

Innovative Proposals for Nanotechnology Studies, Other Priority Research Sought by NIOSH in Grant Notice

The National Institute for Occupational Safety and Health (NIOSH) invites applications from small businesses to conduct innovative research in three high-priority areas, including studies relating to the occupational health and safety aspects of nanotechnology. Applications for competitive funding through the U.S. Department of Health and Human Services' Small Business Innovative Research (SBIR) program are due by April 5, August 5, and December 5 each year.

The SBIR program is intended to meet the following goals: stimulate technological innovation in the private sector; strengthen the role of small business in meeting Federal research or research and development needs; increase the commercial application of Federally-supported research results; foster and encourage participation by socially and economically disadvantaged small business concerns and women-owned business concerns in the SBIR program; and improve the return on investment from Federally-funded research for economic and social benefits to the Nation.

Extramural funding of nanotechnology-related research has been undertaken to help increase the knowledge of nanotechnology and manufactured nanomaterials as they relate to occupational safety and health. "As the global market for nanotechnology grows, diverse partners recognize that robust scientific studies are critically important for understanding the occupational safety and health implications of nanomaterials," said NIOSH Director John Howard, M.D. "This research is vital for supporting U.S. competitiveness and at the same time, ensuring that these revolutionary new materials do not pose unforeseen health risks. We are pleased to offer this opportunity to stimulate such research by small entrepreneurs."

The proposed areas for NIOSH research include:

- **Control Technology and Personal Protective Equipment for High Risk Occupations: Research is needed to develop and evaluate control strategies and personal protective equipment for specific hazards and to assure their**

practicality and usability in workplaces in all industrial sectors with high risk for potentially hazardous exposures. One of the goals of this research area is to evaluate the effectiveness of personal protective equipment in reducing occupational exposures to engineered nanomaterials.

- Exposure Assessment Methods for High Risk Occupations: Exposure assessment provides strategies and methods to anticipate, recognize, evaluate, control, and confirm effective management of occupational health stressors, exposures to those stressors, and resulting health risks. One of the goals of this research area is the need to support effective assessment of worker exposure to engineered nanomaterials.
- Occupational Traumatic Injuries from Motor Vehicle Crashes and Incidents: Motor vehicle-related incidents are consistently the leading cause of work-related fatalities in the United States. Priorities include developing new design concepts and standards, enhancing effective interventions for driver education, evaluating intervention strategies for their effectiveness in reducing the number or severity work-related motor vehicle incidents and crashes, and enhancing engineering controls for the prevention of crashes and incidents or reducing the severity of traumatic injury associated with such crashes and incidents.

A full description of the NIOSH areas of research specified in the proposal announcement can be found at [PHS 2012-2 SBIR/STTR Program Descriptions and Research Topics for NIH, CDC, FDA and ACF](http://grants.nih.gov/grants/guide/pa-files/PA-12-088.html) through the grant solicitation page:

<http://grants.nih.gov/grants/guide/pa-files/PA-12-088.html>. For more information about nanotechnology research at NIOSH see <http://www.cdc.gov/niosh/topics/nanotech/>

NIOSH is the federal agency that conducts research and makes recommendations for preventing work-related injuries and illnesses. Mention of any company or product does not constitute endorsement by NIOSH. More information about NIOSH can be found at www.cdc.gov/niosh.

