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OFFICE of RESEARCH and SPONSORED PROGRAMS

December 2005

UNIVERSITY PUBLISHERS WANT ORIGINAL-ITY, CONVICTION, AND COMMUNICATION

Associate Provost for Research Mark Welker seized on a suggestion from Assistant Professor Margaret Ewalt, Romance Languages, to host a workshop on university press publishing. He realized that if the outcome of humanities and social science research is usually a book, then the successful book proposal is as vital to the university's mission as any other type of grant.

The Publishers Workshop brought two top-flight editors to address and meet individually with faculty. Chuck Grench, Director and Senior Editor at the University of North Carolina Press (Charles Grench@unc.edu), specializes in US and European, classical and ancient, and business and economic history; law and legal studies; and political and social science. Cathie Brettschneider, Humanities Editor at the University of Virginia Press (cib8b@virginia.edu) specializes in literary, cultural, and religious studies, particularly Victorian and Caribbean, and translation of African and Caribbean francophone literature.

Chuck began by defining the purpose of a book proposal. It's a selling tool, and every year, editors see hundreds, so while they remain optimistic, they must also be skeptical. Each book requires considerable investment of expert time, and acquisitions editors must convince many that the project is worth it. The prospectus should quickly convey that the work is exciting and right for their list.

It consists of a cover letter, project description, and CV. The 1-2 page letter must strike a spark, as it imparts title, content, audience, why it should be published *and* with this publisher, the author's credentials, a time table, and whether it is being submitted elsewhere. An editor may actually suggest a better match and, in any case, cannot

waste time on an iffy proposition. Publishing an *orphan*, or a book outside house priorities, is expensive, as it requires different marketing channels, so it would have to be very promising. Use letterhead stationery and a good printer and vet for spelling and grammatical errors. The writing should lure the editor to read on.

Ideally between 2 and 10 pages, the project description includes a synopsis, an annotated table of contents, and enough background for the editor to gauge both its originality and scholarship. Discuss your competition and the book's potential market. Also mention whether it will have tables, photos, or other graphic components. It should not prove that you can be long-winded and obscure. Should you submit a sample chapter at this stage? Not until you're asked; a good outline is sufficient for editors to decide if they want more.

The CV should be up to date, without information about marriage and hobbies, but with your phone number. Editors are interested in where you work, went to school, and publish, but only after they're hooked on the project. While it's good to create an audience and establish your credentials, if 6 out of 8 chapters have already appeared in print, who will feel compelled to buy the book? Further, if the book is based on presentations or articles, it's going to require integration. An unrevised dissertation, probably overannotated and still focused on pleasing the committee, also will not fly. The dissertation is your first book, and it's available through University Microfilms. The publisher is interested in your second book, written out of your independent expertise.

Before you send a prospectus, do your homework. Note the presses that publish work like yours and compile a target list. Consult the publisher's URL to learn the

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name of the editor who will review your work and then address the packet to that individual by name. Electronic submission is generally impermissible. Asked about the advisability of dropping in or even phoning to schedule a visit, both editors laughed. Wait for an invitation.

Chuck said you should hear back in about a month. At what stage should you submit the prospectus? When you can articulate the content from beginning to end; the time table; and why it should be published. "I'll have the manuscript ready in 6 months" is fine; anticipating a completion date enables the editor to schedule. On the other hand, "I come up for tenure in 6 months. Can I have a contract or the book by then?" – no.

Chuck walked us through production. First, the acquisitions editor asks for the completed manuscript and passes it to inhouse reviewers, who will decide if it is a good size, acceptably written, and whether they want to work on it. If so, it goes to outside reviewers, who will probably ask for revisions that will be negotiated between you and the in-house editors. You can propose outside reviewers, but both editors said they seek their own experts, who share their values. If you do suggest a reviewer, think of someone whose good opinion you would like to have. The book is then reviewed by the full editorial board, and if accepted, page proofs are corrected by you and a copy editor. Final proofs are printed, and the index, tables, and illustrations prepared. Finally, the book in its handsome dust jacket arrives in the mail; celebrate.

Cathie didn't want to repeat, "What he said"; she spoke about the need to put humanity back into the humanities. She noted that in the aftermath of the World Trade Center catastrophe, people sought enlightenment and solace in poetry and quoted William Carlos Williams's "Asphodel, That Greeny Flower": "It is difficult to get news from poems / but people die every day for lack / of what is found there."

Interpretive writing should reflect poetic imperatives, yet not long ago, MLA papers were ridiculed as effete and trivial. What Cathie looks for in a book is imagination, passion, and restraint. Its questions should have human relevance, and the larger the scope and implications, the better. Fine-tune your arguments and strive to communicate.

