysis and Summary Statistics (Lecture/Lab)** | Nicholas Mancuso, PhD<br>*TA: Zeyun Lu* |
| **3:00 – 3:15 PT**<br>*6:00 – 6:15 ET* | **Questions and Day 1 Wrap Up** | |

# Multi-omics Boot Camp
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## Day 2: Thursday Jan 19, 2023

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|---|---|---|
| **8:45 – 9:00 PT**<br>*11:45 – 12:00 ET* | *Login to Zoom* | |
| **9:00 – 9:45 PT**<br>*12:00 – 12:45* | **Session 5. Interaction (Lecture)** | William Gauderman, PhD<br>*TA: Yingi Zhao* |
| **9:45 – 10:00 PT**<br>*12:45 – 1:00 ET* | *Break / One-on-one questions* | |
| **10:00 – 10:45 PT**<br>*1:00 – 1:45 ET* | **Session 6. Interaction (Lab)** | WIlliam Gauderman, PhD<br>*TA: Yingi Zhao* |
| **10:45 – 11:00 PT**<br>*1:45 – 2:00 ET* | *Break / One-on-one questions* | |
| **11:00 – 12:00 PT**<br>*2:00 – 3:00 ET* | **Session 7. Advanced Interactions (Lecture/Lab)** | Juan Pablo Lewinger, PHD<br>*TA: Yingi Zhao* |
| **12:00 – 1:00 PT**<br>*3:00 – 4:00 ET* | *Networking Meal Break* | |
| **1:00 – 1:45 PT**<br>*4:00 – 4:45 ET* | **Session 8. Clustering (Lecture)** | Kimberly Siegmund, PhD<br>*TA: Yinqi Zhao* |
| **1:45 – 2:00 PT**<br>*4:45 – 5:00 ET* | *Break / One-on-one questions* | |
| **2:00 – 3:00 PT**<br>*5:00 – 6:00 ET* | **Session 9. Clustering (Lab)** | Kimberly Siegmund, PhD<br>*TA: Yinqi Zhao* |
| **3:00 – 3:15 PT**<br>*6:00 – 6:15 ET* | **Questions and Day 2 Wrap Up** | |

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# Multi-omics Boot Camp
## Analysis of Omics Data for Research Studies

## Day 3: Friday Jan 20, 2023

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| **8:45 – 9:00 PT** *11:30 – 12:00 ET* | *Login to Zoom* | |
| **9:00 – 10:00 PT** *12:00 – 1:00 ET* | **Session 10. Advanced Clustering (Lecture/Lab)** | Kimberly Siegmund, PhD *TA: Yinqi Zhao* |
| **10:00 – 10:15 PT** *1:00 – 1:15 ET* | *Break / One-on-one questions* | |
| **10:15 – 11:00 PT** *1:15 – 2:00 ET* | **Session 11. Mediation/Latent Variable (Lecture)** | David Conti, PhD *TA: Yinqi Zhao* |
| **11:00 – 11:15 PT** *2:00 – 2:15 ET* | *Break / One-on-one questions* | |
| **11:15 – 12:00 PT** *2:15 – 3:00 ET* | **Session 12. Mediation/Latent Variable (Lab)** | David Conti, PhD *TA: Yinqi Zhao* |
| **12:00 – 1:00 PT** *3:00 – 4:00 ET* | *Networking Meal Break* | |
| **1:00 – 2:00 PT** *4:00 – 5:00 ET* | **Session 13. Advanced Mediation/Latent Variable (Lecture/Lab)** | David Conti, PhD *TA: Yinqi Zhao* |
| **2:00 – 2:15 PT** *5:00 – 5:15 ET* | *Break / One-on-one questions* | |
| **2:15 – 3:00 PT** *5:15 – 6:00 ET* | **Session 14. Bringing it all Together: Multi-omic Analysis in Real Data** | Jesse Goodrich, PhD |
| **3:00 – 3:15 PT** *6:00 – 6:15 ET* | **Questions and wrap-up** | All Instructors |

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