

PENNSSTATE



Erie The Behrend
College

Penn State Behrend Faculty Research Handbook

Summer 2009

This handbook can be found at
<http://www.pennstatebehrend.psu.edu/research/facultyresearch.pdf>

PREFACE

The handbook assists Penn State Behrend faculty members in pursuing sponsored research.

The quest for sponsored research can be complex, time consuming, and frustrating. It can also be rewarding if you are successful.

Many benefits can be accrued to faculty members for successful grant development:

- Additional travel money
- Specialized materials and supplies
- Specialized equipment
- Student assistance
- Additional clerical assistance
- Summer salary
- Support for collaboration or use of consultants
- Support for additional services; e.g., media services, artwork, computing, etc.
- Enhanced national and international recognition through increased participation at meetings
- The ability to conduct higher-level research through the use of more sophisticated equipment, additional travel funds, etc.
- Increased academic contacts outside of the college

Grant writing represents a process through which faculty members can achieve and develop in ways that would otherwise be unavailable to them at the college.

If you have questions please contact Patty Lanich in the Contracts and Grants Management Office (CGMO) at 814-898-7596 or pal16@psu.edu.

Robert W. Light
Senior Associate Dean

Summer 2009

OVERVIEW

This handbook will promote and facilitate sponsored research among the college's faculty. This includes internal and external sources: University-wide, college, and external.

The handbook includes information on the following topics:

- **College Statement on Research and External Funding**
Expectations for the pursuit of external funding.
- **Procedures for Initiating Sponsored Research**
Guidance concerning the process for initiating sponsored research, including a step by-step description.
- **Research Administration, Policy, and Proposal Logistics**
Information concerning proposal routing procedures, research protocol, and research policies.
- **College Research Support and Internal Grants**
Support for research that is provided by the college and assists faculty members in applying for internal grants, which may provide seed money to be used to pursue larger external grants.
- **Other Research Protocols**
Other procedures and policies: confidentiality and intellectual property issues, use of human subjects, and private consulting.

STATEMENT ON RESEARCH AND EXTERNAL FUNDING

Mission

The mission of Penn State Behrend as part of the University includes teaching, research, scholarship, and outreach. Our primary objective continues to be to provide excellent education, but we must also focus on research productivity and increasing research funding. External funding provides significant benefits to the faculty and to the college.

Benefits to Faculty

- Independence to pursue scholarship and research
- Salaries to pursue scholarship and research in the summer
- Opportunities for scholarly travel
- Opportunities to employ students in research
- Ability to purchase state-of-the-art equipment beyond the college's ability to provide
- Prestige and evidence of significant impact and importance in the researcher's field

Benefits to the College

- Demonstrates that Penn State Behrend is fulfilling its mission in research and scholarship
- Strengthens programs and facilities with income independent of University funding
- Quantitative evidence of the strengths and competitiveness of Penn State Behrend faculty members and programs

Expectation

The college recognizes that funding opportunities and procedures vary widely among the disciplines. However, the college expects that, when appropriate, the professorial faculty's professional activities will include seeking external funding for research, scholarship, educational enhancement, or equipment.

The annual Faculty Activity Report (FAR) should include recognition of success in funding, as well as recognition of efforts to obtain it even when those efforts did not meet with success. The latter point is particularly important. The funding climate is difficult and competitive, and sponsors only fund a fraction of submitted proposals. Each school will determine how much weight will be granted in the FAR for efforts to obtain external funding.

Assistance

The Contracts and Grants Management Office and the school directors can assist faculty members in determining if and where there is government, corporate, or private funding for research in their fields. Other sources of information include colleagues in the field; acknowledgments in papers, reports, or meetings; and direct contact with agencies. A proposal that is not funded can often be resubmitted with changes suggested by the reviews, or when the funding priorities in an agency change. Faculty members should also consider team efforts with colleagues at Penn State Behrend, other Penn State campuses (including University Park), and other institutions for larger-scale funding efforts.

The United States Congress is strongly pressuring funding agencies such as NIH, NASA, and NSF to do more to support and strengthen undergraduate education. New programs have been established in the last few years. Private and corporate agencies, companies, and foundations also perceive the need to support education. This climate provides opportunities for predominantly undergraduate institutions like Penn State Behrend.

