

FEDERAL PROGRAMS

Federal Department or Agency	Programs	Description	Website
National Science Foundation	Engineering Research Center Program	<p>The goal of the Generation Three (Gen-3) Engineering Research Centers (ERC) Program is to create a culture in engineering research and education that integrates discovery with technological innovation to advance technology and produce graduates who will be creative U.S. innovators in a globally competitive economy. These ERCs are at the forefront as the U.S. competes in the 21st century global economy where R&D resources and engineering talent are internationally distributed. Recognizing that optimizing efficiency and product quality are no longer sufficient for U.S. industry to remain competitive, these ERCs integrate transformational academic engineering research and education to stimulate increased U.S. innovation in a global context.</p>	http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5502&org=EEC&from=home
National Science Foundation	I-Corps	<p>The I-Corps curriculum provides real-world, hands-on, immersive learning about what it takes to successfully transfer knowledge into products and processes that benefit society. It's not about how to write a research paper, business plan, or NSF proposal. The end result is not a publication or a deck of slides or even a scientific discovery.</p> <p>Instead the entire I-Corps Team will be engaged with industry; talking to customers, partners, and competitors; and encountering the chaos and uncertainty of creating successful innovations. Getting out of the laboratory/university is what the effort is about.</p>	http://www.nsf.gov/news/special_reports/i-corps/curriculum.jsp
National Science Foundation	Industry/University Cooperative Research Center Program (I/UCRC)	<p>The National Science Foundation's (NSF's) Industry/University Cooperative Research Centers (I/UCRC) Program is influencing positive change in the performance capacity of the U.S. industrial enterprise. Over the past three decades, the I/UCRCs have led the way to a new era of partnership between universities and industry, featuring high-quality, industrially relevant fundamental research, strong industrial support of and collaboration in research and education, and direct transfer of university developed ideas, research results, and technology to U.S. industry to improve its competitive posture in world markets. Through innovative education of talented graduate and undergraduate students, the I/UCRCs are providing the next generation of scientists and engineers with a broad, industrially oriented perspective on engineering research and practice.</p> <p>With industrial and other support totaling 10 to 15 times the NSF investment, I/UCRCs are a premier example of "leveraged" funding—a model for the Federal Government in how to develop cost effective synergy with the nation's research and development process. Indeed, this model has directly influenced several other Centers programs that were subsequently established by NSF and other Federal agencies. Placed in this context, the I/UCRC Program is a distinctive driver of the growing NSF industry-university partnership. Emphasis continues to be on the establishment of multi-university I/UCRCs. The benefits from the resulting collaborations and pooling of resources are numerous.</p>	http://www.nsf.gov/eng/iip/iucrc
National Science Foundation	Partnerships for Innovation:Accelerating Innovation Research-Research Alliance (PFI:AIR-RA)	<p>The NSF PFI: AIR Research Alliance (AIR:RA) program is intended to accelerate the translation and transfer of existing research discoveries into competitive technologies and commercial realities by leveraging the investments NSF has made in research alliances and catalyzing academic based innovation ecosystems. The goal is that these synergistic partnerships and collaborations between government, academia, and other public and private entities will result in new wealth and the building of strong local and regional economies.</p>	http://www.nsf.gov/eng/iip/pfi/air-ra.jsp
National Science Foundation	Partnerships for Innovation:Accelerating Innovation Research-Technology Transfer (PFI:AIR-TT)	<p>The overall objective of the PFI:AIR-TT program is to provide funding that will enable research discoveries to be translated onto a path toward commercial reality while engaging faculty and students in entrepreneurial and market-oriented thinking. The PFI: AIR-TT solicitation supports innovative ideas in the translation of NSF-funded fundamental science and engineering discoveries into market-valued solutions. It provides an opportunity for investigators to conduct the necessary research to develop a proof-of-concept, prototype, or scale-up of the prototype that addresses real-world constraints and provides a competitive value in a potential application space.</p>	http://www.nsf.gov/eng/iip/pfi/air-tt.jsp

