

PRESENTER



CLINTON DOGGETT

Senior Grants Advisor

Clinton Doggett holds an MFA in Creative Nonfiction (Goucher College) and a BA in English and Communication (University of Pittsburgh). He joined Hanover in 2008 and has served in a range of positions, from research analyst to project manager to team leader, focusing primarily on supporting strategic advising and grant development activities for higher education clients. At Hanover, Clinton serves as the team's Senior Grants Advisor, focused on delivering grantsmanship trainings, providing prospect research consultation, spearheading strategic initiatives, and managing relationships with institutions.

AGENDA

9:00 AM INTRODUCTION TO HANOVER GRANTS (15 MIN)

9:15 AM NAVIGATING THE FUNDING LANDSCAPE AND

FINDING STRONG PROSPECTS (40 MIN)

+ Prospecting Exercise (20 min)

10:15 AM BREAK (15 MIN)

10:30 AM GOOD IDEAS VS. FUNDABLE PROPOSALS (40 MIN)

+ Project Alignment Exercise (20 min)

11:40 AM Q&A / LUNCH (80 MIN)

1:00 PM EFFECTIVE PROPOSAL DEVELOPMENT (50 MIN)

+ RFP Navigation Exercise (10 min)

2:00 PM CONNECTING WITH GRANTMAKERS (40 MIN)

+ Funder Engagement Exercise (10 min)





BACKGROUND ON HANOVER

Hanover provides grant development and strategic advising support to higher education and healthcare organizations.

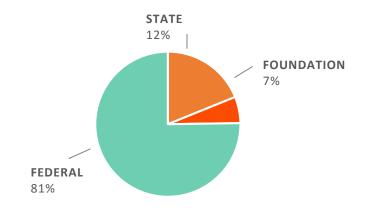
Our grants professionals deliver customized proposal review, revision, and production support, while also helping to align their needs and strategic priorities to funding trends and federal, state, and foundation grant opportunities.

GRANTS WON

\$500+

MILLION

MORE THAN \$500 MILLION IN TOTAL GRANT FUNDING FOR MEMBERS SINCE 2012



RETURN ON INVESTMENT

10 to 1

FOR EVERY \$1 INVESTED IN HANOVER MEMBERSHIPS, WE HAVE SUPPORTED \$10 IN GRANT-FUNDED PROJECTS



OUR SOLUTIONS

GRANTSEEKING CAPACITY DEVELOPMENT Supporting the development of organizational capacity to pursue and manage grant funding, through training, strategic assessment, and benchmarking.

FUNDING RESEARCH Identifying and evaluating grant opportunities aligned to member projects and funding needs, while facilitating planning through funded project research and forecasting.

PRE-PROPOSAL SUPPORT

Facilitating the assessment and development of competitive project concepts, helping to navigate funder requirements and build relationships prior to completing submissions.

PROPOSAL SUPPORT

Supporting member-led grant proposal projects by providing review and revision services designed to ensure the strongest possible proposals are submitted.

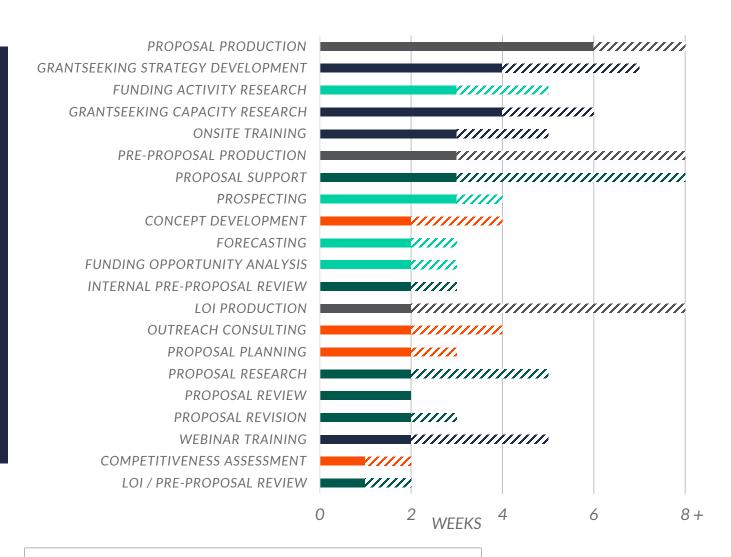
PROPOSAL DEVELOPMENT

For programmatic grants, leading proposal production projects as primary writer in close coordination with member teams, developing iterative narrative drafts over a defined timeline towards a polished submission.



OUR SERVICES

Project windows represent our standard best practices for completion of projects based on typical timeframes needed to produce quality results. Project windows may be impacted by evolving member needs, varying stakeholder participation, or other factors





Solid blocks represent the standard minimum project timelines; shaded pieces reflect the typical outside limit for larger projects.

PROPOSAL REVIEW AND REVISION



PROPOSAL REVIEW

Proposal Reviews include comments in the margins of the text, highlighting where the proposal can better align with funder guidelines and priorities.

- Prescriptive Feedback Real and actionable insight into how to improve a proposal. While we may highlight strength areas, our focus is on helping the PI zero in on what can be improved.
- A Close Eye While "reviews" do not include redlining within the text, they may highlight a need for the PI to proofread or otherwise address the writing itself prior to submission.
- **Key Findings** When delivered, reviews are attached to a concise email that outlines the Grants Consultant's primary observations.
- Consultation A phone debrief with the Grants Consultant is often possible upon request.



PROPOSAL REVISION

Proposal Revisions include the elements of a review in addition to *line-item edits* that may range from proofreading to developmental editing, depending on the agreed upon scope.





SAMPLE AWARDS

RESEARCH GRANTS

\$730k

NSF Faculty Early Career Development Program (CAREER)

\$15M

DARPA Friend or Foe

\$400k

NASA Minority University Research and Education Program

\$500k

NSF Research Traineeship (NRT)

\$950k

DOD Congressionally Directed Medical Research Programs

\$650k

NSF Partnerships for International Research and Education (PIRE)

\$380k

NIH Research Enhancement Award (R15)

\$120k

AHRQ Small Research Grant Program (RO3)

\$325k

NIH Exploratory/Developmental Research Grant Award (R21)

\$20M

NSF Experimental Program to Stimulate Competitive Research (EPSCoR)

\$230k

American Heart Association Scientist Development Grant

\$250k

Patient-Centered Outcomes Research Institute (PCORI)

\$430k

NIH Research Enhancement Award (R15)

\$300M

NSF Major Research Instrumentation (MRI)

\$2.8M

NIH Research Project Grant Program (R01)

\$380k

DOE Early Career Research Program

\$9M

NIH Clinical and Translational Science Award (U54)

\$460k

NIH Resource-Related Research Projects (R24)

\$380k

DOD MSI STEM Research & Development Consortium (MSRDC)

\$120k

NIH Scholarly Works in Biomedicine and Health

\$330k

NSF Dynamics of Coupled Natural and Human Systems (CNH)

\$165k

NIH Support of Competitive Research (SCORE) Pilot Project Award























SAMPLE AWARDS

PROGRAM GRANTS

\$2.1M

ED Title III Strengthening Institutions Program

\$600k

NSF Scholarships in STEM (S-STEM)

\$3.25M

ED Title V Developing Hispanic Serving Institutions Program

\$255k

NSF Improving Undergraduate STEM Education (IUSE)

\$2.1M

HRSA Advanced Nursing Education (ANE)

\$300k

DOJ Office of Violence Against Women Grants to Reduce Sexual Assault

\$300k

Lilly Foundation

\$1.75M

CDC HIV Prevention

\$500k

ED Student Support Services

\$300k

NSF INCLUDES

\$3.5M

ED First in the World (FITW)

\$100k

HRSA Rural Health Network Development Planning Program

\$4.3M

ED HSI - STEM Program

\$1M

ARC Partnerships for Opportunity and Workforce and Economic Revitalization (POWER)

\$140k

DOT University Transportation Centers

\$50k

Robert Wood Johnson Foundation

\$50k

NEH Humanities Initiatives at Hispanic-Serving Institutions

\$2M

ED Native American-Serving Nontribal Institutions (NASNTI) Program

\$400k

Lumina Foundation

\$30M

ED Promise Neighborhoods

\$50k

Hearst Foundations

\$4.2M

ED Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR-UP)

\$3M

DOL Trade Adjustment Assistance Community College and Career Training (TAACCCT) Grant





















YOUR TEAM

UMBC has a dedicated account management team, with roles outlined below:



Audrey Ngeow





Andrew Woods

CONTENT DIRECTOR

- Primary project contact
- Evaluates needs and proposes support approach
- Secures and guides appropriate consultants or analysts to support projects
- Ensures timely and quality delivery of support

RELATIONSHIP DIRECTOR

- Primary commercial and service contact
- Confirms satisfaction with and effective utilization of Hanover services,
- Engages new users to leverage our capabilities.



GRANTS SUPPORT TEAM

- **Grants Consultants** are deeply experienced grant writing professionals who work with members to complete a range of strategic planning, training, and grant development support projects.
- **Grants Research Analysts** execute a variety of prospecting research, benchmarking, and literature review projects for members.







SOCIAL SCIENCES FUNDING LANDSCAPE

Social Sciences funding comes from a variety of public and private entities.

