The Chan Zuckerberg Initiative invites applications for two-year collaborative pilot projects focused on the role of inflammation in maintaining health and triggering disease. CZI will accept applications from teams of two to three researchers with distinct expertise. Applicants can request up to $175,000 in total costs per lab for up to three labs, for a total of $525,000.

CZI seeks applications aimed toward identifying unifying principles that underlie tissue homeostasis and inflammation at the single cell level. The goal is to stimulate collaborations across disciplines that will help define a new field. Successful applications will bring together researchers in different experimental, computational, or medical domains. They will address local cell properties and interactions in inflamed tissues and compare them to the properties and interactions of similar cells in healthy tissues. They will increase understanding of the cell types that mediate inflammation, and their interactions in space and time. The two-year pilot grant period is intended to develop proof-of-concept for the experimental team and the approach, setting up future programs for detailed mechanistic investigations.

CZI especially seeks proposals that support the development and integration of tools and resources for studying inflammation at the level of local cells and tissues, including volumetric imaging, image-based transcriptomics and proteomics, single-cell transcriptomics, organoids and other tissue models, and computation. Successful outcomes for this RFA could include:

- Development, validation, and dissemination of robust experimental and analytical tools;
- High-quality tissue resources that capture temporal or multi-tissue inflammatory events;
- In vitro models that are experimentally tractable and help translate between human and non-human systems;
- Improved protocols for in situ analysis of cellular identity or interactions;
- Analytical tools that extract features or integrate across diverse data sets;
- Panels of antibodies or other reagents that enable consistent interrogation across tissues or inflammatory conditions;
- Visualization methods that enable access and exploration of data by non-experts; and
- Benchmark datasets for the field that will inform mechanistic approaches, deposited into shared data platforms such as the Human Cell Atlas Data Coordination Platform.

Proposals are due November 19th. For more information, visit: https://chanzuckerberg.com/rfa/single-cell-analysis-inflammation/.

Foundation Relations staff are available to assist with your proposal and submission, in collaboration with Cecilia Meisner (cmeisne1@jhu.edu) in the JHSPH Office of External Affairs. Our office can provide background information about this foundation from an institution-wide perspective, as well as assistance with proposal development and review based on prior institutional experience with the foundation. Please contact Laura Fuentes (laura.w.fuentes@jhu.edu) to discuss your proposal.