

# Grantwriting for Fellows and Doctoral Students in Biomedical Informatics



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# 1. Type of Grants for Biomedical Informatics Research: Federal, Private Foundations, Local Institutions

## A. Federal Grants and Contracts

Most of the biomedical research grants received by the Department of Medical Informatics & Clinical Epidemiology come from several federal agencies:

- National Institutes of Health (NIH), especially the National Library of Medicine (NLM)
- National Science Foundation (NSF)
- Agency for Healthcare Research and Quality (AHRQ)

To be eligible to submit NIH and AHRQ grants, you must be registered in the NIH eRA Commons (<https://commons.era.nih.gov/commons/>). The Research Grants and Contracts Office at OHSU can set you up with a Commons account. The online request forms is at: <http://www.ohsu.edu/research/rda/rgc/gcfastlaneform.shtml> (This request form also works for an account for the National Science Foundation's FastLane proposal submission system.) On the Commons you can view the status of submitted proposals and receive your proposal score and summary statements.

NIH uses a three-character code for the different types of grants.

R grants are research projects.

- **R01**: investigator-initiated research, usually for 5 years. You can indicate on the face page if you are a new investigator. Someone is considered a new investigator if he/she has not previously competed successfully as PI for a substantial NIH independent research award.
- **R03**: small grant programs for investigator-initiated research, short period of time with limited resources.
- **R21**: exploratory/developmental research, early and conceptual stages of development, 2-year limit.
- **R36**: Dissertation awards to support dissertation research costs of students in accredited research doctoral programs in the United States.

K grants are career development awards.

- **K01**: Mentored Research Scientist Development Award  
The Mentored Research Scientist Development Award (K01) provides support for a sustained period of "protected time" for intensive research career development under the

guidance of an experienced mentor, or sponsor, in the biomedical, behavioral or clinical sciences leading to research independence.

- **K02: Independent Science Award**  
Develop the career of the funded scientist. 5 yrs; 75% effort. In general, the Independent Scientist Award (K02) provides support for newly independent scientists who can demonstrate the need for a period of intensive research focus as a means of enhancing their research careers.
- **K08: Mentored Clinical Scientist Research Career Development Award**  
Development of the independent clinical research scientist. 3-5 yrs; 75% effort.  
The Mentored Clinical Scientist Research Career Development Award (K08) represents the continuation of a long-standing NIH program that provides support and “protected time” to individuals with a clinical doctoral degree for an intensive, supervised research career development experience in the fields of biomedical and behavioral research, including translational research.  
Example: Jeanne-Marie Guise, MD, MPH, received a K08, with Mark Helfand as her mentor.
- **K12: Mentored Clinical Scientist Development Program Award**  
Support to an institution for the development of independent clinical scientists. 5 yrs; 75% effort; initiated by the educational institution. Note: Institution selects the scholars.  
Examples: Karen Eden, PhD, was a scholar in a K12 program: Building Interdisciplinary Research Careers in Women’s Health, through the OHSU OB/GYN department. Jeanne-Marie Guises, MD, MPH, and Cynthia Moris, PhD, MPH, receive a K12 award for a comparative effectiveness research program from AHRQ.
- **K22: Career Transition Awards**  
This K22 award is intended to facilitate the transition of investigators from the mentored to the independent stage of their careers by providing "protected time" for newly independent investigators to develop and receive support for their initial research programs. The award applies to biomedical informaticians who are pursuing research in basic informatics, clinical informatics, or the informatics relevant to biomedical research.  
Example: David Dorr, MD, MS, had a K22 award
- **K25: Mentored Qualitative Research Development Award**  
To foster interdisciplinary collaboration in biomedical research by supporting career development experiences for scientists with quantitative and engineering backgrounds. 3-5 yrs; 75% effort.
- **K99/R00: Pathway to Independence**  
<http://grants.nih.gov/grants/guide/pa-files/PA-07-297.html>  
This is a fairly new program. The NIH Pathway to Independence Award provides an opportunity for promising postdoctoral scientists to receive both mentored and independent research support from the same award. The initial phase will provide 1-2 years of mentored support for highly promising, postdoctoral research scientists followed

by up to 3 years of independent support contingent on securing an independent research position. Award recipients will be expected to compete successfully for independent R01 support from the NIH during the career transition award period. The total cost per year for the mentored phase is generally up to \$90,000. The total cost per year of the independent investigator phase is up to \$249,000. Example: Jayashree Kalpathy-Cramer, PhD, has a K99 from NLM.