Federal agencies:

- National Science Foundation (NSF)
- National Institutes of Health (NIH)
- Department of Defense (DOD)
- Department of Justice (DOJ)
- Department of Education (ED)

Private organizations:

- Foundations
- Corporations
- Associations

FUNDING IN THE SOCIAL SCIENCES

GOV'T AGENCIES









FOUNDATIONS







American Council of Learned Societies
ADVANCING THE HUMANITIES

SOCIAL SCIENCES GRANT LISTINGS

Many institutions collect grant opportunities in the social sciences for faculty to explore:

- Grants and Proposals: Social Sciences (NYU)
- Funding Opportunities in the Social Sciences (Lewis and Clark)
- <u>Social Sciences Funding Sources</u> (Albert Einstein College of Medicine)
- Grant Opportunities in the Social Sciences (Cornell)



GOVERNMENT FUNDERS



FEDERAL FUNDING

Federal funding for the social sciences is available from a variety of agencies, including:

- National Science Foundation (NSF)
 - Basic social science research and STEM education
- Department of Justice (DOJ)
 - Criminal justice research
- Department of Defense (DOD)
 - Social science related to warfighting
- Department of Education (ED)
 - Education research and programs
- National Institutes of Health (NIH)
 - Behavioral science / health research



NATIONAL SCIENCE FOUNDATION



NSF grants fund:

- Basic science research and supporting equipment
- STEM education at all levels

NSF grants do not fund:

 health-focused research or non-STFM education. NSF makes grants in 7 directorates, with 2 focused on social sciences:

Education and Human Resources (EHR)

- Division of Graduate Education (DGE)
- Division of Human Resource Development (HRD)
- Division of Undergraduate Education (DUE)
- Research on Learning in Formal and Informal Settings (DRL)

Social, Behavioral, and Economic Sciences (SBE)

- Division of Behavioral and Cognitive Sciences (BCS)
- Division of Social and Economic Sciences (SES)
- National Center for Science and Engineering Statistics (NCSES)
- SBE Office of Multidisciplinary Activities (SMA)



NSF SBE GRANTS PROGRAM EXAMPLES

Smart & Connected Communities (S&CC)

Encourages researchers to work with communities and residents to identify and define challenges they are facing, enabling those challenges to motivate use-inspired research questions.

Geography and Spatial Sciences

Supports basic research about the geographic distributions and interactions of human, physical, and biotic systems on Earth.

Political Science

Supports scientific research that advances knowledge and understanding of citizenship, government, and politics.

NSF SBE GRANTS AT UMBC

Smart & Connected			
Communities	(S&CC)		

Appealing to the Authority of Data: Social Complexity, Fragmented Decisionmaking, and the Politics of Smart Cities (Susan Sterett)

\$106,436

Geography and Spatial Sciences

Doctoral Dissertation Research: Impacts of Transnational Volunteerism on Economic Development and Labor Dynamics (David Lansing)

\$16,271

Political Science

Workshop: Advancing Inclusion and Diversity: San Diego, CA: April 17, 2019 (Susan Sterett)

\$4,400



U.S. DEPARTMENT OF JUSTICE (DOJ)



Office of Justice Programs (OJP)

- Bureau of Justice Assistance (BJA)
- Bureau of Justice Statistics (BJS)
- National Institute of Justice (NIJ)
- Office of Juvenile Justice and Delinquency Prevention (OJJDP)
- Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking (SMART)
- Office for Victims of Crime (OVC)

Office on Violence Against Women (OVW)

Programs designed to develop the nation's capacity to reduce domestic violence, dating violence, sexual assault, and stalking by strengthening services to victims and holding offenders accountable.

NATIONAL INSTITUTE OF JUSTICE (NIJ)

National Institute of Justice (NIJ) funding areas:

- Research, development and evaluation. Physical and social science research, development and evaluation projects about criminal justice through competitive solicitations.
- Forensic laboratory enhancement.
- Research fellowships. Two fellowships through annual solicitations.



EXAMPLE GRANTS DOWN THE STREET AT UMB:

- Assessing the Impact of a Graduated Response Approach for Youth in the Juvenile Justice System
- Reducing Gang Violence: A Long-Term
 Follow-Up of a Randomized Trial of
 Functional Family Therapy
- Evaluating Promising School Staff and Resource-Officer Approaches for Reducing Harsh Discipline, Suspensions and Arrests



INSTITUTE FOR EDUCATION SCIENCES (IES)





Education Research Grants Programs

Dedicated programs of research (topics) that typically accept applications once per year.



TOPICS

- Career and Technical Education
- Cognition and Student Learning
- Early Learning Programs and Policies
- Education Technology
- Effective Instruction
- English Learners
- Improving Education Systems
- Postsecondary and Adult Education
- Reading and Writing
- Science, Technology, Engineering, and Mathematics (STEM) Education
- Social and Behavioral Context for Academic Learning



IES EXAMPLE: SOCIAL-BEHAVIORAL

Education Research Grants Program



Social and Behavioral Context for Academic Learning

Supports research on social-behavioral competencies (i.e., social skills, attitudes, and behaviors) that improve student achievement and progress in the K to 12 education system.

Key priorities as of FY 2020:

- New <u>theories of change to advance our understanding of social</u> <u>behavioral competencies</u> and how they relate to success in school and work.
- Valid <u>measures of social and behavioral competencies</u> for applied purposes.
- Developing and testing <u>new approaches to discipline that provide</u> <u>access to teaching and learning</u> for all students regardless of race and ethnicity, gender, or disability status.



NATIONAL INSTITUTES OF HEALTH



public funder of biomedical research in the world, investing more than \$32 billion a year to enhance life, and reduce illness and disability.

Each Institute within NIH has a distinct mission that focuses on a specific disease area, organ system, or stage of life.

- National Cancer Institute (NCI)
- National Eye Institute (NEI)
- National Heart, Lung, and Blood Institute (NHLBI)
- National Human Genome Research Institute (NHGRI)
- National Institute on Aging (NIA)
- National Institute on Alcohol Abuse and Alcoholism (NIAAA)
- National Institute of Allergy and Infectious Diseases (NIAID)
- National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS)
- National Institute of Biomedical Imaging and Bioengineering (NIBIB)
- Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)
- National Institute on Deafness and Other Communication Disorders (NIDCD)
- National Institute of Dental and Craniofacial Research (NIDCR)
- National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)
- National Institute on Drug Abuse (NIDA)
- National Institute of Environmental Health Sciences (NIEHS)
- National Institute of General Medical Sciences (NIGMS)
- National Institute of Mental Health (NIMH)
- National Institute on Minority Health and Health Disparities (NIMHD)
- National Institute of Neurological Disorders and Stroke (NINDS)
- National Institute of Nursing Research (NINR)
- National Library of Medicine (NLM)



NATIONAL INSTITUTES OF HEALTH

National Institute on Aging



- Supports social, behavioral, and economic research and training on the processes of aging at the individual and societal levels.
- Fosters cross-disciplinary research, from genetics to cross-national comparative research, and at stages from basic through translational.

SAMPLE OPPORTUNITIES...

FOA	Title	Release	Expiration
Number		Date	Date
RFA-AG-	Tailoring Interventions to Improve Preventive Health	09-28-	11-05-
20-045	Service Use (R61/R33 Clinical Trial Required)	2019	2019
PAR-17-	Clinical and Epidemiological Research on Chronic Disease in the Caribbean (R01)	08-25-	11-16-
470		2017	2019
PAR-18-	Basic and Translational Research on Decision Making in	12-21-	06-09-
544	Aging and Alzheimer's Disease (R01 - Clinical Trial Optional)	2017	2020
PAR-18-	Emotional Function in Normal Aging and/or MCI and AD/ADRD (R01 - Clinical Trial Optional)	01-12-	06-09-
581		2018	2020
PAR-18-	Emotional Function in Normal Aging and/or MCI and AD/ADRD (R21 - Clinical Trial Not Allowed)	01-12-	06-23-
582		2018	2020
PAR-18-	Basic and Translation Research on Decision Making in Aging and Alzheimer's Disease (R21 - Clinical Trial Optional)	12-21-	06-23-
538		2017	2020
PAR-19- 133	Academic Research Enhancement Award for Undergraduate-Focused Institutions (R15 Clinical Trial Required)	12-21- 2018	01-08- 2021



U.S. DEPARTMENT OF DEFENSE



Provides the military forces needed to deter war and to protect the security of our country.

NOTABLE DOD PROGRAM:

United States Army Research Institute for the Behavioral and Social Sciences

Broad Agency Announcement includes the following research focus areas:

- Understanding Team Dynamics
- Improving Leadership and Leader Development
- Identifying, Assessing, and Assigning Quality Personnel
- Enhancing Lifelong Learning

STATE AGENCIES



Grants and programs support artists and arts organizations in their pursuit of artistic excellence, ensure the accessibility of the arts to all citizens and promote statewide awareness of arts resources and opportunities.



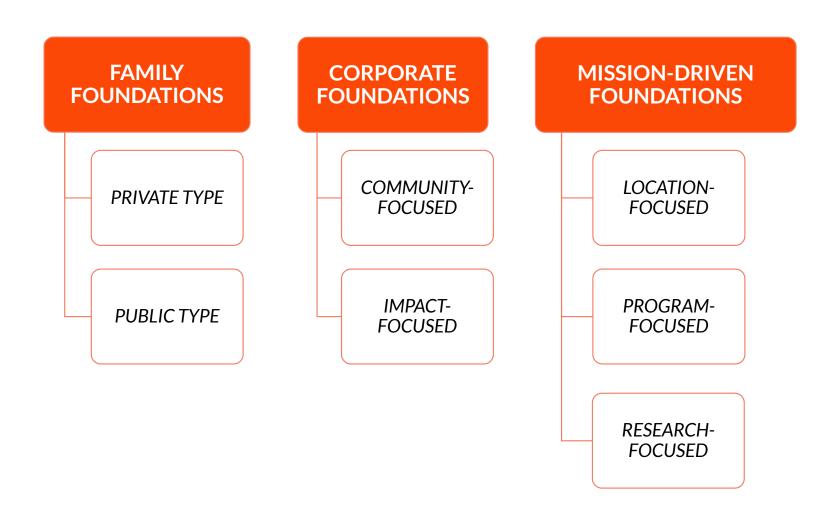
Grants to nonprofit organizations that use the humanities (literature, philosophy, history, etc.) to inspire all Marylanders to embrace lifelong learning, exchange ideas openly, and enrich their communities.

PRIVATE FUNDERS

FOUNDATIONS AND ASSOCIATIONS

- Varied universe of private funders supports wide range of arts and humanities projects and organizations.
- National foundations maintain programs with priorities in the arts/humanities.
- Local or regional foundations invest in projects relevant to communities in geographic areas of interest.
- Independent associations/councils award small grants and fellowships within disciplinary focus areas.

