

# BIOSTATISTICS SEMINAR



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## **Smaller p-values and shorter confidence intervals via information sharing**

Mixed effects models are used routinely in the biological and social sciences to share information across groups and to account for data dependence. The statistical properties of procedures derived from these models are often quite good on average across groups, but may be poor for any specific group. For example, commonly-used confidence interval procedures may maintain a target coverage rate on average across groups, but have near zero coverage rate for a group that differs substantially from the others. In this talk we discuss new confidence interval and p-value procedures that maintain group-specific frequentist guarantees, while still sharing information across groups to improve precision and power.

**Thursday January 23, 2020**

**3:30 pm - 4:30 pm**

**Blue Cross and Blue Shield of North Carolina Foundation Auditorium**



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