

# Connecting Research to Practice: Mechanistic modeling of polyp & CRC development

- Methods
  - Mutation network
  - Stochastic cell growth
- Predictions
  - Likely incidence with age
    - Growth characteristics
    - Transformation rates
- Applications
  - Adaptive modeling to individual patients
    - Connection to “omics” measurements
  - Decision tree hypothesis testing
  - Identification of heterogeneous sub-populations

