PFIZER’S CENTERS FOR THERAPEUTIC INNOVATION
REQUESTS PROPOSALS FOR THERAPEUTIC TARGETS
Deadline: September 21, 2020*

Pfizer’s Centers for Therapeutic Innovation (CTI) is a unique joint drug discovery model focused on collaborating with leading academic centers to translate and transform concepts into breakthroughs that change patients’ lives.

The CTI 2020 Call for Proposals (CFP) is focused on identifying novel therapeutic opportunities in the areas outlined below with application in Pfizer’s core research focus areas: oncology, inflammation & immunology, internal medicine and rare diseases.

Northwestern can facilitate discussion with Pfizer prior to drafting a proposal to help ensure the ideas are aligned with Pfizer’s interest.

**CTI Collaborations Include:**
- Funding for project-specific research
- Hands-on collaboration from dedicated Pfizer drug-development experts
- Access to scientific/technological expertise and infrastructure at Pfizer
- Potential for in-licensing by Pfizer, which would include milestone and royalty payments
- Publishing rights

**Submission Process**: NewCures can facilitate early discussions with Pfizer prior to submission. Interested PIs should contact Caroline Ko, Project Leader of NewCures, as soon as possible. Together with Feinberg Corporate Relations, we will support the PIs to prepare the submission.

Submission entails a non-confidential, 2-3 page Pre-Proposal application; the Pre-Proposal template along with Helpful Tips can be found at the NewCures website. At a high level, the Pre-Proposal should provide an overview of the target, mechanism, evidence for disease linkage, the proposed therapeutic drug, and suggest how the therapeutic hypothesis could be tested in the clinic. Pre-Proposals submitted to Pfizer CTI will be reviewed on a rolling basis.

Pre-Proposals must be submitted to newcures@northwestern.edu by September 21, 2020.
Areas of Interest and Targets/Pathways of Focus:

Opportunities related to **DNA Damage Response and Replicative Stress** such as:
- Chromatin and DNA damage response modulators in the context of nuclear or spatial organization (e.g. biochemical condensates)
- Novel targets identified via synthetic lethal, chemical biology or other approaches, including DNA repair enzymes (esp. nucleases), scaffolding factors and nucleic acid targets (R-loops, G-quadruplexes)
- DNA damage proteins associated with diseases such as cancer and repeat expansion diseases
  
  *Out-of-scope: cell therapies, antibody-drug conjugates, nucleic acid therapeutics*

Opportunities that address the cause or treatment of **Repeat Expansion Diseases**, such as:
- Therapeutic targeting of the mutant gene
- Interventions that halt or reverse the somatic expansion of the repeating DNA sequences
- Novel mechanisms that modulate or regulate the pathological repeat
- Genetic modifiers of repeat instability or repeat contraction
  
  *Out-of-scope: therapeutic approaches that target/clear protein aggregates*

Opportunities to target **Cellular Senescence**, including senolytic and senomorphomic approaches such as:
- Induction or targeting of senescent-like arrest of tumor cells to overcome drug resistance and/or improve immune response to solid tumors
- Novel senescence targets related to fibrosis, specifically mechanisms responsible for modulating fibroblasts/myofibroblasts function and tissue remodeling by stem/tissue progenitor cells
- Targeting of senescence pathways in tissue resident immune cells in the liver, lung, skin, joints, and gastrointestinal tract that contribute to disease
  
  *Out-of-scope: telomeres/telomerase targeting approaches, age-related dysfunction*

Opportunities related to **Tissue-Immune System Crosstalk** in disease pathology including:
- Targets/pathways that induce immune tolerance by modulation of unique or accessory regulatory cells including macrophages (Mregs), B cells (Bregs), and tolerogenic dendritic cells (tolDCs)
- Novel inflammatory pathways/targets in tissue-resident innate, parenchymal, and stromal cell populations including fibroblasts, stem/tissue progenitors, neutrophils and macrophages
  
  *Out-of-scope: cell and gene therapies*

*While the noted areas of interest are Pfizer's priority, other ideas might be viable. For further information, please contact Caroline Ko, c-ko@northwestern.edu.*