JOURNAL CORRESPONDENCE

Manuscripts or letters to the editor should be submitted to the editor. Submission of a manuscript is considered to be a representation that it is not copyrighted, previously published, or concurrently under consideration for publishing in print or electronic form. Consult the journal web page (www.srainternational.org/journal) for specific information for authors, templates, and new material. The preferred communication route is through Email at journal@srainternational.org, attention editor.

SUBSCRIPTIONS

Members—$45 per year (3 issues) in United States, Canada, and Mexico; $50 foreign (included in membership dues). Nonmembers—$55 per year (3 issues) in the United States, Canada and Mexico; $60 foreign. Make checks payable to The Journal of Research Administration. Send change-of-address notices (together with your address label) and all other correspondence regarding subscriptions and purchase of back issues to Society of Research Administrators International, Executive Office, 1901 North Moore Street, Suite 1004, Arlington, VA 22209 USA. Phone: +1-703-741-0140. Periodicals are postage paid at Arlington, VA and at an additional mailing office.

Copyright © 2005 by the Society of Research Administrators International (SRA). All material subject to this copyright may be photocopied for limited non-commercial educational purposes with the written permission of the SRA and with appropriate credit. Opinions expressed in this journal represent the opinions of the authors and do not reflect official policy of either the SRA or the author’s affiliated institution unless so noted in the author’s note portion of the specific article. Papers prepared by employees of the U.S. government as part of their official duties may not be copyrighted, but the journal format is copyrighted and requires written permission of the Society of Research Administrators International, as outlined above. Copying for general distribution, resale, or other purposes may be authorized only with specific written permission from the Society of Research Administrators International. Requests for such permission must be in writing to the Society of Research Administrators International, 1901 North Moore Street, Suite 1004, Arlington, Virginia 22209 USA or through Email at journal@srainternational.org.

OFFICERS OF THE SOCIETY OF RESEARCH ADMINISTRATORS INTERNATIONAL

President Michael McCallister, PhD
Immediate Past President Michael Owen, PhD
Treasurer Donna Marano
Secretary J. Terence Manns

The Journal of Research Administration, published semi-annually, is the official journal of the Society of Research Administrators International, Arlington, Virginia 22209 USA. Founded in 1967, the Society of Research Administrators International is dedicated to the education and the professional development of research administrators and to enhance public understanding of research and its administration. Representing all disciplines and sectors in research administration, it serves as the international society to promote quality and innovation in research administration.

Postmaster: Send address changes to The Journal of Research Administration, 1901 North Moore Street, Suite 1004, Arlington, VA 22209 USA. USPS No. 008245. ISSN No. 1539-1590.
Volume XXXVI, Number 2

In This Issue ................................................................. 1

Contributors ................................................................. 3

Features

Research
What Do Grant Reviewers Really Want, Anyway? ........................................ 5
By Robert E. Porter

Research
Kick-starting Research in Newly Emergent Universities:
Why Faculty Do Not Apply for Research Development ‘Seed’
Funding at the University of Technology, Jamaica ................................. 14
By Cynthia C. Onyefulu and A. F. Ogunrinade

Case Study
Constructing a Grants Office Review: A Case Study ............................... 24
By Beth Olsen

Commentary
Developing Research Foundations at Predominantly
Undergraduate Institutions .................................................. 29
By Phillip E. Myers

Commentary
Ask An Expert: Tips and Tools of the Trade .................................. 35
By Herbert “Chuck” Chermside
This is my last issue as editor. These three years have zoomed past very quickly; time seems to speed up when one is busy. During these three years the journal has undergone several changes, with the main one being adapting to the changing environment of electronic publishing while remaining recognizable.

In this parting message, I’d like to encourage the journal readers to submit an article to the journal. Writing is hard, but the hardest part is getting an idea. Once you have something to say, it’s just a matter of determining the best mechanism to say it. And writing is an incredibly rewarding way to deepen one’s understanding of a topic. Writers often begin thinking they want to say one thing, but in the process of writing their idea down they find they must change what they say in order to be precisely accurate or to say what is true, and so their knowledge grows, and then so does the knowledge base of the profession. Many research administrators, both members of SRA and non-members, have ideas to share, frequently developing them into posters or presentations for various annual meetings.

The journal publishes many types of articles. SRA members also read articles that provoke them to think. RAs are looking for answers to questions, but they also seek questions to answer. What trends and issues are arising? What do we need to prepare for in the future?

Many journal authors write case studies—illustrating a problem or describing the solution to a problem at their own institution. What makes case studies worth publishing is their generalizability—how well the author has generalized the experience to make it meaningful to others.

Research reports are publishable when they enable the reader to think about the sources in a new way. They inform readers of the current state of thinking on the topic, or suggest thinking of it anew.

Methodological articles help readers learn about new approaches or suggest how to modify current methods of activity. They are especially relevant when they discuss analytical and quantitative methods and when they are specific and sufficiently explanatory for readers to relate methods to their own situation.

The journal also publishes brief reports, comments, and replies to previously published articles. The editors welcome responses from readers. Submit all papers to the editor at journal@srainternational.org. Realize that usually a substantial passage of time passes between when an idea is generated, its incubation period, the time it takes to solve it and write about it, and then the lengthy process of submitting it for publication, proofreading, revising, editing, and publishing.

In this second issue of volume 36, the first two articles report on research projects. The first article, Robert Porter’s “What Do Grant Reviewers Really Want, Anyway?” discusses how the peer review system works and how to improve it. The article explains the value of serving as a reviewer from the perspective of the reviewers. In the second article, “Kick-starting Research in Newly Emergent Universities: Why Faculty Do Not Apply for Research Development ‘Seed’ Funding at the University of Technology, Jamaica,” authors Cynthia Onyefulu and Ade Ogunrinade discuss the difficulties of establishing a research culture at a young institution. The authors developed and administered a survey questionnaire to 66 academic staff to determine why faculty members were not taking advantage of the university seed grant program to encourage the staff to pursue research. They conclude with a number of recommendations to increase proposal submission.

Other than comparing the amount of
money a grants office brings in annually with previous years, or looking at the percentage of funded grants to submitted proposals, how does one evaluate a grants office? The third article in this issue is a case study describing how to evaluate a grants office. “Constructing a Grants Office Review: A Case Study,” by Beth Olsen of Richard Stockton College of NJ, looks at ways to establish accountability in these days of assessment, evaluation, and performance improvement.

The fourth article, “Developing Research Foundations at Predominantly Undergraduate Institutions,” is a commentary by Phil Myers of Western Kentucky University, who describes establishing a research foundation at a predominantly undergraduate institution.

The final article is the third installment in a series of questions about all aspects of research administration with answers by Chuck Chermside in “Ask An Expert: Tips and Tools of the Trade.”

As I say farewell as editor, I want to thank the authors, reviewers, and associate editors for the valuable experience of the past three years. The authors have provided the backbone of the journal. Their submissions and interactions with the reviewers have contributed to creating the current professional journal for research administrators. It has been a privilege to work with many fascinating people, and my life is richer for the experience. Thank you.

Announcing the 2005 Recipient of the Rod Rose Award
For Best Paper of the Year

Robert E. Porter, PhD
Program Development Manager
Virginia Tech Research Division
Blacksburg, VA

With the goal of expanding the knowledge and tools of research administration, The Journal of Research Administration has given research administrators a means to exchange ideas and has provided a vehicle for new voices in the profession for 36 years. We owe this resource to the first part-time director of SRA, Rod Rose, who, as chair of the publications committee, in July 1969 produced the first edition of the journal, at that time named The Journal of the Society of Research Administrators. To establish a mechanism recognizing the achievement of our successful authors and to draw greater attention to the Journal, in 1973 the Board of Directors of SRA established an annual cash award program to honor the best paper published in the Journal each year.


Dr. Porter is currently program development manager for the Research Division at Virginia Tech. He has a PhD in speech communication from the University of Michigan and has extensive experience as a tenured faculty member and department chair. Dr. Porter has served as education administrator and private healthcare consultant with over twenty years’ experience in organizational development, planning joint ventures, alliances, and award-winning community partnerships. Dr. Porter has a track record of writing successful grant applications and funding proposals to government agencies and private foundations and has numerous publications; the one for which he earned this award is his third paper published in The Journal of Research Administration. A member of SRA International, Dr. Porter has made one presentation at an NCURA annual meeting and four presentations at SRA annual meetings. He has been invited to deliver faculty workshops for Temple University, Philadelphia; Old Dominion University, Norfolk; and La Trobe University, Melbourne.
Contributors

Robert Porter, PhD, is a program development manager with the research division at Virginia Tech. A former college teacher, Dr. Porter spent nearly twenty years with private consulting firms specializing in strategic planning, organizational development and grant writing. At Virginia Tech, he assists faculty with proposal development and funding searches and conducts workshops on various topics related to sponsored research. He holds graduate degrees in speech communications from the University of Michigan.

Cynthia Onyefulu, PhD, is a lecturer in the faculty of education and liberal studies at the University of Technology, Jamaica. She is also the faculty research coordinator. Dr Onyefulu teaches undergraduate and graduate courses in educational measurement, classroom and behavior management, research methods, and program evaluation. Her publications and presentations are on test purpose and item writing, evaluation research, lecturers’ attitude to research, the use of technology in teaching and learning, and changes in leadership styles of company executives in Jamaica. She has also evaluated several undergraduate and graduate programs at the University of Technology, Jamaica. She is a member of the Canadian Evaluation Society (CES) and the American Educational Research Association (AERA).

Adelani Ogunrinade, PhD, is currently associate vice-president for Research and Graduate Studies at the University of Technology, Jamaica. Dr. Ogunrinade obtained a PhD in 1982 at the London School of Hygiene and Tropical Medicine, UK and undertook a postdoctoral fellowship at Harvard School of Public Health in 1984. He has published widely on the pathogenesis, immunology, and molecular biology of human and veterinary parasitic diseases. He has won a number of honors, grants and awards including the Thomas-Wellcome prize for Biomedical Research in 1992. Dr. Ogunrinade has previously held a number of administrative positions which include dean of the Graduate School, University of Ibadan, Nigeria, and deputy vice-chancellor, Academic Affairs, University of the Witwatersrand, Johannesburg, South Africa.

Beth Olsen, M.Litt., graduated from the University of Aberdeen in Scotland with a master’s in mental philosophy. She has worked in pre-award grants administration for 15 years, building the groundwork and infrastructure for a new office in Academic Affairs at Richard Stockton College of NJ. In doing this she has been involved in every aspect of grant-seeking from writing and editing to developing budgets, procedures and policies. As director of Grants Development at Richard Stockton College, Ms. Olsen has responsibilities for the IRB and other compliance issues and coordinates all internal award programs. Within the Provost’s office, she serves as support staff to many institution-wide projects, including civic engagement, diversity and experiential learning. Ms. Olsen is a member of the National Advisory Board for the Grants Resource Center of the American Association of State Colleges and Universities through 2007.

Phillip E. Myers, PhD, is the executive director of the Western Kentucky University Research Foundation, Inc. and the director of the Office of Sponsored Programs at Western Kentucky since 1994. Prior to that, he was a faculty member, an associate graduate dean, and an assistant
vice president for graduate studies and research. An historian, he holds the Ph.D. from the University of Iowa and the B.A. and M.A. from the University of Colorado. He is the financial manager of the WKU Research Foundation and formulates policies and procedures for the sponsored programs system at Western Kentucky. Dr. Myers is the authorized signatory and compliance officer for grant-related documents and issues, and he represents the research administration community at Western on the Council of Academic Deans. He also chairs the intellectual property and conflict of interest committees. He is the president of the SRA Education Division and a member of the Board of Directors and the Nominating Committee. He has presented at SRA meetings on a variety of topics: developing a research foundation, developing an intellectual property policy, effective sponsored programs training programs, dealing with senior administrators, and conflict of interest. Phil also serves as the SRA Archivist.