PROCEDURES FOR INITIATING SPONSORED RESEARCH

This section outlines a process for faculty members to initiate sponsored research. Please consult early in the process with the Contracts and Grants Management Office.

- Faculty member has formulated an area of research interest and may have a vague idea of potential sponsors. Prior to contacting college or sponsor staff, the faculty member should answer the following questions:
 - ✓ What is the need or problem?
 - ✓ What is the state-of-the-art, or how does this problem rank in importance in the field?
 - ✓ Why is this project urgent or necessary?
 - ✓ What is the proposed plan of action?
 - ✓ What kinds of resources are needed to carry out this project?

- Faculty member identifies potential funding sources via an electronic search on the Web; e.g., (<http://grants.psu.edu>) and other sources.

Refer to page 6 for a Sponsored Research Checklist

SPONSORED RESEARCH CHECKLIST

- 1. **See Principal Investigator's Checklist on page 6.**
- 2. **Submit proposal, statement of work, and budget to the Contracts and Grants Management Office (CGMO) and work with Patty Lanich to prepare PIAF** at least two weeks prior to proposal deadline. CGMO will review the proposal and, if necessary, request modification of the proposal documents.
- 3. **CGMO will transmit the proposal** to the proposal coordinator in the Office of Sponsored Programs (OSP) at University Park for further review and final submission.
- 4. Once **proposal is reviewed and approved by OSP, the proposal is submitted** to sponsor. A copy of the submission is sent to the CGMO, including the OSP # assigned (OSP # necessary for future tracking).
- 5. OSP and/or principal investigator receive notice from sponsor that **proposal is funded or not funded**. (Sometimes that information goes directly to the PI. Please let CGMO know if a project has/has not been funded.)
- 6. **OSP staff conducts award negotiations with sponsor**. If OSP staff has any questions they will be forwarded to CGMO for clarification. *NOTE: Only OSP staff is authorized to negotiate. DO NOT SIGN ANY CONTRACTS OR AGREEMENTS.*
- 7. **Execution of contract or other formal document** between Penn State and sponsor. *NOTE: Only OSP staff is authorized to execute documents.*
- 8. **If required, initiate Subagreement Request** to CGMO. Information will be verified and forwarded to OSP for issuance of subagreement to subcontractors.
- 9. College financial officer (FO), in conjunction with the school and/or CGMO **requests restricted account** (budget and fund number) to be added to IBIS via *Add University Restricted Account (AURA)* form.
- 10. When restricted account is approved, same group from #9 use a *Budget Amendment for Restricted Accounts (BARA)* form to **establish an operating budget** for the project.
- 11. PI and school research staff **follow guidelines in contract** with sponsor:
 - Timely reports.
 - Determine invoicing procedures.
 - Adhere to start and end dates
 - PI is responsible for technical reporting requirements as specified in the contract terms and conditions.
 - Request no-cost extension if necessary. This request goes through CGMO.
- 12. When project is complete, budget office at UP **requests that budget be closed**. The decision to close the budget is done in conjunction with PI, school research staff, college FO, and CGMO.

PRINCIPAL INVESTIGATOR'S CHECKLIST

Things to provide Contracts and Grants Management Office (CGMO) for proposal submission (allowing two weeks for administrative processing)

- My name, department, and email address
- Name of funding agent and address
- Deadline for proposal submission
- Request for Proposal (RFP) or **proposal guidelines*** and funder/sponsor Web site URL
- What type of project? RESEARCH INSTRUCTION OUTREACH
- Identify appropriate format and determine submission protocol – electronic, paper, or both; letters of intent, preliminary proposals, and deadlines
- Project budget, matching funds, and resource issues discussed with school director and CGMO
- Proposal title
- Dollar amount of proposal
- Period of performance
- Preliminary budget
 - Appointment type for investigators – 9 or 12 month, staff, fixed-term, etc.
 - Preliminary budget notes
 - If matching is required, an email or note from unit or school stating matching commitment
- Statement of Work
- Any correspondence with funder/sponsor
- Provide budget and fund number to be charged by Office of Sponsored Programs for transmittal of proposal to sponsor/funder via UPS
- ALL PROPOSALS MUST GO THROUGH BEHREND'S CGMO AND BE REVIEWED BY PATTY LANICH.** Contact the CGMO to begin the administrative processing (or if you need any assistance during the process). Allow two weeks before submission deadline for administrative processing.

