

Grant Support for the Social Sciences from the National Science Foundation

Thomas J. Wenzel
Bates College, Lewiston, Maine

Directorate for Social, Behavioral, and Economic Sciences

nsf.gov - Directorate for Social, Behavioral & Economic Sciences (SBE) - US National Science Fo - Windows Internet Explorer

http://www.nsf.gov/dir/index.jsp?org=SBE

File Edit View Favorites Tools Help

nsf.gov - Directorate for Social, Behavioral & Economi...

Home Funding Awards Discoveries News Publications Statistics About FastLane

 **National Science Foundation**
Directorate for Social, Behavioral & Economic Sciences (SBE)

NSF Web Site

SBE Home SBE Funding SBE Awards SBE Discoveries SBE News About SBE

Increasing knowledge of people and society

SBE Organizations

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

About SBE

- [View SBE Staff Directory](#)
- [Search SBE Staff Directory](#)
- [General Information About SBE](#)
- [Career Opportunities](#)
- [Advisory Committee](#)
- [Budget Excerpt](#)

Proposals and Awards

- [Proposal and Award Policies and](#)

Data Management Plan for SBE Proposals

Beginning January 18, 2011, proposals submitted to NSF must include a supplementary document of no more than two pages labeled "Data Management Plan" (DMP). This supplementary document should describe how the proposal will conform to NSF policy on the dissemination and sharing of research results. Proposals that do not include a DMP will not be able to be submitted. For more information about this new requirement, please see the [Grant Proposal Guide, Chapter II.C.2.i](#) and the [Data Management and Sharing Frequently Asked Questions \(FAQs\)](#). **Please note:** the SBE Directorate has additional guidance for proposals submitted to SBE programs, please see [Data Management for NSF SBE Directorate Proposals and Awards](#). Questions and/or suggestions about the DMP may be addressed to the following SBE organization contacts: **BCS** - [Mark Weiss](#) and [Amber Story](#), **SES** - [Rachel Croson](#) and [Frank Scioli](#), **SMA** - [Rita Teutonic](#).

Special Announcements

SBE 2020 Update. In response to the Dear Colleague Letter, released in August 2010, SBE received 252 unique white papers that lay out visions for the future of the SBE sciences, the capacities necessary to pursue that research, and the infrastructure required to support it. The site is now available to view a complete list of these submissions and it may be accessed at: http://www.nsf.gov/sbe/sbe_2020/index.cfm.

Interdisciplinary Research Across the SBE Sciences. The Directorate for Social, Behavioral & Economic Sciences (SBE)

Get SBE Updates by Email

Featured Programs

- [Cross-Directorate Activities](#)
- [SBE Doctoral Dissertation Research Improvement Grants](#)
- [SBE Minority Postdoctoral Research Fellowships and Follow-up Research Starter Grants](#)
- [Science of Learning Centers](#)
- [Science of Science and Innovation Policy](#)
- [Additional SBE Resources](#)
- [Advisory Committee Members Only](#)
- [Publications](#) [See All](#)
- [Dear Colleague Letter: for Assessing and](#)

Internet 100%

Programs

- National Science Foundation
 - Research at Undergraduate Institutions (RUI)
 - Major Research Instrumentation (MRI)
 - Research Experiences for Undergraduates (REU)
 - CAREER Program

Review Criteria (NSF)

- Intellectual Merit
- Broader Impact

- Project summary must have a distinct paragraph on each – proposal must clearly address each
- Reviewers must specifically evaluate each (separate sections on reviewer's form)

Components of all NSF Proposals

- Project Summary (1 page)
- Project Description (15 pages)
- Literature References
- Biographical Sketch (2 pages)
- Budget and Justification
- Current and Pending Support
- Facilities and Equipment

Project Description (15 pages)

- Results of Prior NSF Support (up to 5 pages)
 - One NSF grant within the past 5 years
 - If directly related to new project – put first in proposal and use most, if not all, of the 5 pages
 - If unrelated to the new project – put last and keep as short as possible – show productivity (money well spent!)