T grants are training grants.

- **T15:** Institutional Grants for Research Training in Biomedical Informatics  
Example: Our NLM informatics fellowship program.
- **T32:** Institutional Research Training Grant  
Example: Cynthia Morris, PhD, MPH, directs a T32 in health services research, awarded from AHRQ.

U numbered grants are cooperative agreements where there is substantial involvement from NIH program officers.

Contracts: Some agencies use contracts as the funding mechanism. For example, the Oregon Evidence-based Practice Center, directed by Mark Helfand, MD, MPH, has a contract with AHRQ and uses a cost-reimbursement method to receive funds. The principal investigator and his/her research team must submit deliverables to the agency by due dates specified in the contract.

## **B. Funding from Private Foundations**

Examples: Robert Wood Johnson Foundation, Intel Corporation, John A. Hartford Foundation

Investigators in the Department of Medical Informatics & Clinical Epidemiology have received less funding from private foundations than from federal sources but some grants have been awarded from foundations. Each foundation has its own funding priorities and process for awards. Indirect costs are usually awarded at very low rates (e.g., 10%). Many foundations tend to fund project related to clinical care or public health issues. Examples: Robert Wood Johnson Foundation interest areas include public health, obesity, addiction prevention, disparities, and tobacco use. Also, private foundations are more likely to fund faculty level investigators than fellows or post-docs.

## **C. Funding from Local Institutions**

Local funding sources can include local foundations including those at biomedical institutions.

### Medical Research Foundation

The Medical Research Foundation supports promising biomedical exploration and the development of research careers in clinical investigation in Oregon through a program of competitively awarded research grants. It is administered through the OHSU Foundation.

See: <http://www.ohsu.edu/xd/about/foundation/about/medical-research-foundation/grants.cfm>

- Early Clinical Investigator Grants: intended to further the development of investigators planning for careers in patient-oriented research – for post-doctoral trainees or fellows - \$20,000 for one year
- New Investigator Grants:  
Must be independent scientist - No funding for PI salaries or travel -- \$40,000

## **D. Dissertation Funding**

Some federal agencies and private foundations offer dissertation funding.

The R36 grant activity code is for NIH dissertation research funding. Several NIH agencies and AHRQ offer this funding. Some awards are to promote diversity.

AHRQ Grants for Health Services Research Dissertation Program (R36)  
<http://grants.nih.gov/grants/guide/pa-files/PA-09-212.html>

Mental Health Dissertation Research Grant to Increase Diversity (R36)  
National Institute of Mental Health  
<http://grants.nih.gov/grants/guide/pa-files/PA-09-132.html>

Aging Research Dissertation Awards to Increase Diversity (R36)  
National Institute of Aging  
<http://grants.nih.gov/grants/guide/pa-files/PA-08-250.html>

NIH also offers an NRSA fellowship for pre-doctoral and post-doctoral students. You can have had funding from another NRSA grant as long as the total funding is not more than 5 years.

Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellows (Parent F31)  
<http://grants.nih.gov/grants/guide/pa-files/PA-10-108.html>

Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellowships to Promote Diversity in Health-Related Research (Parent F31 - Diversity)  
<http://grants.nih.gov/grants/guide/pa-files/PA-10-109.html>

Some non-federal sources of dissertation funding:

American Association of University Women Dissertation Fellowships  
<http://www.act.org/aauw/amdissert/index.html>

IBM PhD Fellowship Program  
<https://www.ibm.com/developerworks/university/phdfellowship/>  
Includes information-based medicine.

Pharma Foundation Pre-doctoral Informatics Fellowship

[http://www.phrmafoundation.org/index.php?option=com\\_award&task=sdetail&id=2](http://www.phrmafoundation.org/index.php?option=com_award&task=sdetail&id=2)

The journal Science offers a searchable GrantsNet database that lists dissertation funding opportunities.

<http://sciencecareers.sciencemag.org/funding>

Also, the CDC offers a two-year Public Health Informatics Fellowship for those with master's or doctoral degrees, but you must be willing to relocate to Atlanta, GA. This is not dissertation funding.

See: <http://www.cdc.gov/PHIFP/index.html>

## **2. The Life Cycle of an NIH Grant Proposal**

### **A. Identifying Funding Opportunities**

All federal grants are now submitted through grants.gov. This Web site can also be searched for funding opportunities: [http://www.grants.gov/applicants/search\\_opportunities.jsp](http://www.grants.gov/applicants/search_opportunities.jsp)

Individual agencies also post funding opportunities.