FOUNDATION TYPE WILL INFLUENCE APPROACH



NATIONAL FUNDERS: RUSSELL SAGE FDN



The Russell Sage Foundation is focused on the conduct and dissemination of social science research. Funding priorities

- Behavioral Economics
- Future of Work
- Race, Ethnicity, and Immigration
- Social, Political and Economic Inequality
- The Social, Economic, and Political Effects of the Affordable Care Act

- Computational Social Science
- <u>Immigration and Immigrant</u>
 <u>Integration</u>
- Non-Standard Work
- <u>Decision Making and Human</u>
 <u>Behavior in Context</u>

NATIONAL FUNDERS: WENNER-GREN



Wenner-Gren Foundation for Anthropological Research is a major international funding sources for anthropological research and is actively engaged with the anthropological community through various grant, fellowship, conference, and capacity building programs.

COUNCILS AND ASSOCIATIONS: ACLS

American Council of Learned Societies ADVANCING THE HUMANITIES

- Leading private institution supporting scholars in the humanities and related social sciences at the doctoral and postdoctoral levels.
- In 2017-18, ACLS funded about 350 fellows and scholars through grant programs, supporting humanistic work at over 100 US institutions of higher education and scores more outside the United States.

FELLOWSHIPS

What is a fellowship?

A professional development opportunity sponsored by an organization wanting to support new leadership in its field, typically lasting short periods of time (from a few months to a few years).

Explore Fellowship Opportunities

- <u>Funding in the Arts, Humanities and Social Sciences</u> (Northeastern University)
- <u>Fellowship Opportunities</u> (U of Chicago Social Sciences Research Center)



THE ART OF PROSPECTING



PROSPECTING: WHO WILL FUND YOUR WORK?

Prospecting is the art of matching projects with likely funders.

GOOD PROSPECTIVE FUNDERS HAVE:

- A mission that aligns with your mission
- ✓ A history of funding similar or related projects
- ✓ Stated priorities that encompass your project area
- No restrictions that would preclude funding your project



WHO IS FUNDING SIMILAR WORK?

Funders' giving history and stated priorities provide a means for identifying prospects.

- Use multiple databases and search tools.
- Search for keywords that relate to your mission and project.
- Search by funder type, funding type, and funding region.
- Note funding restrictions.
- Note typical funding amounts.
- Note key deadlines and other timing constraints.



WHAT KINDS OF PROJECTS ARE FUNDABLE?

- Some ideas and funding needs are not realistic candidates for external grants. Common challenges:
 - General support
 - Equipment grants with no programmatic tie-in
 - "Planning"
- Take note of what types of projects actually get grant funding – and at what levels.
 - Different levels of funding for different types and stages of work.
- Don't waste time searching for prospects that don't exist.



TYPES OF PROSPECTING RESOURCES

- Federal Funding Databases contain information on past, current, and future funding opportunities, in addition to information on funded projects.
- Funder Award Databases provide detail on the projects supported by a grantmaker.
- Funder Websites contain background on active programs, giving interests, past giving, and guidelines for proposals.
- Foundation Databases catalog past foundation grant awards and provide funder background information



PROSPECTING RESOURCES: GRANT FORWARD



- Specialized search algorithm and team of specialists allows for constantly adding new funding opportunities.
- Adaptive search filters to find grant opportunities.
- Dynamic search engine with a personalized funding recommendation service.



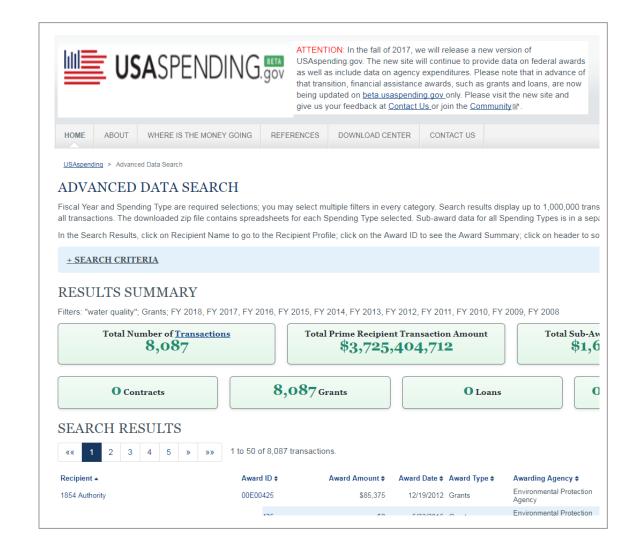
FEDERAL DATABASES

Government grants
databases provide vast
datasets on federal
giving history and
grant competition
announcements

- Put search terms in "quotes."
- Check off closed and/or expired opportunities in your search. (Grants.gov)
- Export the raw data and reduce it to key data points.

USASPENDING.GOV

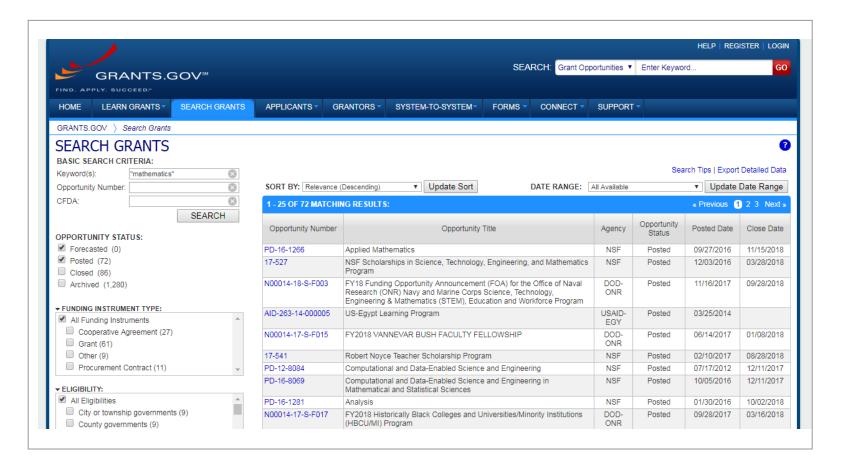
USASpending.gov houses a massive database with information on USfunded grants





GRANTS.GOV

Grants.gov is a key resource for learning about grant competitions





FUNDER-CURATED AWARD DATABASES

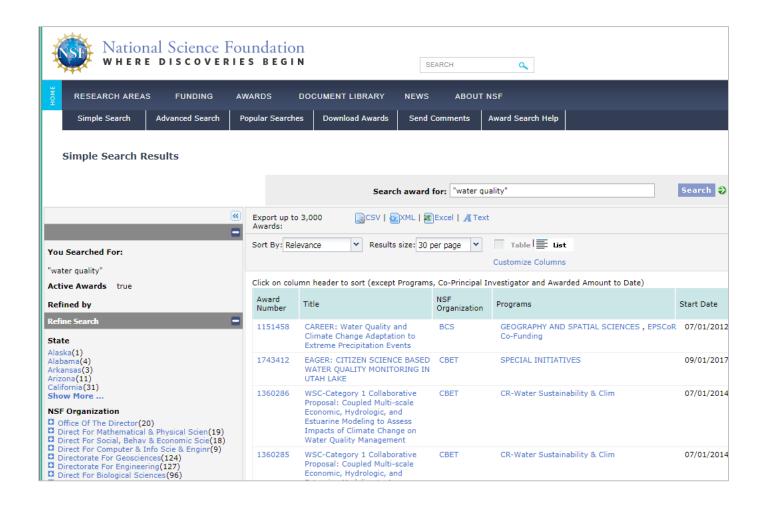
Funder-maintained grant databases are almost always more detailed and current than external sources tracking grants.

TIPS

- Not all federal agencies maintain their userfriendly award databases.
- Large national foundations are more likely to maintain their own giving databases than small foundations.



AWARD DATABASES: NSF



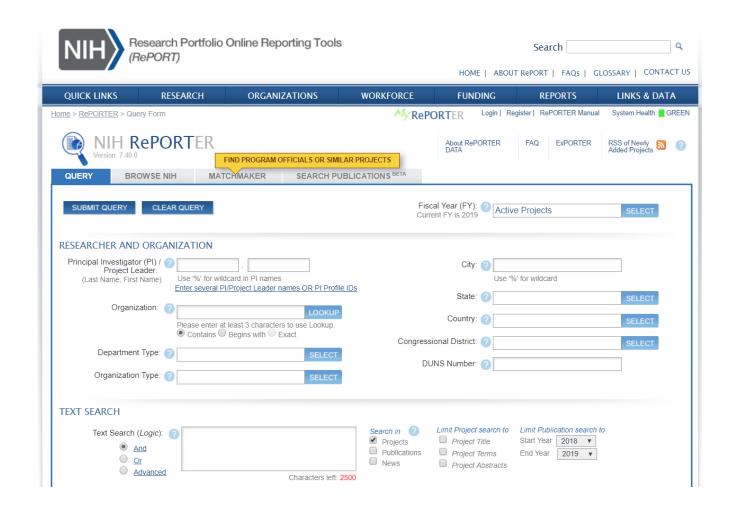


AWARD DATABASES: NSF TIPS

- Search by general keywords to cast wide net.
- Search by program name to find example grants for targeted program
- Look for the most recent examples.
- Use "Table" view to observe patterns.



AWARD DATABASES: NIH





AWARD DATABASES: NIH TIPS

- Search by keyword to find programs/institutes.
- Search by institute to find examples of funded projects.
- Use Matchmaker to find similar projects and program officials.
- Observe which funding mechanisms are most common (RO3, KO1, U54, etc.).



FUNDER WEBSITES

Outside of direct contact with funders, their websites are the best resources for up-to-date information.

TIPS

- Look for the most recent grant examples on funder websites.
- Get a feel for the mission of the funder.
- Learn the character and quirks of the funder.



FUNDER WEBSITES





We are always open to new ideas, and we invite you to submit yours through our short <u>online form</u>. We'll review each one and be in touch within 45 days if we are interested in learning more. Before submitting your idea, we suggest you familiarize yourself with our seven <u>program areas focused on challenging</u> inequality.

To apply for a <u>JustFilms</u> grant or the <u>Ford Foundation Fellowships Program</u>, please complete the inquiry processes on their respective pages.



FOUNDATION DATABASES

Foundation grant databases catalog the grants awarded by foundations and collect background info on funders.

