Areas of Interest and Targets/Pathways of Focus:

1. Opportunities related to **tissue-resident immunity** with application in the fields of **inflammation, fibrosis, autoimmunity and oncology**:
   - Novel molecular or cellular targets with tissue-restricted expression or occurrence that modulate inflammation, immune homeostasis (i.e. tolerance or tumorigenesis)
   - Regulation of non-classical and non-circulating immune cells in human disease progression or prevention
   - Role of tissue-resident macrophages (i.e., synovial, alveolar, adipose etc.) in inflammation, immune homeostasis, or tissue repair
   - Mechanisms of tissue-specific targeting or localization of immune cells and/or therapeutic agents in select peripheral compartments such as gut, liver, skin, and lung

2. Opportunities related to **DNA damage response and replicative stress** with application in the fields of **oncology, immunology, and rare diseases**:
   - Chromatin and DNA damage response modulators in the context of nuclear or spatial organization (biochemical condensates)
   - Innovative targets identified via synthetic lethal, chemical biology or other approaches, including DNA repair enzymes, scaffolding factors and nucleic acid targets (R-loops, G-quadruplexes)
   - Senescence, translesion synthesis and other mutagenic repair processes

3. Novel strategies targeting the cause of **repeat expansion diseases**, including:
   - Those that target the mutant gene
   - Nucleic acid-binding and other small molecules that halt or reverse the somatic expansion of the repeating DNA sequences
   - Novel mechanisms downstream of the pathological repeat, excluding mAbs that clear protein aggregation
   - DNA repair or maintenance mechanisms affecting repeat expansions