

## 2016 Survey of Private Funding for Basic Research

### Summary Report

The Science Philanthropy Alliance recently completed its 2016 Survey of Private Funding for Basic Research.

The annual survey, now in its second year, was created with the goal of establishing a benchmark in private giving to the basic sciences at major research institutions.

**The survey indicated that more than \$2.3 billion of private funding was received by 42 institutions for basic science research.**

With declining federal funding for basic science, it is important to track funding from private sources. As support of basic research in industry declines, and government funding becomes more constrained and tilts toward shorter term goals, philanthropic support of basic science at universities is more important than ever. Total private support of basic science research is small compared to the roughly [\\$38 billion per year the federal government gives to higher education institutions for research and development](#), however philanthropic support is indispensable because it is generally spent on higher-risk early stage research projects that the federal government does not fund.

Support for basic science research is also a fraction of the total funding that colleges, universities, and research institutions receive from private sources. The [Voluntary Support of Education \(VSE\) survey](#) conducted by the Council for Aid to Education, indicates that colleges and universities raised \$41 billion in 2016.

#### **Methodology**

The 2016 survey, conducted by the Council for Aid to Education on behalf of the Alliance, was sent to all 62 Association of American Universities (AAU) members and 18 independent research institutes. In total, 42 institutions completed the survey, including 34 universities (33 AAU members and 1 graduate-only university) and 8 research institutes. In comparison, 27 universities completed the 2015 survey. 2016 was the first year in which a selected group of research institutes were invited to participate. The completion rate was encouraging, with a

56% increase overall in the number of participants and a 27% increase in the number of AAU participants.

The sources of funds tracked were: individuals, foundations, corporations, and “other sources” such as civic organizations and charities.

Survey participants were asked about funding to the life sciences, physical sciences, and mathematics. They were also asked about basic research in the humanities and arts, and behavioral and social sciences, but those results are not the focus of this summary. Survey participants were instructed to include fields such as “engineering, business, and agriculture, as well as certain interdisciplinary fields of study” in a category labelled “other.”

The survey was designed to collect data on basic research—not applied, clinical, or translational research. While reporting institutions provide this data to the best of their ability, a number had difficulty isolating and reporting this type of data. Still, many made a great effort to provide the requested information.

Several factors will lead to an underestimation of the actual level of science philanthropy. The Alliance encourages discovery-driven as well as use-inspired research, as long as it involves the search for fundamental knowledge. Each institution works within its own definition, but the assumption is that they are similar. In addition, the sample represents a self-selected group and not a random nor necessarily a representative group of universities. Of those institutions that were invited to participate in the survey, few had the information requested readily available, but some worked hard to collect it and others have committed to do so in the future. A handful of the largest research universities were not able to participate in the survey this year, though some are making progress in tracking funds for basic science and may participate in future surveys. Other important private funding sources may be missed, such as the Howard Hughes Medical Institute, which provides about \$670 million per year to support basic research, but not typically in the form of grants to universities.

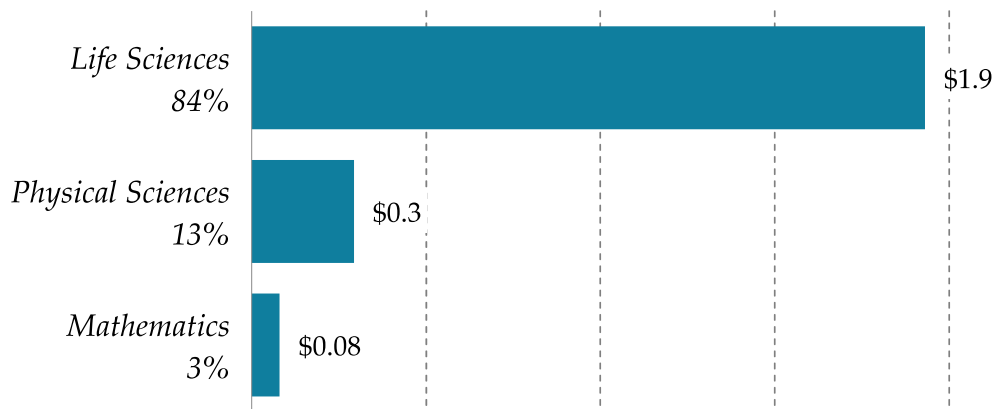
On the other hand, the survey asked for information about grants from foundations and industry, some of which may not be philanthropic, and this may lead to overestimates. Nonetheless, some of the broader trends are unlikely to change, even with additional data.

