Department of Education Solicitations

The Institute of Education Sciences (IES) of the Department of Education (ED) has announced that it will be releasing FY2013 SBIR solicitations through two tracks. The first track will be an IES Phase I and Fast-Track option for the Research and Development of Education Technology Products. Under this track, IES will provide Phase I awards of up to $150,000 for projects of up to six months in duration for the research and development of a prototype of an education technology product, and for research on its usability and initial feasibility. Phase I awardees will be eligible to apply for Phase II for awards up to $900,000 in FY 2014. Under the Fast-Track option, which combines the Phase I and Phase II proposals in a single application, IES will award Phase I ($150,000 over six months) and Phase II ($900,000 over two years) simultaneously. IES’s priorities include the development and evaluation of education technology products which improve student learning and relevant outcomes in general and special education settings, and products which improve how teacher’s teach or more efficiently work. The second track is an IES and Defense Advanced Research Projects Agency (DARPA) joint Phase I SBIR solicitation for the research and development of education technology games. The topic areas for this track 2 solicitation will include: Games for statistics and probability learning (IES topic); Games to support English learners (IES topic); Neuroplastic games for improving foreign language learning (DARPA topic); Hybrid video-games / graphic novels to support computer science learning (DARPA topic). For more information, see: http://www2.ed.gov/programs/sbir/index.html.

Coming Soon: SBIR.gov Registration

A part of the reauthorization of the SBIR/STTR programs at the end of 2011, there are a number of key policy changes that are or soon will be in effect. One of these changes will be a requirement for companies to register on SBIR.gov (in addition to the System for Award Management, Grants.gov, and other registrations). All applicants will be required to register with the Company Registry Database at www.sbir.gov at the time of application. This will become effective when the size regulation final rule is published in the Federal Register (anticipated date is 1/1/2013). For more information on other programmatic changes, see: http://www.sba.gov/aboutsba/info/174308 and the article on commercialization standards on page 2.
New Commercialization Standards Coming

One of the new requirements for companies seeking SBIR/STTR funding will be to meet commercialization standards, including their Phase I to Phase II Transition Rate: Beginning January 1, 2013, Phase I applicants that have won prior SBIR/STTR Phase I awards, must meet agency-specific standards for progress towards Phase II. Proposed benchmark rates were published in the Federal Register for comment on 10/1/2012. Coming in late 2013, companies will have to meet agency-specified Phase II to Phase III Commercialization Rates: Effective October 1, 2013, Phase I applicants that have previously won SBIR/STTR Phase II awards, will be required to meet agency-specific standard rates of commercialization success from those Phase II awards. Proposed benchmarks will be published in the Federal Register for comment on 7/1/2013. Beginning in late 2014, companies will be required to provide a commercialization record. Once the necessary data systems are in place, all applicants will be required, as part of the application process, to provide information on the commercialization of their prior SBIR/STTR awards. The anticipated date for this to be operational is October 1, 2014. See the article on page 1 for more information about new registration requirements.

For more information on other key programmatic changes in place or impending, see: http://www.sba.gov/about-sba-info/174308.

DOT FY13.1 Solicitation to Open

The Department of Transportation (DOT) has indicated that it plans to release its FY13.1 Phase I SBIR solicitation on December 10, 2012.
Research topics will come from the DOT’s operating administrations, and may include the Federal Aviation Administration, Federal Highway Administration, Federal Railroad Administration, Federal Transit Administration, National Highway Traffic Safety Administration, and the Pipeline and Hazardous Materials Safety Administration are being offered. Note that the DOT has several specific forms that must be completed as part of the proposal preparation process. Phase I contracts of up to $150,000 for projects up to six months in duration may be requested. The application deadline will be March 4, 2013 and applications must be submitted electronically using the DOT’s submission form. For more information, or to download the solicitation, visit: http://www.volpe.dot.gov/sbir/.

NSF to Host Webinar on STTR Release 2 Solicitation

The National Science Foundation (NSF) will be hosting a webinar on its Phase I, Release 2 STTR solicitation on Thursday, December 13, 2012 from 1:30-3:00 pm ET. This STTR release 2 solicitation has a single research topic, Accelerating Sustainability using Enabling Technologies (ASET); subtopics include Sustainable Energy; Sustainable Chemistry; Education for Sustainability; Predictive Information Systems; Sustainable Materials and Manufacturing; Sustainable Biotechnology Applications. The webinar will be an excellent way to learn more about the NSF STTR program, as well about this specific topic area. The webinar is free, and advanced registration is not required. For information on how to join the webinar, see: http://www.nsf.gov/eng/iip/sbir/sttr_2013_webinar_rel2.jsp Note that a letter of intent is required for this STTR solicitation, and must be submitted by January 8, 2013. Full applications are due February 6, 2013.
Key Solicitation Dates

