



FY 2011 Funding for the NATIONAL INSTITUTES OF HEALTH April 2010

Position: The Council for Chemical Research (CCR) supports an increase in the budget of the National Institutes of Health (NIH) for FY 2011 of 3.5 % over the FY10 appropriation; the proposed 3.2% increase would barely maintain existing programs, since the estimated inflation rate in the biomedical field is 3.5%. We specifically support additional funding for the National Institute of General Medical Sciences (NIGMS) and the National Institute of Biomedical Imaging and Bioengineering (NIBIB). These institutes fund research that lead to innovations that underlie both biomedical research and clinical applications.

Who We Are: CCR is a non-profit organization dedicated to advancing multi-sector, multi-disciplinary research in the chemical sciences and engineering. Its member organizations – companies, universities and government laboratories – are represented in CCR by their research leaders.

We strongly urge the important components of funding for physical sciences research be maintained. Our studies (<http://www.ccrhq.org/publications>) and those of others demonstrate that Federal investments in chemical science research yield significant payback for the US economy. **Every dollar of Federal investment is leveraged by \$5 of private investment; this investment generates ten dollars of operating income for industry (a 17% annual after tax return), the economy gains roughly \$40 in GDP, \$8 in increased tax revenues, and creates 600,000 new jobs over the ensuing 20 year period.**

Rationale

The NIGMS provides enabling research and training for the biomedical community that underpins advances and discoveries of all of the other NIH institutes. This Institute is responsible for generating the basic knowledge and new technologies that are at the foundation of all discoveries in the biomedical field. The mission of the NIBIB, the newest of the research Institutes at NIH, is to improve health by supporting and conducting interdisciplinary research and training in biomedical imaging and bioengineering.

Funding for basic research in chemistry, particularly by NIGMS and NIBIB:

- **Provides innovations that will reduce America's healthcare costs.** NIBIB supports research in health care IT and early diagnostics and treatment that will transform medical paradigms and result in more successful treatments and major health care cost reductions. NIGMS supports research that discovers new drugs that can control disease and prevent more expensive treatments. These advances are essential to controlling exploding health care costs.
- **Serves as a basis for biomedical advances.** Funding has led to combinatorial chemistry methods and rational drug design, which allow for the more efficient development of pharmaceuticals having greater potency, higher selectivity, and fewer side effects.
- **Provides well-trained, talented, and dedicated researchers.** Training programs at NIGMS develop the multi-disciplinary skills demanded by modern biomedical and pharmaceutical research. Well-trained researchers not only increase productivity for the rapidly expanding biotechnology, pharmaceutical, and diagnostic industries, but also help maintain the world leadership of these industries in extremely competitive markets.
- **Leads to discoveries that protect against biological and biomedical threats,** both natural and those created by terrorists.
- **Provides access to modern instrumentation,** ranging from computers to high-field nuclear magnetic resonance spectrometers, laser systems, and mass spectrometers. These instruments enable researchers to observe fundamental chemical and biomedical processes involved in life and to gain much-needed insight into the chemistry of living organisms.
- **Provides the underpinnings for research in clinical areas** that will have a long-term effect on resisting both bioterrorism and natural outbreaks of disease.