

WHITE PAPER

Adding the

DoD's DURIP **to Your Funding Pool:**

*The Ins and Outs of This Competitive
(Yet Attainable) Funding Program*



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Summary

In terms of grant dollars spent, the federal government is the largest supporter of laboratory equipment and research instrument purchases for colleges and universities. While the NIH and the NSF are usually the first that come to mind when considering submission of a grant proposal, the Department of Defense (DoD) is another federal agency, with substantial fiscal resources, to be considered. The Defense University Research Instrumentation Program (DURIP) is a multiagency DoD program providing funds to Universities for the acquisition of research instruments and equipment. This white paper will discuss how understanding the requirements of the DURIP program will help in determining your eligibility and position yourself for an effective grant proposal. Also included is a breakdown of how the proposal needs to be written with areas and items to emphasize, what can be expected from the review process, and strategies to best position your proposal for successfully being awarded funds.

Introduction

The purpose of the Defense University Research Instrumentation Program (DURIP), which is a part of the broader University Research Initiative (URI), is to improve the capabilities of higher education institutions in the United States to conduct research and to educate scientists and engineers in areas important to national defense. DURIP achieves this goal by providing funds to Universities for the acquisition of research instruments and equipment.

In a recent Department of Defense (DoD) news release, Zachary J. Lemnios, assistant secretary of defense for research and engineering, underscored the importance of this program in accelerating research progress in defense-critical fields. Merit competition for these awards has historically been fierce, and is expected to continue to be so. For example, in FY 2012, only 190 applicants (approximately 27%) from 100 academic institutions were awarded grants to support the pursuit of cutting-edge defense relevant research. In FY 2013, 169 awards totaling \$51.4 million were made. They ranged from approximately \$50,000 to \$1,100,000, averaging \$305,000 per award. These funds will be awarded via grants made by three different offices within the DoD: the Army Research Office (ARO), the Office of Naval Research (ONR), and the Air Force Office of Scientific Research (AFOSR). Grants are made for the sole purpose of acquiring research instruments and equipment costing between \$50,000 and \$1,500,000 with approximately \$43.4 million budgeted for FY 2014.

The intent is to fill an existing gap in other federally funded grant programs, since equipment in this price range cannot normally be purchased within the budgets of single-investigator awards. Funding awards are made to Universities which are currently conducting, or will be able to conduct with the purchase of the proposed new equipment, research in areas of interest to the DoD. Award length is typically one year, and there are no limits to the number of applications a candidate may submit.

The FY2014 DURIP Program Announcement (PA-AFOSR-2013-0001) can be found on www.grants.gov.



FACT:

Many more applications are received than can possibly be funded. Nonetheless, it is still worth your time and effort to submit one.



TIP:

There are no limits to the number of applications a candidate may submit.

As currently posted, proposals for the FY2014 DURIP program must be received by 4:00PM Eastern Time, 21 October 2013. Award decisions are expected in mid-May 2014 with grant awards expected by July 2014.

The Basics

What's Allowed and What's Not

Besides the actual cost to purchase the equipment itself, proposed budgets can also include costs for constructing, assembling and/or installing the equipment. Individual proposals may request funding for more than one item of equipment if the requested items of equipment comprise a “system” that is used for a common research purpose. For example, requesting a PNA-X Network Analyzer and frequency extenders, to be coupled together to conduct Terahertz research, would be considered a system and eligible for a DURIP proposal. In contrast, proposals for purely instructional equipment are not eligible, and general-purpose computing facilities are also not appropriate for DURIP funding. Keep in mind that these awards do not pay for the cost of personnel to operate the instruments, so these costs will have to be covered by some other source of funding. DURIP awards will also not cover costs for continued operation and maintenance, service contracts, or extended warranties for items purchased with these awards.



Exceptions to the Award Limit are Few

As a rule, an individual award may not exceed \$1.5 million in total DoD funding, regardless of whether this limit is met through one DoD office or spread across multiple offices. An institution may, however, submit a proposal to purchase instrumentation costing more than \$1.5 million under either of the following two conditions: (1) The proposal includes a firm commitment from the institution submitting the proposal for the balance of the funds needed to purchase the instrumentation, so that the cost to the DoD remains at or below this amount; (2) in the proposal it submits, an institution requests that the agency receiving the proposal grant an exception to the \$1.5 million maximum amount of DoD funding. At its discretion, the agency may consider a proposal for an amount in excess of this total if warranted by a priority defense research need. However, as exceptions for awards of this size are expected to be rare, it is strongly recommended that a potential proposer communicate with the sponsoring agency before submitting a formal proposal requesting an amount in excess of this number.



