



Grant-Writing Basics

~ A Framework for Success

Political Science Group
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Workshop Goals

- ❖ To facilitate your success as a grant writer
- ❖ To offer insights on proposal development
- ❖ To offer writing strategies
- ❖ To explore qualities of a competitive application
 - What constitutes a competitive grant application?
 - What components contribute to success?
 - What are some best practices for writing competitive applications?



The Extramural Funding Scene



Huge numbers of potential sponsors—**federal** and **private** grantors—each with....

- Different missions and priorities
- Different programs and funding emphases
- Different **funding mechanisms**



Your goal – *match your scholarly idea to the right sponsor and the right program!*

NATIONAL ENDOWMENT FOR THE HUMANITIES



WILLIAM T. GRANT FOUNDATION
Supporting research to improve the lives of young people



National Science Foundation
WHERE DISCOVERIES BEGIN



National Institutes of Health
Turning Discovery Into Health



U.S. DEPARTMENT OF STATE
DIPLOMACY IN ACTION

UK
UNIVERSITY OF
KENTUCKY

Office of the Vice President for Research



Common Funding Mechanisms

Financial assistance mechanism or award type

❖ Grant

- Awarded for completion of a discrete project in response to a broad call by an agency
- Solicited through a funding opportunity announcement or program solicitation
- Usually designed and proposed at applicant's inspiration within broad priority area
- May be completely investigator-initiated

❖ Contract

- Solicited through a request for proposal (RFP)
- *Specifies* through an RFP a service to be provided or a specific project to be completed
- Task driven



Common Funding Mechanisms

Financial assistance mechanism or award type

❖ Cooperative agreement

- Extensive involvement of the grantor's scientific or program staff to assist, guide, or participate in project implementation

❖ Fellowship

- Typically awarded to an individual, rather than institution
- May support training or advanced education
- May involve time away from the institution
- May support production of a specific scholarly product (manuscript, book, dissertation)



Why Should I Apply for a Grant?

Grants allow *you as a professional* to....

- ❖ Achieve your intellectual and programmatic goals
- ❖ Implement change in your institution, environment, or society
- ❖ Advance your field
- ❖ Travel to carry out your work
- ❖ Get resources/assistance with your current activities

But sponsors are only interested in your project if it meets their need or solves their problem!



Why Should I Apply for a Grant?

For *students...*

- ❖ The need is typically personal (education, personal advancement, skills development)

For the *sponsor who is funding students...*

- ❖ The motivation is often to develop
 - Expertise in the discipline
 - A pipeline into the workforce

In non-academic social science fields, grant funding may be the lifeline of the organization!

I'm Convinced—Where Do I Start?

Community of Scholars (COS) Funding Opportunities™ Database

- ❖ Major subscription database for all UK faculty/staff/students
- ❖ More than 25,000 records and 400,000 opportunities
- ❖ Available with any UK computer
- ❖ Includes faculty and student opportunities
 - Fellowships
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- ❖ <http://www.cos.com>





COS
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Register FREE

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COS Scholar Universe

COS Scholar Universe is a searchable, editorially controlled database of more than 2 million published scholars in a variety of disciplines.

Stay Current with RefAware

RefAware is an current awareness service that monitors over 9,000 resources and alerts you as soon as a new paper, article or other reference matching *your criteria* is published.

COS is the leading global resource for hard-to-find information critical to scientific research and other projects across all disciplines. We aggregate valuable information so you spend less precious time and money searching for the information you need, leaving you more time and money for your projects.

Find funding with COS Funding Opportunities: search the world's most comprehensive funding resource, with more than 25,000 records worth over \$33 billion.

COS Expertise profiles and profile tools will no longer be available on www.cos.com beginning January 18, 2012. Profiles will be available on COS Pivot, the new tool for connecting to funding and collaborators. Click [here](#) to learn more about Pivot..

Questions about how this change affects you? Click [here](#) for more information.

I'm Convinced—Where Do I Start?

Grants.gov

- ❖ Official gateway to all 26 federal agencies
- ❖ Federal funding opportunities database
 - Browse agency announcements
 - Find specific grant opportunities
 - Sign up for funding alerts (RSS feeds)
- ❖ Application submission portal
 - Download application instructions and electronic submission packages

<http://grants.gov/>



GRANTS.GOVSM



Find. Apply. Succeed.