Herbert B. “Chuck” Chermside, MA, CRA, has recently retired after 23 years as director of sponsored programs administration at Virginia Commonwealth University (VCU). Mr. Chermside joined SRA in 1969 when he discovered that the new profession of research administration fit his interests and has grown in the profession as the profession itself grew. His career has included service to four universities and one federal agency. At VCU his activities included serving as prime representative to the Council on Governmental Relations (COGR), establishing the technology transfer program, serving on the Conflict of Interest Committee and creating many institutional policies related to research. His contributions to the profession include founding two chapters of SRA, numerous publications, and presentations and training sessions at many meetings over the last thirty-five years. His efforts to define the profession include six years on the Board of the Research Administrators Certification Council (RACC), where he participated in creating tests for the CRA certification. He holds a B.A. in psychology from San Francisco State University and an M.A. in higher education administration from Virginia Tech. He remains active in the profession as executive director of RACC, consulting, and now serving on the editorial review board of this journal.
Review panels determine the success or failure of most proposals, and writers are well advised to polish their prose in a manner that will win their approval. Indeed, many successful proposal writers count their service on review panels among the most powerful learning experiences in their own research careers. Information on how review panels work is abundant, but little has been written on the personal perspectives of reviewers—the critical factors that lead to their support or rejection of any given proposal, how they view the strengths and weaknesses of the peer review system and whether serving on panels has shaped their own proposal writing strategies. This paper presents the findings of interviews with sixteen senior Virginia Tech faculty with extensive experience on review panels. Most participants strongly endorsed the peer review system, though reservations were expressed concerning its administrative complexities and the difficulties in assigning proposals to reviewers with appropriate expertise. The paper concludes with reviewers’ recommendations to improve the overall system.

Abstract

Review panels determine the success or failure of most proposals, and writers are well advised to polish their prose in a manner that will win their approval. Indeed, many successful proposal writers count their service on review panels among the most powerful learning experiences in their own research careers. Information on how review panels work is abundant, but little has been written on the personal perspectives of reviewers—the critical factors that lead to their support or rejection of any given proposal, how they view the strengths and weaknesses of the peer review system and whether serving on panels has shaped their own proposal writing strategies. This paper presents the findings of interviews with sixteen senior Virginia Tech faculty with extensive experience on review panels. Most participants strongly endorsed the peer review system, though reservations were expressed concerning its administrative complexities and the difficulties in assigning proposals to reviewers with appropriate expertise. The paper concludes with reviewers’ recommendations to improve the overall system.

Background

It can be argued that most research administrators owe their jobs to a key power group in academe: grant reviewers. These folks are the gatekeepers who decide who will get money to fund research, and it is quite a bit of money, as universities now consume about $40 billion in R&D funds annually, much of it obtained competitively from government, industry and private sources (NSF, 2003).

Divvying up this diverse pool of funds is a massive undertaking, and it takes a lot of people to do it. In FY2003, the National Science Foundation alone utilized 54,000 individual grant reviewers, 8,000 of whom were engaged for the first time (NIH, 2004). To evaluate the 40,000+ proposals it receives annually, the National Institutes of Health uses 258 separate study sections and special emphasis panels, each with a roster ranging from 5 to 22 members (NIH, 2004). Review panelists work hard for little pay (usually travel expenses and modest daily honoraria when the panel is in session). In an NIH survey of study section members, reviewers reported spending an average of 49 hours reading proposals and writing reviews prior to meeting with the panel! That same study also found a high level of satisfaction with the peer review process: 94 per cent of all respondents reported they were either “satisfied” or “very satisfied” with their overall experience (NIH, 2001). Yet the system that lies at the very heart of science also has its share of critics who have attacked peer review for its...
perceived biases, questionable ethics, and scientific conservatism (Horrobin, 2001; Smith, 1997; Wessely, 1998).

To be funded, grant proposals must receive very high marks from reviewers. NSF reports that just half of proposals rated “Very Good to Excellent” by reviewers were funded in 2003 (NSF, 2004). At NIH, the “streamlining” procedure can eliminate up to half of the proposals submitted from full discussion by the panel; these are returned to the PI’s with no score. For the rest, the numerical panel scores are ranked from top to bottom, often with very small differentials before the payline is reached and the money runs out (NIH, 2003). Overall success ratios range from 20 to 30 percent at most agencies, but these figures include a significant percentage of resubmissions, and many grant programs fund as few as 10 to 15 per cent. With budgets in sponsor agencies flattening and universities ramping up their research goals, competition can only intensify, adding to the need for a better understanding of the people who serve on these vitally important bodies.

Much has been published about the review process, especially the established practices of major federal agencies such as NSF and NIH. Relatively little has been written about the experience of being a reviewer. An exception is biologist Pam Member, who has written a strong personal affirmation of the review process as a valuable learning experience that has particular impact on one’s proposal writing skills (Member, 2003). Recently Molfese, Karp and Siegel (2002) recommended proposal writing strategies geared to reviewers’ likes and dislikes.

Research questions

This paper arose from a desire to learn more of the personal perspectives of experienced grant reviewers: What were (and are) their motivations for serving? What drives their positive or negative recommendations for particular proposals? How do they view the strengths and weaknesses of the peer review system? What have been the most important lessons learned? How has the experience affected their own proposal writing?

These and related questions were asked in structured interviews conducted with 16 senior Virginia Tech faculty, 10 men and 6 women, in May and June of 2004. Twelve were full professors (two of whom were also associate deans for research), and four were associate professors. A wide range of science and engineering disciplines were represented, as were the social and behavioral sciences. This was an experienced group, having served on an average of 10 review panels each, most of them with federal agencies such as NSF, NIH and USDA. Not surprisingly, they were also successful proposal writers, winning an average of 8.3 awards each in the five year period from 1999 to 2004. In dollars, their total awards averaged more than $2.2 million each over that same period.

Motivation

In most cases, the first invitation to join a review panel came soon after receiving a grant from that same agency. When asked why they chose to participate in such a time-consuming task, the answers centered around four basic themes:

1. Learning the ropes
   They wanted to learn more about how review panels operate, in order to write better proposals and improve their chances for future funding. “To see how the game is being played,” and “to pick up on what reviewers like and don’t like” were typical comments.

2. Service to science
   Reviewers felt a strong sense of obligation to serve the science community. “I benefited from this process and felt I had to give back,” said one reviewer. “This was a way I could contribute to the high quality review process at NIH,” said another.

3. Keeping current
   They believed this would be a good way to keep up with their discipline and
learn about future research directions.

4. Professional networking
They wanted to build a network of professional contacts with peers at other universities, as well as program managers within the sponsor agencies.

Preparation for the panel meeting
Reviewers reported receiving anywhere from 20 to 100 proposals prior to the panel meeting, and were assigned to be a primary or secondary reviewer on six to eight proposals. Such assignments often require the submission of written critiques prior to the panel meeting. Starting about two weeks ahead of the meeting, time spent reading and writing reviews was estimated to range from 15 to 60 hours, with 35 hours being the average. While most stated they were usually prepared for the panel meeting, they also observed it was not uncommon for other reviewers to keep on writing at the last minute. “We spend the first hour standing around drinking coffee while these folks are still pecking away at their keyboards,” noted one reviewer.

Reviewer expectations at initial reading
As they started reading each proposal, reviewers emphasized their first wish was to learn very quickly what the project was about and whether it fit the program objectives. Additionally they were looking for: (a) writing that was clear and concise (“concise” being the word most often used); (b) interesting, innovative ideas that would contribute to the field; (c) solid data showing that the approach has promise; (d) a crisp, specific project description with a research plan that is well thought out; and (e) evidence that the PI is well qualified to do the research.

First impressions are critical. “The abstract must sell the grant,” said one. “If I don’t get interested by the first page, the proposal is lost,” said another.

Characteristics of a good proposal
When asked to describe the qualities of good proposals, these characteristics were mentioned: (a) a document that is neat, well organized and easy to read; (b) responsiveness to the program announcement, with specific references showing how the proposed project will achieve program goals and objectives; (c) fresh insight into an important problem; (d) writing that communicates the enthusiasm and commitment of the researcher; (e) evidence that the PI knows the field; (f) convincing preliminary data; and (g) a feasible work plan that is supported by an appropriate budget.

Several stressed the importance of the proposal’s speaking to the reviewer, stimulating a level of interest and enthusiasm to match the writer’s. In the words of one reviewer: “You get the feeling ‘This is really great, this study has to be done.’ It’s like a fire in the belly, or knocking your socks down, it makes you say to yourself, ‘Darn, I wish I had thought of this!’” Another said that reading a good proposal was also a learning experience. “The best proposals teach,” she observed. In this part of the interview, reviewers kept coming back to the core theme of clear, persuasive writing. One used this story to make the point:

Imagine that you’ve submitted a proposal to NIH. Your reviewer is reading through the proposals, but she’s left at the last moment. It’s 6 a.m. on the day she’s flying to Washington. She’s sitting at the bus stop, it’s raining, she has the flu, and she’s got your proposal in front of her. Your writing should be able to persuade her that this is a great proposal, even under those conditions. (B.Tyler, personal communication, 27 May 2004)

Common mistakes
Reviewers were emphatic in describing the common mistakes they encounter, and most began by critiquing poor writing styles. The most common mistake is writing...
that is vague and unfocussed. “It takes me too long to figure what it is that they want to do,” was one description. Another stylistic error is prose that is too densely academic, or “written like a journal paper.” What they dread most is the sheer boredom of wading through tedious material and the unnecessary verbosity of many writers who force small fonts and smaller margins on the weary reader. “It’s as though the PI is desperate to pack in more and more, while the reviewer wants to read less and less,” said one. Other common mistakes include (a) an incomplete response to the program announcement; (b) the writer does not understand the state of the art; (c) the project is too ambitious, too global in scope; (d) the research plan is vague, where the PI seems to be saying, “I know what I’m doing. Trust me”; and (e) the PI lacks proven competence to do the research.

When asked about qualities that particularly annoy or irritate them, a frequent complaint was sloppiness and lack of proofreading. Apparently, killer mistakes in spelling and grammar are encountered all too frequently. “This isn’t freshman English,” one reviewer stated flatly. Others cited instances where it was obvious that the document is a “cut and paste” job, with inconsistent formatting and writing styles. “If the PI can’t take the time to do it right, why should I?” was a question posed by more than one reviewer. When asked why very bright people could commit such basic errors, reviewers guessed that PI’s wait too long to get serious about writing their proposals and don’t allow enough time to polish the document. “Maybe they don’t realize how important this is,” said one.

**Learning from experience**

Most reviewers had multiple years of experience, and most said they now perform their work more efficiently, taking less time than they did when they started. “I used to just plod through each proposal, focusing on all the details,” said one. “Now I get to the gestalt, the big picture first. If I like it, then I’ll go on to the details. If I don’t, I’m done reading.” Another referred to having attained higher standards over the years: “I’m much more confident in my own judgment now, and I’m more ready to strongly advocate or ‘shoot down’ individual proposals.” A third mentioned the advantages of being able to look up citations on the internet. “I use the computer to check references cited in the proposal, and this helps me a great deal to get up to speed in areas where I don’t have specific expertise.” Some mentioned skimming or skipping over sections they deemed to be overwritten or irrelevant.