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National Science Foundation	Partnerships for Innovation: Building Innovation Capacity (PFI:BIC)	<p>The NSF Partnership for Innovation: Building Innovation Capacity (BIC) program supports academia-industry partnerships to focus on post-discovery, academic-led research.</p> <ul style="list-style-type: none"> • Partnerships consisting of 1 academic institution and <i>at least</i> 1 industry partner • An interdisciplinary approach including at least the following 3 components: engineering; computer science; and social, behavioral, and/or cognitive science • Building technological innovation capacity with significant potential for economic and societal impact • Building human innovation capacity by activating academe-industry partnerships and developing the next generation of entrepreneurs (students and post-docs) • Current Topic: Key platform technologies that enable "smart" service systems <p>Grants up to \$800k for 3 years. There is a single funding competition each fiscal year.</p>	http://www.nsf.gov/eng/iip/pfi/bic.jsp
National Science Foundation	Science and Technology Centers	<p>The Science and Technology Centers (STC): Integrative Partnerships program supports innovative, potentially transformative, complex research and education projects that require large-scale, long-term awards. STCs conduct world-class research through partnerships among academic institutions, national laboratories, industrial organizations, and/or other public/private entities, and via international collaborations, as appropriate. They provide a means to undertake significant investigations at the interfaces of disciplines and/or fresh approaches within disciplines. STCs may involve any areas of science and engineering that NSF supports. STC investments support the NSF vision of advancing discovery, innovation and education beyond the frontiers of current knowledge, and empowering future generations in science and engineering.</p> <p>Centers provide a rich environment for encouraging future scientists, engineers, and educators to take risks in pursuing discoveries and new knowledge. STCs foster excellence in education by integrating education and research, and by creating bonds between learning and inquiry so that discovery and creativity fully support the learning process.</p>	http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5541
National Science Foundation	Small Business Innovative Research Program (SBIR)	<p>NSF SBIR/STTR programs incentivize and enable startups and small business to undertake R&D with high technical risk and high commercial reward. There must be significant market opportunity and transformational technology with significant societal or commercial impact. Grants are split into 2 phases:</p> <ul style="list-style-type: none"> • Phase I: \$150K, 6 months • Phase II: \$750K, 2 years <p>plus over \$500k in additional supplemental grants available.</p> <p>At each phase we vet the technology, commercial potential and company following NSF's rigorous Merit Review process.</p>	http://www.nsf.gov/eng/iip/sbir/index.jsp
National Science Foundation	Small Business Technology Transfer Program (STTR)	<p>NSF SBIR/STTR programs incentivize and enable startups and small business to undertake R&D with high technical risk and high commercial reward. There must be significant market opportunity and transformational technology with significant societal or commercial impact.</p> <p>STTR proposals require a researcher at a university (or other non-profit research institutions) to play a significant role in the project. For the current solicitation we seek proposals commercializing NSF-funded fundamental research. Grants are split into 2 phases:</p> <ul style="list-style-type: none"> • Phase I: \$225K, 12 months • Phase II: \$750K, 2 years <p>plus over \$500k in additional supplemental grants available.</p> <p>At each phase we vet the technology, commercial potential and company following NSF's rigorous Merit Review process.</p>	http://www.nsf.gov/eng/iip/sttr/index.jsp