Grants.gov is your source to FIND and APPLY for federal government grants. The U.S. Department of Health and Human Services is proud to be the managing partner for Grants.gov, an initiative that is having an unparalleled impact on the grant community. [Learn more](#) about Grants.gov and determine if you are eligible for grant opportunities offered on this site.

Grants.gov does not provide personal financial assistance. To learn where you may find personal help, check [Government Benefits](#), [Student Loans](#) and [Small Business Start-up Loans](#).

What's New This Week at Grants.gov

New Opportunities This Week

April 15, 2009: Grants.gov Stakeholder Webcast

Recovery Act Opportunities on Grants.gov

Notices and System Information
(Login Issues, Error Messages, Adobe Reader)

Guidelines to Combat Grant Fraud 

Verify if Your Adobe Reader Version is
Compatible with Grants.gov

FOR APPLICANTS

[Find Grant Opportunities](#)

[Get Registered](#)

[Apply for Grants](#)

[Track Your Application](#)

[Applicant Resources](#)

[Search FAQs, User Guides and Site Information](#)

APPLICANT SYSTEM-TO-SYSTEM

FOR GRANTORS

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HELP

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- [E-Biz POC Login](#)

FOR GRANTORS

- [Grantor Login](#)
- [New Agency Users](#)
- [Resources](#)



I'm Convinced—Where Do I Start?

UK Proposal Development Office (PDO)

❖ *PDO Funding Alerts*

- Sign up for email notices by keyword/topic area

❖ *Grant Deadlines*

- 3-month forecast of upcoming grant deadlines
- Sign up for monthly email alerts

❖ Funding searches

<http://www.research.uky.edu/pdo/>

Assessing Mission Fit

Mission fit is critically important to funding success!

- ❖ *Know the sponsor!*
 - Do your research—review carefully...
 - ✓ Web pages
 - ✓ Mission statement
 - ✓ History
 - ✓ Scope of grant-making activity
 - Talk extensively with funded peers.
- ❖ Read and *reread* the funding opportunity announcement (FOA).
 - View the FOA content as an *outline* for the application.



Assessing Mission Fit

- ❖ As you study the FOA, carefully analyze...
 - Goals/purpose of the specific program
 - Topics or issues of interest (*funding priorities*)
 - Benchmarks for success
 - Target populations
 - Review criteria

Against...



- ❖ Your project concept and goals
- ❖ Your own professional capabilities
 - Expertise and experience
 - Collaborative relationships
- ❖ Your institutional capacity
 - Campus environment and infrastructure
 - Human resources/administrative support



Focus on Sponsor Priorities!

Lack of good project/mission fit usually results in rejection!

- ❖ Analyze the match (*your* goals—*their* needs)
 - What's in it for the sponsor?
 - How does your project accomplish the sponsor's goals?
 - Why would the sponsor want to “buy” your idea?
 - ✓ Link project objectives and activities closely to sponsor priorities.
 - What else has the sponsor funded?
 - ✓ Review abstracts/successfully funded proposals.
 - ✓ What kinds of individuals were the awardees?
 - ✓ What similarities does your organization share?

Explore the “non-obvious” sponsors!

Verifying Mission Fit

Once you target a sponsor...

- ❖ Contact the program official listed in the program solicitation to discuss your project concept.
 - **Alignment of project** with program focus
 - Any recommendation for a specific...
 - ✓ Institute at NIH
 - ✓ Directorate at NSF
 - ✓ Program at a private foundation



Contacting the Program Official

Email the program contact
to request a time to call.

In the email, identify...

- ~ Yourself, your expertise, your institution
- ~ Your project concept, i.e., send a brief abstract or concept paper





Cardinal Rules of Grant-Seeking

Funding begets funding!

- ❖ Build a track record by starting small.
- ❖ Each award instills confidence that you can...
 - Manage the funds of others responsibly
 - Complete a proposed project successfully
 - Build on previous work to accomplish even greater outcomes

Persistence pays!

- ❖ Rejection is part of the process.
- ❖ Those who succeed submit again and again and again.

Cardinal Rules of Grant-Seeking

Act on a cardinal rule of grant-seeking: *persistence pays!*

❖ NIH success rates by submission status...