- The deadline for NIH’s 2013 Phase I SBIR contract solicitation has been extended to December 3, 2012.
- The deadline for NSF’s FY2013 Phase I SBIR solicitation is December 3, 2012.
- The deadline for non AIDS-related topics for NIH SBIR/STTR grant applications is December 5, 2012.
- The due date for letters of intent for NSF’s FY2013 Phase 2 STTR Release 1 solicitation is January 8, 2013. The application deadline is February 6, 2013.
- The deadline for DoD’s 2013.1 SBIR solicitation is January 16, 2013.
- The deadline for NOAA’s FY2013 Phase I SBIR solicitation is January 30, 2013.
- The deadline for NIST’s FY2013 Phase I SBIR solicitation is January 30, 2013.
- The deadline for DOE’s FY2013 Release 2 solicitation is February 5, 2013.
- The deadline for DOT’s FY13.1 Phase I SBIR solicitation is March 4, 2013.

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

The National Institute of Environmental Health Sciences (NIEHS) of the National Institutes of Health (NIH) recently released a Funding Opportunity Announcement (FOA), Novel Assays for Screening the Effects of Chemical Toxicants on Cell Differentiation. Under RFA-ES-13-003, NIEHS is seeking Phase I SBIR applications for the development of medium- to high-throughput assays to evaluate the effects of toxicants on pluripotent or induced pluripotent cells with respect to cell differentiation and the resulting differentiated cell populations.

Budgets of up to $225,000 per year for Phase I may be requested, and applicants must be registered in the System for Award Management, Grants.gov, and the eRA Commons.

Note that Letter of Intent are for the FOA are optional and are due January 14, 2013. This FOA also has a non-standard application deadline of February 14, 2013.

Tibbetts Awards Nominations

Nominations for the 2013 Tibbetts Awards will open on December 15, 2012. Named for Roland Tibbetts, the father of the SBIR program, these prestigious awards recognize small business, individuals, and organizations that represent outstanding SBIR achievement. Nominations can be made by current and past SBIR awardees, elected officials, support organizations, service providers or others involved with SBIR funded projects.

Nomination packages must include a cover sheet, nomination statement, supporting documentation, photographs, Congressional and media contacts. The national award ceremony will be held in Washington DC.

Nomination packages are due January 31, 2013 in PDF format. For more information, visit http://www.sbir.gov/.
About OIPTT:

**OIPTT** was formed in 1990 to provide support services to the university community in matters related to intellectual property, to be the first contact related to new innovations, and to market the innovations and negotiate the agreements for transfer of the technology for the Iowa State University Research Foundation’s signature. OIPTT reports to the office of the Vice President for Research and Economic Development.

**OIPTT’s mission is to** serve the university as the primary resource for intellectual property and related matters and facilitate the disclosure and utilization of university innovations for the benefit of society, the university and its faculty and staff, and contribute to economic development in Iowa when possible.

Iowa State University does not discriminate on the basis of race, color, age, religion, national origin, sexual orientation, sex, marital status, disability, or status as a U.S. Vietnam Era Veteran. Inquiries can be directed to the Director of Equal Opportunity and Diversity, 3680 Beardshear Hall, (515) 294-7612.

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**Technology Spotlight**

**Standing Wave Axial Nanometry for Superresolution Microscopy (SWAN) (ISURF #4045)**

Despite its importance as a research tool for understanding cellular functions, the optical resolution of light microscopy has imposed limitations on observing and measuring cellular components and structures. The advent of superresolution microscopy techniques, which enable imaging of nanostructures and processes at X-Y resolutions of approximately 20 nm, opens new opportunities for exploring cell biology and has many other applications. However, current superresolution microscopy approaches may have limitations with respect to whether live or fixed cells can be imaged because of image acquisition and processing speed, and may also have limitations in terms of resolution along the Z axis. To overcome these drawbacks, ISU researchers have developed a new technique call SWAN (standing wave axial nanometry) for determining the axial location of nanoscale fluorescent objects with sub-nanometer accuracy and several nanometer precision. Unlike other approaches, SWAN does not require custom optics or specially engineered substrates, which makes it easy to use with biological samples and live cells. SWAN can be easily integrated with other super-resolution and super-accuracy techniques to image with nanometer resolution along the lateral and axial directions. As a consequence, this approach has broad utility for a variety of applications, such as life science research (e.g., biomolecular interactions, structure-function studies, cell imaging), drug discovery (e.g., direct observation of targeted drug delivery and drug interactions in vitro and in living cells and tissues), nanotechnology (e.g., characterization of nanoscale materials), material science (characterization of materials with novel optical properties), and optical MEMs devices by improving their efficiency through more accurate and precise imaging.

For more information on this and other technologies available for licensing, go to: [www.techtransfer.iastate.edu](http://www.techtransfer.iastate.edu).