The humanities are in trouble. Market forces increasingly drive even university presses. You should know their lists must continually change and be aware of trends. Works that are very theoretical, with no practical application, or narrowly focused are not getting published. Theory and method can be kicked to the notes to show that you're current on scholarly

tools, but they shouldn't muddy your original ideas or your argument.

A financial contribution from the university can help if the book must be over 500 pages or heavily illustrated, but it won't make or break the project. It's standard procedure to ask if you have any funding, university or external; anything from \$1.5K up can improve production values (see Publication and Research Fund, www.wfu.edu/rsp/funding.html). Authors are expected to pay for permissions to reprint graphics. If you cite a whole poem, you will be charged; if you use a line or two, scholarly rates apply; if quoting becomes too expensive, you may be asked to paraphrase. Don't worry about permissions before you have a contract.

The message from both editors: only the project matters. Write the best possible book and pitch it to the best possible publisher with clarity and conviction.

Recommended Reading from Chuck Grench

Derricourt, Robin. Author's Guide to Scholarly Publishing. 1996.

Germano, William. Getting It Published: A Guide for Scholars . . . 2001.

Harman, Eleanor, et al., eds. The Thesis and the Book. 2003.

Luey, Beth. Handbook for Academic Authors. 1987; 1995.

Luey, Beth, ed. Revising Your Dissertation. 2004.

Rabiner, Susan, and Alfred Fortunato. *Thinking Like Your Editor*. 2002.

MELISSA DOUB EARNS RESEARCH ADMINISTRA-TION CERTIFICATE

Melissa Doub, Business Manager for the Chemistry Department, just received the Society of Research Administrators' DA201 certificate. The Departmental Administrators Training Program offers practical answers to preaward, postaward, regulatory, and compliance questions. DA201 covers budget reallocations, retroactive charges, rebudgeting between direct and indirect costs, forecasting and seeking approval for nocost extensions, and allocating budgets for multi-investigator grants.

ORSP congratulates Melissa on her achievement. In serving one of the most research-active departments at Wake Forest, she makes a great contribution to ORSP and the university's overall mission.

OUTSTANDING PROJECT PROFILE

JACQUELYN FETROW, COMPUTER SCIENCE AND PHYSICS

Since Jacque Fetrow joined the Wake Forest Computer Science and Physics departments as Reynolds Professor of Computational Biophysics in 2003, she has won two National Institutes of Health grants, a National Science Foundation grant, and a WFU Cross-Campus grant. She is the first to emphasize her collaborators - Leslie Poole and Larry Daniel in Biochemistry; Pete Santago in Biomedical Engineering and Sciences; Bruce King in Chemistry; David John, Stan Thomas, and William Turkett in Computer Science; Ed Allen in Mathematics; Jason Grayson in Microbiology and Immunology; and Fred Salsbury in Physics. Great teamwork is clearly one of the strengths that explains her tremendous success. It carries over to an innovative, team-taught bioinformatics course, developed with David John, in which students with mathematical backgrounds and biophysics and biochemistry students work together to achieve software solutions to bioinformatics problems.

Dr. Fetrow's research program focuses on the relationship between protein structure, function, and dynamics with the longrange goal of improving drug discovery. In Algebraic and Statistical Models of Redox Signaling (NIGMS), an interdisciplinary group aims to develop theory, algorithms, computational tools, and research methodologies for network modeling of redoxregulated events in human cells. Recent research indicates that redox-regulated networks are central to cellular communication under a variety of normal and diseased conditions, including aging, cancer, and neurodegenerative diseases. This project will: 1) identify a comprehensive set of cellular proteins modified at cysteine residues through redox-dependent signaling; 2) correlate the concentration of a cellular perturbant and its associated redox signal; 3) associate networks with particular perturbants; and 4) produce both topological and dynamic models of the cellular network associated with these pathways. These models will then be compared with other data on protein/protein interactions and kinase cascades to produce a more comprehensive model of cellular regulation and its biological outcomes.

Profiling of Redox-Sensitive Signaling Proteins (NCI) is a collaboration with PI Leslie Poole and hypothesizes that redox signaling is crucial to cell proliferation and transformation. For over 20 years, redox mechanisms have been implicated in oncogenic transformation, but the lack of large-scale methods to identify proteins that respond to cellular redox changes is a serious barrier to progress. This project aims to develop the reagents and methods that will enable identification and molecular analysis of cancer-related redox-signaling pathways in the cell. Its suc-

cess will lead to a new proteomics-based technology for measuring functional throughput in at least two areas relevant to cancer: protection from oxidative damage and redox pathways that regulate cell proliferation.

