

## **Program Description: Biomedical Engineering**

This program primarily supports fundamental, transformative, and discovery research applied to biological systems. The research projects should:

- Develop novel ideas integrating engineering and life science principles in solving biomedical problems that serve humanity;
- Focus on high impact transforming methods and technologies and include models and tools for understanding and control of biological systems; fundamental improvements in deriving information from cells, tissues, organs, and organ systems; new approaches to the design of structures and materials for eventual medical use; new methods of understanding and controlling living systems, and new novel methods of reducing health care costs through new technologies;
- Emphasize the advancement of fundamental engineering knowledge, possibly leading to the development of new methods and technologies;
- Emphasize novel application of existing technologies to advance fundamental knowledge of both engineering and life sciences;
- Encourage initial evaluation of discovery-level research in a clinical setting but not supporting clinical trials;
- Highlight multi-disciplinary nature, integrating engineering and the life sciences; and
- Balance theory, mathematical modeling, and experiment.

The long-term impact of the projects can be related to disease diagnosis and/or treatment, improved health care delivery, or product development.

## ANSWERS TO FREQUENTLY ASKED QUESTIONS:

- The duration of the unsolicited Biomedical Engineering (BME) awards is three years. The awards are \$80,000-\$100,000 per year including indirect costs. Please check the NSF Chemical, Bioengineering, Environmental, and Transport Systems Division (CBET) web pages for the proposal submission window for the unsolicited BME program.
- The duration of BME CAREER awards is five years. The awards are \$80,000 per year including indirect costs. The submission deadline for Engineering CAREER proposals is in July every year.
- Please refer to the Grant Proposal Guide (NSF 04-23) <u>http://www.nsf.gov/publications/pub\_summ.jsp?ods\_key=gpg</u> when you prepare your proposal. Chapter II (Proposal Preparation Instructions, Pages 17-38), especially, will assist you.

- The projects submitted to BME Program should advance both engineering and biomedical sciences.
- The funding requests for conference and workshop support can be submitted anytime after talking with the Program Director.
- The supplement requests for active awards can be submitted anytime after talking with the Program Director.
- After you submit the proposal, it takes us about 180 days to process your proposal (i.e. proposal reviews, panels, releasing reviews, funding decisions).
- Any proposal received outside the announced dates will be returned without review. Please see <a href="http://www.nsf.gov/funding/pgm\_summ.jsp?pims\_id=501023&org=CBET">http://www.nsf.gov/funding/pgm\_summ.jsp?pims\_id=501023&org=CBET</a>.