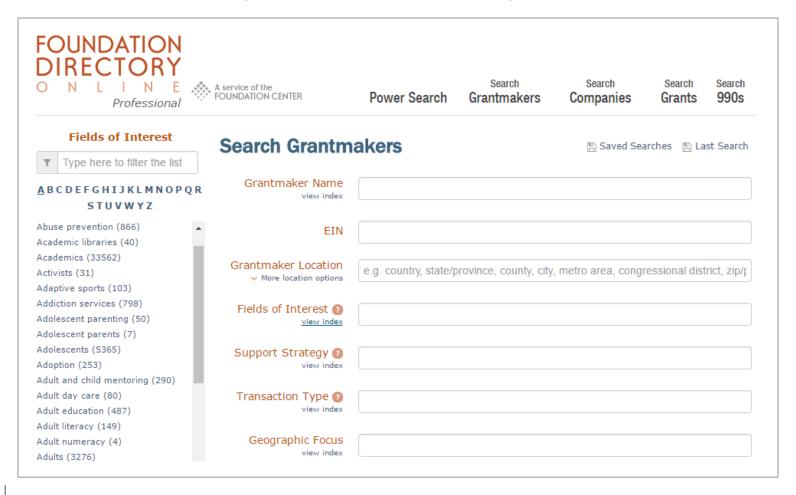
TIPS

- Focus first on a grantmaking history.
- Look for as many indicators as you can find of a good fit.
- "Recent" award data is not always reflective of current funder priorities.



FOUNDATION DIRECTORY ONLINE

Foundation Directory Online has a flexible and powerful search interface.





GRANTS

EVALUATING OPPORTUNITIES



GATHER PROSPECT INFORMATION

Keep notes in a list, spreadsheet, or database for further analysis.

- ✓ Funder type and mission
- ✓ Eligibility restrictions
- ✓ Allowable costs/activities
- ✓ Award information
- ✓ Relevant grantmaking history
- ✓ Key Contacts, Staff and Trustee names and profiles

- ✓ Funding process (e.g., eligibility, timing, amounts, requirements)
- ✓ Indicators of competitiveness
- ✓ Opportunities for connection and communication



WHAT MAKES A GOOD GOV'T PROSPECT?

- ☐ Does the program **align with the goals** of my project?
- Does the program support activities I plan to pursue in my project?
- Does the program grant enough funding to support my project?
- ☐ Is there **evidence of past support** to projects similar to mine?
- ☐ Is the opportunity well-suited to the **stage of my research**?
- Has the program officer confirmed alignment with the program's goals?



WHAT MAKES A GOOD PRIVATE PROSPECT?

- ☐ Are your mission and the funder's mission well-aligned?
- What is the long-term potential of the relationship?
- How challenging will it be to develop a relationship with the funder?
- Is there evidence of past support to projects similar to mine?
- Are there **existing connections** I can leverage through my colleagues or through my institution to cultivate a relationship of my own?



WHO IS THE IDEAL GRANTEE?

Gain an understanding of the ideal grantee from the funder's perspective and do everything you can to match that profile.

- Who is your competition?
- In a perfect world, which organizations does the funder want to support?
- What resources, history, expertise, partnerships, and strategic positioning does the ideal grantee have?
- What distinguishes your organization as an exceptional candidate against the field?



CAST A WIDE NET

A single funder often won't support a whole project or initiative in perpetuity.

- Understand the different components of your project and how each could be positioned towards different funders.
 - Giving priorities
 - Allowable activities
 - Grant amounts
- Demonstrating wide support for a project is a selling point to prospects.
- Show funders you're already thinking of what to do when they're out of the picture.



EXERCISE: FUNDING SEARCH



- 1. Use web search and/or prospecting tools to select one federal program relevant to your research interests.
- 2. Within this program identify one or more examples of funded projects similar or relevant to your interests.
- Confirm key dates and deadlines associated with the program you've selected.
- 4. Identify the program officer to contact and any guidelines regarding how to engage with program staff.





GOOD IDEAS VS. FUNDABLE PROPOSALS



GOOD VS. FUNDABLE IDEAS

A GOOD IDEA

- Helps someone
- Advances an important agenda
- Serves a wise/substantial purpose
- Creates interest
- Involves growth or learning
- Can have undefined steps or processes
- Builds something of value
- Can be of any scale

Can be a one-time effort

A FUNDABLE IDEA

- Addresses funder's target audience
- Advances funder's agenda
- Has "significance"
- Aligns with institutional priorities
- Measures/Analyzes/Evaluate objectives and impacts
- Solid, well-articulated methodology and approach
- Is innovative/adds to body of knowledge/advances the field
- Is scaled by prior experience and to the budget
- Should be replicable



GRANTS

GENERATING GOOD IDEAS

PROBLEMS, PROBLEMS EVERYWHERE



- Narrow scientific/research problems
- Platform problems (requiring enabling tech)
- Regional workforce problems
- Capacity/Infrastructure problems
- Information/Visibility/Assessment problems
- Discipline-specific teaching problems
- Population-specific progress problems
- Etc.



PICK A SOLUTION

- Build expertise/experience
- Apply content/ methodological interest
- Test existing approach in a new context
- Leverage partner expertise/experience



IS MY IDEA BAD, GOOD, OR FUNDABLE?

- Positive preliminary data
- Novelty
- Low cost
- Institutional/external

- financial support
- Existing partnerships
- Sustainability
- Meaningful outcomes

Project outcomes are grantmakers' ROI.



SET THE STAGE: KNOW YOUR FIELD

How does your work relate to other work in the field?

- What gap in knowledge or services will this work fill?
- Does this work build on previous work? Which work?
- Does this work solve a fundamental challenge facing the field?
- Does this work duplicate other work?
- How does this work relate to other work currently in process?
- How will this work contribute to the field in the short and long term?
- Is this work a priority for the field?



DESIGNING STRONG PROJECTS



WHAT IS PROJECT DESIGN?

"Project Design" refers to the structure of a grant project.

Project Design includes:

- Who
- What
- When
- Where
- Why
- How
- ...and how those elements work together to accomplish your goal.



PROJECT DESIGN VS. PROGRAM DESIGN

"Project Design" is not the same thing as "Program Design."

Grants usually fund projects that are:

- Discrete, with activities that are separable from the applicant's other work
- Time-bound, with specific start and end dates
- Concrete, with specific and measurable products and impact



COMPETITIVE PROJECT DESIGN

A strong design makes a project competitive.

Strong project design is:

- Clear, with all elements delineated
- Logical, with sensible and welldefined processes
- Impact-oriented, with all elements working together to produce results

A strong project design convinces the reader that the project is both "do-able" and worth doing.



THE PROJECT DESIGN PROCESS

Use a step-by-step process for a well-designed project.

- 1. Understand the funder's mission and requirements.
- 2. Articulate **specific outcomes** / impact goals that align with the funder's mission and requirements.
- 3. Build the **project logic model** based on outcomes / impact goals.
- 4. Confirm the practicability of the project using a budget.
- 5. Design the **project evaluation**.

An "outcomes-based" design process will ensure a strong Project Design.



FUNDER'S REQUIREMENTS

To understand the funder, start by carefully reviewing their materials.

REVIEW:

- Grantmaker guidance
- Specific grant solicitation
- Funded grants (if possible)
- Previous review comments (if possible)

NOTE:

- Grantmaker intentions and priorities
- Specific requirements



DIVING INTO PROJECT DESIGN

To begin Project Design, articulate mission alignment and outcome goals.

To understand mission alignment with the funder, ask:

- What do I want to accomplish with funding?
- What does the funder want to accomplish?
- Where do my mission and the funder's mission overlap?

To articulate outcome goals, ask:

- What specific outcomes are highest priority for me and for the funder?
- What can I accomplish, given the funder's requirements?

Articulate concrete, measurable outcomes / impact goals.



USE OUTCOMES TO DRIVE DESIGN

Build a concrete logic model beginning with outcomes / impact goals.

- What impact do you want your project to have?
- Given the impact you want to have, what results will you need?
- What activities will create those results?
- What resources will you need to conduct those activities?

Resources	Activities	Results	Impact



BUILD A LOGIC MODEL

INPUTS → ACTIVITIES → OUTPUTS → OUTCOMES

Resources invested in the project

Actions the project will perform

Expected results

Expected impact

Personnel,
Partners,
Funding,
Facilities, etc.

Recruitment, Training, Marketing, Evaluation, etc. Focus on project implementation Focus on project <u>effectiveness</u>

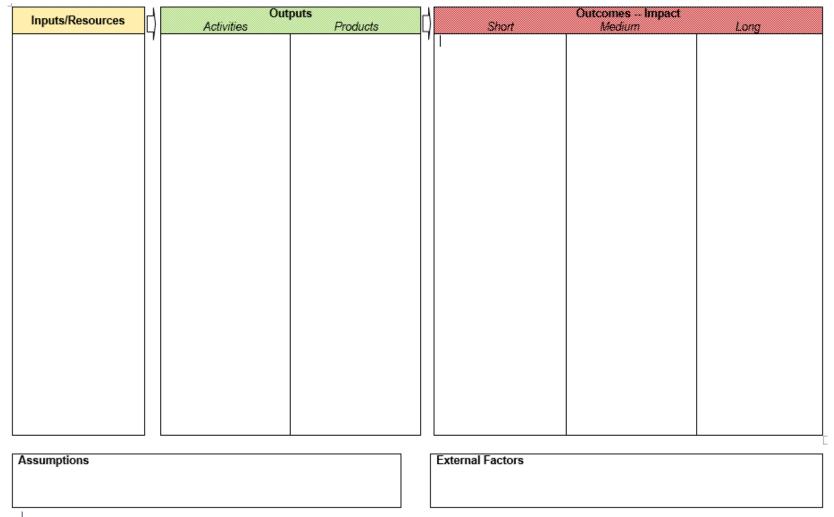


HOW WILL A LOGIC MODEL HELP?

