

## UNIVERSITY OF CHICAGO THE BIG QUESTIONS FUND

Since its founding in 1890 through the philanthropic vision of John D. Rockefeller, the University of Chicago has promoted a distinctive intellectual environment of rigorous inquiry that continues to attract field-defining researchers to our campus and affiliated laboratories. This commitment to unfettered investigation has enabled University of Chicago faculty to push the boundaries of knowledge and advance fundamental science. As the pace of scientific discovery continues to accelerate and the funding landscape evolves, the University is fully committed to providing investigators with the most effective resources to enable path-breaking research.

John D. Rockefeller's foundational partnership with the University of Chicago is an example of how early support from leading philanthropists produced much of the intellectual infrastructure of premier American research universities. Visionaries such as Rockefeller believed that the United States could become the preeminent destination for advanced research in the world. While the federal government played a central role in financing basic research for much of the 20th century, the current upheaval in federal research funding requires philanthropic leaders to play a more substantial role moving forward. The University of Chicago is therefore grateful for the leadership of the Science Philanthropy Alliance in promoting philanthropic support of discovery-driven research. As the University launches the most ambitious fundraising campaign in its history, we recognize the importance of philanthropic investment in the fundamental sciences and we value the SPA as a partner in this important work.

In the face of an increasingly challenging funding environment, the University seeks to provide strategic, financial, and organizational support to enable our researchers to pursue their scientific agendas and compete effectively for external funding. The University prioritizes providing support that is 1) difficult to obtain externally, and 2) plays a critical role for early career investigators initiating their research programs, or for more senior faculty seeking to change research trajectories or explore new approaches. Providing internal funding to pilot such exploration and generate preliminary data also increases the likelihood that faculty successfully compete for large external awards. The University has taken initial steps in these directions by creating a Big Questions Incubator, which provides seed funding for faculty to conceive and pursue high-risk, high-reward scientific initiatives.

In order to ensure that the University continues to play a leadership role in discovery research, and in response to the call by the Science Philanthropy Alliance, the University of Chicago will create the **Big Questions Fund**, a new philanthropic fund that will significantly scale up the University's investment in investigator-initiated, fundamental research.

## **The Big Questions Fund**

The Big Questions Fund will provide financial and organizational support for nascent, ambitious research ideas with high potential to yield scientific advances. The Fund will provide tiered levels of competitive funding to give support at different stages of a research program, together with robust administrative support in order to facilitate the scaling of seeded projects into larger initiatives.

A Faculty Advisory Council, made up of junior and senior University of Chicago faculty members from diverse disciplines and chaired by the Vice President for Research and for National Laboratories, will oversee funding decisions. Grants will be awarded based on the strength of the research plan and rationale, intellectual merit, capacity to advance fundamental science, and potential to secure external funding and achieve sustainability.

**Seed Funds** (\$20,000-\$50,000) will provide flexible resources to explore early-stage, high-risk ideas that might otherwise be too undefined for investigators to pursue. These funds will finance a broad range of activities in order to enable researchers to engage in unorthodox inquiry. They can be used to convene consultations with peers, generate preliminary data or modeling techniques, organize workshops, or facilitate other activities that germinate new discovery-driven science. The University will support a substantial number of these grants on a quarterly basis in order to generate and encourage many potential research projects. The Faculty Advisory Council will conduct a blind review of proposals and make granting decisions.

**Vision Funds** (\$100,000-\$200,000) will be focused on supporting activities for research projects that are past the exploratory stage. These awards will be given to larger initiatives with a well-articulated research plan, scientific potential, and the capacity to grow into externally-funded, collaborative basic science programs. The awards will be given semi-annually following a two-tiered blind review process: first through internal and external peer-reviewers, and then by the Faculty Advisory Council.

**Launch Funds** (\$500,000-\$1,000,000) will reflect the University's recognition that a given line of inquiry has significant potential to become an institutional priority and will be awarded on an occasional basis. When the Faculty Advisory Council believes that a research program merits this level of investment, it will make a recommendation for consideration by the President's Science Group (made up of the President, Provost, Executive Vice President, Vice President for Research and for National Laboratories, and science deans).

Gifts to support the Big Questions Fund could include both short-term expendable funds and endowed funds.

In addition to financial resources, the University will provide organizational expertise in launching new research initiatives. Investigators aided by the Big Questions Fund will receive support in developing and implementing a research plan, building collaborations, and assisting with organizational management and communication strategies to extend the impact of funded research. Finally, awardees will receive assistance in securing funding from diverse external sources. Close

collaboration between the Offices of the Vice President for Research and for National Laboratories and Alumni Relations and Development will ensure that seeded projects effectively engage individual donors, private foundations, corporations, and federal agencies.

### **Research Scope**

The focus of the Big Questions Fund reflects the value that the University of Chicago places on fundamental inquiry in its broadest and most ambitious sense. The Fund will encourage researchers to address the most compelling questions they would pursue if they had no constraints on time or resources, and access to the most talented colleagues. The Fund will seek to minimize these constraints and provide a platform for the systematic pursuit of investigator-driven basic research.

The Fund will support research spanning all academic divisions of the University community that pursue fundamental inquiry. Investigators from the University of Chicago as well as its associated laboratories, Argonne National Laboratory, Fermi National Accelerator Laboratory, and the Marine Biological Laboratory, will be eligible to participate. The fund will target a set of overarching research themes, including:

- Computation and Data Science
- Molecular Engineering
- Neuroscience
- Energy, Climate, and Environment
- Urban Science

Applicants will also be encouraged to put forward compelling proposals on any topic that has the potential to advance fundamental research. The expansive scope of the Fund will encourage scientists at every stage of their careers to explore nascent ideas that push beyond disciplinary boundaries. Funding will support the broadest spectrum of research, from single-investigator efforts that target critical scientific questions within a specific discipline, to larger interdisciplinary, inter- institutional collaborations that will address some of the most complex intellectual and societal challenges of our day.

### **Enabling Discovery-Driven Research**

The Big Questions Fund will create an effective model for enabling high potential fundamental research that would likely otherwise not come to fruition. By seeding high impact science that is not yet mature enough for external funding in the current landscape, the Fund will support researchers at all stages in their careers to mitigate funding hurdles and thereby accelerate the pace of discovery at the University of Chicago.

Since its founding, the University of Chicago has encouraged researchers to tackle the most challenges questions in science. Our continued commitment to this endeavor is evident in the Big Questions Fund, and we hope that the Fund will provide a productive mechanism to engage a new generation of donors in the promise of fundamental research.