Exemplar Genetics Wins Fast-Track

Sioux Center, IA-based Exemplar Genetics (formerly Porcinogen) has been awarded a FastTrack SBIR grant from the National Institutes of Health (NIH). The NIH Fast-Track mechanism helps eliminate the gap in funding between Phase I and Phase II since both grant applications are submitted and reviewed together. The decision to award Phase II funding is thus expedited for especially meritorious proposals.

Exemplar Genetics will use the funding to support development of a humanized pig model of cystic fibrosis (CF). CF is a hereditary disease that affects the lungs, liver, pancreas and intestines, and is caused by mutations in the cystic fibrosis transmembrane conductance regulator (CFTR) gene. Despite improvements in the lives of patients with CF, it remains one of the most common life-shortening diseases, and current treatments are directed at secondary manifestations rather than the underlying defect. The lack of an animal model that develops the lung disease seen in patients with CF is a major impediment to understanding disease pathogenesis and developing effective therapies. Also, mutant CFTR proteins from other species may differ in significant ways from the human version. Thus, an animal expressing the human mutant CFTR may provide an opportunity to better understand CF and accelerate the discovery of new therapeutics for this fatal disease.

For more information about Exemplar Genetics, visit: http://www.exemplargenetics.com.

SBIR Program Temporarily Extended

The SBIR program was originally set to expire on September 30, 2008. However, recent legislative developments have temporarily extended the program.

The US Small Business Administration (SBA) has determined that P.L. 110-235, which was signed into law on May 25, 2008, temporarily extends all programs authorized under the Small Business Act and the Small Business Investment Act of 1958, including the SBIR program. According to official notice provided by the SBA’s Acting General Counsel, participating agencies’ SBIR program responsibilities will continue uninterrupted through March 20, 2009. Reauthorization of the SBIR program will still be necessary to keep it going after March 20.
NSF FY2009 STTR Solicitation

The National Science Foundation (NSF) recently received its FY2009 STTR solicitation. The solicitation topic area is Multi-Functional Materials, with subtopics in the areas of Bio-Inspired Materials and Systems, Materials for Sustainability, Nanostructured Materials, and Smart Materials and Structures. NSF anticipates making approximately 35 awards of up to $150,000 for projects up to 12 months in duration. While this solicitation is for STTR applications and thus requires the small business to partner with a non-profit research institution, NSF stipulates that the Principal Investigator be primarily employed with the small business concern at the time of award.

Note that letters of intent are required prior to submission of applications and are due by January 14, 2009. Proposers are strongly encouraged to communicate with the cognizant program manager for feedback before submitting a letter of intent. Proposals are due February 25, 2009 and must be submitted electronically using NSF's FastLane system or Grants.gov. Applicants must also be registered in the Central Contractor Registry (www.ccr.gov). Only STTR (not SBIR) applications will be accepted.

For more information on NSF's SBIR and STTR programs, or to download the solicitation and application instructions, visit: http://www.nsf.gov/eng/iip/sbir/.

DOE FY2009 SBIR/STTR Solicitation

The Department of Energy (DOE) has released its FY2009 SBIR/STTR Phase I solicitation. DOE anticipates making approximately 360 awards of up to $100,000 for projects up to nine months in duration under this announcement. Note that DOE permits grants applications with a substantial amount of research collaboration (30%) to be performed at a single research institution to be considered for funding under both the SBIR and STTR programs.

A wide variety of research topic areas is being offered under this announcement, including but not limited to biofuels, wind energy, catalysts, nanotechnology, solar energy, climate control technologies, and sensors and controls. Applications are due November 20, 2008 by 8:00 pm EST and must be submitted through Grants.gov. Additional information is available through the DOE SBIR/STTR website, including detailed descriptions of the technical topics offered and application instructions: http://sbir.er.doe.gov/sbir/.

Department of Education FY2009 Phase I Solicitation

The Department of Education’s (ED) National Institute on Disability and Rehabilitation Research recently released its FY2009 Phase I solicitation.

There is one broad priority area for this solicitation with five invitational priorities or topics; these five topics relate to innovations using new technologies that support research to develop methods, procedures, and rehabilitation technology that maximize the full inclusion and integration into society, employment, independent living, family and community support, and to promote economic and self-sufficiency of individuals with disabilities, especially individuals with the most significant disabilities; and improve the effectiveness of services authorized under the Rehabilitation Act of 1973, as amended.

ED anticipates that approximately 15 awards of up to $75,000 for projects up to six months in duration will be made under this announcement. Applications may be submitted electronically through Grants.gov or by surface mail and the application deadline is November 10, 2008. For more information, the solicitation can be viewed here.
The Fall National SBIR/STTR Conference will be held November 12-14, 2008 in Hartford, CT. The conference will provide an opportunity for SBIR newcomers and veterans alike to learn more about the participating Federal agencies’ programs, commercialization strategies, success stories, and more. The conference will also provide opportunities to meet one-on-one with program managers, potential strategic partners, and investors. Sessions will include presentations on open innovation, business development, supply chain management, and partnering with large national and international corporations. Small companies will also be able to showcase their technologies and products to large companies, investors, and manufacturers during a poster session. Exhibitors are anticipated to include large companies, conference sponsors, participating Federal SBIR/STTR agencies, and service providers. Optional preconference workshops on preparing proposals for submission to the DoD and NIH, as well as “Perfecting Your Pitch” will be held on November 11.

Anyone wanting to learn more about this annual $2 billion resource for small businesses is encouraged to attend.

For more information or to register, go to: http://www.ccat.us/sbir_conference_08.

Key Solicitation Dates

- The deadline for the DOT FY08.2 SBIR solicitation is October 3, 2008. Note new deadline.
- The application deadline for the NIH SBIR contract solicitation is November 3, 2008.
- The application deadline for the Department of Education FY2009 Phase I SBIR solicitation is November 10, 2008.
- The deadline to submit proposals for the DOE's FY2009 solicitation is November 20, 2008. Note updated deadline.
- The deadline for the NSF FY2009 SBIR Phase I solicitation is December 4, 2008.
- The deadline for non-AIDS-related topics for NIH SBIR/STTR grant applications is December 5, 2008.

For more information on these solicitations, visit: www.sbir.gov
Technology Spotlight

Structures with Negative Refractive Index for Applications in Optics and Nanophotonics (ISURF #3304)

No known materials exist in nature with a negative refractive index—natural materials reflect light or electromagnetic radiation. Materials with a negative refractive index (NIMs) have been demonstrated and are currently made through a combination of artificial “electric atoms”—metallic wires with negative electrical permittivity, and artificial “magnetic atoms”—split ring resonators with negative magnetic permeability. These NIMs are typically built from an array of split ring resonators combined with a grid of continuous metal wires. However, these materials are difficult to fabricate and characterize, especially at high (THz and optical) frequencies. To overcome this drawback, ISU researchers have recently developed left-handed materials, also referred to as metamaterials, and structures that have a negative refractive index. These NIMs are constructed using wire-pair structures that lie in parallel planes, making fabrication easier. In addition, the structures have a negative refractive index at microwave and optical frequencies and thus may enable new applications in optics, such as “perfect lenses”, and nanophotonics.

For more information on this and other technologies available for licensing, go to: www.techtransfer.iastate.edu.