TIP:

150-200 DURIP grants are typically made each year with an average award amount around \$300,000.

Eligible Institutions

Competition for DURIP funding is open to accredited U.S. institutions of higher education with degree granting programs in science, mathematics and/or engineering. These eligibility requirements also contribute to the extreme competition in getting awarded these grants, particularly for small institutions that are competing with ivy-league and big-name universities having greater depth and breadth of experience in winning awards. Make sure your college or university fits these criteria before you spend considerable time and effort on a proposal which will immediately be disqualified if your institute is not eligible. It is worth pointing out that submission of proposals from Historically Black Colleges and Universities and Minority Serving Institutions (HBCU/MSI), which are accredited U.S. postsecondary institutions that have been designated as MSIs by the Department of Education, are specifically encouraged. While the DoD clearly states that no funds are purposely allocated for HBCU/MSI participation, the fact that HBCU/MSI are explicitly encouraged has helped to fuel speculation that these applicants might possibly have some competitive advantage during the review and awarding processes. When viewing the award data, however, there is no support for the notion that these institutions have any type of advantage over any other institute.

Research Areas

Having a crystal clear understanding of the agency's overall mission is vital to writing a successful proposal. If you cannot convince the reviewer that your proposal address a specific area consistent with the overall mission, your application will be rejected, plain and simple. While the research areas of specific interest to the administering agencies are available on-line at their respective websites, in general, the DoD is focused on the following research areas (see DURIP Program Announcement or the Conclusion section of this White Paper for additional details):

- *Biomimetics*—research to develop novel synthetic materials, processes, and sensors through advanced understanding and exploitation of design principles found in nature.

Stated another way, this research area uses biological systems as models for the development of novel materials and machines. Think biomimicry.

- *Nanoscience*—research to achieve dramatic and innovative enhancements in the properties and performance of structures, materials, and devices that have controllable features on the nanometer scale (i.e., tens of angstroms).

Nanoscience refers to the science and manipulation of chemical and biological structures with dimensions in the range from 1-100 nanometers. On this scale, new properties (electrical, mechanical, optical, chemical, and biological) that are fundamentally different from bulk or molecular properties can emerge. Nanoscience is about creating new chemical and biological nanostructures, uncovering and understanding their novel properties, and ultimately about learning how to organize these new nanostructures into larger and more complex functional structures and devices.



- *Smart Materials and Structures*—research to demonstrate advanced capabilities for modeling, predicting, controlling, and optimizing the dynamic response of complex, *multielement*, deformable structures used in land, sea, and aerospace vehicles and systems.

Smart materials are materials that have one or more properties that can be significantly changed in a controlled fashion by external stimuli, such as stress, temperature, moisture, pH, electric or magnetic fields. Smart skins for drag and turbulence control of vehicles would fit in this area. Also include is the creation and utilization of novel forms of transduction; the touch screen on your cell phone is a good example.

- *Information Technology (IT)*—research to provide fundamental advances enabling the rapid and secure transmission of large quantities of multimedia information (speech, data, images, and video) from point to point, broadcast, and multicast over distributed networks of heterogeneous communications, command, control, computers, intelligence, surveillance, and reconnaissance (C4ISR) systems.



This is a much broader area than the others, and encompasses any and all technological advances that can be used to increase efficiency and clarity of multimedia data transfer. The agency is also concerned with development of new and improved safeguards to prevent such data transmissions from being interfered with or intercepted by hostile groups.

- *Human-Centered Systems*—research to develop advanced systems that can sense, analyze, learn, adapt, and function effectively in uncertain, changing, and hostile environments in achieving the mission.

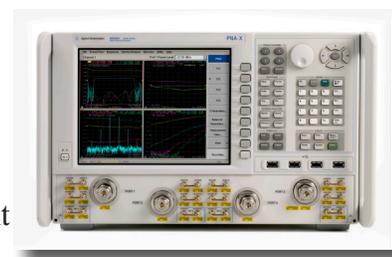
The design of technology based systems is often predominantly techno-centric, even when the objective

of such systems is to support human activity. Human centered systems focus on enhancing human skills in situations where technology tends to undermine these skills. Integrating areas such as computer technology with vision, audition, perception, decision processes and performance modeling may be included in this area. The goal here is to improve human interaction with computer technology to accelerate and improve the decision-making process.

