SBIR/STTR award winners exhibit many of the same attributes. Some of these attributes are actual program requirements, while others are characteristics or capabilities. There are always exceptions; some firms initially thought not to be good candidates have come through with strong capabilities and resolve, resulting in winning proposals.

QUALIFICATIONS AND ATTRIBUTES

U.S.-based, for-profit businesses Only for-profit, U.S.-based companies are eligible for awards. Proposals may be submitted by individuals or groups of individuals prior to actually creating the company, but awards are made only to established business entities. The program's competitiveness will favor established businesses, as they can focus more attention on the project and less on creating the business.

Small businesses only Applicants must meet the U.S. Small Business Administration's definition of "small business concern" (SBC). In determining SBC status, affiliates and subsidiaries must also be considered. If a company has a parent organization, or is itself the parent of one or more sub-companies, these additional entities must be considered in determining whether the candidate company qualifies as a small business.

Individuals/companies who routinely use technology or seek innovative ways of doing things Generally, companies that produce a product are better candidates because of the value that increased efficiencies and product innovations can add to their operations. There are many exceptions, such as: environmental consulting firms; teachers with innovative ideas; testing labs; physicians, nurses, and other healthcare professionals. The key is in the answers to three questions ... (1) Is the proposed idea truly innovative?; (2) Can a research project be built around it?; and (3) Does the applicant bring technical expertise to the proposed project?

Presence of a true champion A champion is recognized as the individual who has the authority and makes the commitment to pursue the program. Many potential candidates are excited to learn about the SBIR program, but aren't interested in preparing the proposal. This approach is not recommended, because the employee or consultant assigned to the task seldom feels the same passion and commitment as the idea's author. Additionally, whether in a new sole proprietorship or an established firm, it is critical for top management to commit company priorities and resources to the project.

Experience in preparing and writing research proposals Though not a requirement, SBIR applicants with experience in preparing and submitting proposals tend to be better candidates. The key exception is a company with a true champion on board; someone with the willingness and authority to tackle the learning curve.

Commitment to team building Proposals must clearly explain how the work plan will be carried out. Applicants often build teams of recognized experts in their field of study because few SBCs have the resources to perform all needed activities. University faculty/researchers are particularly favored as teaming partners, but industry-based experts can also be used. Rather than becoming formal "partners" in a business sense, they serve as consultants or subcontractors during the term of the proposed project. Proposals that fail to present a team approach are often downgraded by reviewers.

Perception of SBIR as an opportunity, not as a sole funding source The SBIR program may be an excellent opportunity to obtain financial support for the research, development, and commercialization of innovative technology. However, the program is neither a quick nor a certain source of funds. As such, applicants are encouraged to regard SBIR funding as one of several potential funding resources, rather than the sole funding source for their business.

What are the SBIR/STTR Programs? The Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs are federal sources of money exclusively for small, for-profit companies engaged in technology innovation, development, and commercialization. SBIR/STTR money comes in the form of grants or contracts. The funds do not have to be repaid or matched, and they may be used to pay project wages and benefits, purchase supplies and materials, pay prorated portions of administrative and overhead costs, and even provide a profit for the company. The small business retains first right to claim new intellectual property emerging from the project.

What technologies are funded by SBIR/STTR? SBIR/STTR monies fund the development of technologies that must be proven to have strong market potential with the commercial sector, the government, or both. Consumer products are generally not funded. Instead, these programs seek to fund:

- true technical innovation represented by advancement in the state-of-the-art;
- major enhancements in existing technology, especially if it advances the state-of-the-art; or
- important new applications of existing technology.

How do the programs work? SBIR/STTR funds the research and development (R&D) of technologies that meet agency-identified needs in the form of technology "topics." Each year, the 11 participating federal agencies issue one or more solicitations for proposals (see page three). The SBC must then seek to match its technology interests with one specific topic. When a match is found, the SBC prepares and submits a proposal for developing a solution to the agency's need as defined by the topic description.

SBIR/STTR are phased programs, with only two of the phases being funded:

- **Phase I** funds activity to prove the technical feasibility of the proposed technology as a solution to the agency's need. Depending on the agency, Phase I funding may be between \$100,000 to \$225,000 and typically covers a six to nine month project timeframe.
- **Phase II** is the period of in-depth research and development needed to move the technology to the prototype stage. Phase II funding may be up to \$1.5 million and extends up to two years.
- Phase III is for the SBC to pursue commercialization. Though the programs do not fund Phase III, support may involve follow-on (non-SBIR/STTR) R&D funding or production contracts with the U.S. Government.

How do SBIR and STTR differ? SBIR is suited for SBCs with the expertise and facilities to perform most of the work in-house. Only one-third of the award may be outsourced to subcontractors or consultants. STTR is suited for companies wanting to transfer technology from the public sector for further development. STTR is also suitable for companies requiring greater levels of technical skills and facilities. Under STTR, the SBC forms a partnership with a research institute, e.g., a university; a non-profit or government laboratory, which may receive up to 60 percent of the award.

WHAT IS THE NEXT STEP?

Montana companies and researchers wanting to learn more about these programs should contact the Montana Innovation Partnership (MTIP) powered by MSU TechLink Center at http://montanainnovationpartnership.org or email techlinksbir@montana.edu MTIP provides free counseling from consultants knowledgeable and well-experienced with the SBIR/STTR programs. MTIP's consultants will help you determine if SBIR/STTR is a viable option for your situation, and if so, can provide custom assistance so you can develop and submit a highly competitive proposal