“Causal Mediation Analysis in Sibling Designs: Methodological Considerations and Application to Prenatal Antidepressant Exposure”

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Brief description: Mediation analysis permits decomposition of total effects into direct and indirect effects, under strong assumptions about unmeasured confounding. Sibling studies have emerged as a method for controlling measured and unmeasured confounding that is shared within families, such as genetic factors. Carrying out a mediation analysis within a sibling context may alleviate concerns about unmeasured confounding, but careful attention must be paid to biases that can be amplified using these models. Using simulations and a real data example from the Norwegian Mother and Child Cohort study, this project explores gestational age at birth as a possible mediator of previously-observed associations between prenatal antidepressant exposure and toddler behavior.

Lunch will be provided: Please RSVP to Kelley.Baron@umassmed.edu