- *Compact Power*—research to exploit new concepts to achieve significant improvements in the performance of compact power sources and power consuming devices through fundamental advances relevant to current technologies.

While compact implies a small footprint, it does not mean a lack of power. The goal is to not sacrifice power at the expense of size.

Keep in mind that there are Broad Agency Announcements (BAA) that are issued by the agencies which are additional sources of funding. A BAA is a notice from the government that requests basic and applied research proposals concerning certain areas of interest to the government. BAAs include that part of the development process which is not related to the development of a specific system or hardware procurement. The type of research solicited under a BAA attempts to increase knowledge in science and/or to advance the state of the art as compared to practical application of knowledge.



Agilent Instrumentation Solutions

Agilent Technologies offers a broad range of test instrumentation that may be candidate solutions for DURIP grant funding. Many of our instruments are already in University research facilities across the country to help expand defense capabilities. Some DURIP candidate solutions may include, but not limited to the following state-of-the-art measurement instruments (additional examples can be found on the Agilent website; www.agilent.com):

- **Molecular Spectroscopy:**
 - Website: <http://www.chem.agilent.com/en-US/Products-Services/Instruments-Systems/Molecular-Spectroscopy/Pages/default.aspx>

- **Mass Spectrometry:**
 - Website: <http://www.chem.agilent.com/en-US/Products-Services/Instruments-Systems/Mass-Spectrometry/Pages/default.aspx>
- **X-Ray Crystallography:**
 - Website: <http://www.chem.agilent.com/en-US/Products-Services/Instruments-Systems/X-ray-Crystallography/Pages/default.aspx>
- **NMR:**
 - Website: <http://www.chem.agilent.com/en-US/Products-Services/Instruments-Systems/Nuclear-Magnetic-Resonance/Pages/default.aspx>
- **High Performance Oscilloscopes:**
 - Website: <http://www.home.agilent.com/en/pc-1000001736%3Aeps%3Aapgr/oscilloscope?nid=-536902447.0&cc=US&lc=eng>
 - Data Sheet: <http://cp.literature.agilent.com/litweb/pdf/5989-7650EN.pdf>
- **Network Analyzers:**
 - Website: <http://www.home.agilent.com/en/pc-1000001745%3Aeps%3Aapgr/pna-network-analyzers-300-khz-to-11-thz?nid=-536902643.0&cc=US&lc=eng>
 - Data Sheet: <http://cp.literature.agilent.com/litweb/pdf/5990-4592EN.pdf>
- **Modular Solutions:**
 - Website: <http://www.home.agilent.com/en/pc-1879461/pxi-axie-daq-modular-solutions?nid=-33703.0&cc=US&lc=eng>
 - Data Sheet: <http://cp.literature.agilent.com/litweb/pdf/5990-6379EN.pdf>
- **Nano Technology Instruments:**
 - Website: <http://www.home.agilent.com/en/pc-1674481/atomic-force-microscopes-fe-sem-nanoindenters-utm?nid=-34006.0&cc=US&lc=eng>
 - Data Sheet: <http://cp.literature.agilent.com/litweb/pdf/5989-6406EN.pdf>
- **Bit Error Ratio Test (BERT):**
 - Website: <http://www.home.agilent.com/en/pc-1000000193%3Aeps%3Aapgr/bit-error-ratio-test-bert-solutions?nid=-536902433.0&cc=US&lc=eng>
 - Data Sheet: <http://cp.literature.agilent.com/litweb/pdf/5988-9514EN.pdf>

- **Photonic Test:**
 - Website: <http://www.home.agilent.com/en/pd-632820-pn-86038B/photonic-dispersion-and-loss-analyzer?cc=US&lc=eng>
 - Datasheet: <http://cp.literature.agilent.com/litweb/pdf/5989-2325EN.pdf>

- **Optical Polarization & Dispersion Test:**
 - Website: <http://www.home.agilent.com/agilent/product.jsp?nid=-35518.0.00&lc=eng&cc=US>
 - Datasheet: <http://cp.literature.agilent.com/litweb/pdf/5989-8115EN.pdf>

- **Semiconductor & Power Device Analyzers:**
 - Website: <http://www.home.agilent.com/en/pc-0000100020022%3Aatg%3Apgr/parameter-device-analyzer-curve-tracer?nid=-34161.0.00&cc=US&lc=eng>
 - Datasheets: <http://cp.literature.agilent.com/litweb/pdf/5991-2443EN.pdf>
<http://cp.literature.agilent.com/litweb/pdf/5990-3853EN.pdf>