***Questions to ask funder/sponsor if no RFP or guidelines are available**

- What are your funding policies?
 - Indirect cost allowance – if requesting a reduced rate, Susan Wiedemer's (Assistant Controller) approval on waiver document/letter is necessary
 - Any fringe rate restrictions?
 - Maximum amount being awarded per proposal?
 - How much detail is required for budget?
 - Is cost sharing required? (Do not show cost sharing if not required.)

***General rules for proposal when guidelines are not provided**

- Cover page
 - Name and address of funder/sponsor
 - Title of proposal
 - Principal investigator's name
 - Principal investigator's title
 - Submitting department, unit or campus
 - Period of performance
 - Space for Penn State approval signatures
- Page numbers
- Table of contents
- An abstract
- Proposal text– a clear statement of the project goals and objectives and a description of the proposed work, external budget, and budget justification
- References, if necessary
- Bibliography

RESEARCH ADMINISTRATION, POLICY, AND PROPOSAL LOGISTICS

Also refer to *Proposal Preparation Guides* (<http://www.research.psu.edu/osp/proposal/guides.html>)

Logistics

- A Proposal Internal Approval Form (PIAF) must be completed for each proposal (<http://www.research.psu.edu/osp/proposal/approvals.html>)
- Do not staple proposals unless stated in guidelines
- University fiscal year extends from July 1 to June 30
- The University Federal Identification Number is 24-6000376
- NIH Employer ID Number: 1246000376A1
- The NSF Institutional Code for Behrend is 0033332000 and for University Park is 0033290000
- NSF DUNS Number: 00 340 3953
- Assurance of Compliance Number: M1145
- NASA CAGE CODE: 7A720
- NAICS CODE: 611310
- FICE: 006965
- Contractor Establishment Code: 003403953
- Legislative Districts: **Erie** – PA Senate (49), PA Congress (1 & 4), U.S. Congress (3); **University Park** – PA Senate (34), PA Congress (171), U.S. Congress (5)
- University sign off for all proposals is D. Richardson, Associate VP Research
- The address for the OSP is 110 Technology Center, University Park, PA 16802-7000
- Date of last indirect cost agreement – July 1, 2009
- DHHS assurances – August 18, 1994

Definitions

- **Direct Costs:** Typical direct budgetary costs include those for salaries, fringe benefits, small equipment purchases, assistantships, computer time, machine shop time, materials, publication costs, travel, etc. Inflation rates for subsequent years are typically 7 percent for tuition and 3.0 percent for all other categories.
- **Fringe Benefits:** These are expenses directly associated with employment and are applicable to salaries (category I), graduate assistants (category II), wages (category III), and students (> 6 credits fall/spring or 4 credits summer - category IV).
- **Indirect Costs (F&A):** Indirect costs are based on Modified Total Direct Costs (MTDC) that are calculated as total direct costs less graduate assistant tuition; subcontracts over \$25,000 (regardless of period); equipment (life > 2 years and cost > \$5,000); plant construction; and building amortization. Rates are different for on-campus and off-campus research and instruction. Check with the Contracts and Grants Management Office for appropriate rates.
- **Budget Notes:** These notes must accompany each budget. Examples of notes appear below:
 - ✓ **Recovery of Fringe Benefits**
Fringe benefits are computed using the rates of **29.9** percent applicable to Category I Salaries, **15.9** percent applicable to Category II Graduate Assistants, **8.3** percent applicable to Category III Salaries and Wages and **0.7** percent applicable to Category IV Student Wages for the current fiscal year – July 1, 2009 through June 30, 2010. If this proposal is funded, the rates quoted above shall, at the time of funding, be subject to adjustment for any period subsequent to June 30, 2010, if superseding Government approved rates have been established. The fringe benefit rates are negotiated and approved by the Office of Naval Research, Penn State's cognizant federal agency.
 - ✓ **Recovery of Indirect Costs (F&A)** (A similar statement should be included for off-campus research and for on- and off-campus instruction/outreach.)
F&A rates are negotiated and approved by the Office of Naval Research, Penn State's cognizant federal agency. Penn State's current on-campus rate for research is **48** percent of Modified Total Direct Costs (MTDC) from July 1, 2009 to June 30, 2010. New awards and new competitive segments with an effective date of July 1, 2010 or later shall be subject to adjustment when superseding Government approved rates are established. Per OMB Circular A-21, the actual F&A rates used will be fixed at the time of the initial award for the duration of the competitive segment.

