

"Winning Proposals"

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Getting Started

- No lack of opportunities
- Challenges of finding the right fit
- Assess your chance of success
- Build the right team
- Know your customer
- Get organized!



Funding Opportunities

- Firstgov.org
- Air Force Research
- Army Research Office
- Catalog of Federal Domestic Assistance
- Congressionally Directed Medical Research Program
- Defense Advanced Research Projects Agency
- Environmental Protection Agency
- FedBizOpps.Gov
- Federal Acquisition Jumpstation
- Federal Register
- Grants.gov (all federal funding opportunities)
- Health & Human Services (HHS) GrantsNet
- National Aeronautics and Space Administration
- National Endowment for the Arts
- National Endowment for the Humanities
- National Institutes of Health
- NIH Parent Announcements
- NIH Basic Behavior and Social
- National Oceanic and Atmospheric Administration
- The Foundation Center (foundationcenter.org)

- National Science Foundation
- Office of Naval Research
- U.S. Department of Agriculture
- U.S. Department of Education
- U.S. Department of Energy
- Office of Science
- National Energy Technology Lab
- Office of Nuclear Energy
- Office of Energy Efficiency and Renewable Energy
- Advanced Research Projects Agency
- U.S. Department of Homeland Security
- U.S. Department of Housing and Urban Development
 Information about Grants
- Federal Register
- Federal Business Opportunities
- NIH Guide to Grants & Contracts
- NSF Bulletin
- NSF Guide to Programs
- Catalog of Federal Domestic Assistance



Documents and Websites

SBIR.gov

- http://sbir.gsfc.nasa.gov/SBIR/sbirsttr2017 /solicitation/taxonomy.html
- <u>http://www.acq.osd.mil/osbp/sbir/sb/schedule.shtml</u>

Office for Counter Terrorism

Department of Homeland Security

Air Force, Air Force Research Laboratory, AFRL

Navy, Office of Naval Research ONR Naval Research • Laboratory, NRL

Department of Energy Contact Information DOE: Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) U.S. Department of Energy SC-29/Germantown Building 1000 Independence Ave., SW Washington, DC 20585 E: sbir-sttr@science.doe.go More Information >>

http://science.energy.gov/sbir/funding-opportunities/

NASA Topics

Aerodynamics

- <u>A3.04 Aerodynamic Efficiency Drag</u> <u>Reduction Technology</u>
- <u>A3.07 Rotorcraft</u>
- A3.08 Propulsion Efficiency Turbomachinery Technology
- <u>A3.09 Ground and Flight Test Techniques and</u> <u>Measurement Technologies</u>
- H7.01 Ablative Thermal Protective Systems
- <u>S3.07 Unmanned Aircraft and Sounding Rocket</u> <u>Technologies</u>
- <u>T15.02 Autonomous Systems for Atmospheric</u>
 <u>Flight</u>
- <u>T4.02 Dynamic Servoelastic (DSE) Network</u> <u>Control, Modeling, and Optimization</u>
- <u>T5.01 Autonomous Navigation in GNSS –</u> <u>Denied Environments</u>
- <u>T9.01 Technologies for Aerospace</u> <u>Experimental Capabilities</u>



Two Major Research Funding Paths

- 1. Responding to an agency-published research solicitation.
- 2. Following agency specific guidelines to submit an unsolicited or investigator-initiated research proposal.
 - These are best done after building a relationship with a program manager or responding to a multi-year BAA.
 - Agency websites are the best places to go to get information each one has a different process, but it usually includes a white paper, (for example, DOE (energy) has a guide for unsolicited proposals.)