- **Spectrum Analyzers/Signal Analyzers**
 - Website: <http://www.home.agilent.com/en/pc-1000000520%3Aepsg%3Apgr/spectrum-analyzer-signal-analyzer?nid=-536902453.0&cc=US&lc=eng>
 - Datasheet: <http://cp.literature.agilent.com/litweb/pdf/5968-3413E.pdf>

- **Baseband Generator and Channel Emulator:**
 - Website: <http://www.home.agilent.com/agilent/product.jsp?nid=-536902257.800382.00&lc=eng&cc=US>
 - Datasheet: <http://cp.literature.agilent.com/litweb/pdf/5989-8971EN.pdf>

- **High Speed Digitizers:**
 - Website: <http://www.home.agilent.com/en/pc-1128783/digitizers?nid=-35556.0&cc=US&lc=eng>
 - Data Sheet: <http://cp.literature.agilent.com/litweb/pdf/5989-8038EN.pdf>

Technical Aspects of the Proposal

Similar to grant submissions to other Government agencies, DURIP application forms and instructions are accessed through the Grants.gov website. To do so requires that both the PI and the institution are registered. For those of you that have applied for other types of government grants before, the electronic forms should look similar. There are several one-time actions you must complete in order to submit an application through Grants.

gov, including some required by the System for Awards Management (SAM). Make sure you are registered in SAM (www.sam.gov) prior to submitting your application. The Central Contractor Registration (CCR) has been consolidated with other government-wide systems into the new SAM, so you should verify that your CCR registration migrated over to SAM correctly well before the proposal submission deadline. If you are new to this system, be advised that it can take as long as four weeks for your account to become active, so plan this time into your submission deadline. You want to make sure that there is time to remedy any problem with the migration that could potentially interfere with the on-time submission of your proposal.

A completed proposal consists of the following elements:

- Standard Form 424 (Research and Related) (SF-424 (R&R)) as the cover page
- SF-424 (R&R) Budget form;
- SF-424 (R&R) Other Project Information form;

- The project abstract and project narrative, which are attachments to the SF-424 (R&R) Other Project Information form
- Research & Related Senior/Key Person Profile
- SF-424 (R&R) Project/Performance Site Location(s) form

- SF-LLL form if the proposer has lobbying that it is required to disclose under 31 USC 1352, as implemented by the DoD at 32 CFR 28

The completion of most fields is self-explanatory, with the possible exception of the ten fields which are listed in the DURIP Program Announcement. The DoD provides detailed explanations for these fields, in addition to how certain fields need to be filled out. Follow these explanations to the letter, otherwise your proposal may be automatically kicked out of the system and not reviewed.

The instructions also state that the project abstract and narrative (including curriculum vitae of all key personnel) have a strict 25 page limit when printed out. Conversion of a word document to a PDF, which is the format required for submission, can sometimes increase the document length by a line or two. You can imagine the frustration experienced if your submission were to be rejected because it was one line over the page limit, due



TIP:

Print the final version of the proposal which you upload and review to make sure that it adheres to all of the technical requirements for submission.

innocently enough to a format conversion. The take home message here is to check the page length of the PDF, do not rely on the page number of the word document alone.

Remember that it is the proposer's responsibility to notify the agency if the proposal contains proprietary information and to identify the relevant portion(s) (i.e.: text or figure) that require protection. The agency will do their best, but under the Freedom of Information Act, there is always the potential for such information to be released. In the past, this was of concern for inventors and their patent filings, as a public disclosure prior to the actual filing would put allowance of the patent in jeopardy. This is less of a concern today due to changes in the patent laws from a 'first to invent' to a 'first to file' system. Nonetheless, if you do not want certain aspects of your proposal to be readily available for others to see, especially if any trade secrets are divulged, let the agency know and mark the section(s) accordingly.



REMEMBER:

It is okay to call up the DoD and ask questions; in fact; they provide you with their phone numbers!