## Survey Results

**The 42 institutions that completed the survey received \$2.3 billion for basic science research from private sources.**

Life sciences again received the greatest amount of private funding for basic science research: \$1.9 billion. Private basic research funding for the physical sciences ranked second at \$292 million. Mathematics again ranked last in funding among all the academic fields surveyed, with \$80 million.

## 2016 Science Philanthropy Alliance Survey: At least \$2.3B in Private Funds to Basic Science



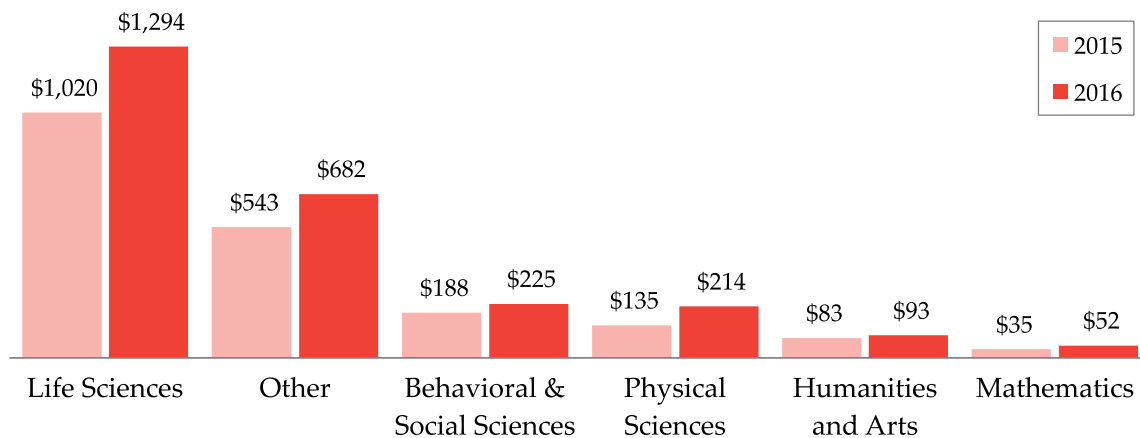
*Note: Sources of funding measured by the survey include foundations, individuals, corporations, and other (donor-advised funds and other charities).*

Of the \$2.3 billion generated for basic science research, three institutions (two universities and one research institute) received \$613 million—27% of the total amount.

## **2015 vs. 2016 Results**

We also compared data from the 26 institutions that completed both the 2015 and 2016 surveys. Overall private funding basic research in all the fields (mathematics, humanities and arts, physical sciences, behavioral and social sciences, life sciences, and “other”) increased by 28%, from \$2 billion to \$2.56 billion. Private funding for basic research in mathematics, physical sciences, and life sciences increased 31% from \$1.19 billion to \$1.56 billion.

Private funding for basic research at universities that completed Science Philanthropy Alliance's surveys in both 2015 and 2016, in millions



*Note: Sources of funding measured by the survey include foundations, individuals, corporations, and “other” (donor-advised funds and other charities)*

## **Future Considerations**

As with last year's survey, it is important to remember that participants had many questions during the process and had to make judgment calls regarding which gifts/grants to include in various academic categories while also doing their best to interpret the survey guidelines on what constitutes basic research. Another important issue raised is the difficulty institutions have in reporting this type of data with their current systems and reporting tools. The results should be considered with these caveats in mind.

The goal in setting up the survey two years ago was to determine a baseline for private funding for basic research in the sciences. Based on the data received, the 42 reporting institutions raised an estimated \$2.3 billion in private funding for basic science research. This year's survey was also beneficial in that research institutes were involved for the first time and provided valuable insights regarding the private funding they receive.

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February 10, 2017