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Department of Commerce	Economic Development Administration: i6 Challenge	<p>Launched in 2010, the i6 Challenge is a cutting edge federal grant program that supports truly innovative initiatives to spur innovation commercialization, entrepreneurship and jobs creation at the local level. Modeled after the MIT Deshpande Center for Technological Innovation and the von Liebig Center at the University of California at San Diego, this program has great promise to create robust centers of entrepreneurship among our nation's centers of innovation.</p> <p>The i6 Challenge is a multi-agency competition led by the U.S. Department of Commerce's Office of Innovation and Entrepreneurship to encourage and reward universities and research centers to create proof of concept centers that identify innovations to commercialize and help them to put together the building blocks to create high growth, successful companies, including business model support, access to investors, mentors and access to potential customers.</p>	http://www.eda.gov/challenges/i6/2012/factsheet.htm
Department of Defense	Defense Threat Reduction Agency (DTRA): Basic and Applied Science BAAs, Fundamental Research BAAs, SBIR, Technology Development BAAs, contracts.	<p>DTRA accomplishes its mission by investing in basic research efforts at universities, non-profit organizations, national labs and Department of Defense service labs, to enable future capabilities to better counter threats posed by weapons of mass destruction. DTRA also facilitates productive relationships with other scientific organizations and seeks to identify promising research efforts overseas. Through the Basic Research Program, DTRA recruits and trains scientists and engineers to develop a talented workforce for the future. Their technical experts foster basic research projects that could eventually transition to research results that support an ability to counter the threat of weapons of mass destruction. Using carefully balanced research portfolios, DTRA's technical leaders seek to create opportunities for revolutionary scientific breakthroughs that will enable the U.S. to better address future threats.</p>	http://www.dtra.mil/Research.aspx
Department of Defense	US Army Medical Research and Materiel Command (USAMRMC)	<p>A complex and diverse organization, USAMRMC protects and sustains the health and fighting ability of Soldiers, Sailors, Airmen, and Marines through its programs in medical research, medical materiel development, medical logistics and facility planning, medical information systems, and development of new technologies to improve military health care on the battlefield. The Command is engaged in a broad spectrum of activity, from basic research in the laboratory to innovative product acquisition and the fielding and lifecycle management of medical equipment and supplies for deploying units. Six laboratories make up the Command's core science and technology capability. These centers of excellence specialize in various areas of biomedical research, including infectious diseases, combat casualty care, operational medicine, and chemical and biological defense, and are staffed by highly qualified military and civilian scientists and support personnel. In addition, a large extramural contract research program and numerous cooperative research and development (R&D) agreements with leading organizations in the civilian sector complement the Command's in-house science and technology capabilities. To support its vision and mission, USAMRMC continually strives to advance the R&D of medical products and technologies to support our Armed Forces. It does this by forging collaborations with researchers, businesses, and other organizations through its unique extramural research funding programs.</p>	http://mrmc.amedd.army.mil/assets/docs/media/Doing_Business_with_MRMC_v11.pdf
Department of Defense	US Army Medical Research and Materiel Command (USAMRMC) Technology Transfer/Commercialization Programs	<p>The U.S. Army Medical Research and Materiel Command (USAMRMC) Office of Research and Technology Applications (ORTA) or Technology Transfer Office coordinates all intellectual property licensing on behalf of all USAMRMC's subordinate laboratories from the federal sector to nonfederal parties. The ORTA office at each subordinate laboratory coordinates Cooperative Research and Development Agreements (CRADAs), Material Transfer Agreements (MTAs), Interagency Agreements (IAAs), Nondisclosure agreements (NDAs), and other technology transfer transactions.</p>	http://technologytransfer.amedd.army.mil
Department of Energy (DOE)	Advanced Research Projects Agency-Energy (ARPA-E)	<p>The Advanced Research Projects Agency-Energy (ARPA-E) advances high-potential, high-impact energy technologies that are too early for private-sector investment. ARPA-E awardees are unique because they are developing entirely new ways to generate, store, and use energy.</p> <p>ARPA-E projects have the potential to radically improve U.S. economic prosperity, national security, and environmental well-being. We focus on transformational energy projects that can be meaningfully advanced with a small investment over</p>	http://arpa-e.energy.gov/?q=arpa-e-site-page/about