Strategies for Success

Ask for Guidance

First and foremost, if you have questions while you are putting your proposal together, not only is it permissible to contact the agency, but such contact is encouraged. Ask early and ask often if necessary. Questions regarding full proposal submission should be submitted not later than two weeks before the due date for receipt of full proposals. Questions received after this date may not be answered. The DoD DURIP Program Announcement contains the names, phone numbers, and email addresses of the points of contact for all three offices of the agency. While these contacts are primarily for administrative questions or problems, they are also a valuable resource for questions regarding programmatic content or the relevance of your project to the mission of their specific office. At a minimum, they can put you in contact with each office's program managers, if they cannot satisfactorily address your question. While no one at the agency will tell you how to guarantee funding, they will often provide sound advice which you should take advantage of. Also pay close attention to their choice of words during the conversation. For example, while discussing the relevance of your project to the mission of the agency offices, if the contact describes your idea as reaching the minimal requirements for submission and funding consideration, you are best advised to figure a way to make your project more appealing.

Why You Need the Equipment

Next on this list is to clearly communicate the ‘need’ for the equipment as opposed to a ‘want’. Remember that the grant reviewers are people just like you, and they can tell when a want is being disguised as a need. Making a convincing argument for the equipment need should include a recent effort illustrating the need, a discussion on how the equipment will be used over time and who will have access to it, and the potential negative consequences to be endured as a result of the equipment need not being met. This approach works well for applicants who are requesting DURIP funds to enhance their research capability in already established areas of interest to the DoD, but what if you are applying so that your lab can acquire new capabilities? Reviewers like to see logical extensions of your current capabilities to justify a need to acquire new ones.



REMEMBER:

Write your compelling argument for support with enthusiasm.

Be sure to also highlight the significance, impact and benefit of the equipment being requested on the research conducted in your lab and how this will reflect positively on your home university. Reviewers want to see enthusiasm as well as a compelling argument for how this equipment will contribute to your success and how your achievements contribute to the success of your institution’s long-term research goals. Point out that this equipment may also be beneficial to some of your colleagues’ research, thereby increasing the capacity of the institute and contributing to the overall research community and the field.

Why You, and Perhaps Only You, are the Best Recipient for this Award

As with any grant application, you will need to distinguish your capabilities from those of others. The usual approach of pointing to your publication and grant funding track record still applies. If you are the only lab pursuing research in an area of interest to the agency within a certain locale or geographical area, you may also benefit by bringing this to the attention of the reviewers. In reviewing any federal agency grant award data, there is a noticeable disparity between states and areas within states where the funding goes. This is a reflection of project merit, as it should be, and university locations, as is predicted. If your institution happens to be in an under-awarded geographical location, point this out. A gentle statement that the equipment you are requesting isn’t even available locally for you to use to conduct your



TIP:

No one can be better at setting you apart from other investigators than you can.

research may help your cause.

To see the list of current awardees, go to

<http://www.defense.gov/news/FY2013DURIPWinners.pdf>.

For additional news releases or to search past DURIP award winners, go to

<http://www.defense.gov/releases/> and search DURIP awards for the fiscal year you are interested in.

Since one of the criteria for these awards is enhancing the university's ability to educate and train future scientists, highlighting the number of students and postdocs who have trained in your lab, and what they are doing now, is also a fine strategy. If you have received any special recognition, make sure to bring this to the reviewers' attention also. Ideally the reviewer should see that this recognition is directly relevant to your research, the instrumentation requested, and the overall mission of the DoD. This may be a tall order, requiring careful wording on your part so as not to appear boastful or condescending.

Realistic, and Accurate, Budget Request

Make sure that you ask for the correct amount of funding. All equipment purchases must be exempt from indirect costs, and inclusion of these costs, even if inadvertent, will not fly well with reviewers. Also, inflating the budget is not advised. While budget evaluation is of lesser importance than other criteria, the DoD does factor this into the review process, and this is clearly stated in the Program Announcement. There are few things more frustrating in this process than receiving high scores for merit and then not being awarded because your budget request dropped the reviewer's enthusiasm and, ultimately, your overall score. Asking for too little funding will be perceived as lack of experience and misjudgment on your part for what it will take to actually get that equipment into your laboratory. Likewise, this can lower enthusiasm which can be reflected in your overall score, thus putting you out of award range. Be sure to get an accurate quote for your proposed instrumentation from your Agilent sales representative and include it with your DURIP proposal as required by the Program Announcement.

