

Biomedical Research

as a Means to Strengthen the Nation's Health and Our National Economy

The increased longevity and improved quality of life enjoyed by society over the past century can be attributed to innovations resulting from biomedical research. Beyond health improvements, the biomedical research enterprise is a key component for economic growth and job creation in the 21st century.

Biomedical Research Saves Lives

- The death rates for heart disease and stroke have dropped more than 60 percent since 1940.
- Through a better understanding of the underlying molecular causes of cancer, U.S. cancer death rates are decreasing by 1 percent each year. With each 1 percent decline in cancer deaths, the U.S. saves \$500 billion in medical costs.¹
- NIH-funded researchers recently discovered a super-antibody that protects against several subtypes of influenza. This may reduce the need for annual vaccinations and be the key to protecting millions from flu outbreaks.¹

The Role of Federal Investment in Biomedical Research

- Federal funding for research helps support private, university and federal laboratory research.
- Federal funds provide for more than 60 percent of R&D work performed by colleges and universities.
- The federal government invested about \$45 billion, or 1.2 percent of GDP, in biomedical research in 2011.²

Examples of Biomedical Research's Role in the Economy

- By leveraging investment in federal laboratories, universities and industry R&D, our nation is able to produce high-value, technologically advanced products that the rest of the world highly values.
- The American pharmaceutical industry directly employs 674,000 people, supports more than 4 million jobs and contributes \$917 billion to U.S. GDP annually.³

Innovation as an Economic Stimulation

- Investment in research will modernize our nation's research laboratories and facilities, spur innovation, and provide an immediate boost in employment for our nation's workforce.
- As an example, the federal government invested roughly \$4 billion in the Human Genome Project. The benefits of this project have generated nearly \$800 billion in economic activity in the 10 years since the project officially ended.⁴

¹ <http://www.nih.gov/about/impact/index.htm>

² Research!America. 2011 U.S. Investment in Health Research. 2012.

³ Battelle Technology Partnership Practice. The U.S. Biopharmaceuticals Sector: Economic Contribution to the Nation. 2011.

⁴ Battelle Technology Partnership Practice. Economic Impact of the Human Genome Project. 2011.