



Supporting Collaborative Computational Tools for the Human Cell Atlas

The [Chan Zuckerberg Initiative](#) (CZI) is announcing new funding for 85 projects to support the [Human Cell Atlas](#), a global effort to map every type of cell in the healthy human body as a resource for studies of health and disease.

Collaborative Computational Tools

CZI is providing funding and engineering support for 85 one-year projects focused on developing computational tools, algorithms, visualizations, and benchmark data sets that will enable researchers and scientists around the globe to work with the large variety of molecular and imaging data being generated by scientists working on the Human Cell Atlas. Some key facts:

- **85 projects total** being funded, after a thorough evaluation process in response to an open Request for Applications issued by CZI in July 2017. There were nearly 300 applications submitted from institutions in 24 countries across five continents.
- CZI is recommending funding for projects which involve:
 - 83 principal investigators
 - 53 organizations and institutions
 - 9 countries
 - 4 continents
- **\$15 million over one year recommended in new funding** for the projects, in total.
- To learn more about each project, visit [this website](#).

Fostering Collaboration

- Participants will collaborate with each other to accelerate progress, facilitate communications, and maximize open dissemination of the resulting tools.
- Participants also will work with CZI's science and engineering teams to help enhance and package their tools, and where appropriate, link them to the Human Cell Atlas [Data Coordination Platform](#).

About the Human Cell Atlas

- The goal of the [Human Cell Atlas](#) project is to create a shared, open reference atlas of all cells in the healthy human body as a resource for studies of health and disease. This global endeavor will generate a large variety of molecular and imaging data across a wide range of modalities and spatial scales.
- CZI is supporting the project in several ways—through funding to develop the [Data Coordination Platform](#) to facilitate open sharing of data produced for the HCA efforts, and through funding for [38 pilot projects](#) to build new technologies, best practices, and data analysis techniques for the Human Cell Atlas. Recommended funding for these 85 projects is the latest support CZI is providing toward this effort.

Frequently Asked Questions

What is the Human Cell Atlas, and how did it begin?

The [Human Cell Atlas](#) is an international effort to create a reference atlas of all cells in the healthy human body as a resource for studies of both health and disease. The idea grew from an enthusiastic scientific community, and is now a large-scale collaborative effort to increase the impact of single-cell biology by federating results from different organs, cell types, experimental approaches, and countries, without suppressing the dynamism of individual communities and projects. The Human Cell Atlas project welcomes participation by scientists, physicians, and engineers around the world.

Who leads the Human Cell Atlas Project?

The HCA is steered and governed by an Organizing Committee, which is its decision-making body. The Organizing Committee is co-chaired by [Aviv Regev](#) at the Broad Institute of MIT and Harvard and [Sarah Teichmann](#) at the Wellcome Trust Sanger Institute.

What kind of scientific, medical, and health benefits can we expect from a completed Human Cell Atlas, and when will it be completed?

The Human Cell Atlas will revolutionize our understanding of human anatomy and cell biology. We can expect to understand fundamental questions about cell biology, disease progression, cellular state, and many more areas. A few examples of applications may include development of novel diagnostic biomarkers, cell therapy candidates, antibodies for clinical and R&D use, and computational techniques for disease stratification. Like other major efforts--like the human genome project--the Human Cell Atlas will take shape over time and will give rise to entire fields of research that will reflect a whole new way of thinking about human anatomy.

Will Human Cell Atlas data be openly available to everyone?

The Human Cell Atlas community is committed to building a resource that makes data as openly available and easily accessible as possible, and to developing all software and standards for analyzing and sharing data in the open, using best practices of open-source and collaborative development.

How much funding will individual grantees or projects receive?

CZI is providing \$15 million over one year, in total, for the projects. Collectively, we are focused on the projects, scientists and institutions leading the work, new collaborations, and the collective work that will enable scientists to access and interpret information about healthy and diseases cells.