- At NLM, you can go to: <http://www.nlm.nih.gov/ep/>
- At AHRQ, you can go to: <http://www.ahrq.gov/fund/>
- At NSF, you can go to: <http://www.nsf.gov/funding/>

### **B. Preparing the Proposal**

Make sure that:

1. You have a great idea for a research project that you think someone will want to fund.
2. You have a sound hypothesis, methods, and specific measurable objectives for your innovative project.
3. You are well qualified to conduct the research and have adequate personnel.
4. You have put together a reasonable budget.
5. You know the requirements for your specific proposal and how to address them.

NIH now uses the SF424 (R&R) form for grant applications, not the PHS 398 form. The “Bible” of SF424 (R&R) grant proposal preparation is the Grants.gov Application Guide SF424 (R&R) - Version 2, which gives specific instructions for filling out all of the S424 forms. You can download this guide at: <http://grants.nih.gov/grants/funding/424/index.htm>

The heart of the proposal is the Research Strategy. There are three major sections in the Research Strategy, who altogether cannot exceed 12 pages (in an R01): Signification, Innovation and Approach. You also get one page to delineate your Specific Aims.

The usual SF424 forms for an NIH proposal are:

- 424 Face Page (cover component)
- 424 R&R Other Project Information
  - Project Summary (Abstract)
  - Project Narrative
  - References
  - Facilities and Other Resources
  - Equipment
  - Other Attachments
- R&R Project/Performance Site Locations
- R&R Senior/Key Person Profile
- 424 Budget Period 1 Section A & B
- 424 Budget Period 1 Sections C, D, & E
- 424 Budget Period 1 Sections F-K
- Budget Justification
- 424 Cumulative Budget
- PHS 398 Cover Page Supplement
- Specific Aims
- Research Strategy
  - a. Significance
  - b. Innovation
  - c. Approach
- Human Subjects Sections
  - Protection of Subjects
  - Inclusion of Women and Minorities
  - Targeted/Planned Enrollment
  - Inclusion of Children
- Other Research Plan Sections
  - Vertebrate Animals
  - Select Agent Research
  - Multiple PI Leadership
  - Consortium/Contractual Agreements
- Letters of Support
- Resource Sharing Plan

## **C. Navigating the OHSU Grant Proposal Review Process**

Federal grants are officially given to institutions, not individuals, so OHSU has a vested interest in the proposals submitted to federal agencies. All proposals must receive internal review and sign-off before submission to a federal agency. Kathryn Krages is the departmental pre-award person who works with investigators on their proposals, and at a minimum, she needs to review your budget and PPQ before the proposal goes on for internal review.

OHSU's Research Grants and Contracts Office (RGC) oversees the pre-award process. Our grant administrator there is Neil Unger (ext. 4-6399).

For electronic grants, OHSU now uses the Web-based InfoEd system to prepare proposals. You can also use InfoEd to find funding. You can find information about InfoEd and electronic grant submission at:

<http://www.ohsu.edu/research/rda/rgc/electronic.shtml>

Along with your grant proposal, you will need to submit a Proposed Project Questionnaire (PPQ) to RGC when you ask them to review your proposal. The PPQ is signed by the PI, department

chair, and dean of the school before submission to RGC. (Note: The PPQ is also needed for IRB approval.)

RGC asks that you submit all of your proposal, except the final Research Strategy, 10 business days before the due date. They ask for the final version of your Research Strategy at least 3 business days before the deadline. This allows time to resubmit the proposal if it is rejected by grants.gov on the first try.

The RGC analyst will check over your proposal for any errors or omissions. The person pays close attention to the budget. Usually one budgets salaries at 3% over current salaries, with a 3% increase for every year of the grant.

The Indirect Rate, or F&A, is the amount negotiated between the Department of Health and Human Services and OHSU to cover costs associated with facilities and administration for federally-sponsored research. Our current F&A rate will be 54% of direct costs. One does not take indirects on equipment, tuition or subcontracts (after the first \$25,000).

Once the RGC administrator has reviewed and approved the proposal and has final copies of all proposal items, he will send it to Jesse Null, manager of RGC, who will submit it electronically to grants.gov. If there are errors, grants.gov will kick the proposal back. The problems must be fixed and a new cover letter attached. If there are warnings, the proposal will still be accepted.