**Objectivity of review panels**

In the intensely competitive arena of proposal reviews, one could expect disgruntled PI’s to challenge the objectivity of the panels, and they do. However, the participants in this study, all of whom have experienced disappointment as well as success with their own proposals, rate their panels’ objectivity very highly. Several stated that in their experience, evidence of bias was “nil” or “virtually nonexistent.” One described his panel as a “straight, straight arrow operation.” Another stated that “perhaps the system isn’t perfect, but it’s the fairest one possible.” In response to the perception that there is an “old boys’ network” conspiring to steer a disproportionate amount of funds to its members, several reviewers disagreed. They described panel dynamics as a democratic, self-correcting system where it is hard for one person or faction to dominate. Here is a typical comment:

Applicants have got to realize that the people doing these reviews are doing the best they can. They’re providing the very best information and judgment they’re capable of. There is very, very little cronyism in the system. There is some, but not very much. But there is clubbism, which is not cronyism. That is, if I’m sitting in an NIH study section, and I believe the real area of current interest in the field is neurotoxicology, I’m thinking if you’re not doing neurotoxicology, you’re not doing interesting science. So there is this possibility of egotistical impact on the
process. But it’s relatively minor, and unless you’re a very powerful person, you won’t get away with it. (N. Castagnoli, personal communication, 14 May 2004)

Some did acknowledge the occasional favoritism shown toward a senior PI based on his or her reputation rather than solely on the proposal itself. Where a PI has a strong record of scholarly output, panels will sometimes “fund it on the come,” a gambler’s phrase used by one reviewer.

Panel procedures

Though they served on many different panels in several agencies, these reviewers described working procedures that were remarkably similar. In a typical routine, the program manager at the agency starts the working session by reviewing program goals and laying out the ground rules for the actual review. Responsibility to moderate the discussion rests with the program chair, a peer who is a member of the committee, but doesn’t vote. Primary and secondary reviewers read or summarize their written reviews, and panel members are polled for their scores or recommendations for funding. Discussion follows, after which panelists may change their ratings. The program chair checks for the panel’s concurrence with the final rankings, and the session ends.

Recently the Center for Scientific Review at NIH posted an interesting video on the internet depicting a typical study section study meeting (NIH, 2003). Although it’s a simulated exercise (referred to as “mock review panel”), it’s an instructive introduction to the group dynamics of the review process.

Impact on grant writing

All participants reported that serving on review panels has dramatically improved their proposal writing. “You learn to put the reviewer’s hat on,” said one. “You know what the panel is looking for; you can hear their discussion in your head while you’re writing.” “You’re exposed to the writing skills of successful PIs and you learn to imitate their best qualities,” said another. A third noted, “I used to write to a peer; now I write to a committee. I write to reach both the specialist scholar in my particular field and the generalists, who make up the majority of the panel. And I make it easy to read, large font (never size 10!), and 1-1/2 line spacing.” A typically enthusiastic response was this:

It’s been a tremendous influence on my own grant writing, all across the board—learning how to strengthen the qualities of a good proposal—coherence, theoretical background, feasibility, methodological nuances, need for a statistical consultant, the overall vision. How to write so you’re not coming across as pompous, how to write so you’ll be well received—almost every facet of my grant writing has been enhanced. It’s just been a tremendous source of feedback. (T. Ollendick, personal communication, 13 May 2004)

Other improved skills were mentioned, including: (a) a simpler, livelier writing style aimed at capturing and holding the reviewers’ attention; (b) key points laid out very early; (c) clear organization with frequent section headings; (d) more use of visual illustrations (graphs, charts, photos). One reviewer summed up her new perspective with the simple statement: “You have to be a critic reading a proposal in order to write a good one.”

Lessons learned

Participants were asked to step back, take the long view of their experience as reviewers, and sum up the most important lessons they’ve learned. One reviewer went back to a strong restatement of the “clear writing” theme:

The big lesson reviewers learn is how pitifully, poorly written a lot of proposals are. It’s truly an eye opener for all of your life. You say to yourself, “Oh my gosh, we got 150 proposals and half to
two-thirds of them are in the No Merit/Do Not Fund category, so about fifty are still in the game, and you’re only going to fund 20 to 25 of those, so you’re looking at a pretty small number.” So the reviewers walk away clearly knowing that they have to write their own proposals so they wind up in that final quadrant. We never really sit down and say how we do it—we all do this independently—but two things make the big difference: One, it’s just the power of the idea, and two, their writing conveys that idea very concisely and you can see right away how they’re going to do something very specific with it. (S. Sumner, personal communication, 25 May 2004)

Another reviewer with a strong funding history stressed relationship building as the key to success:

As a PI or co-PI you need to have a relationship with the program manager. Your job in writing the proposal is to help the program manager be successful. I really believe that. So if the program manager says, “Look, I want to develop the next XYZ,” your job is to help him or her be successful by doing just that. That’s the truth. Your job is to help that manager establish that research program. You do it by showing a 2 or 3 page white paper and asking, “How about this, does this fit your program?” It’s very important to strike up a relationship with the program manager in a somewhat personal way. I mean go visit face-to-face first, you don’t want to send a white paper out of the blue, you want to go up to DC and meet these people. (T. Long, personal communication, 20 May 2004)

Other basic lessons included: (a) “Study, study, study the program call”; (b) “Make your proposal easy to read”; (c) “Start much earlier than you think you have to”; (d) “Make sure you know what has already been done”; (e) “Write in an accessible way that can be understood by a diverse group”; and (f) “Get in the habit of resubmitting.”

**Luck of the draw**

In discussing lessons learned, luck was often mentioned. Two dominant realities of the peer review process—the powerful influence of lead reviewers and the low probability of success—have led most reviewers to the ironic conclusion that, in spite of the inherent fairness of the system, luck has a great deal to do with the outcome. Despite the sponsor agencies’ best efforts, the final decision contains an element of randomness, depending on who gets appointed to the panel and who are the primary and secondary reviewers. Their conclusion is that shrewd PIs start with a resolve not to be deterred and always keep resubmission in mind. “Remember the funding decision, positive or negative, can be dumb luck, due to factors beyond your control,” said one. “Keep on writing and resubmitting; you’ll always be faced with a low probability of success, so there’s no shame in being rejected,” said another. A third brought in his own gambling analogy:

The big lesson is not to take rejection personally, because when you throw in the social dynamics of the panel, and the large number of proposals they’ve looked at in a short period of time, it’s a crapshoot. Also, remember you’re writing a document that most panelists are not going to read—they’re going to look at parts of it, but they won’t read it from start to finish—so you better put some eye-catching things in there to hold their attention. (D. Inman, personal communication, 13 May 2004)

**Strengths of the peer review system**

With few exceptions, participants in this study gave a ringing endorsement to the peer review system. In their view, its great strength is democratic self-determination, as researchers themselves chart the future direction and quality of their respective disciplines. “The research community decides its own fate by determining what good science is,” said one. Another noted, “The people doing the work are the right people
to decide where science is going.” A second strong theme was the diversity of the panels, credited with assuring a good cross section of ideas to drive innovation. While admitting it’s not perfect, the overall consensus was that peer review is the best means to preserve the scientific integrity of sponsored research.

**Weaknesses of peer review**

Despite their strong overall support, participants expressed a range of concerns about peer review. No one theme dominates, though several mentioned that panel discussion can be unduly influenced by a strongly opinionated member. A related concern was the “veto” effect, whereby less than enthusiastic comments by any one of the lead reviewers can doom the proposal. Most commented on the heavy workload, and the difficulty of giving a fair hearing to so many proposals in a single batch. Women are especially pressured to participate more often, a concern shared by both genders. A few mentioned that some panels do not have the breadth of expertise to adequately cover all the proposals. Finally some expressed a concern about “splitting hairs,” as intense competition forces many panels to focus on relatively minor weaknesses, for example “this proposal lacks preliminary data.” The funding decision is then based not on the merit of the basic idea, but on how much work has already been done. Some reviewers felt that this was at the root of ill feelings expressed toward peer review, usually by disappointed PIs. (An excellent example of PI outrage can be found in a letter published in Current Biology, entitled “Moron Peer Review” (Brenner, 1999).)

One reviewer expressed deep reservations about NSF’s increasing emphasis on interactive panels contrasted with the old mail reviews:

> I think the panel review process is terrible. It is not the best way to review proposals. The best way in my mind is the old way, where the program manager sent the proposal out to two or three reviewers with expertise in the field, and asks for a written critique, collects the reviews, and then makes the decision. It was a mail review process very much like reviewing papers for a journal. Review panels are terrible for two reasons: One, you’re forced to read 40 proposals at one time, as opposed to the old mail review where you read maybe ten proposals over a year. That way you got a higher quality, more serious written review, like the Canadians and the British do. Two, putting people in a room for discussion opens the process to a tremendous amount of subjectivity, and not because anybody wants to or tries to, it’s just because of human nature. (D. Inman, personal communication, 13 May 2004)

Most participants were more forgiving, concluding that the system may have its flaws, but there is no better way. Some recalled Winston Churchill’s famous dictum about democracy: “It’s absolutely the worst form of government except for all the other forms that have been tried.”

**Innovation or incrementalism?**

Critics have charged that review panels shy away from funding truly innovative work in favor of research that is within established boundaries (Horrobin, 1996). Participants in this study were almost evenly split on the issue: 9 agreed with the accusation while 7 disagreed. One who agreed gave this rationale:

> The proposals most likely to get funded are incremental, where the writer takes a very mature topic and kicks it up just one notch. The ones that have a hard time getting funded are the most creative ones, where the writer is taking a huge leap forward, so much so that there aren’t a lot of references, and most people aren’t comfortable with that. One of the tactics of successful grant writing is that you have to make people comfortable.

One who disagreed was adamant in plac-
The real reason that a lot of ideas that are called “innovative” aren’t funded is not because review panels are biased against them, but because they’re not well-developed, scientific ideas. They’re not well thought out or grounded in anything that’s persuasive. You need to make your case, and if you’re going outside established boundaries, the bigger the burden of proof to show that this is an interesting idea, and people just aren’t meeting that higher burden of proof. (S. Ball, personal communication, 27 May 2004)

Recommendations to improve peer review

Not surprisingly, most recommendations to improve the peer review system centered on the workload and how to relieve some of its pressures. Suggestions to spread the load among more reviewers were tempered by the observation that expanding an already large army presents its own challenges, not to speak of the added costs. Several felt that allowing more time for panel meetings would help, especially when the number of proposals is high. There were some suggestions to allocate more money to exploratory, high risk work that does not require as much preliminary data. One reviewer recommended that phone conferences be eliminated entirely, as face-to-face discussions are immensely preferable. One interesting suggestion to help new reviewers who need mentoring was to set up a listserv so panel members can access an interactive bulletin board prior to the meeting.

Summing up

Consistent with the 2001 NIH study, these reviewers were generally well satisfied with peer review, both with the system and with its overall implementation. Some saw impressive value in peer review above and beyond its functional role in allocating research funds. A particularly cogent expression of this view is the following:

Participating in these panels is part of doing science in this country. It’s not an option. You owe it to the system if you expect to get funding. At the same time, it’s an integral part of your own intellectual development, your ability to stay in touch with things. It’s much more than just deciding who’s going to get money. It’s like going to a conference, except it’s even broader and more intense intellectually. It affects my teaching, it affects my research, it affects what I think about my university in terms of where things are going and how priorities are set. It just a huge thing with me, and part of that is because I’m successful with it, I’m one of the success stories. I’m very, very fortunate and I’m very grateful. (B. Winkel, personal communication, 18 May 2004)

For a minority view, consider this blunt assessment of the massive time and effort it takes to administer the enterprise:

If I were science advisor to the president, I would look at the peer review system and ask: “Are we using our best scientific and engineering minds in the best way?” And I would say there has to be a better way, because we spend way too much time writing proposals and way too much time evaluating proposals and way too little time actually doing the work. The British, Canadian and Australian systems are better because they’re much less voluminous, with much less time spent writing and much less time evaluating. Overall, when I look at my life, if I didn’t have to spend so much time chasing money, or evaluating other people who are chasing money, I’d be a heck of a lot more productive. (D. Inman, personal communication, 13 May 2004)

The author leaves the last words to the reviewers.
Special thanks to Virginia Tech faculty who were interviewed for this study:

Sheryl Ball, Economics  
Frank Chen, Industrial & Systems Engineering  
Neal Castagnoli, Chemistry  
Felicia Etzkorn, Chemistry  
Daniel Inman, Mechanical Engineering  
Thomas Inzana, Biomedical Sciences & Pathobiology  
Yilu Liu, Electrical & Computer Engineering  
Gwen Lloyd, Mathematics  
Timothy Long, Chemistry  
Scott Midkiff, Electrical & Computer Engineering  
John Novak, Civil & Environmental Engineering  
Craig Nessler, Plant Pathology, Physiology & Weed Science  
Thomas Ollendick, Psychology  
Susan Sumner, Food Science  
Brett Tyler, Virginia Bioinformatics Institute  
Brenda Winkel, Biology

References


Kick-starting Research in Newly Emergent Universities: Why Faculty Do Not Apply for Research Development ‘Seed’ Funding at the University of Technology, Jamaica

Cynthia C. Onyefulu and A. F. Ogunrinade

Abstract

Newly-emergent universities face a plethora of problems which bedevil development efforts and inhibit the building of a research culture almost from scratch. These challenges arise from lack of human and material resources, lack of research infrastructure, lack of role models and mentors and general capacity problems often lumped together and described as a general lack of a “research culture.” In order to redress this lack of a research culture and encourage the building of an active research enterprise, the 10-year old University of Technology, Jamaica introduced a seed grant mechanism in 1998, since re-designated the Research Development Fund (RDF) to encourage staff of the university to pursue research activity. Despite this initiative, response to the funding has been lackluster. In this paper, we investigate the reasons why academic staff at the University have not utilized this promising facility and what could be done to encourage more active participation in research.

