

# Building a Research Agenda

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# Bloom's Syndrome Registry

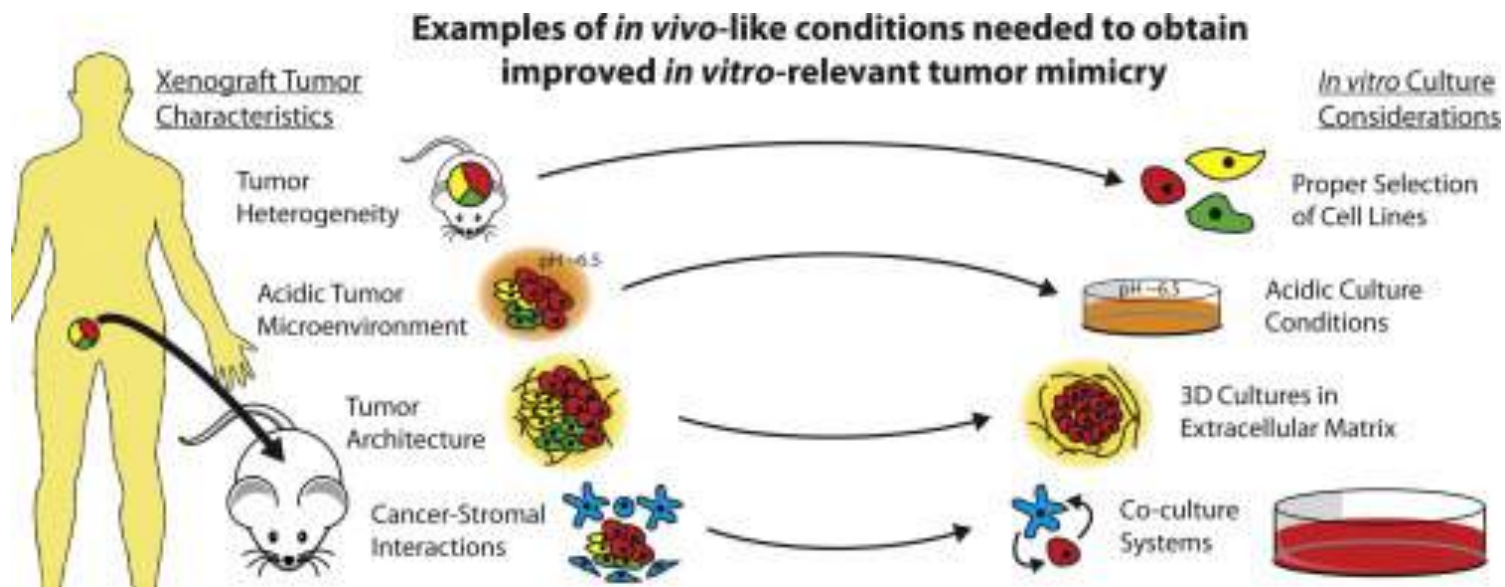
- Cancer treatment efficacy and outcomes
- Adverse effects of treatment
  - radiation
- Early detection of cancer development
  - Exosomes
  - Circulating tumor DNA (ctDNA)
  - Other markers as they become available

# Cancer Biology

- Bloom's syndrome cancer genomics
  - Sequencing the genes
  - Determining the expression phenotype
- Mutation signatures
  - Chromosome abnormalities
  - Site-specific changes (point mutations)
  - Genetic heterogeneity

# Cancer Biology continued

- Cancer cell models
  - Fresh tumor specimens
  - Cancer-specific synthetic lethal genes
  - Test the panel of FDA approved drugs

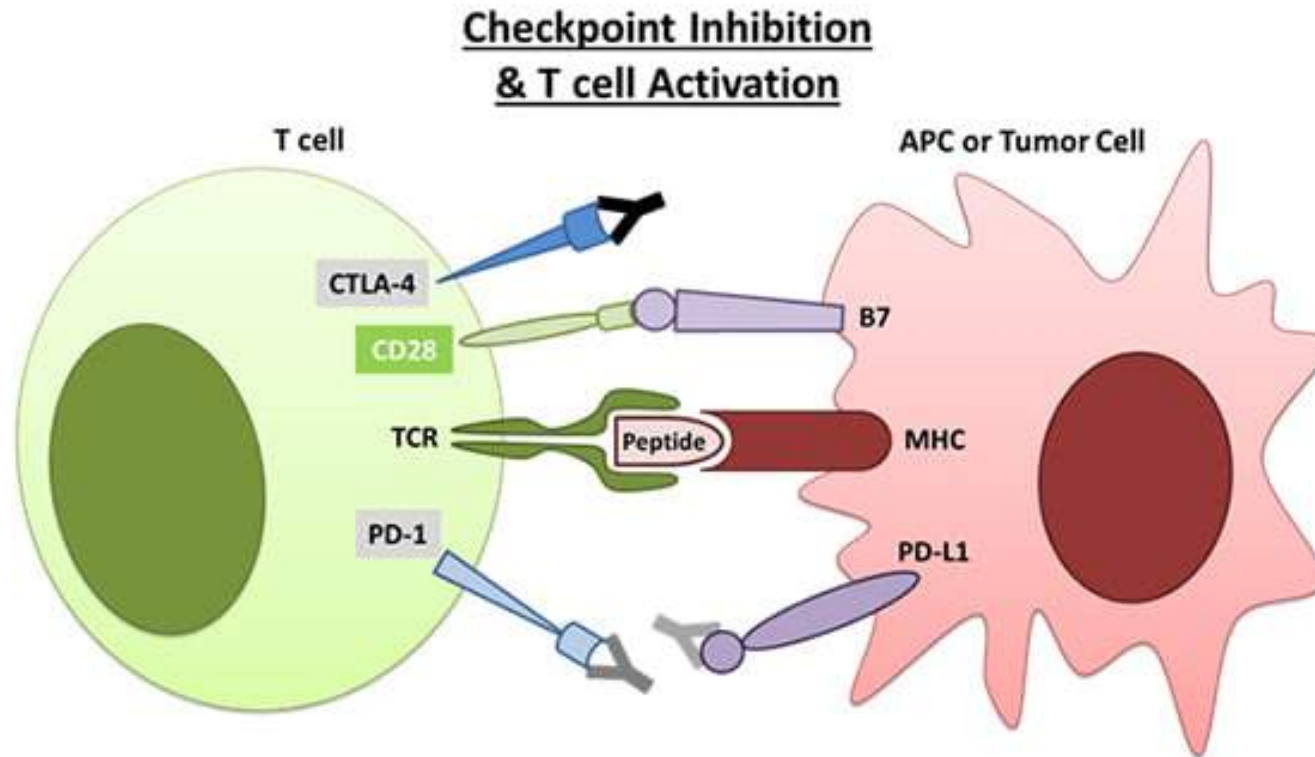


# Cancer Screening & Guidelines

- Will the guidelines be accepted by the Bloom's community?
- Can we test the efficacy of the screening guidelines?
- Aspirin/NSAIDs
- Vitamin D

# Immune oncology

- CAR-T cell treatments
- Immune checkpoint inhibitors



# Growth

- Can we test the efficacy and safety of growth hormone treatment?
- What is the effect of GH treatment on cancer risk in Bloom's syndrome?

→ Mouse models