FY	New R01 Equivalent Grants by Submission No.	Success Rate
2011	Original (-01)	12.7%
2011	First Amendment (-01A1)	39.2%

*Success with NSF may require as many as **four** submissions!*

Are You Ready to Propose?

A competitive proposal is ...

*a detailed, step-by-step **action plan!***

If you find yourself proposing...

- Ideas without processes for implementation
- Potential partners with no letters of support
- Several “to-be-named” roles
- Plans to...
 - ✓ Recruit key partners
 - ✓ Identify gaps or assess needs
 - ✓ Identify evidence-based methods to carry out the aims...



...you are probably not yet ready to write the proposal.



Avoiding “Holes” in a Proposal

- ❖ The grant-writing process takes place *after significant planning of the details...*
 - Gap or needs analysis
 - Collection of data/evidence to document your project rationale (NIH—preliminary studies/NSF—work in progress)
 - Identification of collaborators and project team
 - Partner commitments and documentation of expertise
 - Extensive **project** development involving committed partners

Think “shovel-ready” – in short, you have laid extensive groundwork, and the proposed project is ready (or almost ready) to launch!

Conceptual Strategy

What **works** with this sponsor?

❖ Propose from a position of...

▪ *Strength?*

- ✓ Appropriate expertise
- ✓ Excellent resources
- ✓ Considerable prior achievement
- ✓ Promising evidence base

▪ *Weakness?*

- ✓ Education achievement gap
- ✓ Health disparity
- ✓ Underrepresentation of a target population
- ✓ Low socio-economic status of target population
- ✓ Lack of resources

The Successful Grant Application

❖ Strong idea

- Well-aligned sponsor-project match
- Supporting evidence
 - ✓ Preliminary studies, work in progress, baseline

❖ Strong scholarship

- Appropriate methods
- Feasible plan of work

❖ Strong team

- Evidence of expertise
- Documentation of commitments to...
 - ✓ Collaborate
 - ✓ Support the work

❖ Strong presentation

- Well-developed implementation plan
- Effective written communication





Thoughts on Writing the Application

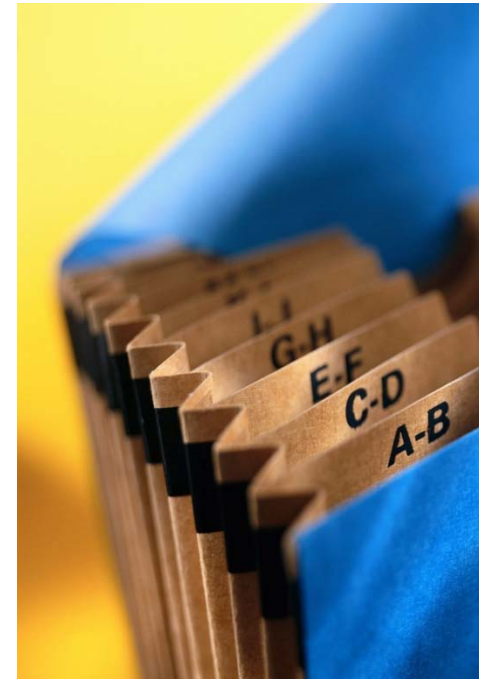
To **be** an NSF-funded investigator, you must **look like one!**
(Substitute **any sponsor**—the game is the same.)

- ❖ Let reviewers “recognize” you as someone who knows how to play the game. This means...
- ❖ You (i.e., your grant application) must...
 - Reflect your knowledge of NSF conventions.
 - Speak the “language” of the agency
 - ✓ Objectives **or** specific aims
 - ✓ Intellectual merit, broader impact, integration of research and education **or** significance and innovation
 - ✓ Outcomes **or** deliverables
 - Follow “the formula”—the broad pattern or layout of a typical NSF application.
 - In short, write for an NSF audience (or USDA, or CDC, or DoED, or...).

Presentation and Format

Be “reviewer friendly”, i.e., **make specific content easy to find!**

- ❖ Read and follow the guidelines strictly!
- ❖ Use the **outline structure** provided by the sponsor—*you deviate at your own risk!*
 - Include all specified content.
 - Use the sponsor’s terminology.
- ❖ Avoid long, unbroken expanses of text.
 - Judicious use of “white space”
 - Blank lines between paragraphs
 - Short “digestible” blocks of text



Eye on the Reviewers!

Make complex content easy to digest!