Out of the 66 academic staff who responded to a questionnaire survey, 74.2% claimed to be aware of the available funding for research in the university but only 10.6% had applied for funding under the RDF mechanism between 1999 and 2004. Of those who applied, only half were successful. However, about a third of the respondents have been utilizing other funds for research outside of the RDF. The reasons given for not applying for the fund include lack of time to write the proposal or conduct the study (46.9%), the bureaucracy surrounding the release of the fund (22.8%), the paucity of information in the proposal form and the tedious application process (19.6%) while 7.5% of the respondents were deterred by fear of being rejected. However, such reasons may just underlie the need for more capacity building efforts, research training and mentorship at all levels. A number of suggestions were made by the respondents in order to encourage increased participation in the application process. These include a more customer-friendly application process, reduction in teaching load in favor of research, research mentorship and the reduction in staff participation at meetings and other administrative duties.

Author’s Note: Contact A. F. Ogunrinade, PhD, Associate Vice-President, Research and Graduate Studies, University of Technology, Jamaica. E-mail: aogunrin@utech.edu.jm
**Introduction**

The importance of research and the role of universities in the new knowledge society are well recognized. The purpose of research and the major role of universities as articulated in the UK Dearing Report (National Committee of Inquiry into Higher Education, 1997) are to “increase knowledge and understanding for their own sake and to foster its application for the benefit of the economy and society.” Further, the reasons for encouraging faculty to engage in research are to prevent “obsolescence, restore vitality and foster the teaching – research nexus by ensuring that faculty remain at the cutting edge of their discipline” (Idaho State Board of Education, 1999). There is an added dimension to university research given the new emphasis on entrepreneurship and commercialism, in terms of revenue generated from intellectual property – innovation, patents and technology transfer (Clayman, 2004).

However, there is a segmented or an uneven world of research as institutions have varying research capabilities and differing institutional norms and values which may hinder or support research (Young, 2001). Although the challenges facing research in established universities are well known (Taylor, 2001), hindrances to the development of a research culture in newly emergent universities have not been well articulated beyond the anecdotal. There is therefore a need to identify ways in which organizational processes in new universities can be employed to support change and institutional transformation so as to foster a research culture.

**The University of Technology, Jamaica**

The University of Technology, Jamaica (UTech) was accorded University status in 1995. Created out of the former College of Arts, Science and Technology (CAST), established in 1958, it is a public institution supported by the Government of Jamaica. Given the traditional culture of teaching only at CAST, a number of hindrances to research were recognized in the new university during the period of transition. These include lack of infrastructure, lack of research rewards and an inadequate link between local industry and applied research at the university (Bridge & Johnson, 1998).

In order to address these problems, the university established an office of sponsored research and graduate studies in 1998 and introduced a seed granting mechanism (since re-designated as Research Development Fund) to promote and encourage research activity among staff. However, patronage of staff and recourse to the seed funds remain abysmally poor in the university. For instance, in 2002 there were only 11 applications out of a staff complement of 353 and only 9 applications were approved (Catalysis, 2003) for a third of the budget available under the scheme. This study seeks to investigate why academic staff at the University of Technology, Jamaica do not apply for seed funding under the RDF and what should be done to increase the number of staff applications for the available seed funding.

**Academic Staff Profile at UTech**

The target population of this study is the 353 Academic staff at UTech, Jamaica, 48% of whom are males and 52% females spread across five Faculties (the Built Environment, Business and Management, Education and Liberal Studies, Engineering and Computing, and Health and Applied Science). About 8% of the staff hold Ph.D. or professional doctorates while the rest hold masters degrees (76%) and first degrees (16%). The age profile of staff could not be ascertained but the majority fell within the 30-50 year age span.

**The seed grant/RDF Mechanism**

The seed grant was introduced in 1998 to provide support for pilot research of modest cost to the university, on a competitive basis. A secondary objective was to support and train new researchers. In 2002, the seed grant was re-designated as the Research Development Fund with five new categories (Individual, Multidisciplinary Group, Equipment, New Lecturers Grant and a Feasibility/New
Initiative Grant) designed to broaden the scope of the original seed grant.

**Selection Criteria and Processes for the RDF**

The RDF is available to all academic staff who have part-time (more than 50%) or full-time appointments. The application form is in a simple format which elicits information about the applicant, the proposal design and outcomes, and a budget. Approved budgets for all categories are in the range of 1000-15,000 USD and total available funding under the seed grant scheme is about 100,000 USD per annum. Applications, after endorsement by the faculty, are considered by a research committee of the Academic Board drawn from the five faculty research co-coordinators and three external members representing diverse professional interests and chaired by the director of the Office of Research and Graduate Studies (ORGS). The selection criteria are based on an average score of the quality of the research project and its applicability to solving local problems (40 points), coherence and clarity of proposal (30 points), feasibility of the proposal (20 points), proven track record of the individual researcher (5 points), and relevance and consistency with the university plan (5 points). In addition, the ORGS reserves the right to send proposals to an external assessor. Applicants are normally awarded if they score above 50%. No interviews are granted to applicants. Successful applicants are informed of the award and only conditional awardees are informed of details which require further amendment and future consideration of the proposal.

**Research Support and Research Promotion at the University of Technology, Jamaica**

The central office for the promotion of research at UTech is the ORGS established in 1998. Headed by a director, it is supported by a research committee and a postgraduate committee with members drawn from each faculty. In addition, each faculty has its own research and postgraduate committees which report to the central body bi-monthly.

Apart from the seed grant mechanism for research support, the ORGS introduced a research plan and drew up a research agenda based on recognized strengths of the UTech faculties. A “Teaching Company Scheme” was also introduced to foster research partnership and postgraduate training with industry. A number of research training workshops were introduced on proposal writing (Grantsmanship); thesis writing (Demystifying the Thesis); how to write research reports and publications; research ethics and intellectual property rights; statistics and data analysis in research; and research methodology. Despite the announcements of the training workshops and opportunities on the university mass mailer and other media, these training workshops were often poorly subscribed to by academic staff. Annual research forums are held to discuss problems and prospects, apart from the committee meetings in faculties and the bimonthly university research committee which reports to the Academic Board monthly.

In addition, in 2002 the ORGS introduced a research bulletin (Catalysis) and a Research and Technology Day to promote research awareness and to showcase research activities in the university. The ORGS website and intranet contain information about available support for research at the University and the ORGS published a research policy and guidelines. Part of the new policy recognizes reduction in the teaching load for staff engaged in research, postgraduate studies or externally-funded research. In 2004, a President’s Research Initiative award was introduced to reward research productivity, and university promotion has become increasingly tied to research productivity. A call for formation of research entities is in progress.

A major European Union grant for capacity building has generated 24 staff training at masters and PhD levels so far. Although the number of postgraduate research students at MPhil and PhD levels in the Faculty of Engineering and Computing is growing, postgraduate training is generally in its infancy in the university. Only three MPhils have gradu-
ated since the inception of the University. However, postgraduate taught master’s degrees are available in architecture and in work force education and development. In addition, postgraduate diplomas are offered in education and geographic information systems.

Methodology

This study was a cross-sectional survey design, the rationale for which was to obtain a cross-section view of why lecturers do not apply for the RDF. The target population of the study consisted of 353 full-time academic staff at the five faculties at UTech.

A stratified random sampling technique (Gall, Borg, & Gall, 1996) was used to ensure representation from each faculty. Thereafter, a simple random sample was used to select 223 potential participants, out of which 66 individuals eventually volunteered to participate in the study. In addition, 19 administrative staff were selected by purposive (non-probability) sampling (Barbie, 2004), out of which 13 volunteered to be interviewed. The number of participants for this study totalled 79. See Table 1 for the summary of the number of participants surveyed.

A questionnaire was used to collect data from the lecturers. This instrument consisted of two sections. Section A was designed to collect demographic information on the participants while section B contained 25 closed-ended questions on the RDF. Each participant received a letter of introduction explaining the purpose of the study, an informed consent slip and a questionnaire. In addition, a semi-structured interview was conducted on 13 members of the senior staff. Ethical clearance and appropriate permission were sought from the University Ethics Committee prior to the survey.

Research Questions

The central question that guided this study is: “Why do so few lecturers apply for the RDF?” From this question, five more specific questions were identified:

1. What percentage of lecturers is aware of the RDF?
2. How successful are lecturers who benefit from RDF in completing their research studies?
3. How fair and transparent is the RDF selection process?
4. Is the RDF sufficient to attract lecturers?
5. What should be done to increase the number of lecturers applying for the RDF?

Results and Findings

Demographic Profile of Participants

The response rate for lecturers who completed the questionnaire was 30%, while the response rate for the interview was 68.4%. Of the 79 persons who participated in the study, 30 (38%) were males while 49 (62%) were females. The profile of participants according to academic rank is as follows: 16.8% were assistant lecturers, 60.6% were lecturers, 10.1% senior lecturers, 9% principal lecturers.

Table 1
Faculty Participation in Questionnaire Survey

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Number of Lecturers</th>
<th>Number Randomly Selected</th>
<th>Actual Number Participating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Built Environment</td>
<td>48</td>
<td>30</td>
<td>7</td>
</tr>
<tr>
<td>Business &amp; Management</td>
<td>71</td>
<td>45</td>
<td>16</td>
</tr>
<tr>
<td>Education &amp; Liberal Studies</td>
<td>76</td>
<td>48</td>
<td>25</td>
</tr>
<tr>
<td>Engineering &amp; Computing</td>
<td>76</td>
<td>48</td>
<td>11</td>
</tr>
<tr>
<td>Health &amp; Applied Science</td>
<td>82</td>
<td>52</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>353</strong></td>
<td><strong>223</strong></td>
<td><strong>66</strong></td>
</tr>
</tbody>
</table>
and 1% professor.

Of the 79 participants, 12.6% have worked at UTech for less than a year, 41.8% have between 1 to 5 years of work experience, 31.6% have 6 to 10 years, 8.9% have 11 to 15 years and 5.1% have more than 15 years. These figures suggest that most of the participants (45.6%) have worked in UTech for over six years.

The level of education attained by the participants varied from bachelor’s degree (15.2%), to master’s degree (75.9%), while 5.1% had a doctoral degree. About 65% of the participants claimed to have written a dissertation during their training while 25.3% did not write a dissertation.