**Errors** -- inaccuracies, inconsistencies, omissions, and some formatting problems that cause your application to be unacceptable.

**Warnings** -- potential issues that won't stop your application from moving forward but can reflect serious problems you should correct.

Once grants.gov accepts the proposal, it is routed to NIH eRA Commons, and the principal investigator receives an email saying that he or she has 48 hours to view the application image.

A great Web site about submitting proposals to NIH is through the National Institute of Allergy and Infectious Diseases:

<http://funding.niaid.nih.gov/researchfunding/grant/cycle/pages/part07.aspx#m2>

## **D. The NIH Peer Review Process**

Text from: <http://cms.csr.nih.gov/AboutCSR/OverviewofPeerReviewProcess.htm>

It normally takes a minimum of eight months from submission of a proposal to receipt of an award. Usually a study section meets about four months after the proposal deadline.

**Your application is assigned to a review group and an NIH Institute or Center.** One or more Center for Scientific Review (CSR) Referral Officers examines your application and determines the most appropriate Integrated Review Group (IRG) to assess it for scientific merit.

Your application is then assigned to one of the IRG's study sections. A study section typically includes 30 or more scientists from the community of productive researchers. You may request in a cover letter with your application that it be assigned to a particular study section or IC. The CSR referral office seriously considers such requests.

The combined expertise of the scientists in a study section is intended to span the breadth and diversity of the science it covers. CSR may recruit temporary reviewers or secure mail reviews from outside consultants. Special Emphasis Panels also may be formed on an ad-hoc basis to review applications when special expertise is required or when special circumstances arise.

**An assignment notice is sent to you.** Within 10 days of determining your assignments, CSR will send notices to you and your sponsored research office. You may question either your study section or IC assignment by contacting the Scientific Review Administrator (SRA) noted in your letter or the CSR referral office (301-435-0715). It usually takes 6 weeks to refer the thousands of applications submitted each round.

**Reviewers are identified.** Your SRA will analyze the content of your application, check for completeness, and decide which study section members can best review it or act as discussants. Study section members receive electronic copies of your application approximately 6 weeks before their meeting. Typically, two or three members are asked to provide written reviews of each application, and one or two additional members serve as discussants. These members also will receive paper copies of your application.

Before the study section meets, members list all R01 applications believed to be in the lower half for scientific merit. If all members agree, these applications are "streamlined." They will not be discussed at the meeting, but the assigned reviewers will still provide written critiques.

**The review meeting is convened.** Study section members convene for about 2 days. One member serves as chair and conducts the meeting with the SRA. Relevant NIH extramural staff are encouraged to attend, but they may not participate. Assigned reviewers and discussants present their evaluations and outside opinions are read. After a general discussion, members mark their priority scores privately on scoring sheets, which are later tabulated by CSR.

### **Scoring System**

NIH introduced a new peer review scoring system in 2009. The scored review criteria cover five areas: significance, investigators, innovation, approach and environment. The NIH grant application scoring system now uses a 9-point scale, but still with the lower the number, the better the score. A score of 1 indicates an exceptionally strong application with essentially no weaknesses. A score of 9 indicates an application with serious and substantive weaknesses with very few strengths; 5 is considered an average score.

See: [http://grants.nih.gov/grants/peer/guidelines\\_general/scoring\\_system\\_and\\_procedure.pdf](http://grants.nih.gov/grants/peer/guidelines_general/scoring_system_and_procedure.pdf)

**The results are made available to you.** Within a few days after the meeting, your priority score and percentile ranking are available to you via the NIH Commons. Within about 30 days, your summary statement will be available via your NIH Commons account. It will include (1) the written critiques produced by the assigned reviewers, (2) the SRA's summary of the study section's discussion, (3) study section recommendations, and (4) administrative notes of special

consideration.

**The assigned NIH Institute or Center takes charge** After the review, an IC program officer will be your main point of contact. He or she may help interpret your review results or answer questions about the further consideration of your application. In a second level of peer review, IC Advisory Councils may consider the study section's recommendations and determine the relevance of your proposed research to IC priorities and public health needs.

### 3. Grant Writing Tips

#### Know your audience

Who will be reading your proposal? Who makes the decision to fund?

Will it be people with a background in your subject area, e.g., NIH study section?

Or people with minimal background in your topic, e.g., board members of a small foundation?

Walk a mile in their shoes. Is your proposal clear to the reader? Does it answer all the questions they might have about your project?