NSF Research Grants (RUI/MRI/REU/Career)

- Culture of different divisions at NSF
- Interdisciplinary projects can provide opportunities as well as challenges

Definition of Undergraduate Research

Undergraduate research is an inquiry or investigation conducted by an undergraduate that makes an original intellectual or creative contribution to the discipline

- Original work
- Peer-reviewed publications

Components of an RUI Proposal (Renewable)

- Project Summary (1 page)
- Project Description (15 pages)
- Literature References
- Biographical Sketch (2 pages)
- Budget and Justification
- Current and Pending Support
- Facilities and Equipment
- RUI Impact Statement (5 pages)

You must convince reviewers that:

(1) the work is significant – why the work you want to do is important and needs to be done

(2) that you have a well designed experimental plan that is likely to succeed

- You can mention aspects of the broader impacts throughout, but remember that there is an RUI impact statement. Make sure that discussions of the impact do not diminish or distract from developing the scientific research in the proposal

RUI Impact Statement

- A chance to promote your activities
 - Institutional
 - Departmental
 - Individual
- Importance of research to all three
- Success stories within all three
- The approach taken by any or all three to provide students with a better educational experience

Major Research Instrumentation(MRI)

- Funds allocated specifically for PUIs
- No match
- \$50 - 500K (or even larger)
- Usually multi-user (especially if larger pieces of equipment)
- Research-based request
- No RUI impact statement

- Original research with expected outcomes
 - Publications/presentations
- External research support
 - Important to have or at least pursue
- Thorough descriptions with appropriate references
- Need research-active users – be very careful about including senior people as co-PIs with no/weak research records

- Show that traveling to another site to use the equipment being requested
- Contrast data from current capabilities with new request to show how new instrument is needed to provide the appropriate information
- Mention use in courses (1-2 pages) – but do not give impression that request is mostly based on curricular uses

Maintenance Plan

- Reviewers must be convinced that the instrument will be well maintained – that the department has the ability to integrate the instrument into its holdings
- Where housed?
- Service contract (?)
- Support staff for maintenance and operation

REU Site Program (Renewable)

- A research program – not curriculum
 - 8-12 students for summer research
 - Publications/external funding – not much room for research descriptions so biographical information and current/pending support crucial
 - Not enough to just involve students in the work
 - Need high quality mentors with strong programs
- Provides added value to research program that is already strong (**although may be NSF division-dependent**)

Follow-through on Research

- If there is a way to continue the work beyond the summer – will strengthen the request
 - Faculty participants from other institutions
 - Students continue collaboration (may be easier at PUI since half of participants can be from the home campus)

Theme?

- Divisions may have different views on this – especially for PUIs
- Needs to be authentic – should build on existing expertise and not an “invented” theme
- Needs to lead to publication – in chemistry, measuring pollutants in a nearby stream likely won't be enough

Student Participants

- PUIs – usually half on-campus, half students from other institutions
- Describe selection process/criteria
- Desire to serve students who would not otherwise have a chance to participate in research
- Desire to serve underrepresented minorities
 - Can't just say that will have 50% of participants from minority groups without showing established links – perfunctory letters of support are not enough

Professional Development

- Group of students must interact and not simply be dispersed into individual labs
- Orientation
- Meetings/presentations/workshops
- Closing poster session
- Social activities over summer
- Reunion at professional meeting

NSF CAREER Program

- Early faculty (assistant professor without tenure)
- Five-year award (\$400K-500K minimum)
- Supports research and educational activities
 - Probably originated to get faculty from R1s to think about education too – but open to PUI faculty as well
- Best if the research and educational activities are integrated – don't invent "artificial" outreach programs

NIH AREA PROGRAM (R15) (Renewable)

- \$300K direct support (1-3 years)
- Match with institute or center within NIH
- Can only submit the same project twice – directly respond to reviewer's criticisms in a resubmission
- Meritorious research
 - Significant novel question or hypothesis
 - Significant impact

Review Criteria

- Significance – quality of research
- Approach – experimental method
- Innovation – novelty of work
- Investigator – expertise/record in field
- Environment – infrastructure to support work

Components of Proposal

- Specific Aims (1 page)
- Research Strategy (12 pages)

Research Strategy (12 pages)

- Significance
- Innovation
- Approach – divide by each specific aim
 - Introductory paragraph
 - Justification and feasibility
 - Review relevant literature
 - Preliminary studies
 - Research design
 - Expected outcomes
 - Potential problems/Alternative strategies
- Timetable
- Future Directions

Renewal Applications

- Plan for renewal immediately upon receipt of grant
- Fix renewal submission date in your head
- Start short-term projects
- Start long-term projects

Activities to Promote Proposal Writing

- Attend CUR Conferences
 - National Conference (even years)
 - ***Dialogue (every year)
- Attend CUR Institutes
 - Proposal-writing institute
 - How to institutionalize undergraduate research