Office of Research & Sponsored Programs

November 2013



NOTES FROM NANCY

The award of a new grant is a natural time of celebration. While it's wonderful to announce the achievement of securing funding, it's the outcomes facilitated by a grant received that are the more enduring and important reasons for excitement. In this month's issue we feature the grants experience of Drs. Dawn Lawrie and Dave Binkley, who have just completed a project funded by the National Science Foundation. I hope that their experience provides a taste of the benefits that grants can provide, the scholarly work accomplished, and the opportunities afforded to Loyola students.

Nancy Dufau Director

Positioning Yourself for Grants Success

Crafting a grant proposal is part art and part science. While a bad idea won't be funded, a great idea poorly communicated is likely to fall short as well. Making a compelling case for funding is critical to success. Remember, not only are you asking someone to rank your project more strongly than others in your field; you are also asking them to invest someone's money—taxpayers or otherwise—in it. Below are some tips for success with grantwriting. While some may be self-evident, they bear repeating as among the most important steps to follow when writing a grant proposal. And, of course, remember that the ORSP is your partner throughout this process. Don't hesitate to contact us for assistance at any time.

- 1. Read the guidelines/rfp/program announcement.
- 2. Start early, even 6 months prior to the due date is not too early.
- 3. Obtain a copy of a successful proposal to the program.
- 4. Make sure you're well-positioned for the opportunity. Have you published in the area, do you have pilot data to report, etc.?
- 5. Contact the program officer to determine whether your project is a good fit.
- 6. Volunteer to serve on a review panel. The agency will be thankful for your service and you will gain invaluable information on what makes for a successful proposal.
- 7. Ask trusted colleagues for feedback on a draft of your proposal.
- 8. Make the reviewers' job easy; use the agency's preferred format, highlight important information so that it's easy to find and prioritize readability.
- 9. Understand the review process for the program to which you are applying.
- 10. If you're not successful, don't despair! Request the reviewers' comments, debrief with the program officer, revise extensively, and resubmit.

CONGRATULATIONS TO RECENT AWARDEE

Lisa Scheifele

American Society for Biochemistry and Molecular Biology Seed Grant

Development of a sustainable synthetic biology workshop and public lecture at a community laboratory

ANNOUNCEMENTS

Summer Research Grant Applications Due January 17, 2014 by 5:00 p.m.

Kolvenbach Program Deadlines

Applications for both the Summer Research grant and Fellows program are due by 5 p.m. on January 17, 2014.

Loyola named "Top Producer" of U.S.

Fulbright Scholars

Recently named a top producer of U.S. Fulbright Scholars, Loyola is among very few institutions that had the highest number of stu-



dents and scholars who received Fulbright grants for 2013-14. The Fulbright Program, the U.S. government's educational exchange program, is sponsored by the Bureau of Educational and Cultural Affairs of the United States Department of State.

For more information about Fulbright opportunities or to discuss an application, please contact Nancy Dufau or Julie Ryder.

DAWN LAWRIE AND DAVE BINKLEY MAKE SENSE OF SOURCE CODE

In September 2009, Dawn Lawrie and Dave Binkley of the computer science department were awarded \$309,757 from the National Science Foundation's (NSF) Software and Hardware Foundations program for their project, "Making Sense of Source Code: Improving Software through Information Retrieval." Their project, which brings together two research fields, is making a critical contribution to the software engineering community using techniques imported from the information retrieval domain. Their project period recently wrapped up and the ORSP had a chance to sit down with Dawn and Dave to discuss their experience with the grant.

What did you accomplish through this research?

Dave: We were able to produce two tools for software engineers through the grant. The first, called SplitIt, carves language, and separates it into pieces. While a person is able to read and separate text into words or

phrases, a computer is not. SplitIt allows a computer to split up the combined abbreviations into meaningful words. This is akin to splitting the hashtag #csrks into "cs" and "rks".

The second, called Norm, also performs a splitting function and expands out abbreviations into full words. Another trick humans can do, but computers can't—or couldn't until Norm. For example the above hashtag expands to "computer science" rocks".

Dawn: Other researchers are already using SplitIt—it's available on-line and has received almost 300,000 hits to date. Additionally, a Ph.D. candidate at Montreal Polytechnique University is using it and I'm sitting on the student's dissertation committee.



Matt Payne, Frank Mongero, Jeff Matthies, Dave Binkley, and Dawn Lawrie after presenting Norm. Summer 2012

How did the grant impact your research?

Dawn: In addition to giving us both the flexibility to attend conferences, the grant gave us name recognition in the research community. We also formed collaborative relationships with other researchers. One of these collaborations, with faculty members from the University of Texas at Austin, led to the recent submission of a collaborative proposal to NSF's Software and Hardware Foundations program.

The funding also enabled us to mentor many more undergraduate students than would have been possible without the grant. This benefitted the computer science department, allowing it to offer more summer research opportunities. In fact, we provided 10 students with research experiences over the life of the grant project.

Why Do You Write Grants?

Dave: I'm interested in ideas. For me, the grant is a facilitator and a motivator to that end. The funding not only facilitates the ability to add student research assistants to the project, but even the possibility of the funding, forces me to think through what I want to accomplish. In this way, grant writing is like paper writing. It helps me to focus on the thing or problem I want to think about.

Dawn: I like research and the grant provided me with time to focus on that. Like Dave, I enjoy the forethought involved in grant writing. Writing a grant helps me to think through where I want a problem to take me. When I write a proposal I need to tell the reviewers what will be produced, forcing me to come up with a concrete plan to achieve my research goals.

What Is Your Advice for Applying for Grants?

Dave: My strategy is simple. I try to make the job of the reviewer as easy as possible by writing the proposal the way NSF wants it written and not the way I think it should be written.