#### Be responsive to the Funding Opportunity Announcement.

If you are responding to an FOA, have you included everything requested?

Are you using language the FOA uses?

If the FOA lists evaluation criteria, does your proposal cover all those areas?

#### Reviewers like well-done, easy-to-read figures and tables.

Figures inserted within the text help break up pages of solid text.

Keep your figures and tables close to the text referencing them.

Keep the figure/table self-contained, so the reader does not have to refer back to the text.

If an FOA gives an example of a table, follow that example.

#### Be consistent in your writing.

Use terms consistently.

Be consistent in your use of numbers or numerals (2 vs. two).

Be consistent in your use of headers and subheaders.

Ask someone else to do a careful proofreading of your proposal.

#### Get feedback before you submit.

Have colleagues read your draft before you submit it, especially someone less familiar with your work. Does that person fully understand your proposal?

If you know someone who has been on a study section, ask him to read the proposal.

Examples:

- Joan Ash, Paul Gorman and Bill Hersh have been on NLM study sections or special emphasis panels.
- Mark Helfand, David Dorr and Jeanne-Marie Guise have been on AHRQ study sections.
- Paul Gorman has been on NSF study sections.

- Cindy Morris has been on study sections for National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), National Institute of General Medical Sciences (NIGM), National Heart, Lung and Blood Institute (NHLBI).

Start early on the proposal preparation process!

Find out deadlines: internal and external.

Make a checklist.

Plan the time to collect letters, biosketches and subcontract items.

Multitask content and administrivia.

## 4. Grantwriting Resources

There are myriad resources on preparing proposals for external funding. They deal with topics such as identification of sources of funding, the proposal preparation process, elements of successful proposals, budget preparation, practical tips, and review of proposals. We are listing these print and Internet resources on proposal writing for your information and do not necessarily endorse them. There are many more resources available. Web sites from university research support offices are a good source of information of the multiple aspects of grant writing. Also, nursing journals frequently have articles on proposal writing.

### OHSU Resources

The OHSU Research Administration office has several resources to help investigators find funding and learn more about grant proposal preparation. Research Funding & Development Services offers a Funding Portal to find funding opportunities:

<http://www.ohsu.edu/xd/research/administration/research-funding-development/funding-portal/index.cfm>

Funding Focus is a monthly “brown bag” session, held the second Thursday of each month at 12 noon, where special topics related to grant funding are presented. See:

<http://www.ohsu.edu/xd/research/administration/research-funding-development/classes-workshops/funding-focus.cfm>

### Books on Proposal Writing

Brewer, Ernest W. Grantseeker's Toolkit for Writing Grant Proposals. University of Tennessee, 1999.

Browning, Beverly A. Grant Writing for Dummies. For Dummies, 2001.

Carlson, Mimi. Winning Grants: Step by Step, 2nd Edition. San Francisco: Jossey-Bass, 2002.

Friedland, Andrew J. and Folt, Carol. Writing Successful Science Proposals. New Haven: Yale University Press, 2000.

Hall, Mary S. and Howlett, Susan. *Getting Funded: The Complete Guide to Writing Grant Proposals*. Portland, OR: Portland State University, 2003.

Ogden, Thomas E. and Goldber, Israel A. (editors). *Research Proposals: A Guide to Success*, Third Edition. Academic Press, 2002

Russell, Stephen W. and Morrison, David C. *The Grant Application Writer's Workbook; Guide to a Competitive Application*. Grant Writers' Seminars & Workshops, LLC.

[www.grantcentral.com](http://www.grantcentral.com)

This accompanies a workshop on preparing NIH proposals. OHSU has offered this workshop annually for the last few years, sponsored by the Human Investigations Program. Kathryn have attended this workshop several years ago and found it to be very worthwhile for someone submitting a proposal to NIH.

## **Journal Articles on Proposal Writing**

Barnard J. Keys to writing a competitive grant. *Journal of Pediatric Gastroenterology & Nutrition*. 35(2):107-10, 2002 Aug.

Beasley JW. Garcia-Shelton L. Magill MK. Ten commandments for writing family medicine grants. *Family Medicine*. 30(7):515-6, 1998 Jul-Aug.

Bordage G. Dawson B. Experimental study design and grant writing in eight steps and 28 questions. *Medical Education*. 37(4):376-85, 2003 Apr.

Lusk SL. Developing an outstanding grant application. *Western Journal of Nursing Research*. 26(3):367-73, 2004 Apr.