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<p>Department of Energy</p>	<p>Agreements for Commercializing Technology</p>	<p>a defined period of time. Our streamlined awards process enables us to act quickly and catalyze cutting-edge areas of energy research.</p> <p>DOE labs use Agreements for Commercializing Technology (ACT) when a partner seeks highly-specialized or technical services to complete a project. An ACT agreement also authorizes participating contractor-operated DOE laboratories, such as NREL, to partner with businesses using more flexible terms that are aligned with industry practice. The agreement type used depends on the business, and the specific partnership selected is determined on a case-by-case basis.</p> <p>Benefits The benefits of Agreements for Commercializing Technology include:</p> <p>Intellectual Property Rights. ACT provides a more flexible framework for negotiation of intellectual property rights to facilitate moving technology from the laboratory to the marketplace as quickly as possible.</p> <p>Payments and Indemnification. Issues ranging from payment arrangements to project structures to indemnification will also have more flexible terms.</p> <p>Multi-Party Research and Development Partnership. ACT will facilitate the development of multi-party research and development partnerships. Groups of companies, universities and other entities may collaborate with NREL to address complex technological challenges that are of mutual interest.</p>	<p>http://techtransfer.energy.gov/ACTpilotFAQ</p>
<p>Department of Energy</p>	<p>Energy Innovation Portal</p>	<p>The Energy Innovation Portal is a one-stop resource for Department of Energy (DOE) Energy Efficiency and Renewable Energy (EERE) technologies. This application enables users to locate technologies developed with DOE funding and available for licensing. These technologies can be viewed as marketing summaries, which provide business friendly descriptions of the technology, or the patent itself. When you find a technology you are interested in, simply fill out the contact form to get directly in touch with the licensing representative from each laboratory.</p>	<p>http://techportal.eere.energy.gov/about/</p>
<p>Department of Energy</p>	<p>America's Next Top Energy Innovator</p>	<p>The America's Next Top Energy Innovator Challenge, a part of the Startup America initiative, makes it easier for start-ups to use inventions and technology developed at the U.S. Department of Energy's 17 National Laboratories and the Y-12 National Security Complex.</p>	<p>http://energy.gov/science-innovation/innovation/americas-next-top-energy-innovator</p>
<p>Department of Health and Human Services</p>	<p>NIH Centers for Accelerated Innovations (NIH/NCAI)</p>	<p>The NIH Centers for Accelerated Innovations program was initiated in response to a recommendation by the Enhancing the Return on the NHLBI SBIR/STTR Investment Team (ERNSIT) to develop strategies to provide pre-SBIR funding opportunities. The NCAI will specifically address the gap in the commercialization pipeline between scientific discovery and company formation, supporting the long term goal of more rapidly and effectively moving breakthrough innovations to available products that will have health, economic, and societal impact.</p> <p>NCAI Working Group Meeting</p> <p>The NIH Centers for Accelerated Innovations will address the knowledge and funding gaps for the early steps needed to translate novel discoveries and technologies into new diagnostics, devices, therapeutics, and tools for patient care by providing:</p> <ul style="list-style-type: none"> •Pilot funding, based upon a review process for scientific merit and commercial potential •Resources and expertise, including •business plan development •market research •IP protection •Educational and networking activities and linkages to local ecosystem resources 	<p>http://www.nhlbi.nih.gov/about/dera/otac/caip/CAIP_background.html</p>

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		<p>To achieve these objectives, each Center will focus on:</p> <ul style="list-style-type: none"> •Investigators with research projects that have progressed to a point where a potential commercial product can be envisioned but additional development efforts are required to demonstrate feasibility or proof of concept and commercial potential •Integrating and leveraging project management, intellectual property, business and technology development, and new venture expertise •Building alliances and developing sustainable relationships with local ecosystem stakeholders and leaders •Providing educational and mentoring opportunities in entrepreneurship targeted at the needs of the innovator. 	
