

**The University of Pennsylvania**  
Discovery Research and Innovation Fund

The University of Pennsylvania is firmly committed to knowledge-driven basic research, because research in the pursuit of fundamental discovery often leads to serendipitous findings with tremendous societal and economic impact. The cellular and biomolecular discoveries of 20 years ago underlie recent advances in treatments for cancer and neurodegenerative disease. Discoveries in fundamental physics 30 years ago enable scientists today to “see” the tiniest atoms, as well as the scope of the universe. The development of ENIAC, the first computing machine, during World War II enabled the computer revolution that has transformed society. Across disciplines, collaborative research in fundamental processes is required to solve complex theoretical challenges about the natural world.

The Penn faculty is defining the frontiers of knowledge in fundamental sciences that will lead to future solutions for societal challenges. However, these advances are threatened by challenges that limit support for discovery science. Discovery science is severely challenged today because:

- Support of nascent ideas that are precursors to transformative advances are premature for research support from traditional sources
- The steady support over the time required to take a concept from an idea to a discovery is rare in an age of short-term grant mechanisms
- Support of ideas that occur at nontraditional intersections of disciplines fall through the cracks of traditional support structures, even though they are fertile soil for transformative discovery

In light of these realities, private support has become increasingly critical to the health of the national basic science enterprise. Therefore, Penn is establishing a Discovery Science Fund and seeking new private investment to support groundbreaking, discovery-based science.

The Discovery Research and Innovation Fund will support novel, early stage research that is unlikely to receive funding from traditional sources due to the challenges outlined above. Outstanding faculty researchers with ambitious visions for transformative research in biomedical and life sciences and physical sciences are eligible for support individually or in groups. To address the structural challenges in supporting fundamental science the Discovery Research and Innovation Fund will operate with several levels of support mechanisms.

With the Discovery Research and Innovation Fund, the University of Pennsylvania enables philanthropists to support the most promising research by a faculty of internationally recognized global leaders in their fields. The following components constitute the Fund.

***Discovery at the Beginning***

Seed grants for very early-stage, innovative research by individual scientists predominately but not exclusively for junior faculty members. Grants of \$25k for one year.

***Discovery at Frontiers***

Longer term support for visionary research with the potential to transform a field by individuals or teams of faculty members of any rank. Grants of \$50k–\$100k/year for five years.

***Discovery at Intersections***

Tiered support to establish new research directions at the intersections of multiple disciplines that could define the evolution of new fields of inquiry and unexpected societal benefits. \$10k for program planning; \$50k for multidisciplinary seed activity; \$100k/year for preliminary research.

***Technology Enabling Discovery***

Support for major facilities and instrumentation that enable discovery research. Grants of \$500k–\$10M, depending on the project.

**GOVERNANCE**

The Office of the Vice Provost for Research (OVPR) will administer the Discovery Research and Innovation Fund. The OVPR will advertise and solicit applications for awards. The Vice Provost for Research will be assisted in selecting award recipients by faculty peer review committees defined by disciplinary areas: biomedical and life sciences, physical science. Members of the peer review committees will be accomplished investigators in their respective fields, appointed by the Vice Provost for Research.