### Faculty Participation in Research and Research Funding

The responses to questions designed to elicit pattern of participation in research and research funding are presented in Table 3. Although about a third of the participants

<table>
<thead>
<tr>
<th>Questions</th>
<th>Responses Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you research active?</td>
<td>Yes (30.3)</td>
</tr>
<tr>
<td></td>
<td>No (60.6)</td>
</tr>
<tr>
<td></td>
<td>NS (9.1)</td>
</tr>
<tr>
<td>Have you ever applied for the RDF?</td>
<td>Yes (10.6)</td>
</tr>
<tr>
<td></td>
<td>No (77.2)</td>
</tr>
<tr>
<td></td>
<td>NS (12.1)</td>
</tr>
<tr>
<td>Would you like information on RDF?</td>
<td>Yes (73)</td>
</tr>
<tr>
<td></td>
<td>No (19.7)</td>
</tr>
<tr>
<td></td>
<td>NS (7.6)</td>
</tr>
<tr>
<td>Would you apply for the RDF in future?</td>
<td>Yes (74.2)</td>
</tr>
<tr>
<td></td>
<td>No (18.1)</td>
</tr>
<tr>
<td></td>
<td>NS (7.6)</td>
</tr>
<tr>
<td>Is the funding sufficient/worth applying for?</td>
<td>Yes (3.0)</td>
</tr>
<tr>
<td></td>
<td>No (7.6)</td>
</tr>
<tr>
<td></td>
<td>NS (89.4)</td>
</tr>
</tbody>
</table>
claimed to be research active, only 10.6% had ever applied for the RDF. However, there was increasing enthusiasm for more information on the RDF (73%) and a similar number said they would like to apply for the fund in the future.

**Hindrances to Application for Research and Research Funding**

Although a majority of respondents could not give an opinion whether the funds awarded under the RDF was sufficient inducement for application, the recognized hindrances to participation include non-availability of time, bureaucracy of fund release/administration, tedious proposal process, and fear of rejection. See Table 4 for a summary of the responses.

**Improving Application Rate for Research and Research Funding**

When asked what ought to be done to improve the application rate, the suggestions include the following:

1. Distribute information about RDF in a simplified, easy to read fashion
2. Publish the names of awardees, their pictures, and their research abstracts in the research bulletin or on the office website
3. Advertise in different media
4. Offer incentives to lecturers to do research
5. Give each lecturer a research grant and monitor its usage

When asked whether the ORGS was effective in promoting research in the university, about 50% of respondents considered the office effective or very effective, 23% considered it marginally effective, while only 3% considered the office not effective (Table 5).

Steps suggested for the increasing staff involvement in research are grouped in Table 6. The most significant suggestions were in the areas of providing more time for research and reducing the teaching load while providing for mentorship and conferences.

Table 4

<table>
<thead>
<tr>
<th>Recognized Hindrances</th>
<th>Responses Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Not enough time to write proposal/conduct study</td>
<td>31 (46.9)</td>
</tr>
<tr>
<td>2. Bureaucracy of Fund administration</td>
<td>14 (21.8)</td>
</tr>
<tr>
<td>3. Lack of information on Requirements for proposal/tedious process</td>
<td>10 (15.1)</td>
</tr>
<tr>
<td>4. Fear of rejection</td>
<td>5 (7.5)</td>
</tr>
<tr>
<td>5. Unstated</td>
<td>6 (9)</td>
</tr>
</tbody>
</table>

Table 5

<table>
<thead>
<tr>
<th>Item</th>
<th>Responses Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is ORGS effective in promoting research activities?</td>
<td></td>
</tr>
<tr>
<td>Very effective</td>
<td>8 (12)</td>
</tr>
<tr>
<td>Effective</td>
<td>25 (38)</td>
</tr>
<tr>
<td>Marginally effective</td>
<td>15 (23)</td>
</tr>
<tr>
<td>Not effective</td>
<td>2 (3)</td>
</tr>
<tr>
<td>No response</td>
<td>16 (24)</td>
</tr>
</tbody>
</table>
Suggestions for Improving Selection Criteria for the Research Development Fund

A number of steps were recommended by interviewees to improve the participation rate in the RDF. Four of the 13 persons interviewed who claimed to be familiar with the process made the following comments:

Interviewee A: “The selection team may not be fully aware of all research areas of the applicant. A team that is knowledgeable about the topic should be appointed when a selection is to be made.”

Interviewee B: “There should be more lecturers from the faculty of the applicant to decide who gets the fund instead of using the Faculty Research Chairpersons.”

Interviewee C: “The RDF should be given to each faculty instead of selecting certain persons as beneficiaries.”

Interviewee D: “Lecturers should be told when the grant is refused and why their applications were not successful.”

Suggestions for Enhancing Research Development Fund

Of the 13 interviewees, 3 stated that the money granted was insufficient for research while 10 agreed that it was sufficient. When asked how the funding could be improved, the interviewees made the following comments:

Interviewee A: “The office of Research and Graduate Studies should assess the research needs of individual academic staff to determine an estimate of grants to be awarded on an individual basis.”

Interviewee B: “Increase the RDF based on what UTech can afford.”

Interviewee C: “Seek additional funding from private sector and establish collaborative Programmes. Advertise UTech’s research strength in daily newspapers in order to attract funding.”

Discussion and Conclusions

The central question in this study is: “Why do so few lecturers apply for the Research Development Fund?” The answers given were lack of time for writing a proposal, the tedium of the application process, the bureaucracy of fund disbursement, and lack of information on RDF. With regard to the last item, it is apparent from the findings and suggestions made for enhancing research that a great number of staff are not really aware of the RDF granting mechanism and its selection processes and criteria or the research promotion efforts in the University, although these were advertised on the intranet, published in the university’s research bulletin, Catalysis, and the university research policy. In terms of research promotion, there is general agreement that the ORGS is effective in promoting research in the university. However, there appears to be a decoupling of the efforts of the central office and the faculties leading to the setting up of parallel research office in at least one faculty while one other faculty is in the process of setting up a research office. Although devolved structures are new administrative strategies for achieving growth and development in modern uni-
versities, it is not clear whether such devolution represents a good strategy for kick-starting research in new universities. What seems apparent is that faculty coordinators at UTech are themselves young lecturers with little administrative clout and there is a suggestion that deans or vice-deans should be brought on an executive structure of the ORGS in order to strengthen the administrative structure for research and ensure a seamless research administration.

We recognize from these findings that it is not the lack of research promotion, equipment or funding per se that are presently critical to research development efforts at UTech, especially in the short term. Rather, we believe that more emphasis should be placed on enhancing human resources and research mentorship. At present, most staff appear overwhelmed with the teaching load and administrative duties (which sometimes run up to 15-20 hours/week) and did not avail themselves of information on research or research funding. Further, most staff at UTech hold master's degrees and were busy trying to improve their qualifications through higher degrees and distance education. In terms of staff turnover, about 54% of staff had spent 0-5 years in the university while only 15% has spent 10 years or more. This raises the issue of critical mass necessary for kick-starting and sustaining the research enterprise.

Given the overstretched teaching staff, the limited number of staff with terminal research degrees and few postgraduate students, a research capacity hiatus has existed due to lack of dedicated research staff and mentors to champion the research enterprise at the university. Overcoming this requires considerable investment in time and effort to “recruit, retain, reinvigorate, re-orientate and enable” staff to engage in research. Addressing these long-term challenges may well require considerable investment in human capital. Use of teaching assistants may alleviate the teaching load, but we recognize the vicious cycle between lack of graduate students and lack of supervisors. Establishing a graduate school may be one such means of kick-starting a research culture as these may generate teaching assistants and research students. However, graduate schools in established universities are often vehicles for marketing the university programmes, achieving a higher institutional profile, and creating space for collegiality of graduate students (Young, 2001). Unless the graduate school is a significant budget centre, it may have limited value as a research strategy (Ogunrinade, 1996; Young, 2001).

No generic formula for success in developing a research culture in universities exists. However, developing the culture and processes that sustain a research-led university is an intellectual, not merely a managerial challenge (Young, 2001). It involves identifying the goals and mission of the university as research informed, research-based, research active or a research-intensive institution (Hazelkorn, 2004). Given UTech’s experience, the goal of the research mission has not been properly defined, although emphasis continues to be placed on applied research.

References


Case Study

Constructing a Grants Office Review: A Case Study

Beth Olsen
Richard Stockton College of NJ

Introduction

Working within an academic context one may find it uncomfortable (and even a little repugnant) to think about the college or university in terms of efficiency, productivity, and bottom lines. The notion of accountability seems more appropriate to the corporate and government sectors and belies the more noble goals of institutions of higher education to inspire young intellects, nurture good citizens, and explore ideas. And yet all institutions now face accrediting reviews that include questions on assessment practices, judging how well the institution is meeting its mission. This nation-wide push for accountability affects the curriculum and the performances of faculty and staff and often encourages our grants and sponsored program office management to expect that the exercise will lead to improvements.

While the movement toward increasing assessment is affecting our office staff and activities, the challenge is to find an appropriate and useful way to evaluate the sponsored program office that will lead to distinct opportunities, challenge the status quo, and establish practices for improvement. This paper describes a distinct model that is useful for organizing an assessment of grants offices. Even though the review process could be constructive for strategic and other planning, the model presented here has inherent value for a grants office.

Because a review systematically investigates activities and rigorously evaluates outcomes, its usefulness depends on the priority it receives. Fundamentally, an assessment should be helpful in gathering information about the current status of activities and products and in pointing at areas that could be improved. When given top priority, the review can serve several goals; it can, for example, a) enhance the capacity of the grants office; b) increase the services offered; c) alter policies, practices, and structures; and d) enable the faculty to seek more grants. And yet a review can provide an opportunity for much more: marketing the grants office, making administration aware of needs, developing a plan for growth that has support from others, and organizing for change. How then can this process be managed so the results are valid and the process serves a variety of goals? Deciding on the framework for the assessment requires some reflection on the level of the analysis—the context—to be researched.

Stockton Context

Even though the academic programs are required to undergo self-studies and reviews every five years at Stockton, the academic service programs had never been assessed. Every year the administrative staff is required to produce a self-evaluation which often

Author's Note: This paper was originally presented as a Roundtable discussion at the American Association of Colleges and Universities, Grants Resource Center Spring 2002 conference. The author appreciates and acknowledges the assistance of the editorial reviewers. Contact Beth Olsen, Director of Grants Development, Office of Academic Affairs, Richard Stockton College of NJ, PO Box 195, Pomona, NJ 08240-0195, USA. Ph: (609) 652-4514. Fax: (609) 748-5509. Email: Beth.Olsen@stockton.edu.
involves setting professional goals and evaluating the effects of office management. Since the grants office at Stockton is a one-person shop, a self-evaluation is, by default, an evaluation of context as well.

This situation could suggest that a review of a small grants office might be so narrow as to have limited consequences. And yet the College, as a public liberal arts, primarily undergraduate college with approximately 6,500 students, is poised for institutional transformation: the state allocation has been cut, creating more interest in outside funding; a new president began in June 2003, bringing a robust interest in building relationships outside the college, and inspiring the College community to reflect on ways it meets the mission, and bringing a new mandate to establish goals and achieve results. In other words, the College is ripe for growth, and a well-structured review process could launch the grants office into the mainstream. Whatever the state or context of an institution, a thoughtfully created assessment can serve as an initiative for change.

**Model for the Review Process**

The literature on assessment is extensive and will provide a wide variety of general terms and practices. Since an assessment review is basically a research project, we can look to research methods to guide the process. A more traditional scientific model of research begins with a theory for which there is no clear answer (appropriate so far for the grants office review); then we devise research questions (still pertinent) and a hypothesis based on logically deduced and observable outcomes (and this is where this model gets tricky for a grants office review). While this research method is focused, it can be too narrow and linear for our purposes. A program review of the grants office needs more flexibility and broader input than a more traditional research model can manage. The social scientists will think of participatory action research (Wadsworth 1998) or a more open-ended and experiential-based approach.

The model outlined here as appropriate for grants offices relies on the theories and goals of a community-based research (CBR) assessment. If the grants office is considered the place that facilitates change, CBR provides guiding principles and practices that are useful (Stoecker, 2002). By adapting our goals to a CBR approach, the grants office review will be collaborative, sensitive to the college culture and context, systematic and rigorous in gathering data, multidimensional, and anticipative of change.