- ❖ Use the **4-S strategy** of audience-centered communication for discussion points!
 - *Signpost* – Signal upcoming content with subheadings, boldface or italic type, figures, diagrams, charts.
 - *State* – Open with a key point *or topic sentence*.
 - *Support* – Cite supporting evidence for each statement.
 - ~ *Tell* (state) – then *show!* (support)
 - *Summarize* – Pause periodically to interpret and lead reviewer thinking.





Eye on the Reviewers!

More on audience-centered communication

- ❖ The reviewer...what kind of reader is he?
 - ***Linear vs. non-linear reader***
 - ✓ Allow non-linear readers to navigate your content successfully!
 - ✓ Reviewers expect certain content in certain places in an application!
 - ~ “Recognizable” outline based on program guidelines
 - ~ Topic sentences as subheadings
 - ~ Strategic use of emphasis – bold or italics
 - ~ Strategic use of repetition



Eye on the Reviewers!

More on audience-centered communication

- ❖ The reviewer...what kind of reader is she?
 - ***Specialist vs. generalist***
 - ✓ Give reviewers of varying levels of expertise *different access points* to your content.
 - ~ Strategic mix of lay and technical language
 - ~ General-to-specific writing structure
 - ~ Direct statements of **implications** or **significance of the data** (**leading** reviewers to accept your rationale)
 - ***Visual vs. textual reader***
 - ✓ If I say it in a visual, do I have to say it in the text?
 - ✓ And vice versa?

Provide a Snapshot of Your Work!

Executive summary, abstract, project summary...

“...a rose by any other name....” (Shakespeare)

❖ What it **is**...

▪ “**Summative**” conversation with...

- ✓ Reviewers
- ✓ Program officers
- ✓ Public (if funded)

▪ “**Mini**” version of the proposal

- ✓ Covers each major component
- ✓ Captures the **essence** of the review criteria
 - ~ **Do** discuss review criteria fully **in the narrative!**
- ✓ Addresses a wide variety of audiences





What Else Goes in My Application?

- ❖ Clear **goals/objectives** in a well-written overview
- ❖ Well-defined **needs** statement or **rationale** supported by...
 - **Preliminary studies/data/work** in progress
 - **Background section** (literature review)
 - Most often presented as a “**gap**” in the field
- ❖ Detailed set of **methods/project** activities...
 - Clearly linked to objectives *and* outcome statements
- ❖ Direct alignment of narrative with **review criteria**
- ❖ Meaningful **data analysis/evaluation** measures
- ❖ Anticipated **outcomes**
- ❖ Carefully justified **budget**

Writing Goals and Objectives

❖ Goals...

- Indicate overarching long-range direction
- Provide broad statement of the targeted outcome

~ **Example:**

[The goal is to determine] the role of changing marriage and family practices in shaping international migration.

(The Reciprocal Dynamics of Family Transformation through International Marriage Migration; PI—Cole, University of Chicago; NSF award 1060807)



Writing Goals and Objectives

❖ Objectives...

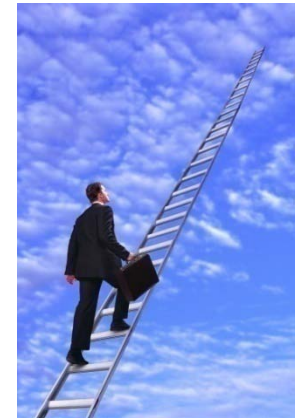
- Break the goal down into smaller units
- Provide *specific, measurable actions* to achieve the goal
- *Outcome objectives...*
 - ✓ Express intended results or accomplishments
 - ✓ Focus on changes in policy, a system, the environment, knowledge, attitudes, or behavior
- *Task-based or process objectives...*
 - ✓ Focus on the activities to be completed
 - ✓ Represent concrete steps in the implementation process

Writing Effective Objectives

Objectives **drive** the application!

Know **where** your work is headed! Ensure your objectives are **SMART**...

- Specific
- Measurable
- Achievable
- Realistic
- Time-bound



Non-SMART objectives invite reviewer criticisms...

- *The scope is too ambitious.*
- *It is not clear that the applicant can achieve the objectives during the project period.*
- *The objectives are not easily measured and, thus, the expected outcomes are doubtful.*





Sample Objectives

❖ *Outcome objectives...*

~ **Example:**

...develops theory about the implications of [disciplining arguments and position-taking arguments]...