Please note that industrially sponsored projects must add 5 percent to indirect costs.

COLLEGE RESEARCH SUPPORT

Contracts and Grants Management Office

- Assistance during sponsor identification
- Assistance in proposal process and preparation
- Selection and procurement of proposal formats
- Assistance with budget preparation
- Liaison to the Office of Sponsored Programs at UP
- Consultation on proposal content and format
- Liaison with the Office for Research Protections at UP
- Guidance on issues related to private consulting and intellectual property

College

- A research staff assistant is available for each school
- In recognition of excellence in research, a Faculty Research Award is presented annually
- Each school supports travel for research and scholarly activity
- Scientific, engineering, and computer equipment is purchased in support of faculty research
- Electronic sponsor search systems such as FEDIX Alert, SPIN WWW, and the Community of Science Web Service are linked to the college's Web site (<http://grants.psu.edu>)
- Other internal resources include the Lilley Library and the Computer Center

Internal Grants

- **Undergraduate Research**
 - ✓ Penn State Behrend Undergraduate Student Academic Year Research Grant (<http://pennstatebehrend.psu.edu/research/undergraduateresearchform.pdf>)
 - ✓ Penn State Behrend Undergraduate Student Summer Research Fellowship (<http://pennstatebehrend.psu.edu/research/summerresearchform.pdf>)
- **Faculty Research**
 - ✓ Africana Research Center (<http://arc.psu.edu/>)
 - ✓ Ben Franklin Technology Partners (<http://www.cnp.benfranklin.org/>)
 - ✓ The Gerontology Center at Penn State (<http://gerontology.ssri.psu.edu/>)
 - ✓ Global Fund Application, Penn State Behrend (<http://pserie.psu.edu/research/globalfund.pdf>)
 - ✓ Institute for the Arts and Humanistic Studies (<http://iah.psu.edu/>)
 - ✓ Schreyer Institute Grants (<http://www.schreyerinstitute.psu.edu/Grants/>)

CONFIDENTIALITY AND INTELLECTUAL PROPERTY ISSUES

The following statements cover most aspects of faculty and/or student interactions with outside organizations.

Confidentiality

- Keep in mind the University Intellectual Property Agreement form that you signed when you were hired.
- Don't give away your ideas until you are covered by a confidentiality agreement.
- No faculty member, staff member, or student shall sign a confidentiality agreement with an outside organization.
- A faculty member shall not sign a confidentiality agreement with an outside organization on behalf of a student.
- An undergraduate student may be asked to sign a University confidentiality agreement based on a research agreement that has been issued to an outside organization.
- All confidentiality agreements from outside organizations shall be forwarded to the Contracts and Grants Management Office (CGMO) and in turn will be forwarded to the Industrial Research Office (IRO) for signature by an authorized official of the University.
- In most cases, confidentiality issues with outside organizations will be covered by a University agreement. A Confidential Disclosure Agreement Checklist (<http://www.research.psu.edu/osp/PSU/Toolbox/CIDAChecklist.pdf>) should be filled out, approved by the CGMO, and forwarded to IRO. IRO staff will select the appropriate agreement.

Intellectual Property (<http://www.research.psu.edu/ipo/index.html>) **and Contract Issues** (<http://www.research.psu.edu/osp/toolbox/univagreements.html>)

- In general, services to an outside organization that are of short duration, less than \$20,000 of direct costs, and which include no transfer of University intellectual property, can be covered by a one-page quote sheet. Appropriate indirect costs should be included in all cases. Check with the CGMO before using quote sheet.
- In general, all projects which include longer-term research services to an outside organization and which exceed \$20,000 of direct costs, and which include no transfer of University intellectual property should be handled by a Memorandum of Agreement for Measurement, Composition, Fabrication, or Analysis Academic Research Services. Appropriate indirect costs should be included in all cases.
- All research projects with an outside organization that involve the addition of intellectual property should be handled through a Sponsored Research Agreement. Appropriate indirect costs should be included in all cases.
- In cases where no direct benefit is accrued to the sponsor (e.g., gifts, memberships) a Memorandum of Agreement Establishing a Research Grant-in-Aid should be used. No indirect costs are involved with a grant-in-aid.
- When the University has the potential to conduct multiple projects with a single company, a Master Research Services Agreement may be appropriate. Contact the CGMO for additional details.
- In general, if an undergraduate student or faculty member adds sufficient intellectual property to a project, they can be named on the patent as either inventor or co-inventor.
- Interactions with outside organizations, which do not promise deliverables, including certain membership fees and gifts, are not subject to indirect costs per University policy. However, these interactions should be covered by a membership agreement.
- Copyright issues are covered in Policy RA12 – Technology Transfer and Entrepreneurial Activity (<http://guru.psu.edu/policies/RA12.html>) and Policy RA11 – Patents and Copyrights (<http://guru.psu.edu/policies/RA11.html>).