**Guiding Questions to Consider**

As Patton (1997) wrote, “There is no best way to conduct an evaluation. It depends on the people involved and their situation.” Even though each office has its own culture, a program review has characteristics common to most offices which can be discovered through a variety of data-gathering tools that include both qualitative and quantitative data. In designing the framework for the review, the following broad dimensions inform what methods and activities can best document the process: a) What is the goal of the review? b) What are the deeper purposes that might be served in this process? (For example, a grants office can be a change agent, which means including more than charts and bottom lines.) c) What information and data are relevant? d) What role might an outside evaluator play in the process?

Once the general questions are considered that will frame the assessment, the review will take on a more practical and pedestrian pace. From the first meeting with administration to the end of the process, one might spend eight or nine months, and implementing the recommendations and plans for change might require several years. To monitor progress of the office review, outline a process and note the concepts that will characterize the assessment. Concepts might include the following:

1. The grants office mission is basic to the whole review. Is it working? Do staff attend to all it says? Are there other activities outside the mission that occupy the staff?
2. Review job descriptions. What are the...
big tasks that require staff time? Internal/external grants, compliance issues, fundraising, pre-award and post-award.

3. Who are the constituents? Faculty, student affairs, administration, community partners.

4. What are “best practices” for similar offices? And how can they contribute toward improving this office?

And think about parameters that will guide the kinds of information to gather:

1. What context(s) might be used for comparisons? Other institutions within the same state, across the country, within the same Carnegie classification, with a similarly-sized private/public—all can provide some interesting information.

2. What quantitative data are essential? Has there been an institutional self-study within the past few years? (These documents contain useful information)

3. What data will show activity and trends without becoming mere numbers?

4. What methods are best to gather qualitative information?

5. What timeline is reasonable, given one’s other responsibilities?

6. How might an outside consultant best serve the goals of the review?

Process – Road Best Taken

Since the review may take close to a year to collect and analyze all the documentation and write the self-study report, this will be a project with long interruptions while one tends to regular responsibilities. A matrix can keep the process organized by tracking the activities/methods, the processes by which activities will be complete, the resources needed, a target date and completion date.

The review process requires commitment of time and work, so one must gain approval and support from the administration for the plan early in the process. Toward this end, one should craft a preliminary draft of the process to be followed, a timeline, a request for an outside evaluator, and a table of contents for the self-study report. Once a plan is given the go-ahead and a budget established, the review can proceed on several fronts.

The table of contents for the self-study extends in several sections with subsections, so that gathering information and writing can begin. The self-study report expands to include the following sections:

a) Overview – background/history of the office, mission and values;

b) Infrastructure – outreach and marketing activities, technology and information resources, staff, budget, and compliance activities;

c) External award activity – policies and procedures, outcomes, examples;

d) Internal faculty development programs – policies and procedures, outcomes;

e) Comparisons and context – nationally, statewide, interdepartmental;

f) Anticipated trends;

g) Conclusions – policy implications, resources needed, future activities; and

h) Appendices – job descriptions, organizational chart, external grants activity summary, internal grants summary.

Gathering data for comparisons and information from various stakeholders often requires developing surveys for more local distribution and researching outcomes from national studies. National data on grants and sponsored research offices is scarce and often has limited value when compared to one’s own institution.1 The colleges and universities within one’s own state frequently provide useful comparisons since these may be familiar to the administration and often have similar traditions. In Stockton’s case, a survey was developed and sent to the grants offices at the other eight public colleges within New Jersey. With follow-up phone calls, a 100% response rate was achieved.

If the process is to be collaborative and sensitive to the college culture, the stakeholders within the college also need an opportunity to participate in and inform the review. Another survey can gather information from faculty members via e-mail to ask about their grant-seeking history, experi-

1See Kirby and Waugaman (2003) for national benchmarking study of sponsored programs offices.
ences with the grants office, their problems and recommendations. Space can be given for written responses for some questions, and a Likert scale response on others. Similarly, a survey developed for the academic deans elicits an administrator’s point of view. These data can then be collated and summarized for the report and narrative responses selectively quoted in the Self-Study Report to add richness and other voices.

Professional associations and colleagues’ recommendations are effective sources for external evaluators. The evaluator is in a position to give guidance and advice to upper administrators, so select someone from outside the college who has the effect of a top administrator and is also someone who shares your vision and with whom you can collaborate. This person is important to the process for providing balance of opinions. The evaluator’s voice carries weight and authority, so the choice must be someone with experience and intelligence. The evaluator for Stockton developed guiding questions for personal and group interviews before arriving on campus to give these conversations some consistency. The consultant should meet with a variety of stakeholders across the college including academic affairs vice presidents, administration and finance, academic deans and group sessions with funded project directors and faculty who are not project directors but have the potential to become so. The variety of opinions and perspectives should give the consultant a more inclusive description of grants office activity. The consultant’s report becomes an important reference document during the final stages of the review process. Once the report arrives, the grants office director ought to respond in writing with some objectives to meet the consultant’s recommendations and an action plan for implementation. These documents become the basis for later discussions on ways to best develop the grants office.

Lessons Learned

Framing a review within the methods of community-based research assessment employs a feedback process in which stakeholders are asked for advice, make recommendations, and then are solicited to respond to the consequences of the review. Thus both the review and its implementation are collaborative. Encouraging all the stakeholders to give voice to their opinions about the grants office will also mean that they have been “prepped” to help implement the recommendations. Changes may be more welcome, because a broad group has already invested in the outcomes.

The review process largely reflects the experiences and practice of the staff in the office—its culture. Hearing from the grants office workers and reflecting on their relationships will help formulate guiding questions and appropriate methods. This is the value-laden premise of a review—to improve the efficacy of the grants office so that the opportunities for grant-seeking can be improved.

Check and recheck the data and information included in the self-study, because the report will become a reference for administration for several years.

Keep the review focused on the process and not the staff. An office review is not an evaluation of personnel. Be vigilant that the review does not deteriorate into complaints and criticisms about personalities.

Staff should request at the outset that the review process include a budget, especially when hiring an outside consultant. The process takes time to complete. Keep the process alive by sharing “marker moments” with others and advocate that the recommendations remain on the agenda.

Value and Outcomes

Assessment looms over us all as education moves through an active period of new ideas and new structures. The process of review requires some effort but then the documents that accumulate as a result provide fertile groundwork for leading the grants office in new directions. These documents become invaluable records for the college community and for the grants office in planning for change and when they need to show results. Once a review cycle is com-
pleted, the baseline data is established and information gathered that will be useful as comparison in the next review cycle. During the year or so of the review, and then another year or so of implementation, the grants office becomes a focus of attention and activity. Especially during this time there will be opportunities to press for change in policy, to market the grants office, to promote the grants office in strategic planning sessions and to position the grants office for growth.

Even though at Stockton we are still in the process of implementing the recommendations that emerged from the review process, the assessment established that the grants office was operating on limited resources that limited its activities. Since the review, the director has been promoted, a new clerical position has been approved which will increase the capacity of the office, a task force has been established with faculty and administrators to redesign the internal award programs, and new incentives are under investigation to encourage more grant-seeking. Perhaps as important is the positive and supportive message widely delivered by the upper administration about the grants office and its value to the institution.

Conclusions
An assessment of the office can be helpful and productive. The reports make a clear statement of need and prioritize what matters most to all the stakeholders. By collecting and documenting the activities of the grants office, the process establishes where things stand and gives some authority to those assumptions. This documentation can then become a vehicle for consensus-building to increase support for the grants office. Even though a review is time-consuming, the process gives legitimacy to the needs of the grants office and can become critical to its growth.

References


Developing Research Foundations at Predominantly Undergraduate Institutions

Phillip E. Myers
Western Kentucky University

Abstract

Over the past five years or so a number of predominantly undergraduate institutions have chartered research foundations to add flexibility to the institutional mission. These foundations complement the older foundations that began in research universities in the 1920s and 1930s. Whether old or new, research foundations differ from each other because of the institutional cultures that spawned them. Taken together they offer an added value of services in support of research and sponsored programs. This article outlines generic considerations for visualizing, planning, and implementing a research foundation.

Introduction

This article provides an introduction and overview of University Connected Research Foundations (UCRF) and developing a research foundation at Predominantly Undergraduate Institutions (PUIs). This article has been stimulated by the increase of research foundation start-ups at PUIs over the last five years, requests for information, and PUIs observing at University Connected Research Foundations annual meetings. The UCRF is a private organization serving the university connected research community.

A favorite saying around the UCRF table is: “If you’ve seen one research foundation you’ve seen one research foundation.” They have been developed because of institutional needs to provide flexibility for research. The first university research foundation was established in 1925 at the University of Wisconsin. It began as a receptacle for faculty donated patents and gifts that state law prohibited the university from accepting. Purdue’s research foundation was incorporated in 1930 and was devoted to university-industry relations. Five more followed spanning the country from California State University at Fresno, to Indiana University, to Ohio State University. In 1951 the Research Foundation of the State of New York was founded and today serves over thirty campuses in the system. It is the largest research foundation with annual awards nearing one billion and many services (Meadows, 1977).

These earliest and more recent foundations were separately incorporated for a number of practical reasons. The upswing in research in the late 1950s created the need to avoid restrictive state procedures, provide fiscal flexibility, facilitate contracting, encourage entrepreneurship, promote intellectual property and commercialization, and provide for accountability. For example, The University of Kansas Center for
Research, Inc. was founded in 1961 to provide flexible research administration for engineering research grants. This remained the model until July 1, 1997 when the Center expanded into all sponsored projects. (Gabriel, Garton, Scuto, Artz, & Myers, 2004). Today these trends continue to prevail. Some foundations are full-service and some provide specified services.

**Purpose and Structure**

How do you know when the time is right to start thinking about developing a research foundation? This question is answered differently from institution to institution, but some common indicators can be listed. First, officials at PUIs must realize that a research foundation based on undergraduate and some graduate programs will be different from a foundation supporting institutions that have hard science/engineering schools. The rapid growth of external funding may cause thinking about providing added value to benefit faculty. Second, this reality may lead to the need to create a mechanism to spawn financial flexibility. This variable can increase incentives for grant and intellectual property opportunities, and instill faculty confidence, increased morale, and visibility for research. Third, the foundation can provide customized services for business and industry contracts. Research foundations arise on campuses that are undergoing transformation of the strategic plan to become a nationally recognized institution of choice. A rule of thumb might be that external awards have risen to ten million dollars and there is an institutional desire to better serve the public good through its faculty, students and the community as part of the change. Another indicator stems from the institutional ambition to transfer technologies. The foundation can provide flexible finances to increase awards and for technology transfer. It can provide a litigation shield for the supported university. In a word, the foundation can be more responsive to both internal and external constituencies.

Whatever the reasons, a research foundation should not be developed as a “quick fix” to onerous statutes or internal obstacles. It must be part of a broader vision of the institutional strategic plan because there could not be a foundation unless there was first a university that wanted this added structure. For that reason, there must be a “top down” approach from the president, provost, CFO, deans, department heads, and research center directors. Time must be spent answering questions and concerns of various campus groups. Once buy in is achieved, the leaders need to develop a mission statement to describe how the foundation supports the university’s strategic plan. It should be brief and focused. An example is: “the foundation exists to stimulate and accept the assignment of grants, and to accept and manage the resultant intellectual property, within the broad institutional mission.”

**Services**

Benefits to researchers need to be considered in defining the services of the foundation. In addition to providing “real time” services, the foundation can offer customized contract terms and conditions to provide flexibility with business and industry. Equity interest in startup companies can be accepted. Low risk contracts can be engaged. The research foundation can create purchasing and risk management options that the university might be reluctant to pursue. Moreover, the research foundation earns interest on grants from non-federal sponsors and on indirect cost recovery dollars. The foundation can make proper payment of costs that the university considers “unallowable.” For example, if an investigator with private contracts needs operating costs, the foundation can pay the invoices from the researcher’s account. Moreover, deans and research or other sponsored projects directors like the interest earned on awards and non-federal indirect costs in the foundation.

