Attention Tissue Engineering Researchers

NSF/CASIS Collaboration on Tissue Engineering Research on the International Space Station to Benefit Life on Earth

The National Science Foundation (CBET - Chemical, Bioengineering, Environmental and Transport Systems Division of the Engineering Directorate) and the Center for the Advancement of Science in Space (CASIS) are pleased to announce a new collaborative initiative. This program will support transformative tissue engineering research that can take advantage of experiments conducted on the International Space Station (ISS) in order to benefit life on earth.

The primary program interest is in tissue engineering. However, any research that would fit within the scope of the Engineering of Biomedical Systems Program but that requires access to experimental facilities on the International Space Station may be considered. This includes cellular engineering, tissue engineering, and modeling of physiological or pathophysiological systems in areas that include, but are not limited to:

- Scaffolds and matrices
- Cell-cell and cell-matrix interactions
- Stem cell engineering and reprogramming
- Cellular immunotherapies
- Cellular biomanufacturing
- System integration between biological components and electromechanical assemblies

Before submission of the proposal to the NSF, a Feasibility Review must be conducted by CASIS. Details of this requirement are provided within the solicitation.

Prospective investigators are encouraged to contact the EBMS Program Director, Michele Grimm (mgrimm@nsf.gov), to discuss the intended scope of the research project. Projects that do not fit biomedical engineering scope of the program will be returned without review. Researchers may submit only one proposal to this solicitation as a PI or co-PI per year. Projects will not be accepted that substantially duplicate those that have been submitted for review through a standard NSF program.

Submission window: January 30 – February 12, 2018

Award amount: Maximum of $300k

Award duration: Up to 3 years

Full information on the program is available through the NSF Solicitation 18-514, available at www.nsf.gov.