...generates and estimates statistical models that account for the effect of expected outcomes on the decision to request a recorded vote.

(Collaborative: Using Roll Call Votes to Understand Legislative Behavior; PI—Carrubba, Emory University, NSF 1067899)

.

Sample Objectives

❖ *Task-based or process objectives...*

~ **Examples:**

... examine[s] how voters form opinions on ballot propositions.

(The Causes and Consequences of Opinion Formation in Direct Democracy Elections; PI—Bowler, University of California-Riverside, NSF 1125325)

...to evaluate [gendered] attitudes and other factors by comparing races in which a woman runs against a man with those in which both candidates are men.

(The Impact of Gender Stereotypes on Support for Women Candidates; PI—Dolan, University of Wisconsin-Milwaukee, NSF 1024071)



Project Rationale

The discussion of rationale (*Why?*) helps you **sell** the project.

- ❖ A strong project rationale builds on a...
 - Specific problem statement **or**
 - Gap in the current state of the field
- ❖ Provides a context or frame of reference for the work
- ❖ Underscores the importance of the goals/objectives
- ❖ Uses compelling language and statistics to describe...
 - Extent/degree of problem
 - Need for the project and its urgency
 - Impact of leaving the problem unaddressed
 - Populations affected



Tell Your Reviewer That It's Important!

Never leave your reviewers to determine the impact themselves!

Joshua Bell at the metro...

- ❖ “By most measures, he was nondescript: a youngish white man in jeans, a long-sleeved T-shirt and a Washington Nationals baseball cap. From a small case, he removed a violin. Placing the open case at his feet, he shrewdly threw in a few dollars...and began to play.”

By Gene Weingarten

Washington Post Staff Writer on one of the nation's great musicians
Sunday, April 8, 2007

<http://www.washingtonpost.com/wp-dyn/content/article/2007/04/04/AR2007040401721.html>

Methods—Success Is In the Details!



❖ A competitive proposal...

- *Starts with* a good idea but develops the idea into a very detailed *action plan*.
- Clearly indicates *who, what, why, when, and how*...and it does so in highly specific detail.

Good Idea



Action Plan

Position your proposal content as far as possible along the “**Good Idea** → **Action Plan**” continuum by laying out *very specific details* of the work.



Review Criteria Rule!

- ❖ Study the review criteria.
- ❖ Are your responses to the criteria easy to find?
- ❖ Are the criteria thoroughly addressed?
 - **NSF intellectual merit**
 - ~ Importance to the field
 - ~ Potentially transformative concepts
 - ~ Qualifications of the team
 - ~ Project conception and organization
 - ~ Access to resources

Review Criteria Rule!

- ❖ Are the criteria thoroughly addressed?
 - **NSF broader impacts**
 - ~ Integration of research and education
 - ~ Broadening participation of underrepresented groups in NSF programs
 - ~ Enhancement of infrastructure for research and education
 - ~ Societal impacts
- ❖ Are **all** criteria addressed?
- ❖ Get outside review of the narrative “against” the guidelines.



PDO Resources

Grant Writing Guides and Tips

http://www.research.uky.edu/pdo/funding/guides_tips.html

Information for Students

<http://www.research.uky.edu/pdo/AdditionalResources/InformationforStudents.htm>

PDO Facilities Description Library

<http://www.research.uky.edu/aspnet/vsprojects/PDO/RefLib/LogIn.aspx?sPage=PIView.aspx>

PDO Funding Alerts

<http://www.research.uky.edu/aspnet/vsprojects/pdo/pdoservicerequests/subjectmailinglistnew.aspx>

Watch the PDO workshop calendar for future sessions on developing grant applications!

ON THE ART OF WRITING PROPOSALS

Some Candid Suggestions
for Applicants to
Social Science Research Council
Competitions

http://www.ssrc.org/workspace/images/crm/new_publication_3/%7B7a9cb4f4-815f-de11-bd80-001cc477ec70%7D.pdf



UK Resource

UK Proposal Development Office

The mission of the Proposal Development Office is to assist University of Kentucky faculty, staff, and students to seek and secure external funding for their scholarly activities through the submission of competitive grant and contract applications.

<http://www.research.uky.edu/pdo/>

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