Application and Review Process

The federal government already has application forms and submission and tracking systems in place for other Government grant applicants. For consistency of use, the DoD uses the same general forms, proposal format, requires



REMEMBER:

Don't over- or under-inflate your budget; it will come back to haunt you.

the same types of information and uses the same electronic submission portal. The application deadline for the 2014 DURIP program is currently October 21, 2013 (4:00 pm Eastern Time), with reviews completed and decisions expected in mid-May 2014. While the start date may be negotiated, the earliest start date is usually in June. Keep these dates in mind when including details in the budget page of any other federal funds to be used and any funds coming from non-federal sources towards the purchase of the instrumentation. This holds especially true for personnel funds to operate the equipment, because as mentioned previously, DURIP funding does not cover these costs.

With regards to review, it is not unusual for the DoD to tap into the same pool of reviewers that other granting agencies use. That being said, the criteria for DURIP evaluation includes the impact of the equipment on existing and new research capabilities pertinent to DoD agency areas of interest, the importance and priority to DoD missions, and the potential to enhance the university's ability to educate future scientist in areas important to the DoD mission. Although it is stated to be of lesser importance, another criterion for judgment is realism and reasonableness of cost. As was discussed above, be certain that you ask for only the amount of funding that you need and resist the idea to discount this amount in the hopes of winning an award because it appeared less costly.

Be aware that there is a pending government-wide policy on the use of the Federal Awardee Performance and Integrity Information System (FAPIIS) in the award of grants that may affect the agencies' process for judging proposed recipients to be qualified to receive financial assistance awards. If the policy is finalized by and implemented by DoD prior to the agencies' making of FY 2014 DURIP awards under this announcement, awardees will be contacted and instructed on how to best comply with this policy . The proposed award recipient may go to FAPIIS through the PPIRS web site <http://www.ppirs.gov/>. See the Contractor Users section under the FAQs for specific access instructions.) at any time to comment on any information about itself that a Federal Government official previously entered and is currently in FAPIIS.

Heed the Reviewer Comments

Let's be optimistic first. When the grant is awarded, the reviewer comments can provide a view as to what they are hoping to see should you apply for additional equipment funding in the future. Comments pertaining to where the missions of the DoD are tracking can provide insight for additional equipment requests to build upon systems currently in your lab. Any comments regarding capabilities of equipment not necessarily requested in the original application, which may add value to the already funded request, may be a hint that the agency would like to see

another request by you for such an instrument. If reviewers comment on the relevance to other fields, this may be something to include next time around to help garner high marks for the impact of the equipment on research currently funded by the DoD evaluation criteria.

Now, of what value are the reviewer's comments if the application is not funded? First off, addressing these comments in a resubmission next year of the same request is expected. Sufficiently putting to rest the reviewer's concerns are your best chance of having the proposal awarded the next time around. The one caveat here, however, is that if your resubmission doesn't have the same reviewers, you may still not be funded owing to different concerns by the different reviewers. The agency tries to avoid this inconsistency in reviewing, but it does still occur. While there are many reasons for not funding an application, including technical, not falling within the agency's mission, failure to write persuasively, and poor scientific design, it is important to discern between those that can be addressed and those that cannot. Of the aforementioned list, seeking input from DoD agency program directors and your academic colleagues can help you improve your proposal in all of these areas. Looking at DURIP award data can also help you fine-tune your application to what the agency likes to see. Sometimes, there are comments that just cannot be adequately addressed. This may be especially true for applicants who are requesting equipment monies to enable their lab to embark on new areas of research, where the applicant's track record for grants and publications in this new area is lean. If you happen to be one of these applicants, you may want to consider acknowledging this perceived deficiency and propose in the resubmission having a collaborator with a strong presence in the area.

Resubmission or New Proposal?

This is always a tough question. While there are no set guidance's to help you make this decision, anecdotal evidence suggests though your reviewers' critiques may be off the mark, you will need to accept the review for what it is and move forward. Thoroughly assess the summary statement and analyze the critiques to get a sense of whether your reviewers thought your application is worth fixing, and asking for help from other colleagues to make this assessment is also advised. If the application's problems are relatively straightforward to fix, ie: requiring an improved prose, then a resubmission may be order. If the comments suggest that the application is not worth fixing,



TIP:

DoD reviewers are just like you, so recall the successful grants that you have reviewed for this or another agency, and the characteristics which placed them in the award category.

then overhauling the whole premise and concept of the proposal is in order, which would lead to submission of a new proposal.

The agency will expect the new proposal to have substantially changed specific aims, the questions that you are asking, the approach and/or methods that you are using to address your research questions, and consequently the potential outcomes that might be expected.