Software Licensing

The University Department of Purchasing Services' purchasing agent for computers signs all software licenses. If a fee is associated with the license, the purchasing agent requires a purchase order number or a budget number to which the fee will be charged.

RESEARCH INVOLVING HUMAN SUBJECTS

This procedure covers research activities that will: 1) result in a publication or product for use outside of the college; 2) incorporate non-university human subjects; 3) include any medical procedures; 4) include potentially controversial questions; and 5) involve minors, the elderly, or other special populations. All relevant policies and forms can be found at (<http://www.research.psu.edu/orp/>).

Follow the procedure outlined below:

- Determine if your research requires approval by the Office for Research Protections (<http://www.research.psu.edu/orp/>)
- If approval required, complete online orientation (you need do this only once) (<http://www.research.psu.edu/orp/areas/humans/training.asp>)
- Fully develop your survey instrument or procedures
- Fill out the Protection of Human Subjects forms for Social Science Research (<http://www.research.psu.edu/orp/areas/humans/applications/index.asp>)
- Get required approvals; i.e., adviser, Contracts and Grants Management Office (CGMO) and forward forms

If you have questions or require assistance with this process, contact the CGMO.

PRIVATE CONSULTING PRACTICE (Policy HR80)

(<http://guru.psu.edu/policies/OHR/hr80.html>)

- **Purpose**

To outline the conditions governing private consulting by individuals classified as full-time academic or academic administrator. For an activity to be considered legitimate private consulting, the activity must be in the faculty member's field and be of a professional nature.

- **Duty**

A faculty member is expected to perform his or her University duties in the most effective manner of which he or she is capable. The faculty member's first duty and first responsibility is to the University. Outside service should not be undertaken, whether with or without pay, that might interfere with the discharge of this paramount obligation.

- **Consulting Time**

A member of the faculty may engage in a limited amount of private consulting within the parameters established in policy RA12 (<http://guru.psu.edu/policies/RA12.html>), Technology Transfer and Entrepreneurial Activity (Faculty Research). In accordance with RA-12, a faculty member may engage in consulting up to a maximum of four days per month with the understanding that it may not interfere with the performance of University duties or other contractual obligations of the University involving the faculty member and that the consulting enhances his/her professional stature or academic proficiency.

- **Required Approval**

Faculty members are to inform their department head or chancellor of the type and extent of their outside activities, whether undertaken for compensation or otherwise, so that the department head or chancellor may judge the appropriateness of the activity in relation to the performance of the faculty member's regular duties.

A faculty member may not provide special service to the Commonwealth for additional compensation without prior written approval of the President of the University (see HR42) (<http://guru.psu.edu/policies/OHR/hr42.html>). A faculty member requesting approval for such service to the Commonwealth shall submit his or her request to the President describing the service, the approximate time required, personal compensation expected, and the effect of such service on the faculty member's regular work.

- **Responsibility for Private Professional Services**

The University assumes no responsibility for private professional services performed by members of its faculty. The name of the University is not in any way to be connected with the service rendered or the results obtained. The faculty member must make it clear that his or her consulting work is a personal matter. He or she must not use the official stationery of the University or stationery having a University address or a University telephone number. A faculty member shall not accept or retain employment, which would bring him or her as an expert or in any other capacity, into conflict or in competition with the interests and purposes of the University or The Commonwealth of Pennsylvania and federal agencies.

- **Internal Consulting**

Faculty and staff members are ineligible to serve through third-party intermediaries, as paid consultants on University programs whether funded from general University or external grant or contract monies. When such collaboration is required, the faculty or staff member should participate directly in the project and his or her salary should be distributed accordingly.