Services should be planned around long-term benefits of the research foundation. Typical considerations concern whether or not leaders desire a structure to facilitate leasing or purchasing facilities for additional
research space. For example, the San Diego State Research Foundation serves the university by purchasing real estate to facilitate campus expansion. Non-university employment service is sometimes a contributing purpose. Do you want your research foundation to facilitate hiring post-doctoral researchers and faculty and to be responsible for the payroll of principal investigators and their grant staffs?

Models

Based on the services the foundation will perform for the university, four university-connected research foundation models exist whether the institution is public or private: the full-service stand-alone foundation with its own indirect cost rate, the foundation centered in the Office of Sponsored Programs (OSP) that uses the university indirect rate as the foundation rate, the foundation that performs specific services outside of the OSP such as intellectual property or contracts, and the State University of New York model where a single foundation serves all of the state institutions in the system.

The first model is the most separate from the institution and the most expensive to start up. The foundation has its own pre- and post-award units, and depending on its volume, a technology transfer office, purchasing unit, human resources, payroll and all of the functions of the parent institution.

The second model is currently being adopted as the structure for developing research foundations at some PUIs. This is the research foundation combined with the Office of Sponsored Programs (OSP). Because of the smaller or mid-sized dollar volume (up to $50,000,000 perhaps), all of the functions of stand-alone foundations are within the OSP, such as pre- and post-award services, intellectual property, compliance, and internal grant programs. Other services may be provided by the university such as grants accounting, payroll, insurance, human resources, use of mainframe computing, email, and purchasing. Staff members remain university employees to continue participating in the benefits plan. If the institution is public, the board of director’s liability can be covered under the university’s directors’ and officers’ policy. Research centers often purchase their own insurance under this model. This is probably the most inexpensive start up.

Still another model falls under the category of “Other.” These foundations have very specific roles to play such as managing technology licensing, legal affairs, source accounting, or sponsor invoicing.

What influences the choice of a model? First the foundation can offer an alternative avenue to onerous state laws and regulations. For instance, some states require review of contracts, which is time consuming and burdens relations with business and industry. Second, the nature of the research program should be considered. PUIs will probably be more weighted to applied rather than pure research. The foundation could house such programs to provide for flexible spending and collect interest on indirect costs and awards in addition to costs collected and invoices paid out on typical federal, state, local, or private grants and contracts. Finally, the objectives of the university help determine the model. If the university wants to rapidly increase its research base, it will probably want an arms length foundation for maximum flexibility.

Despite the chosen model, many foundations offer generic services in addition to the “bread and butter” sponsored programs services. Some of the more common services focus on protection, finances, risk management and contracting. Moreover, the research foundation can serve as a litigation shield. This role enables the foundation to assume litigation responsibilities, performance liability, joint ventures, and equity interests. In finance, the foundation can maintain fluid funds by bridging fiscal years where the university could not, provide a financial float with interest and investment earnings, and assume bad debts. For example, the foundation can promote fluidity for incentive funds derived from indirect costs by not having payouts interrupted by the end of the year university audit where many accounts are frozen for a period of months over the summer and fall for audit.
On the other hand, bureaucratic burdens can emerge in the foundation to challenge its mission of providing flexibility and efficiency through a “one stop shop.” For example, if risk management becomes a responsibility, the foundation must have specialized personnel to negotiate insurance to cover the risks inherent in research. The same characteristic applies to the human resources arm of a foundation. Who is to say that the HR function could not become as bound up in red tape as the university HR program? Finally, the foundation can facilitate contracting by issuing bids without going through sometimes time-consuming university or even state bid systems. But again, foundation leaders must be aware of how efficiencies can be maintained as these services evolve.

Making the Research Foundation Official

No matter how independent the university wants its research foundation, the university must complete charter documents known as the Articles of Incorporation, the Bylaws, and the Management Plan between the university and the foundation. The model adopted will be reflected in these base documents. (Western Kentucky University Research Foundation, Inc., n.d.).

There are three primary steps to official recognition. They are institutional governing board approval, state approval, and IRS approval. First is approval by the institutional governing board. Perhaps the most difficult hurdle to surmount, this step must have the leadership of the senior administration, deans, department heads and faculty leaders. The president must keep the governing board informed as the purposes and structure are developed. These reports must stress sponsored programs development and the added values the foundation can bring to students and faculty members. Universities often hire a consultant who is skilled in the development and executive administration of research foundations to explain how the foundation can help the strategic plan flow through the services discussed above and help to frame the key documents.

The second step is to obtain state recognition. Obviously, this step will vary widely between states. Planners need to become familiar with state statutes on corporations. Then they need to draft the Articles of Incorporation and the Bylaws. As a minimum the Articles of Incorporation must have the Secretary of State’s approval. The Articles of Incorporation can be three to four pages to provide the name of the foundation based on state laws. For example, most research foundations are 501(c)(3) nonprofits designated as such by the Internal Revenue Service (IRS). The Articles need to conform to this IRS designation that includes support for education, fund raising and other charitable purposes for the public good. The Articles need to discuss that the foundation will manage funds, oversee finances and so forth. The Articles specify the initial board of directors and exemption requirements. These requirements are that the foundation is nonprofit, that it will not influence legislation and that it will heed IRS guidelines. The Articles also state that directors are exempt from prosecution except in cases of financial conflict of interest. The Articles must be signed and dated by a senior administrator or the executive director of the foundation. Once the Articles are signed, they are the base document for the entire enterprise. The Articles are then submitted to the Secretary of State along with that office’s application form. Many states have these forms on line. There will probably be a small filing fee. In Kentucky, once the state application is approved the Secretary of State’s Office will send the research foundation stamped Articles of Incorporation.

The bylaws delineate the board’s composition that is critically important to the foundation’s mission and how closely affiliated the supported university wants its research foundation to be. There are questions with significant political overtones and control matters to consider. Will there be a majority of university directors or a majority of community-at-large directors? Will the executive officers be all from the university or partly from the university and partly from the community? Will the chairperson (or
When there is more outreach to business and industry, several community officials will serve as executive officers and also a number of them will serve on the board. This board composition implies a largely independent foundation. If this is the case, particularly clear relations must be written between the senior leadership of the university and the board’s leadership, especially if a community director presides.

In addition, the bylaws must define terms of office, committee structure, meetings, quorums, and how to amend, duties of officers, termination of directors, how vacancies are filled, and the duties of the chair, vice-chair, treasurer, secretary, and executive director. Moreover, the bylaws need to explicitly state what funds the board can accept and outline the method of collecting funds, the receipt of funds, and the location of funds (i.e., a bank). The bylaws need to define the foundation’s fiscal year, indemnification, and how the foundation can be dissolved (Internal Revenue Service, n.d.).

To receive consideration for IRS recognition, the bylaws must be filed with the Articles of Incorporation to accomplish the third step of official recognition. Along with the bylaws and articles, various forms need to be completed and a filing fee of $500 paid. The SS-4 is the Application for Employer Information Number (EIN) that will be needed for grants and contracts. The Form 8718, Determination Letter Request, and Form 872, Assessment of Tax, are next completed. Form 1023, Application for Recognition of Exemption, is where you lay out the initial officers and that you are applying to be a research foundation. Based on your sponsored programs data, projections are made of financial data for the first three years of operations. These data are taken from sponsored programs’ research, instruction, public service, operations, scholarship, and other grants and contracts for the previous three years at least, and projected onto the form. Next attach the bylaws. Upon submission to the IRS corporate division, an IRS official will review the application.

Formalizing Relations with the University

Research foundations exist upon the desire of the university. Thus, mutual responsibilities of this partnership must be clearly defined. The most important is the management agreement between the university and the foundation. The agreement should include the services of the research foundation, its compliance function, and define whether an audit will be part of the university audit or an independent external audit. The agreement describes the duties of the executive director and the staff (if one exists), the amount of dollars (if any) that the university will contribute annually to the foundation, who pays for the foundation’s operating space if it is on university grounds, and whether or not the OSP and other foundation staff will remain university employees.

Other critical documents that need to be drafted and agreed upon by the board are the investment plan, financial procedures with the university or within the foundation if it has an accounting unit, an intellectual property policy, a policy governing technology transfer and commercialization, and other policies deemed necessary to define the foundation’s function. Auditors will request these documents as well as internal control documents such as reconciling the foundations revenues and expenditures with the university if the latter is performing the foundation’s accounting functions.

Conclusion

The institutional culture with top down support is the most important reason for starting a research foundation. Such institutions believe that additional flexibility, efficiencies and funds can be secured to support students, faculty, and administration and to provide community outreach. Indeed, the establishment of a research foundation sends a signal that good teaching is linked to research. There are four models to choose
from, with the OSP centered model the most inexpensive to implement. Once these steps are taken and institutional, state, and IRS recognition is achieved, the foundation becomes the fiscal agent for awards, royalties, and other revenues for the university as specified in the articles of incorporation, the bylaws, and the management plan.

References


Ask An Expert: Tips and Tools of the Trade, Series 3

Herbert “Chuck” Chermside, CRA
1915 Robindale Rd.
Richmond, VA 23235-3931
804-320-5502
(hcherm@verizon.net)

1. Is this Permitted?
Q: Where is the regulation allowing me to ... ?

A: It is fundamental to our society that we can do anything that is not prohibited or controlled by law or regulation. We research administrators spend so much time dealing with limiting regulations that we forget this fundamental freedom. Assume an activity is permitted unless prohibited or regulated.

2. Learn Foreign Business and Cultural Practices
Q: Our institution has a few agreements that require subawarding with other countries whose business practices are different from the U.S. practices we take for granted. How can we learn about those foreign practices and determine what controls we must put in place to protect our institution?

A: Use your institution’s resources! It is likely that some faculty member in the business school knows about these different practices and how to adapt U.S. practices to meet them. Graduate students from those countries may also be a resource. Your institution’s strengths in multiculturalism will help make better international agreements. Also, if USAID or some other experienced agency is the prime sponsor, review their resources on foreign practices and listen to their suggestions.

3. Foreign Agreements
Q: Are there special concerns for foreign subawardees?

A: The following ones are the most important. Some subawardees have systems similar enough to those of the U.S. that few problems occur. Others may not. Co-mingling of funds is common in many foreign entities, so ensuring that the subaward be set up in an account not co-mingled with any other funds is extremely important. If nothing else works, require a separate bank account. Foreign entities often do not measure or track effort. Be sure the foreign institution has an appropriate way to measure time and effort. You may have to provide advice on how to do that. I recommend that you include a clause warranting that the individual who signs the agreement has the authority to execute on behalf of the institution. Also be sure to include a clause under which the subrecipient will reimburse you any costs paid but later found to be unallowable by audit.

4. Flow Down to Foreign Entities
Q: A foreign subcontractor wants to say that it will comply only with those “federal laws provided to it by us”! If a foreign entity applies as a subcontractor, shouldn't it be responsible for knowing which regulations apply to it? Should we
just refer them to the “dot gov” web site and tell them all the regulations they need are there? If it is an NIH sub, is the NIH Grants Policy Manual (GPS) comprehensive enough?

A: You should treat a foreign recipient without previous experience with your prime agency as completely unknowledgeable. Be explicit about applicable regulations. You should specify applicable CFR's and OMB Circulars as well as award language. Provide URLs rather than copying, or even worse, paraphrasing, the material. Also inform them what does not apply; you need to know those things anyway to ensure proper monitoring of them. For example, specify that “requests to the sponsor agency” come to you, not the sponsor. You will have to add some clauses to your stock subagreement to handle these special matters. The NIH GPM is a good place to understand generally what is required in foreign subawards; a section is devoted to it. Also provide your foreign partner a contact to answer specific questions about applicability. Remember, YOU are responsible for the performance of the sub, in all ways.

5. Applicable Cost Principles

Q: How does subawarding affect cost principles?