- Forces you to concisely describe approach
- Summarizes linkages more simply than prose
- Emphasizes research basis for project
- Narrows focus on meaningful outcomes

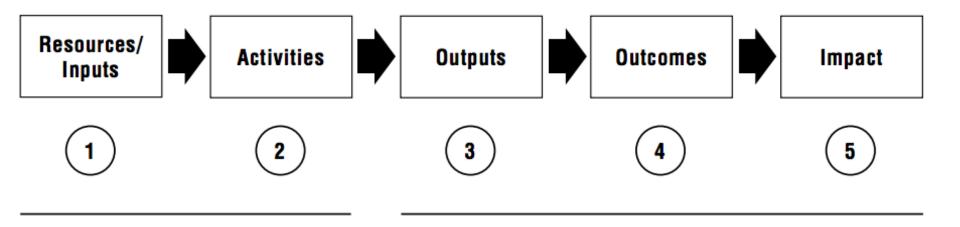


SAMPLE LOGIC MODEL TABLE





USING THE WK KELLOGG LOGIC MODEL SET-UP



Your Intended Results

Your Planned Work

RESOURCES/INPUTS

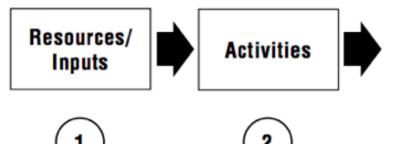
Resources/ Inputs



- Funding
- Staff
- Partners
- Volunteers
- Program materials
- Site/Facilities
- Equipment



ACTIVITIES

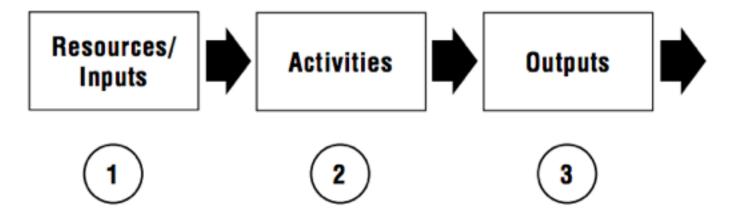


Your Planned Work

- Hire staff
- Staff training
- Recruit volunteers
- Volunteer training
- Recruit partners
- Implement programming
- Collect data
- Analyze data



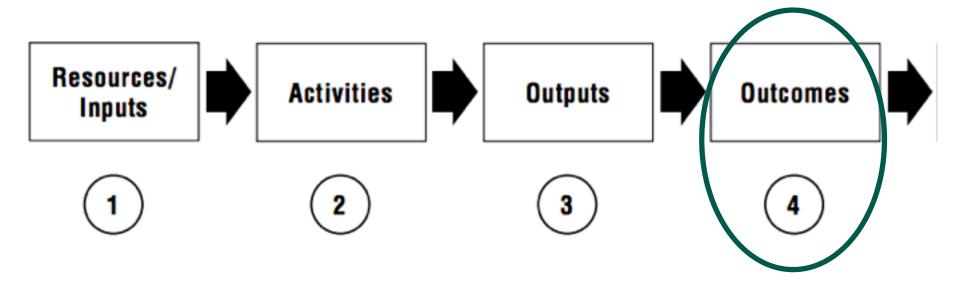
OUTPUTS



- Staff is hired
- Staff is trained/proficient
- Volunteers are recruited
- Volunteers are trained/proficient
- Program implemented to 50 individuals
- Program evaluation



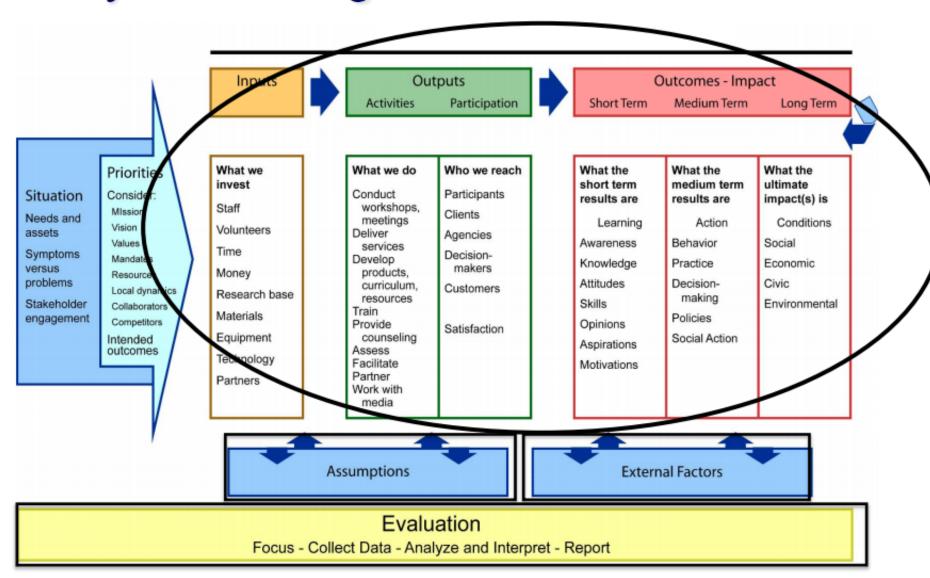
OUTCOMES



- Short-Term Outcomes (immediate effects: weeks-months)
 - Increased proportion of patients treated; changes in knowledge, skills, or beliefs
- Intermediate Outcomes (intended effects that occur over the mid-term: months-years)
 - Change in policies or behaviors
- Long-Term Outcomes (long-term intended effects: years-decades)
 - Reduced disease prevalence; changes in morbidity and/or mortality



Fully detailed logic model



Source: University of Wisconsin, Extension, Cooperative Extension, Program Development and Education. Retrieved from: http://sites.bu.edu/miccr/files/2015/11/logic-model-from-uw-extension.pdf

EXAMPLE: BIKE HELMET AWARENESS

Situation >

Inputs

Target Systems

Activities

Outputs

Outcomes - Impact

Funding for an

runding for an informational campaign to encourage bicyclists to use helmets has been received

- Three full-time staff members
- Volunteers with traumatic brain injuries
- Space and equipment (donated by a local nonprofit agency)
- Individuals and organizations aligned with riding bicycles for recreation and / or
- transportation
 Journalists and publications covering disability, athletic, and mainstream issues
- Bicycle helmet and bicycle manufacturers conducting marketing/ public relations campaigns
- Community-based charities interested in bicycle helmet give-away programs
- Community and state chapters, and the national association on brain injury

- Gather current information on deaths due to bicycling accidents
- Gather information about rate of traumatic brain injuries from bicycle accidents currently documented
- Gather data about injury prevention from use of helmets when bicycling
- Develop press kits for media
- Develop and support use of Public Service Announcements for television and radio
- Attract key individual journalists to the issue of traumatic brain injuries from bicycle accidents
- Promote attention and award recognition to media attention on helmet use campaign

- Special Report Comparing Costs of Helmet Safety and Traumatic Brain Injury produced and shared with all local, state, and national TBI-related agencies
- Fact sheets produced on available data concerning incidence rates of traumatic brain injury and helmet safety programs distributed by local, state, and federal elected officials
- Establish national recognition program for effective helmet safety programs and solicit volunteer "celebrity" to work in association with this recognition effort
- PSA announcements about people benefited by helmet safety programs and people (including family members) experiencing injuries that they consider preventable through the wearing of a helmet while bicycling
- helmet while bicycling
 Contact Governors'
 Committees
 for People with
 Disabilities
 concerning past
 "journalist awards"
 and also coverage
 (related through
 pres kits) of helmet
 safety effects on TBI
 (including consumer

stories)

Short-Term

- Bicycle riders will become more aware of benefits of wearing helmet while cycling
- Disability and mainstream journalists will be more aware of bicycle helmet use

Intermediate

 Bicycle riders will use helmets more frequently

Rate of traumatic brain injurie

Long-Term

· Frequency of

deaths due

to bicycling

accidents will

traumatic brain injuries from bicycling accidents will decline



Data

- Focus groups measuring change in
- awareness
 Individual
 interviews with
 volunteer group
 of bicyclists
- Focus groups with disability and mainstream journalists
- Individual interviews with journalists to asses specific changes in awareness and understanding

Data

- Focus groups to asses helmet use and attitude regarding helmet use
- Survey of TBI-related consumer organization to identify new information sharing campaigns implemented s a result of project activities and information sharing

Data

National data sources

SET SMART TARGETS

Using the logic model, articulate the specific objectives of the project.

Objectives should be SMART targets.

SMART objective:
By project month 12, provide 10
hours of training in lab techniques to 50
undergraduate students.

Not-so-SMART objective: Train students in lab techniques.





USE BUDGETS TO DRIVE REALISTIC DESIGN

To ensure project design is realistic, draft a budget early in the process.

- 1. Begin by determining the **total funding available** from all sources.
- 2. Next, identify **budget** restrictions and requirements.
- 3. Use totals and restrictions to draft a basic line item budget.
- 4. Map the budget onto the logic model and objectives.
- 5. Adjust project design and budget as necessary.



EVALUATION

Before the project design is final, design the evaluation.

- Evaluation is how you know whether you've succeeded.
- Most program grants, and some research grants, require independent evaluation.
- An independent evaluator should be independent of the project, and may also need to be independent of your institution, depending on funder requirements.
- The independent evaluator should be involved in the development of the evaluation plan at the design stage.

Evaluation plans should reflect activities, outputs, and outcomes in the logic model.



EVALUATION DESIGN

Design the evaluation based on funder requirements and aims.

A thorough evaluation should include:

- Summative evaluation: What did you accomplish?
- Formative evaluation: How did the process go?
- Feedback mechanisms that allow you to make course corrections based on midproject evaluation results.

WHAT THE REVIEWERS ARE LOOKING FOR

▼ The proposal evaluation is based on measuring stated outcomes.

<u>✓</u> The proposal clearly describes processes and schedules for data collection, tracking, review, analysis, and synthesis, including descriptions of any necessary privacy protections, recruitment activities, etc.

✓ The proposal evaluation methodologies are theoretically-based or justified.

✓ The proposal states the role, responsibility, identity, and experience of the evaluator. For internal evaluators, the proposal describes the steps to be taken to ensure the evaluation is valid and unbiased. For external evaluators, the proposal describes the role of the evaluator in planning and preparing the proposal (should be limited to evaluation and not include program design).

✓ The proposal describes how quantitative and qualitative data will be used to inform decisions about revisions to program activities, goals, and objectives, (i.e. formative evaluation) and how the project's overall results will be measured.