Grey M. Top 10 tips for successful grantsmanship. *Research in Nursing & Health*. 23(2):91-2, 2000 Apr.

Sandler RS. Writing clinical research grant applications. *Inflammatory Bowel Diseases*. 8(3):196-200, 2002 May.

Schwinn DA. DeLong ER. Shafer SL. Writing successful research proposals for medical science. *Anesthesiology*. 88(6):1660-6, 1998 Jun.

## **Internet Resources**

### **General Resources**

Grants and Funding Guide, Cushing/Hay Medical Library, Yale University  
<http://info.med.yale.edu/library/reference/publications/grants.html>

Grants Information Center, University of Wisconsin at Madison  
<http://grants.library.wisc.edu/organizations/proposalwebsites.html>

Developing and Writing Successful Proposals, University of Missouri at Kansas City  
<http://www.umkc.edu/research/proposalwritingUMKC.pdf>

Guide to Preparation and Submission of Proposals, The University of Memphis  
<http://www.people.memphis.edu/~ressvc/gtext04.html#gwrite>

Articles Related to Proposal Writing/Grantseeking, The Grantsmanship Center  
<http://www.tgci.com/magazine/proposal.asp>

Developing and Writing Federal Grant Proposals, State of Utah  
<http://www.governor.state.ut.us/rplr/rdcc/manual1/grantwrit.htm>

## **Federal Resources**

Grants.gov Resources  
<http://www.grants.gov/Resources>

NIH Resources for New Investigators:  
[grants.nih.gov/grants/new\\_investigators/resources.htm](http://grants.nih.gov/grants/new_investigators/resources.htm)

Grant Writing Tips Sheets, National Institutes of Health  
[http://grants1.nih.gov/grants/grant\\_tips.htm](http://grants1.nih.gov/grants/grant_tips.htm)

A Guide for Proposal Writing, National Science Foundation  
<http://www.nsf.gov/pubs/1998/nsf9891/nsf9891.htm>

Developing and Writing Grant Proposals, The Catalog of Federal Domestic Assistance  
[http://12.46.245.173/pls/portal30/CATALOG.GRANT\\_PROPOSAL\\_DYN.show](http://12.46.245.173/pls/portal30/CATALOG.GRANT_PROPOSAL_DYN.show)

## **Special Topics**

### **Preparing Budgets for Proposals**

Budgeting Guidelines, Columbia University  
<http://www.tc.columbia.edu/administration/osp/budgetingINSTRUCTIONS.htm>

Preparing Proposal Budgets, University of Pennsylvania  
<http://www.upenn.edu/researchservices/rih/chapter6.html>

Project Budgets-Overview, Shoreline Community College Grant Resource Center  
[http://success.shoreline.edu/workforce/project\\_budgets.htm](http://success.shoreline.edu/workforce/project_budgets.htm)

The Grant Budget, East Stroudsburg University of Pennsylvania  
<http://www3.esu.edu/graduate/howto.asp>

## **Writing Proposals for Qualitative Research Projects**

Belgrave LL. Zablotzky D. Guadagno MA. How do we talk to each other? Writing qualitative research for quantitative readers. *Qualitative Health Research*. 12(10):1427-39, 2002 Dec.

Carey MA. Swanson J. Funding for qualitative research. *Qualitative Health Research*. 13(6):852-6, 2003 Jul.

Connelly LM. Yoder LH. Improving qualitative proposals: common problem areas. *Clinical Nurse Specialist*. 14(2):69-74, 2000 Mar.

Penrod J. Getting funded: writing a successful qualitative small-project proposal. *Qualitative Health Research*. 13(6):821-32, 2003 Jul.

Sandelowski M. Barroso J. Writing the proposal for a qualitative research methodology project. *Qualitative Health Research*. 13(6):781-820, 2003 Jul.

## **Writing Proposals to Private Foundations**

Basic Elements of Grant Writing, by the Corporation for Public Broadcasting  
<http://www.cpb.org/grants/grantwriting.html>

User Aid for Proposal Writers, The Foundation Center  
<http://fdncenter.org/learn/useraids/proposal.html>

## **Your Departmental Resource:**

I am available to help you throughout the entire proposal process, including preparing forms, doing budgets, editing and proofing, getting the proposal through OHSU, dealing with subcontracts, etc. I can do just about anything related to proposals except write the science.

Kathryn Krages  
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503-494-6058  
[krages@ohsu.edu](mailto:krages@ohsu.edu)