



**PMED Program Transition Workshop**  
**May 20-22, 2019**  
**SCHEDULE**

**Monday, May 20<sup>th</sup>**

*SAS Hall, North Carolina State University*

Theme 1 (Tumor Heterogeneity)

9:00-9:15

*“Intro and Overview on Tumor Heterogeneity Working Group”*

**Kevin Flores**, NCSU  
**John Nardini**, SAMSI and NCSU

9:15-9:45

*“Nonlinear Mixed Effects Models Applied to Tumor Heterogeneity”*

**Rebecca Everett**, NCSU

9:45-10:15

*“Optimizing Therapy Schedules Under Uncertainty”*

**Nick Henscheid**, University of Arizona

10:15-10:30

Break

10:30-10:45

*“Creating Virtual Populations for Modeling Tumor Heterogeneity”*

**Ding Li**, WUSTL  
**John Nardini**, SAMSI and NCSU

10:45-11:15

*“Applications of Machine Learning to Heterogeneous Population Data”*

**John Lagergren**, NCSU

11:15-11:45

*“Bayesian Calibration and Model Selection for Cancer Modeling”*

**Bruce Pittman**, SUNY at Buffalo

11:45-12:15

*“Non-Parametric Techniques for Estimating Tumor Heterogeneity”*

**Erica Rutter**, NCSU

12:15-1:30

Lunch on Own

Theme 2 (Sequential Decision Making (Observational Data))

Session title: Real World Challenges in Observational Data DTR Analyses

1:30-1:45

*“Intro and Overview on Theme 2”*

**Erica Moodie**, McGill University

- 1:45-2:15      *“Reward-Ignorant Modelling of Individualized Treatment Strategies”*  
**Michael Wallace**, University of Waterloo
- 2:15-2:45      *“Using Inverse Conditional Probability Weights to Adjust for Unmeasured Cluster-Specific Confounding in Clustered Data”*  
**Zhulin He**, Iowa State University
- 2:45-3:15      *“Estimation and Optimization of Composite Outcomes”*  
**Daniel Lockett**, UNC at Chapel Hill
- 3:15-3:30      Break
- Theme 3 (Observational Microbiome)
- 3:30-4:00      *“Intro and Overview on Theme 3”*  
**Li Ma**, Duke University
- 4:00-4:30      *“Network Methods for Integrating Compositional Microbiome Data with Machine Learning”*  
**Andrew Hinton**, UNC Chapel Hill
- 4:30-5:00      *“Bayesian Compositional Graphical Regression for Microbiome Data”*  
**Jialiang Mao**, Duke University
- 5:00-5:30      *“A Bayesian Mixed-Effects Model to Estimate Treatment Effects on a Microbiome Using Designed Experiments”*  
**Brian Reich**, NC State University
- 5:45              Return to Hotel

**Tuesday May 21<sup>st</sup>**

*SAS Hall, North Carolina State University*

- 9:15-10:15      Plenary Talk 1: title TBA  
**Elizabeth Slate**, Florida State University
- 10:15-10:30      Break
- 10:30-11:30      Plenary Talk 2: title TBA  
**Michael Kosorok**, UNC Chapel Hill
- 11:30-12:15      Discussion Session or Panel
- 12:15              Adjourn and Shuttle to RDU Airport