

# YALE UNIVERSITY THE SCIENCE FRONTIERS FUND

## **Fostering Innovative Thinking and Research**

Discovery-driven research, which satisfies our human curiosity about the world, is motivated by the potential to advance fundamental knowledge rather than by specific applications or needs, and yet lays the foundation for potential future transformative applications that may affect all of our lives.

Yale's world-class faculty has garnered recognition for discovery-driven research contributions in areas as diverse as physics, chemistry, biochemistry, cell biology, and ecology, and has included a total of 25 Nobel Prize winners over the years. Breakthroughs take place across Yale University, which offers a tremendous breadth of research labs, including those in the Faculty of Arts and Sciences, the School of Medicine, and the West Campus Institutes.

Yale's tripartite mission to create, preserve, and disseminate knowledge empowers its basic research enterprise. However, to achieve and maintain the highest levels of excellence and innovation, private support has become ever more important, particularly in view of declining federal and state funding.

Yale is therefore introducing and seeking new private investment opportunities by establishing a **Science Frontiers Fund at Yale**, which will ensure that the University's basic research initiatives have the support needed to make ground-breaking discovery-driven contributions to the biological, physical, and engineering sciences.

## **Investments in Discovery**

Yale leadership will oversee the **Science Frontiers Fund at Yale**. They will ensure that donor intentions are fulfilled, and that the funds are directed to initiatives that have the greatest possible impact on basic science.

The University will work with donors to determine how their philanthropic objectives can best be aligned with Yale's scientific priorities and needs. The **Science Frontiers Fund at Yale** will provide dedicated and strategic resources that enable the pipeline of scientific knowledge to continue to flourish.

Donations toward the **Science Frontiers Fund at Yale** may be established as endowed or as currently expendable funding and will be subject to standard University policy and procedures for accepting financial contributions and reporting on their use. Support for the Fund may be given toward discretionary funding or directed toward one or more of the following:

### ***Research Awards***

Under the **Science Frontiers Fund at Yale**, the University will establish the Yale Science Frontiers Awards program, which grants awards for discovery-based science. The program's top priorities will be to support highly innovative, high-impact basic

research in a broad range of fields, with potential to advance our state of knowledge significantly. Faculty applications to this program will be reviewed by a committee of peer investigators who will choose the award recipients. Awards may fund single investigators, collaborative projects, or interdisciplinary initiatives.

**Current Use** (minimum): \$250,000

**Endowment** (minimum): \$2,000,000

### ***Early Investigator Awards***

Funding from the **Science Frontiers Fund at Yale** may be directed to recruit and establish the brightest young investigators and world-renowned academics at a crucial time in their career. Such early support may be used by the faculty toward research personnel or equipment. Scientific progress made possible by such startup funds will help to leverage additional sources of private and public funding. Therefore, this form of support may reap benefits of even greater impact for the future career of a faculty member.

**Current Use** (minimum): \$100,000

**Endowment** (minimum): \$2,000,000

### ***Fellowship support for graduate and postdoctoral researchers***

Fellowship support enables Yale to expand its pool of young researchers in the basic sciences. Not only do these researchers make high-impact research breakthroughs possible, they will become the scientists and leaders of tomorrow. Increasing such training opportunities thus instills in young minds the thrill and importance of basic scientific research.

**Current Use** (minimum): \$100,000

**Endowment** (minimum): \$1,000,000

### ***Access to state-of-the-art research technology***

Funding from the **Science Frontiers Fund at Yale** may support state-of-the-art technology and instrumentation in core facilities administered by Ph.D.-level scientists. In recent years, scientific breakthroughs have become increasingly dependent upon expensive, state-of-the-art instrumentation managed by highly trained personnel. Such resources, available at only a few select universities in the world, are beyond what can be afforded by individual investigators. For this reason, Yale operates centralized core facilities that enable ready access to key technologies such as rapid genome sequencing, high-performance computing, clean-room and nano-fabrication facilities, and super-resolution bio-imaging. Yale is widely known for its core facilities, which have paved the way for countless advances. The rapid development of new technologies requires continual investment in equipment and personnel in order to remain at the forefront. For established and new investigators alike, access to cutting-edge facilities also makes them more competitive for extramural funding.

**Current Use** (minimum): \$250,000

**Endowment** (minimum): \$2,000,000

## **Stewardship**

*Following Yale's standard practices, donors to the Science Frontiers Fund will receive appropriate recognition and stewardship reports at regular intervals.*

Please contact Deputy Provost for Science & Technology Steven Girvin ([steven.girvin@yale.edu](mailto:steven.girvin@yale.edu)) for more information.