

Big Bucks for Small Businesses

Few small companies possess enough capital to move a new technology from the drawing board to commercial development. Private investors rarely fund such projects because of the high risk involved.

The Small Business Innovation Research program was created to give qualified small high-technology companies much-needed


force in the technology area in which it competes for funding.

The SBIR competition consists of two phases. All companies start in Phase 1, which offers an opportunity to establish the feasibility and technical merit of the proposed innovation. Phase 1 awards go to the proposals that offer the best combination of

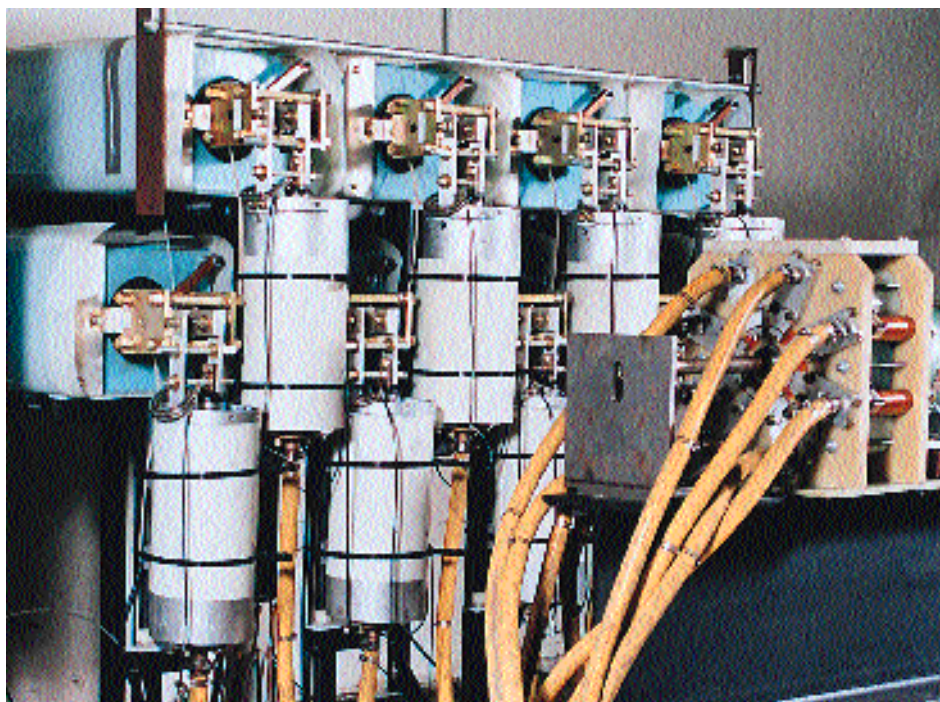
The SBIR program consists of 11 federal entities: the EPA, Health and Human Services, NASA, NSF, the Nuclear Regulatory Commission and the Departments of Agriculture, Commerce, Defense, Education, Energy and Transportation. Each agency determines the nature of its own SBIR program, the topics in which it is interested and the applications procedures.

The SBIR program run by the Department of Defense's Ballistic Missile Defense Organization has awarded more than \$300 million to small businesses since 1982. This program looks for lighter, faster, smarter and more reliable components for missile-related technology. Nevertheless, only products that promise a technological leap forward are considered.

The Ballistic Missile Defense Organization's program provides seemingly boundless opportunities for small businesses. In fact, this program funds research in 16 areas: directed energy concepts; kinetic energy weapons; sensors; unit cost reduction; nonnuclear space power and power conditioning; propulsion and logistics; thermal management; survivability; lethality; computer architecture, algorithms and language; optical computing and optical signal processing; structural concepts; structural materials; electronic materials; superconductive materials; and surprises and opportunities. The last area reflects the organization's belief that unexpected innovations will arise from creative minds.

For more information on the SBIR program call the Small Business Administration at 202 205-6450. For more information on the BMDO, see the organization's home page on the World Wide Web (<http://www.futron.com/bmdo/sbir.html>) or call its helpline (1-800-937-3150). 

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Dynamic magnetic compaction system at IAP Research, Inc., a multiple SBIR award winner located in Dayton, Ohio.

no-equity venture capital. Since it was established by Congress in 1982, the SBIR program has awarded more than \$4.3 billion to small businesses, some of which are becoming the new giants of high technology.

Small businesses compete for financial awards from the SBIR program. To be eligible, the business must consist of no more than 500 employees, be organized for profit, have its principal place of business in the United States, be independently owned and operated and be at least 51 percent owned by U.S. citizens or lawfully admitted permanent resident aliens. In addition, an eligible business must not be a dominant

a high degree of innovation and the potential for commercialization. In addition the qualifications of the proposed principal investigators and their supporting staff and consultants are also considered. Phase 1 contracts generally last about six months and are generally about \$60,000.

The most promising Phase 1 projects move on to Phase 2, which is the major R&D effort. A company can increase its odds of winning a Phase 2 award if it has lined up outside financial commitments for future development. Phase 2 contracts usually cover two years and only occasionally exceed \$1 million.