PROGRAM EVALUATION RESOURCES

- The Center for Advancement of Informal Science Education (CAISE) maintains a list of <u>evaluation planning resources</u>.
- The Institute of Museum and Library Services also provides a list of evaluation resources.
- The US Department of Education Institute for Education Sciences (IES)
 maintains the What Works Clearinghouse, which includes specific
 standards that apply to many DoE-funded grant evaluations.
- The National Organization for Research Development Professionals (NORDP) maintains a <u>list of program evaluators</u>.
- The American Evaluation Association maintains a database of member evaluators.

DEVELOP A CONCEPT PAPER

Many funders specify Concept Paper (or Letter of Inquiry) parameters, but in lieu of specific direction:

- Executive Summary
 - Org/PI, Project Title,
 Amount, Term,
 Alignment
- Problem/Need
- Project Description
- Expected Impact/Outcomes
 - Alignment with Funder Aims
 - Sustainability or NextStage Impact

- Management Plan
 - Personnel, Resources & Timeline
 - Experience with Similar Successful Projects
- Budget/Amount Requested
- Conclusion

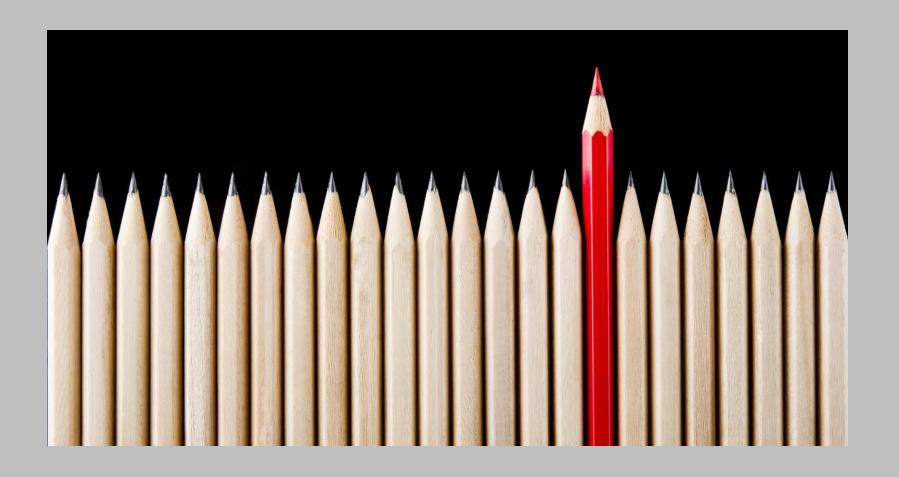


CONSULT A PROGRAM OFFICER

- 1. Develop a one-page Concept Paper (more detail = better)
- 2. Make contact <u>early</u> to show preparedness / seriousness
- 3. Request a consultation
- 4. Ask great questions, and take copious notes!



CASE STUDY: RURAL K-6 STEM PEDAGOGY





PURSUIT OF NSF DRK-12

- Hanover client expresses interest in NSF DRK-12
- Wants \$\$ to study a pedagogy to improve K-6 STEM ed
- Unsure of best approach, baselines and outcome(s)



Assets

- Partnerships with rural districts/teachers
- Publications in core pedagogical approach
- Piloted prof devt workshop prior summer
- Nine-month proposal devt lead time



<u>Liabilities</u>

- No prior external grants
- No prior NSF submissions



ANALYZE THE RFP

DRK-12 seeks to enhance the learning and teaching of STEM by preK-12 students and teachers, through R&D of STEM ed innovations and approaches. Projects will build on fundamental research in STEM ed and prior R&D efforts that provide theoretical and empirical justification for proposed projects.

Three R&D Strands:

- Assessment
- Learning
- Teaching

Six Project Types:

- Exploratory
- Design and Development
- Impact
- Implementation and Improvement
- Syntheses
- Conferences



GATHER PRELIMINARY DATA

- Did not collect impact data from pilot summer workshop
- Hanover recommended fielding an informal survey of partner teachers to collect access / challenges data

Results

- STEM often embedded in literacy lessons due to time constraints and standards.
- Face-to-face PD workshops rarely offered, because rural schools are dispersed.



REVIEW LITERATURE

 Clear basis to try to increase access to STEM prof devt, especially for rural elementary teachers

- Early indications that online/hybrid prof devt works
- No strong studies comparing prof devt models





DECISIONS, DECISIONS, DECISIONS

Three R&D Strands:

- Assessment
- Learning
- Teaching

Six Project Types:

- Exploratory
- Design and Development
- Impact
- Implementation and Improvement
- Syntheses
- Conferences



DECISIONS, DECISIONS, DECISIONS

Strands: Teaching

Proposals to research and develop STEM education innovations or approaches to teacher education.

Project Type: Exploratory Studies

Exploratory Studies provide investigators with opportunities to investigate approaches to STEM education problems that establish the basis for design and development of STEM education innovations or approaches.



CONCEPT EVOLUTION

- Asked Program Officer about testing professional development models
- Adjusted concept to address rural access to testing professional development
- Scaled back to Exploratory budget
- Focused on Teaching not Learning outcomes
- Integrated preferred pedagogy into workshops(!)
- Recruited senior Advisory Board
- Recruited experienced Evaluator



EXERCISE: PROJECT ALIGNMENT

FIND A PROGRAM ALIGNED TO THE PROJECT IDEAS BELOW

NEH PROJECTS

I want to...

- Digitize and provide access to 800 video oral history interviews of veterans of Japanese American military units in World War II.
- Establish a program offering college-level liberal arts learning and civic education to underserved and first generation college-bound high school students across LA.
- Research and write a book on Jewish revenge after the Holocaust.
- Create a prototype digital map of three indigenous American nations that will document their geographic ranges, languages, architectural styles, and cultural practices both before and after contact with European settlers.

NSF PROJECTS

I want to...

- Compare the skeletons of individuals who were overweight and healthyweight during life to determine the effects of increased loading and altered walking mechanics on bone microstructure.
- Examine the role of sleep and brain development on memory during early childhood, specifically as children transition out of naps.
- Examine the extent to which the public and employers view military spouse job seekers differently than their civilian peers.



EXERCISE: PROJECT ALIGNMENT (NEH)

- Digitize and provide access to 800 video oral history interviews of veterans of Japanese American military units in World War II.
- Establish a program offering college-level liberal arts learning and civic education to underserved and first generation collegebound high school students across LA.
- Research and write a book on Jewish revenge after the Holocaust.
- Create a prototype digital map of three indigenous American nations that will document their geographic ranges, languages, architectural styles, and cultural practices both before and after contact with European settlers.

Preservation and Access

> Humanities Collections and Reference Resources

Challenge Grants

> Humanities Access Grants

Research Programs

> Summer Stipends

Digital Humanities

> Digital Humanities Advancement Grants



EXERCISE: PROJECT ALIGNMENT (NSF)

- Compare the skeletons of individuals who were overweight and healthy-weight during life to determine the effects of increased loading and altered walking mechanics on bone microstructure.
- Examine the role of sleep and brain development on memory during early childhood, specifically as children transition out of naps.
- Examine the extent to which the public and employers view military spouse job seekers differently than their civilian peers.

Biological Anthropology

Science of Learning

Sociology







REVIEW GRANTMAKER MATERIALS

Start by carefully reviewing all grantmaker materials.

REVIEW:

- Grantmaker
 guidance (e.g., NSF
 Grant Proposal
 Guide)
- Solicitation
- Funded grants (if possible)

CONFIRM:

- Eligibility
- Deadlines
- Submission process and method

REVIEW MATERIALS: SOLICITATION

The grant solicitation gives information on the requirements associated with the particular grant program.

Most solicitations contain:

- Goals: Mission and objectives of the grantmaker with regard to the competition.
- Background: How the grant program was developed; links to other programs.
- Award Information: Number and amount of planned grant awards.
- Eligibility: Specific individuals and entities that may apply for the grant.

- Timing: Key deadlines and timelines for submission and review.
- Program Requirements: What applicants must propose to do.
- Selection Criteria: What the grantmaker is looking for in a proposal.
- Review Process: How the grantmaker will review and select proposals for funding.
- Administrative Process: How funding will be managed.



GRANTS

SAMPLE RFP COMPONENTS

NATIONAL SCIENCE FOUNDATION

- I. Introduction
- II. ProgramDescription
- III. Award Information
- IV. Eligibility Information
- V. Proposal
 Preparation and
 Submission
 Instructions
- VI. NSF Proposal Processing and Review Procedures
- VII. Award
 Administration
 Information
- VIII. Agency Contacts
- IX. Other Information

NATIONAL INSTITUTES OF HEALTH

- Funding Opportunity Description
- II. Award Information
- III. Eligibility
 Information
- IV. Application and Submission Information
- V. Application Review Information
- VI. Award
 Administration
 Information
- VII. Agency Contacts
 VIII. Other Information

ROBERT WOOD JOHNSON FOUNDATION

- Background and Purpose
- II. Program Fit
- III. Approaches & Outcomes
- IV. What We're Funding
- V. Total Awards
- VI. Eligibility Criteria
- VII.Diversity Statement
- VIII.Selection Criteria
- IX. Evaluation and Monitoring
- X. Use of Grant Funds
- XI. Application Timeline
- XII. Program Direction



GRANTS

REVIEW YOUR PROJECT DESIGN

- After reviewing all grantmaker guidance, assess:
 - O What are the funder's aims?
 - How does your project accomplish these aims?

 Refine your project design with funder aims, Program Officer guidance, and RFP requirements in mind.

MAKE A GRANT DEVELOPMENT PLAN

Map out your strategy to develop and submit the proposal on time.

- **CREATE:** Checklist of all required proposal elements
 - → Timeline for proposal development, including key dates
 - Narrative Outline based on the scoring rubric or key section headings

Always allow time for derailments: plan to submit well before the deadline.

OUTLINE THE NARRATIVE

Strong narratives have similar core elements:

- Statement of the Problem
- Literature Review
- Conceptual Framework
- Hypotheses or Research Questions

- Methodology/ Strategy
- Scope of Work
- Management Plan
- Staff and Institutional Qualifications

Each solicitation will require information to be presented in specific ways.

CORE QUESTIONS FOR PROPOSAL NARRATIVES

The best proposals make the reviewers say "I wish I had thought of that!"