Expectations Once You Are Awarded

Following the brief celebratory event immediately following award notice receipt (come on now, we all do it!), finalizing delivery and payment of the requested equipment is the next priority. While the DURIP does not provide support for personnel to operate the equipment, you must have convinced them that you have other funding for these personnel, even if those personnel happen to include you. Have those operators at the ready when the equipment arrives. The agency will expect the equipment to be utilized in a reasonable time frame after delivery. The timing of when the equipment becomes operational will be reflected in the required programmatic reporting. This document is submitted as a final technical report, to indicate fulfillment of the proposed objective by the acquisition and utilization of the requested instrumentation. What are the consequences if you do not fulfill the proposed objective? Depends on how the agency views your efforts toward fulfillment. For example, using the equipment for the project you proposed, but could not complete because your experimental samples were in short supply due to production issues or lack of raw materials (i.e.: you tried to the best of your ability) will be viewed favorably. In contrast, using the equipment for a totally different project without providing very strong justification for the change after the award was made is viewed poorly by the agency. In this latter case, the agency is within their rights to request a return of the funding, as the contract under which the award was made had been voided. Instances of the agency having to exercise this payback agreement are rare, indicating that, as a group, awardees are careful to follow through with fulfilling their proposed objectives.



REMEMBER:

Fulfilling your proposed objective benefits not only you, but your institute, the agency, and it supports the continuation of future awards for everyone.

While you will look good in the eyes of your institute and your peers when you secure the award, the DoD also wants to look good to other federal agencies by making the award to you. As investigators, we sometimes

forget this aspect of the relationship. Careful and thoughtful citing in publications of the award's importance to the work is expected. Additional award recognition can be made in oral and poster presentations at scientific meetings. Performing exemplary work will reinforce with the agency that they made the right decision not only on you but also on the research area. When the agency is able to point to you and your program as a success, the DoD will have additional justification to continue supporting research efforts in these areas, which will benefit others in the field.

Conclusion

While it is true that many good proposals are not awarded funding, it is also a certainty that you will not get funded unless you submit a proposal. Taking your time to send in a clear, focused, and concise proposal, strictly adhering to the agency's directions and addressing their mission will immediately place you in the range of possible funding. Remember that reviewers have limited time and energy to devote to your proposal. If you make them work too hard just to understand what you are trying to say, they will have little energy left to assess your ideas. Ensure that your proposal makes a compelling and enthusiastic case for why you are deserving of this award will help to distinguish your project from others being reviewed at the same time. Make certain that yours stands out in the reviewer's mind.

Below are the agency specific websites for their Broad Agency Announcements (BAA). Pay particular attention to the specific research areas of interest for each administering office; your application may not hit the mark with one, but it may be right on target for one of the others:

1. Army Research Office: www.arl.army.mil/aro/ (select "Business" and then "Broad Agency Announcements"). See the most recent ARO Core Broad Agency Announcement for Basic and Applied Scientific Research.
2. Office of Naval Research: <http://www.onr.navy.mil/> (select "Contracts and Grants" and then "Broad Agency Announcements") See Long Range Broad Agency Announcement for Navy and Marine Corps Science and Technology 13-001.
3. Air Force Office of Scientific Research: See BAA AFOSR-2013-0001 Research Interests of the Air Force Office of Scientific Research available at www.grants.gov or on www.FedBizOpps.gov at: https://www.fbo.gov/index?s=opportunity&mode=form&id=aae3775c2814584ca21f1504e7f3d6a2&tab=core&_cview=1

Agilent Technologies Assistance

Agilent wants to work with you to make sure that you get the appropriate and best instrumentation to meet your DoD research needs. In terms of winning grant funding, the more successful applications have engaged the equipment vendor in helping to justify need and demonstrating technical advantage. Please contact your local Agilent sales representative for a detailed quote and assistance with your DURIP proposal requirements:



- Recommendations with equipment specifications to ensure you have the instrumentation that best meets your research requirements;
- Accurate detailed quote(s) for the desired equipment (required in DURIP proposal);
- Suggested wording for the concise abstract that describes the requested instrumentation (required in DURIP proposal);
- The estimated useful life of the equipment (required in DURIP proposal).

www.agilent.com/go/contactus



TIP:

To receive monthly grant, funding and lab management education sent directly to your inbox sign up for Principal Investigators Association **Science Pro Insider Free eNewsletter** at: <http://www.principalinvestigators.org/science-pro-insider>