A: For federal funds, the nature of the recipient determines which cost principles apply. OMB Circular A-21 applies to Educational Institutions. OMB Circular A-87 covers State, Local and Indian Tribal Governments. OMB Circular A-122 covers Non-Profit Organizations. FPR (Federal Procurement Regulations) and its required accounting practices disclosures cover for-profits. For non-federal sponsors you should check the award instrument or the agency’s regulations to determine if they are relaxed or more stringent than federal cost principles. A few non-profits specify cost principles that apply to their awards. So an institution should determine the type of any subawardee it deals with when preparing the subaward. Also, you should watch on subawards you receive that the cost principles that apply to you are correct. For example, a university should receive A-21; state agencies are notorious for trying to apply A-87 to university sub-recipients.

6. Administrative Principles

Q: What regulations other than cost differ in application based on the nature of the recipient?

A: Federal grant administrative regulations: OMB Circular A-102 applies to Grants and Cooperative Agreements with State and Local Governments, while OMB Circular A-110 applies to Grants and Other Agreements with Institutions of Higher Education, Hospitals and Other Non-Profit Organizations. A university subrecipient should receive A-110 as administrative regulations for any subaward under a federal grant.

7. Policy and Procedure Fundamentals

Q: How should policies and procedures be drafted?

A: Policies should be broad, and simply stated. They should not change frequently. Procedures can be much more detailed and can be changed more frequently to meet changing needs and externalities. Posting them to web sites makes promulgation easy. It is important to state them so everyone can understand them.

8. Writing Policies and Procedures

Q: Preparing policies and procedures takes time; where do we find time?

A: You probably follow some good practices which can be written up as policies and procedures. Taking the time to document these and publish them is very important to a successful A-133 audit. You might take advantage of your own institution’s resources to do this. For example, a senior or graduate student from the business school might do an independent study documenting policies and procedures in your office. An old administrator’s trick is
to remember as you are writing a memo, etc. that states policy or procedure, to put a copy of that information in a “bucket” and review the bucket once a month – a little editing will quickly produce those policies and procedures.

9. Making Life Easy For Faculty Members

Q: How can we help the faculty understand what costs are allowable and how to manage a project?

A: PIs want to do things right—they just don’t know how. Put an Informal Guide for PIs on the web. With hyperlink technology, it is easy to develop links to underlying policy and practice that will provide greater detail. Give a listing of what costs are allowable on the web and refer individual questions to it. This will allow faculty members to budget their projects correctly, and a properly budgeted proposal becomes a simple award to manage fiscally. Emphasize “allocable” and that it means the expenditure is for this grant’s purposes, in the post award guidance. Running a project is like running a small business in that it is not a skill most faculty members learn as they progress through graduate school. Yet they can, and will, learn this new skill quickly if given guidance and references – learning new things is just what their education prepared them to do.

There is a range of administrative actions, and a quantity of them, and 10% of the range covers 90% of the quantity of actions. Faculty members should know to do that 10% of the range they use daily, and that will cover 90% of the cases they experience. They should know to call on the expertise of college business managers, Office of Sponsored Programs, or Finance for something less usual. The Informal Guide for PIs should focus on the 10% of actions that faculty members need to know and provide some guidance on how to recognize when they need expert advice.

10. Late Request for a No-Cost Extension

Q: How should we deal with faculty members who do not spend their funds during the project period and need no-cost time extensions (NCTE) at the last minute?

A: This is an academic management problem, and chairs and deans are responsible for overseeing faculty performance. “Because funds are left over” is not an acceptable reason for an NCTE. If the funds were not used, generally it means that the project was not performed timely, or that its costs were “bootlegged” elsewhere. If there was a reasonable delay, an NCTE can be obtained “to complete the goals of the project.” Whether the award requires specific permission or allows the institution to exercise expanded authorities, there should be an internal document from the PI requesting the NCTE, approved by the chair, before OSP acts on it. This will give academic management an opportunity to judge the appropriateness of the request, as neither OSP nor Finance can judge that. Routinely providing academic management with the same monthly financial reports the PI gets will allow more timely oversight by academic management.

11. Rebudgeting Effect on Cost Sharing

Q: How do we keep the PI from messing up cost sharing by rebudgeting?

A: First, do not offer cost sharing needlessly, and avoid cost sharing by reducing F&A. Second, determine what rebudgeting actions affect mandatory or voluntary committed cost-sharing commitments, and require these to be approved by OSP. When NSF first delegated to institutions certain changes (now “expanded authorities”), they required the institution to designate an individual to approve changes. This is still a good practice for a small institution or one with faculty and business managers who are not experienced.

12. Contract Details

Q: Should you include a Scope of Work (SOW) and a Schedule of Deliverables for a subaward?

A: Always! Require the PI to prepare these, based on the proposal’s statement of
goals and division of work. A SOW is verb centered: “Sub will do X”; “Sub will measure X.” Often these can be taken almost directly from the proposal. A Schedule of Deliverables is noun centered, has a timeline, and should be objectively measurable: “Sub will deliver a written report on X date”; “Sub will deliver A on date X, B on date Y.” Be satisfied that these are prepared properly before writing them into the agreement.

13. F&A Rate for Subawardee
Q: What F&A rate is used for a subawardee?
A: The subawardee’s approved F&A rate applies to direct costs expended by the subawardee. If no approved rate exists, the NIH Grants Policy Manual has guidance that can be used in cases where there is no approved F&A rate as long as the substitute rate is in the proposal for your prime to see. However, some sponsors may reject F&A for a subcontractor with no established rate. Watch out for use of the term “indirect” in a for-profit’s quote or billing, because this may be a proportional allocation of direct costs instead of being calculated as a university’s F&A is.

14. Withholding Final Payment for a Subcontractor
Q: Should we withhold final payment pending receipt of the final deliverable?
A: YES – and write it into the agreement! I find 10% is the most you need to withhold unless you have good reason to withhold more for that particular subawardee. This is also the most you should agree to for incoming sponsored programs.

15. Be Sure You Are Paid!
Q: How should we require payment from an entity with an unknown or bad track record?
A: Require payment periodically in advance; quarterly is usually reasonable (applies mostly to for-profit sponsors).

16. Working Capital
Q: How do we provide working capital if the subawardee cannot provide its own?
A: In the agreement, specify an advance payment (typically one, or certainly no more than two, times the estimated cost to complete the work of an average billing period), and require that the advance be closed out as a reduction from the final invoice(s).

17. Fixed Price Agreements
Q: What are the merits and dangers of Fixed Price or Fixed Unit Price agreements?
A: Fixed Price agreements are essentially, “You deliver X and we will pay you Y.” From an accounting point of view these are wonderfully simple because if there is no delivery, there is no payment! There can be audit or review of the process for setting the price, but once set, delivered, and paid, there can be no audit of how the funds are spent. Fixed Price can be good for agreements with for-profits, because they like to know the price going into an agreement. The drawback is that you must cost out the offer carefully, so that no unexpected costs appear later. You should add 10-20% to be sure. Be certain that the PI certifies that all deliverables have been met before billing on a fixed price agreement, or paying on a fixed price subaward. Also, keep the account on a fixed price agreement as you would a cost reimbursement agreement, because a fixed price agreement should revert to cost reimbursement in case of termination before completion.

18. Fixed Level of Effort Agreement
Q: What is a fixed level of effort agreement?
A: Fixed level of effort is a special case of fixed price in which the effort to be expended and billed is agreed to in advance. This is especially convenient in research, where the outcome cannot be predicted. You should be sure that the PI, Chair, and Finance understand that an
agreement is fixed level of effort, so that your obligation is met when it becomes time to bill. Do not allow changes from proposed named personnel to be made. This can be a good reason to quote effort by category of performer rather than name of personnel.

19. Regulation and Compliance

Q: Can you clarify the difference between Assistance and Procurement?

A: By federal law, “assistance” is to assist the grantee institution in performing an activity it wants to perform and which serves a public purpose but which the institution cannot complete with its own resources. Federal assistance is awarded by a grant instrument and follows A-110 for administrative regulations. Federal Procurement is obtaining goods or services that benefit the agency and is awarded by contract, following Federal Procurement Regulations (FPR). Foundations and other non-profits follow the same system, but seldom have to procure. For-profit sponsors (not to be confused with the non-profit arms set up by for-profits) will often “procure” rather “grant” sponsored programs simply because they have no other means of supporting a project. If a for-profit entity sponsors an activity under its federal prime award, be sure whether it is procuring under FPR or sub-awarding under grant regulations; that affects how you administer it. State and local government agencies can use either.

20. Waiving/Amending Award Terms

Q: Who has authority to waive or amend award terms and regulations?

A: The sponsor’s grants officer or contracting officer can approve various changes. They cannot change regulations, but they can give guidance. Sometimes one has to read very carefully to discover that a person is saying “Yes,” while still carefully walking a tightrope to keep from appearing to permit something he has no authority to approve. Note that for U. S. Department of Education and NSF, many changes can be allowed by the Program Manager. Obviously, you should always get approval to waive or amend in writing, but e-mail is the preferred communication. Be careful to understand the difference between regulation and administrative guidance.

21. Retention of Technical Reports

Q: Should OSP keep copies of technical reports?

A: No, at least not paper copies because keeping paper copies creates a significant storage problem for a central office. However, procedures should require the PI to provide OSP a copy of the document transmitting the report and to retain a record copy of the report itself. The retention period for federal grants is three years after the final fiscal report is made. I suggest that five years after submittal is a wise retention period. This will allow OSP to inform a sponsor when they submitted a report and to whom, and the PI will still have it if another copy is required. Note that in some cases the technical report for a period is also the proposal for the next. You may need to point out to inexperienced auditors that agency regulations provide for that.

22. Closely Related Projects

Q: We have a brilliant young PI who won two major awards to conduct research and perform motivational interventions on campus to combat alcohol abuse among college students. The Dept of Education grant focuses on issues relating to men and the NIH grant focuses on women. Now the PI is close to running out of funds on one grant, so he proposes to bill "similar activities" to the other grant. He believes that since this is all government money and because the projects are essentially similar, it is permissible to pay for activities and personnel from one grant to another. Also the salary of a member of the key personnel listed on the one grant budget was billed for a few months to the other grant on which the person was not listed. This seems to be a fundamentally flawed view of how to manage grants. Do you know of a reference for
the prohibition of co-mingling grant funds that I could share with the parties concerned?

A: A-21 C.2 states that costs should be “allocable” to be allowable. The three basics of costing are reasonableness, allowability, and consistency of treatment. A-21 B.3 defines allocation as “the process of assigning a cost, or a group of costs, to one or more cost objectives, in reasonable and realistic proportion to the benefit provided or other equitable relationship.” In short, costs charged to a project should result only from goods and services expended for that project.

This can cause a management problem where projects are closely related. You may have closely related goods and services that benefit more than one project. But they must be allocated between accounts “in reasonable and realistic proportion.” Hence you should have careful planning before spending, rather than rushing to “fix” things after the fact. The coding for physical supplies for closely related projects can be split. Other than the PI, you can change the level of effort of assigned personnel on most grants; if they are named key personnel there may be limits to the change, or requirements to justify it. But you must be sure that changes in assignment are documented, and also that you do not have conflicting records. For example, if Dr. Jones is working 20% on grant A and 20% on grant B during the year, it is better to charge each grant 20% all year rather than charging A 40% for the first half a year and B 40% for the second half, because the lab notebooks will certainly show that Dr. Jones did actually work on both projects simultaneously.

But note that “closely related projects” is a special category or relationship which does allow transfers with less precision. The distribution can be by any “reasonable” method, but be sure to document the method if it differs from your usual one or involves after the fact cost transfers. In my experience, this cannot be invoked in situations where the support comes from two different agencies without the express permission of both grants officers. NIH has provisions for closely related work in its GPS that allow the institution to make the closely related work decision and distribution, but they need to be looked at carefully and they do not apply between two different agencies. And “because I ran out of money on one grant” is not reasonable.