- What do you want to do, how much will it cost, and how much time will it take?
- How does the proposed project relate to the sponsor's interests?
- What difference will the project make to your university, your students, your discipline, the state, the nation, and other stakeholders?
- What has already been done, and how will your project advance that work?
- How do you plan to implement and accomplish project goals and outcomes?
- How will the results be evaluated?
- Why should you, rather than someone else, be selected to do this project?

STATEMENT OF THE PROBLEM

Include a clear and concise statement of the purpose of the project.

FOR RESEARCH GRANTS:

- Specific question(s) to be answered
- Brief explanation of the need for or significance of the study
- Explanation of how the results will contribute to the existing body of knowledge and the expected results

FOR PROGRAM GRANTS:

 Statement of need, including statistics and qualitative data

Do not simply restate or paraphrase the RFP

LITERATURE REVIEW

Convey your understanding of relevant literature and how the proposed study or project fits in context.

- Make it comprehensive but concise.
- Trace the central themes in the literature, highlight major areas of disagreement, and reflect a critical stance toward the materials reviewed.

CONCEPTUAL FRAMEWORK

Identify theories or concepts that will guide the project.

- Describe strengths and weaknesses of the proposed framework.
- Show understanding of the theoretical perspective and relevance.
- Describe how or why they suggest the specific hypotheses or research questions.
- Connect your conceptual framework to your logic model, if applicable.

HYPOTHESES OR RESEARCH QUESTIONS

Provide clear statement(s) regarding the research hypotheses (formal or informal) and key questions/expectations.

- Explain why testing the hypotheses or answering key questions is appropriate for elucidating the research problems.
- Be absolutely sure that your "hypotheses" are actual hypotheses—they must be fully testable and falsifiable.

METHODOLOGY/STRATEGY

Describe implementation methods.

- Proposed methodology should contain enough detail to indicate applicant knows what s/he is doing and allow reviewers to assess both feasibility and appropriateness to the research questions.
- Include details for all procedures, work, and implementation protocols.
- Describe the instruments that will be used for collecting data, explain why are they appropriate for this study, and provide evidence of the instruments' reliability and validity.
- Provide detailed data analysis procedures.

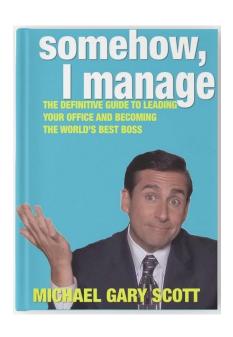
SCOPE OF WORK

Indicate exactly what will be done, including the sequence of the proposed activities and the anticipated outcomes and/or deliverables.

- Specify the tasks, outcomes/deliverables, and schedule in sufficient detail.
- Include all activities necessary for completing the project.
- Provide a viable schedule for carrying out the tasks (work plan).

MANAGEMENT PLAN

Explain how you will manage the project.



- Indicate who will be responsible for each work component.
- Describe how each element of the project will be coordinated.

STAFF AND INSTITUTIONAL QUALIFICATIONS

Explain why your staff and institution are qualified to implement the project.

- Include discussion of the qualifications and experience of the proposed staff (be brief but comprehensive), including how they are qualified to conduct the project.
- List capabilities of the institution (applicant and/or partners).
- Where applicable, include information on facilities and equipment.

REFINE THE NARRATIVE

Your narrative should communicate your project clearly and appropriately.



- ✓ Know your audience.
- ✓ Write clearly and in an appropriate style.
- ✓ Use SMART goals.
- ✓ Provide logic models where appropriate.
- ✓ Present information in tables and figures where appropriate.
- ✓ Use skillful repetition.
- ✓ Seek feedback from peers and grant professionals.
- ✓ Refine and edit.

EVALUATION

Evaluation is how you—and your funder—know whether you've succeeded.

- Most program grants, and some research grants, require independent evaluation.
- An independent evaluator should be independent of the project, and may also need to be independent of your institution, depending on funder requirements.
- The independent evaluator should be involved in the development of the evaluation plan at the proposal stage.

EVALUATION

Increasingly, grant funders require robust evaluations, even for education and outreach projects.

- Understand the funder's evaluation needs.
- Connect with an evaluator early.
- Work collaboratively to design a project that is easy to evaluate.
- Make sure you allocate sufficient time and funding to evaluation activities.

Make sure your evaluator is qualified for the level of evaluation required by the grant.

EVALUATION ELEMENTS

A thorough evaluation should include:

- ☐ Summative evaluation: What did you accomplish?
- ☐ Formative evaluation: How did the process go?
- ☐ Feedback mechanisms that allow you to make course corrections based on mid-project evaluation results.

Evaluation plans should reflect activities, outputs, and outcomes in the logic model.

BUDGET

TYPICAL BUDGET LINES INCLUDE

- Personnel
- Fringe Benefits (standard rates)
- Travel
- Equipment (durable, long-lasting, costs more than \$5,000 each)
- Supplies (expendable, short-term)
- Contractual
- Construction
- Indirect Costs (note limitations)
- Other

It is often helpful to develop the budget in <u>a separate spreadsheet using</u> <u>categories that make sense internally</u>, and only "translate" to the grantmaker's required form after the budget is final.

BUDGET NARRATIVE

The budget narrative must be consistent with the project narrative.

TIPS FOR BUDGET NARRATIVE DEVELOPMENT:

- Show a clear method of calculation for each item.
- Link each item back to grant activities and grantmaker goals.
- Use the same terminology that you used in the project narrative.
- A table can make the information easier to digest, even in the budget narrative.
- Be specific!

CREATE ATTACHMENTS

Attachments vary by funder and solicitation, but often include:

- Abstract / Project Summary (Write it last!)
- Biosketches / CVs
- Quotations or documentation for specific budget items
- Detailed project timelines
- Letters of commitment or Memoranda of Understanding
- Agency-specific documents (e.g., NSF's Current and Pending Support)

Keep careful track of all your attachments!

ASSEMBLE PACKAGE AND SUBMIT

After each element of the proposal is complete, assemble the final package.

- Review the package as a whole:
 - o Is it internally consistent?
 - o Does it follow all funder guidelines?
 - o Will a reviewer be able to find everything in the package?
 - Will a reviewer who doesn't know you, your institution, or your work need any additional information to understand your project?
- Double check to make sure the package is complete.
- Obtain internal approval for submission.
- Submit the package <u>before the deadline date</u> if at all possible.

OVERALL TIPS & SUGGESTIONS

- Start the grant submission process <u>early</u>
- Build the Budget early and as you go
- Write the Abstract/Executive Summary <u>last</u>
- Less is <u>not more</u>
- Repetition can help to emphasize keys points
- <u>Don't be shy</u> of talking with Program Officers
- Seek an <u>objective review</u> before submitting

WHAT IF I FAIL?

Remember that by submitting a grant you will have...

- Practiced the process
- Established and/or deepened connections
- Developed text and material for future grants and other projects
- Designed a new project
- Put your name/ideas/work in front of disciplinary experts
- Gathered constructive criticism

LEARN FROM THE PROCESS

Grantseeking is a competitive, iterative process.

- Many grants aren't funded on the first submission.
- Learn as much as you can from each grantseeking process.
- Reviewers' comments are very valuable: pay attention.
- A grant decline can be the opening step in funder relationship development.

TIPS FOR NSF PROPOSALS



ELEMENTS OF AN NSF PROPOSAL

- A. Cover Sheet
- **B.** Project Summary
- C. Table of Contents
- D. Project Description
- E. References Cited
- F. Biographical Sketch(es)
- G. Budget and Budget Justification
- H. Current and Pending Support

- I. Facilities, Equipment and Other Resources
- J. Special Information and Supplementary Documentation
 - Data Management
 Plan
 - Postdoctoral Mentoring Plan (if applicable)



THE PROJECT SUMMARY

The one-page NSF Project Summary contains three sections.

- Overview: A summary of activities, objectives, and methods.
- Intellectual Merit: A statement of how the project advances knowledge.
- Broader Impacts: A statement of how the project benefits society and contributes to NSF's specific desired outcomes.



PROJECT SUMMARY TIPS

- Write it last, after all the details of the proposal are in place.
- Write it in the third person (though the Project Description is usually written in the first person).
- The three sections may not total more than 4,600 characters, including spaces.

- Normally, the Project Summary is copied and pasted into the appropriate sections in FastLane.
- ☐ If the Project Summary contains special characters (e.g., mathematical notation), it may be uploaded as a PDF Supplementary document.
- ☐ If uploaded as a PDF, the Project Summary must contain the three separate required sections with individual headers



GRANTS

PROJECT DESCRIPTION

The Project Description provides the following information to NSF:

- What the PI wants to do
- Why they want to do it
- How they plan to do it
- How they will know if they succeed
- What benefits could accrue if the project is successful



PROJECT DESCRIPTION TIPS

- Provide reviewers with a clear organizational structure, including consistent headings.
- Provide clear and easy-to-read formatting, following the GPG requirements.
- Provide consistent internal references and number tables and figures sequentially.
- □ Remember that reviewers are very busy, and have many, many documents to read; make their lives easier.

- Provide enough detail so the reviewer knows what you want to do, but not so much that they get lost.
- ☐ Edit and proofread carefully; good writing matters to NSF.
- ☐ The structure of the Project
 Description is flexible, but it must
 contain a separate section titled
 "Broader Impacts of the
 Proposed Work."
- The Project Description is limited to 15 pages, of which up to 5 may describe the results of prior NSF support.



SAMPLE PROJECT DESCRIPTION OUTLINE

- I. Introduction
- II. Objectives
- III. Rationale
 - A. Review of the Literature
 - B. Contribution to the Field (Intellectual Merit)
- IV. Research Plan
 - A. Methods
 - B. Resources
 - C. Project Management Plan
 - D. Timeline

- V. Education Plan
 - A. Rationale
 - B. Methods
 - C. Evaluation
- VI. Broader Impacts of the Proposed Work



TIPS FOR NIH PROPOSALS

TEAM COMPOSITION TIPS

Collaborate with senior or more experienced PIs if you lack experience.