Dawn: I think adding a summary table early on that introduces your research questions, and method of approaching them, can be very helpful for the reviewers. Though you will go into detail later in the proposal, this summary gives your reader a sense of what is coming and makes it more accessible.

Dawn has been at Loyola 10 years and this was her first grant award. Dave who has been at Loyola for 22 years has been a PI or Co-PI on about a dozen grant awards. They both look forward to many more.

FUNDING OPPORTUNITIES

NEH Fellowships

Support individuals pursuing advanced research that is of value to humanities scholars, general audiences, or both. Recipients usually produce articles, monographs, books, digital materials, archaeological site reports, translations, editions, or other scholarly resources in the humanities. Projects may be at any stage of development.

Due: May 1, 2014 for Projects Beginning January 2015 http://www.neh.gov/grants/research/fellowships

2014-2015 Fellowships at the New-York Historical Society

The New-York Historical Society offers eight fellowship programs for the 2014-2015 academic year. The fellowships, designed to encourage and promote the use of the society's extraordinary collections of primary and secondary sources relating to the history of New York and the nation, are open to scholars at various times during their academic careers.

For more information on each specific fellowship please visit the program page below.

Due: January 3, 2014 http://www.nyhistory.org/library/fellowships

American Antiquarian Society (AAS)

At least three fellowships will be awarded for periods extending from 4 to 12 months. Funds come from the National Endowment for the Humanities. AAS-NEH fellows are expected to be in regular and continuous residence at the Society. They must devote full time to their study and may not accept teaching assignments or undertake any other major activities during the tenure of their award. Fellows may hold other major fellowships or grants during fellowship tenure, in addition to sabbaticals and supplemental grants from their own institutions. Other NEH-funded grants may be held serially, but not concurrently.

Due: January 15, 2014

http://www.americanantiguarian.org/nehfellowship.htm

American Educational Research Association (AERA)

The program seeks to stimulate research on U.S. education issues using data from the large-scale, national and international data sets supported by the National Center for Education Statistics (NCES), NSF, and other federal agencies, and to increase the number of education researchers using these data sets. The program supports research projects that are quantitative in nature, include the analysis of existing data from NCES, NSF or other federal agencies, and have U.S. education policy relevance. Applications are encouraged from a variety of disciplines, such as but not limited to, education, sociology, economics, psychology, demography, statistics, and psychometrics.

Applicants are encouraged to submit proposals that

- develop or benefit from new quantitative measures or methodological approaches for addressing education issues;
- include interdisciplinary teams with subject matter expertise, especially when studying science, technology, engineering and mathematics (STEM) learning;
- analyze Trends in International Mathematics and Science Study (TIMSS), Program for International Student Assessment PISA, or other international data resources; and
- include the integration and analysis of more than one data set.

Due: January 24, 2014

http://www.aera.net/ProfessionalOpportunitiesFunding/FundingOpportunities/AERAGrantsProgram/ResearchGrants/tabid/12813/Default.aspx

NSF Linguistics

Supports basic science in the domain of human language, encompassing investigations of the grammatical properties of individual human languages, and of natural language in general. Research areas include syntax, semantics, morphology, phonetics, and phonology.

The program encourages projects that are interdisciplinary in methodological or theoretical perspective, and that address questions that cross disciplinary boundaries.

Due: July 15, 2014

https://www.nsf.gov/funding/pgm_summ.jsp?

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FUNDING OPPORTUNITIES

National Endowment for the Arts Literature Fellowships Grants of \$25,000 are offered in prose (fiction and creative nonfiction) and poetry to published creative writers to enable recipients to set aside time for writing, research, travel, and

general career advancement.

The program operates on a two-year cycle with fellowships in prose and poetry available in alternating years.

Due: February 28, 2013

http://arts.gov/grants-individuals/creative-writing-fellowships

The National Academies National Research Council Research Associate Programs

Summer Faculty Awards are available for scientists and engineers at all stages of their careers and are 8-14 weeks, renewable for up to 3 successive summers. Research is conducted at a participating agency in collaboration with an advisor who is a member of the senior professional staff at the laboratory. Research Advisors provide guidance, advice, and support for the Associate during their tenure.

Review Cycles:

While the NRC Resident Research Associateship Programs hold four competitions each year, some sponsors limit applications to certain reviews:

- National Energy Technology Laboratory (NETL) & National Institute of Standards and Technology (NIST) February and August
- Naval Research Laboratory (NRL) May and August

www.nationalacademies.org/rap

NSF Workforce Program in the Mathematical Sciences Supports activities centered on education through research involvement for trainees at the undergraduate through postdoctoral educational levels. Activities that broaden participation in the mathematical sciences are of significant interest to the Division of Mathematical Sciences.

The program is interested in activities that improve:

- recruitment and retention: increasing the number and diversity of students who successfully pursue undergraduate degrees in mathematics and statistics;
- **educational breadth**: broadening undergraduate and graduate education content in the mathematical sciences preparing students for a wider range of career opportunities; and
- **professional development**: enhancing the professional skills of mathematical sciences undergraduate students to better prepare them for both academic and nonacademic employment.

Due: May 15, 2014- June 15, 2014 and annually thereafter http://www.nsf.gov/funding/pgm_summ.jsp?

Just Announced!

NSF Improving Undergraduate STEM Education

Supports the improvement of undergraduate STEM education through funding research on design, development, and wide-spread implementation of effective learning and teaching knowledge and practice, as well as foundational research on student learning. It supports projects that build on both fundamental research in undergraduate STEM education and prior research and development that provide theoretical and empirical justification for the proposed efforts. Proposals should describe projects that build on available evidence and theory, and that will generate evidence and build knowledge.

Due: February 4, 2014

http://www.nsf.gov/funding/pgm summ.jsp?pims id=504976

CONTACT US

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