Department of Health and Human Services	NIH National Center for Advancing Translational Sciences (NIH/NCATS)	<p>The National Center for Advancing Translational Sciences (NCATS) is the newest of 27 Institutes and Centers (ICs) at the National Institutes of Health (NIH). This Center was established in December 2011 to transform the translational science process so that new treatments and cures for disease can be delivered to patients faster.</p> <p>Several thousand diseases affect humans, yet fewer than 500 have any treatment. Translational scientists aim to address that gap by taking basic discoveries about the causes of a disease and transforming this knowledge into a new treatment — such as a drug, device, diagnostic or behavioral intervention — that tangibly improves human health.</p>	http://www.ncats.nih.gov/about/about.html
Department of Health and Human Services	NIH National Heart, Lung, and Blood Institute (NIH/NHLBI)	<p>The NHLBI Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs are engines of innovation for developing and commercializing novel technologies and products to promote the prevention, diagnosis, and treatment of heart, lung, blood, and sleep diseases and disorders. The NHLBI provides grant and contract funding opportunities to support small businesses performing research and development on technologies related to the NHLBI mission.</p>	http://www.nhlbi.nih.gov/funding/sbir/index.htm
NASA	LAUNCH	<p>LAUNCH is a global initiative to identify and support the innovative work poised to contribute to a sustainable future and accelerate solutions to meet urgent challenges facing our society. NASA, USAID, Department of State, and NIKE joined together to form LAUNCH in early 2010 in an effort to identify, showcase and support innovative approaches to global challenges through a series of forums. LAUNCH searches for visionaries, whose world-class ideas, technologies or programs show great promise for making tangible impacts on society.</p> <p>LAUNCH's mission is to maximize human potential by transforming our existing human systems into new ones that are more sustainable, accessible, and empowering. The quest to maximize human potential will require the collaboration and commitments of government, corporations, investment, sustainability and global development organizations to accelerate innovation and convert ideas into action around the world. We call this "collective genius" which we harness "for a better world".</p>	http://www.launch.org/about#sthash.baLnc5e6.dpuf
NASA	Regional Partnerships	<p>NASA is committed to moving technologies and innovations into the mainstream of the U.S. economy. NASA actively seeks partnerships with U.S. companies that can license NASA innovations and create "spinoffs" in areas such as health and medicine, consumer goods, transportation, renewable energy, and manufacturing. When businesses leverage NASA technologies to develop new products, it not only benefits the regional economy, but significantly strengthens the nation's competitiveness in the global marketplace.</p>	http://www.nasa.gov/offices/oct/home/index.html
US Department of Agriculture	Agricultural Technology Innovation Partnership (ATIP)	<p>The USDA Agricultural Technology Innovation Partnership (ATIP) Program is comprised of 8 economic development "Partners", each serving as a portal anchored to an ARS Area, and a 9th Partner representing a national organization, the National Association of Seed and Venture Funds. ATIP "Associates" work in conjunction with a proximal Partner. Currently,</p>	https://www.ars.usda.gov/servlet/UserFiles/Place/01090000/USDA%20Technology%20

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		<p>there is one ATIP Associate. Partners and Associates become members of ATIP through a Partnership Intermediary Agreement (PIA) executed with the Office of Technology Transfer.</p>	<p>Transfer%20and%20the%20Agricultural%20Technology%20Innovation%20Partnership%20program.pdf</p>
<p>US Department of Agriculture</p>	<p>Small Business Innovation Research (SBIR)</p>	<p>The Small Business Innovation Research (SBIR) program at the U.S. Department of Agriculture (USDA) makes competitively awarded grants that are to qualified small businesses to support high quality, advanced concepts research related to important scientific problems and opportunities in agriculture that could lead to significant public benefit if successful.</p> <p>The objectives of the SBIR Program are to:</p> <ul style="list-style-type: none"> •stimulate technological innovations in the private sector; •strengthen the role of small businesses in meeting Federal research and development needs; •increase private sector commercialization of innovations derived from USDA-supported research and development efforts; and •foster and encourage participation by women-owned and socially and economically disadvantaged small business firms in technological innovations. 	<p>http://www.nifa.usda.gov/funding/sbir/sbir_synopsis.html</p>