KEY STRATEGIES

- ✓ Specific to the research proposed
- ✓ Necessary expertise to implement all aspects of the project
- ✓ Personnel with a history of NIH funding
- ✓ Personnel and collaborators who can augment PI's weaknesses
- Multi-disciplinary teams where appropriate
- ✓ Leverage the strengths

KEY MISTAKES

- x PI with no history of funded research
- x Gaps in expertise relative to project needs
- x Poorly defined roles for Senior/Key Personnel
- x Failure to provide evidence of past or current collaborations

PROPOSAL STRUCTURE

Writing Tips:

- Use first person rather than third person.
- NIH proposals are not foundation proposals reviewers are not amused or positively influenced by inspirational quotes, heartwarming vignettes, or other approaches designed to establish an emotional connection.
- Tell a logical story identify the problem or question, place it in scientific / public health context, identify what sets the proposed work apart from what has been done previously, and provide a convincing, detailed approach to fill the knowledge gap.
- Focus on content first and length last.

RESEARCH PLAN

Do not add or take away sections.
Place them in the exact order specified.

Prepare research plan narrative outline/draft with holes

- The research plan is the main part of the grant application describing a principal investigator's proposed research, stating its importance and how it will be conducted
- A typical research plan has four main sections:
 - A. Specific Aims
 - B. Significance
 - C. Innovation
 - D. Approach

SPECIFIC AIMS (1 PAGE)

- Open with an interest grabbing sentence that will get the reviewers' attention
- In 3-5 sentences present the current knowledge that supports your proposal
- Describe how your proposed project will build upon and/or differ from what has been done in the field
- Add a statement of need.
- Discuss how your study meets the need and the consequence is if the need is not met

- Write a what, why, who approach paragraph where you will state your long-term research goal, the objective of this proposal and a central hypothesis
- List each aim and related hypothesis
- Conclude with a statement that expresses the potential impact on your field and human health

SIGNIFICANCE

Importance of the problem: What problem or critical barrier your research addresses

Rigor of prior research: Reliable foundation on which your proposal is built.

Significance of the expected research contribution: The research contributions you expect to make;

- Opening sentence/problem being addressed...
- It is widely appreciated that...
- There is a clear lack of...
- There is an urgent need...
- Numerous studies have...
- However, none has...
- Toward this end we will...
- Thus, our proposed studies will address limitations of prior research ...by...
- Impact of the project on scientific knowledge: The significance of the information to the scientific community, and the positive (broad) impact that will result from your studies.
- Impact of the project on **the field**:

 The specific impacts of your proposed work, and how the results will vertically advance the field.

INNOVATION

KEY STRATEGIES

- Review existing strategies being used to address the problem of interest and their limitations.
- ✓ Show how the proposed research is innovative: How the proposed project differs from the status quo.
- Emphasize advancements that are only possible because of this new approach.

KEY MISTAKES

- Making claims of novelty that are not true or not supported by the literature cited.
- x Failing to identify all innovative aspects of the work.
- x Relying on minimally incremental innovation (e.g., previous work was with men ages 30-45 and the proposed work is ages 30-50).
- x Promoting innovation without impact.

APPROACH

KEY STRATEGIES

- Most successful proposals are hypothesis driven
- Aims and approach must directly address the hypothesis or focus
- Scope of project must be constrained by budget, length, and available resources (including personnel)
- ✓ Use literature and experience to inform design

KEY MISTAKES

- x No hypotheses
- x No clear focus or direction; unrelated research questions
- X Overly ambitious
- x Accepting design flaws due to resource constraints
- x Inadequate rationale for design choices/parameters
- x Underpowered studies due to resource limitations or failure to properly estimate sample size
- x Inappropriate design for the research question



EXERCISE: DISSECTING AN RFP

Answer the following questions about the NSF Smart and Connected Communities (S&CC) program from the solicitation

- 1. What is the program's primary goal?
- 2. Is an LOI required for the Integrative Research Grants (IRG)?
- 3. What are the page limits for IRG and PG project descriptions?
- 4. What standard activities are within the general scope of the Planning Grants (PG) track?
- 5. What is the budget limit and project period for an IRG Track 2 project?



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Supports integrative research that addresses fundamental technological and social science dimensions of smart and connected communities

Yes, but they will not be reviewed for merit.

Project Descriptions for SCC-IRG proposals are limited to 15 pages in length and SCC-PG proposals are limited to 5 pages in length.

Travel, multidisciplinary workshops, stakeholder meetings, data collection, preliminary experiments, and pilots.

Track 2 is for budgets not to exceed \$1,500,000, and for up to three years of support.





COMMUNICATING WITH FUNDERS

- Evidence suggests that most funded proposals involve contact with the program officers at the funding agency
- For many opportunities, it is not worth submitting a proposal if you have not first connected with a Program Officer.



RESISTANCE TO RELATIONSHIP-BUILDING

Grantseekers sometimes resist building relationships with funders.

- It can be challenging to reach out to new people, especially for introverts.
- In most cases, relationship-building is not part of the "official" required process.



WHY COMMUNICATING MATTERS

- Program staff influence funding decisions.
- Pre-proposal communication helps to establish a relationship with the sponsor.
- The program officer's immediate response to a project is a good predictor (although not a guarantee) of success/denial.



REASONS TO CONTACT A PROGRAM OFFICER

- To confirm if a project idea fits with the sponsor's and the program's objectives.
- To obtain guidance about a project's design, collaboration, budget, and timeline.
- To discover underlying considerations, methodology trends, preferences, dislikes, and shifting priorities that do not appear in published material.
- To ask for clarification of stated guidelines or an RFP.
- To discuss ways to strengthen the project if a prior application was not successful.



CONNECTING AT THE CONCEPT STAGE

With a concept paper in hand, you are ready to connect with funders.

Connecting with a funder at the concept stage allows you to:

- Introduce yourself, your work, and your concept.
- Solicit feedback on project alignment and funder interest.
- Verify funder priorities and preferences.
- Build your reputation with the funding agency or organization.
- Develop a long-term relationship to facilitate future funding.



PUBLIC FUNDER OUTREACH

Connecting with a Program Officer at a public funder (e.g., a federal agency) is a fairly straightforward process.

Always follow the agency's preferred practice. A general guide:

- Reach out and introduce yourself via email first.
- ☐ Ask for a meeting, on the phone or in person.
- Note that some POs prefer not to meet in person.
- If the PO prefers to answer questions via email, go with that.



GRANTS

OUTREACH EMAIL

Sample email to a Program Officer

Subject: Request for call to discuss XXX due on DATE

Dear Dr. X:

I am interested in submitting a proposal for RFA #XXX "RFA Title" and would like to schedule a call with you to discuss whether my research is appropriate for this opportunity. [If your request is urgent, indicate that here and explain why.]

[Briefly describe your proposed work and why you think it is a good fit.] If it would be helpful, I can provide a [brief concept paper / project summary / specific aims] for you to review prior to our call. [If you have specific questions that you want the PO to consider, include them here.]

[Provide possible days/times or indicate that you can be available at the PO's convenience.]

Thank you in advance for your assistance. I look forward to talking with you soon.

Contact Information



PUBLIC FUNDER MEETING

Always prepare questions before your meeting with a PO.

- Is this project a good fit for this opportunity / your funding priorities?
- Are there other opportunities that would be a better fit?
- What are your recommendations for improving the fit / competitiveness?
- What other recommendations do you have?

- What are the most common causes for proposals being declined?
- What are the usual success rates for this program?
- What is your preferred method for me to contact you if I have additional questions?



GRANTS

LISTEN TO THE P.O.

- Remember to spend as much time listening as talking: Program officers can provide very valuable feedback and guidance.
- Take the program officer's advice to heart—this feedback can be essential in making the proposal competitive.



PUBLIC FUNDER FOLLOW-UP

Always follow up after meeting with a PO, and send questions as soon as they arise in the proposal development process.

- Follow up with an email thanking the PO.
- In any future communication about this opportunity, reference your call.
- Use the subject line of your email to reflect the purpose and urgency of the request.
- Remember that Program Officers are very busy: make things easy for them with clear, specific, actionable communication and a courteous tone.



APPROACHING PRIVATE FUNDERS

- Faculty should not approach foundations directly because it may be disruptive to an existing relationship or pending request.
- First contact <u>Corporate and Foundation Relations.</u>
- See handout for details on procedures and protocols on engaging with foundations.



PRIVATE FUNDER CULTIVATION

Connecting with private funders (e.g., foundations, corporations) can be a bit "stickier" than connecting with public funders, but it is no less important.

REMEMBER THAT PRIVATE FUNDERS:

- Are not required to be transparent or straightforward about their processes.
- Often say one thing and do another.
- Are much more likely to award funding to an individual or entity that they know and trust.



CULTIVATION PLANNING

To prepare for cultivation, assess and analyze your connections and potential connections to the target funder and its personnel, as well as opportunities for building additional connections.

- Research institutional history with the funder.
- Identify connections to the funder, funder personnel, or people and organizations connected to the funder.
- Gather intelligence and/or request introductions from connections.
- Identify online and in-person connection opportunities.



CULTIVATION STRATEGY

With internal support, develop and implement a cultivation strategy for each target funder.

- Reach out to the funder, either through connections or "cold."
- 2. <u>Introduce yourself</u> and your work.
- 3. <u>Gather information</u> on funder priorities and preferences.
- Ask how you might work together.
- 5. <u>Continue</u> the conversation.



PREPARING FOR THE CONVERSATION

Key Tips:

- Be succinct and focus on impact.
- ☐ Leave room for questions and conversation.
 - Approach the conversation as **sharing enthusiasm** or "geeking out" rather than convincing someone of something.



LEARNING FROM THE CONVERSATION

Key Questions:

- How did it go?
- What was most difficult?
- What was easiest?
- What did you learn?
- What do you still need to work on?
- Did you identify any good conversation "hooks" that you can use to talk about your work?



RELATIONSHIPS DRIVE GRANTMAKING

Even in formalized grantseeking structures, relationships are an essential element of the funding process.

- A monetary award involves trust; people trust people they know.
- Grants are awarded in the context of communities; communities are built on relationships.

EXERCISE: FUNDER ENGAGEMENT

Use insights from this section to answer any of the following questions:

- 1. You are an early career Economics professor working on an NSF RUI proposal. Find the right contact for your inquiry and draft an email requesting time for a conversation to receive feedback on your project concept.
- 2. You have identified a local foundation that appears to support projects like the one you are developing. You discover during your research that this foundation has awarded multiple grants to UMBC during recent years. What are your initial steps for developing a strategy?





GRANTS

