About Me



NAME

Yixun (Penelope) Xing

TITLE

Clinical Associate Professor

Department of Data Analytics and Statistics

YEARS AT UNT

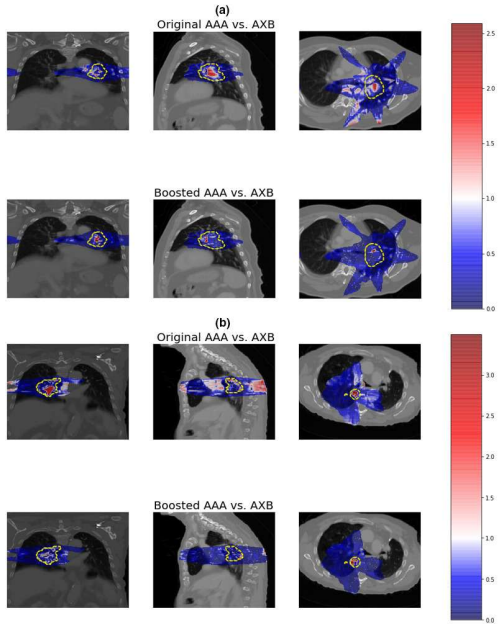
5 Years

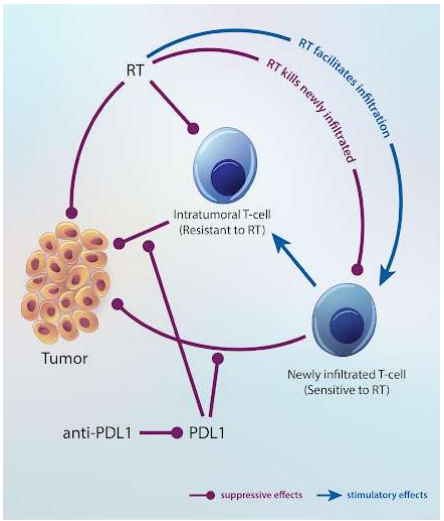
RESEARCH FOCUS AREAS

- Biomedical Statistics
- AI and Quantitative Modeling in Medicine
- Intervention Evaluation and Optimization

AI and Quantitative Modeling in Medicine

- Deep learning dose calculation for radiation therapy
- Mathematical modeling of combination cancer therapy
- AI and statistical modeling of medical community and news media attention to cancer





Biomedical Statistics

- Speech disorders in children with cleft palate
  - Measurement and predictors of speech outcomes
  - Treatment efficacy

  NIH-funded, Co-I, Quantitative lead

- Bilateral wearable system for tracking edema
  - Standardizing measurements and endpoint
  - Pilot monitoring and future clinical trial design

  Under review, Co-I, Quantitative lead

Intervention Evaluation and Optimization

- Multilevel children's health intervention (Effectiveness-implementation hybrid design)
  - Effectiveness on children's health behaviors and home environment
  - Implementation outcomes and factors

  R01 in preparation, Statistical lead

- Preschool healthy-weight promotion study (Multiphase Optimization Strategy)
  - Conceptual model of intervention components
  - Design and sample-size considerations
  - Toward a large-scale trial, then adaptive interventions

  UNT mentoring grant funded, External pilot grant planned