Solicitation

- May be too late
- Lots of competition
- Advertised project details
- Respond to larger agency needs

<u>Unsolicited</u>

- Targets a known problem
- <u>Must know your end user</u>
- May not have funding
- Might not get response
- Better know a <u>name</u>



A Strategic / Realistic Approach

- Assess:
 - 1) Does your project answer their need?
 - 2) Do you have a unique approach?
 - 3) Do you have, or can you get the right expertise?
 - 4) Do you have enough time to
 - Develop your approach
 - Write your proposal <u>and</u> have it reviewed at least twice by numerous people
 - Finalize a budget and budget narrative (for all partners)
 - Obtain letters of commitment
 - Finalize a teaming agreement
 - Get signatures for NDA's
 - Start the IRB process
 - Write other required documents (like a DMP)
 - Get all partners CV's/biosketches completed in the right format



Get Tactical

• Define the research need and the purpose of the solicitation

Research expectations

- Project scope
- Expected outcomes/deliverables
- Schedules
- Outline competitive information
 - Eligibility
 - Number and size of awards
 - Conditions of award
 - Review process and timeline
- Application instructions
 - Deadlines
 - Content requirements
 - Format requirements
 - Page length
 - Margins/fonts
 - Headers/footers
 - Page numbers
 - URLs
 - Completion of required forms
- Sponsor contact information
 - Program officer and technical support
- Conditions of award/reporting requirements/deliverables



Get Organized

- Once you are satisfied with your approach, contact the agency Program Manager for feedback.
- Finalize the required personnel to meet project requirements.
- Agree on partner responsibilities.
- Determine how you will maintain configuration management.
- Assign partners writing tasks, be as specific as possible and limit them to a reasonable space relative to your page count.
- Develop or use letter templates, DMP templates, CV's/biosketches, organizing the proposal, providing strategic comments, editing, adherence to requirements, and alignment of your proposal to the solicitation.



Stay on Track

- Let your team know that you plan to stay on schedule, have regular meetings and regular reviews.
- When you have a question, use the relationship you have developed with the Program Manager and get answers quickly.
- Collect information/data, build tables, maintain citations, maintain documents/attachments, (central location?).



Partnering

- Locate the best partners that add unique expertise to your project.
- Look for partners that broaden your opportunities for funding. Small business, academia partners (HBCU/MI/Rural), large business (sponsorship), non profits.
- Seek sponsorship for interns, equipment, advisory panels/boards, events, scholarships.
- Use existing programs to open opportunities.



Process and Programs

- CRADA Cooperative Research and Development Agreement
- EPA Educational Partnership Agreement
- IRAD Independent Research and Development (industry funds)
- ILIR In-house Laboratory Independent Research (Mainly Basic Research; hi-risk/hi-payoff)
- SBIR Small Business Innovative Research (2.5% of research budgets > \$100M) Phase I/II/III
- STTR Small Business Technology Transfer Program (3%>\$100M) Phase I/II



Strategic Advice

- Be aware of national/international research/funding trends.
- Keep in mind that partnering (internal or external) may increase your chances of success.
- Tailor your work to the customers needs.
- Think outside the box Be innovative.
- Identify letters and allow time to get through the system.
- Adhere to your checklist and schedule
- Be willing to stretch your research into new areas.



What to provide . . .

- Approaches that emphasize cost avoidance/reduction
- Understanding of research application and impact on production
- Shortened research cycles
- Multiple applications
- Innovation results, relevance and responsiveness

What to look for . . .

- Budget cycles (CRA crisis)
- Programs in chaos
- Who has ownership of the problem
- Partnering & teaming arrangements
- Conference, opening meetings where government organizations brief research efforts
- Association memberships/meetings
- Opportunities to serve on panels, chair sessions

Remember . . .

- Doing business with the government is like a 3-legged stool
 - 1) Relationship 2) Credibility 3) Delivery





Partner with Universities

Academic Units

- Faculty / Research efforts
- Students, (grad and under grad, student projects)
- Potential for hires

Research Centers

- Center Directors / Subject Matter Experts
- More specific and applied research
- Facilities

• Office of Sponsored Programs (OSP)

- Supports budget and submission, experienced with contracts and grants
- Office of Technology Commercialization (OTC)
 - Liaison for private sectors looking for access to expertise within research community; enter into appropriate agreements that facilitate technology commercialization; link potential investors with start-up companies based on technologies developed.

UAH I²C Innovation to Invention Center

- Groundbreaking June/July, 2017
- Scheduled to open December 2018/January 2019
- Located with the College of Business Administration at UAH
- Leverages resources at UAH
- High Tech Business startups; no biomed
- Serves 15-county region in north Alabama and southeast Tennessee
- Facility to be 45,000 square foot



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