Integrated Process for Functional-Site Feature Analysis (NSF) uses sequence, structure, bioinformatics, and biophysical methods to characterize the molecular function sites of 6 protein superfamilies. The combination of computational and experimental expertise should yield insights into biological mechanisms and lead to hypotheses that can be tested experimentally. In the long term, the development of general concepts for identifying and classifying molecular functional site features of proteins will improve the ability to predict molecular function, to design enzymes with novel functions and mechanisms, and to determine the molecules that bind to proteins of unknown structure and function. Students involved in this project gain leading-edge, cross-disciplinary molecular biophysics training that will fuel productive scientific careers

Computational Modeling of Reactive Oxygen Intermediate Signaling in CD8+ T Cells (WFU CCRSF) hypothesizes that: 1) cellular proliferation pathways are very sensitive to reactive oxygen intermediate (ROI) levels, but activating death pathways requires a higher and chronic level of stimulation; and 2) different ROI levels induce different redox responses that can be identified as part of a biological network. CD8+ T cells are critical for clearing viruses, tumors, and certain bacteria, and understanding the molecular mechanisms that control their proliferation and death is critical to optimizing HIV and cancer vaccines and developing treatments for autoimmunity. Recently, the team demonstrated that treatment with MnTBAP, an anti-oxidant, reduces both the expansion and contraction of antigen-specific CD8+ T cells in vivo during viral infection. With treatment, proliferation decreased 10-fold, while the contraction phase was almost completely blocked. This result demonstrates that increased immunological memory can be generated from a smaller expansion of virus-specific cells, yet the molecular mechanisms remain to be determined.

Dr. Fetrow's energy and imagination added to her scientific expertise are constantly building avenues for larger interdisciplinary research and pedagogical projects. She's taking us all to the next level.

WHO CAN BE A PRINCIPAL INVESTIGATOR?

On the Reynolda Campus, only the following may serve as PI on an externally sponsored project:

- full-time, tenured or tenure-track faculty;
- research support staff with an adjunct faculty appointment;
 or
- nontenure-track faculty with the title of Research Assistant Professor, Research Associate Professor, or Research Professor.

Emeritus faculty must be appointed Research Professor to serve as PIs.

MAKING IT SIMPLE MAY BE COMPLICATED AT GRANTS.GOV

from Federal Grants and Contracts Weekly 29, no. 40 (10 October 2005); no. 42 (24 October 2005)

Under pressure from the White House Office of Management and Budget, 26 funding agencies must post 100% of their discretionary grant solicitations and provide applications for 75% of their competitions, up from 25%, on Grants.gov this year. Experience suggests applicants may have difficulty negotiating a system that 1999 lawmakers envisioned simplifying and streamlining the process. Over 15,000 proposals were submitted through the central portal in FY05, which collected only about 1,200 applications the previous year, and even this modest growth brought problems. Applicants were locked out of some competitions and temporarily stranded last spring by a major shutdown of servers. Officials attribute that episode to an explicit attempt to flood the website with requests. Usually, they claim, applicants failed to follow instructions or left the involved Grants.gov registration process until the last minute. All agency websites now include instructions, and applicants can expect to see tutorials, workshops, and Webcasts.

Whether the site can handle the added pressure remains to be seen. NSF has required electronic submission via FastLane since 2000 and receives tens of thousands of applications each year. It received 35 applications in its 2005 try-out year with Grants.gov, with most problems related to registration and pdf attachments. At NIH, which receives about 9,000 proposals for each of 3 standard receipt dates plus thousands with specific deadlines, less than 1% have been submitted electronically.

ORSP has entered into an agreement with Clinical Tools to use healthproposals.net for NIH submissions next year. It allows us to submit 14 proposals with unlimited support from December 2005 to November 2006. PIs using Grants.gov for non-NIH

proposals should allow additional time.

See www.Grants.gov; for NIH plans, http://era.nih.gov/ElectronicReceipt.

NEW NIH FORMS AND ELECTRONIC SUBMISSION

from *Peer Review Notes* (September 2005) http://cms.csr.nih.gov/NewsandReports/PeerReviewNotes/

NIH is transitioning from PHS398 to a SF424 Research and Related (R&R) form for electronic submission through Grants.gov by May 2007. **ALL** applications for the following dates and afterward must be submitted electronically, using the new form:

December 1, 2005: Small Business (R41, R42, R43, R44, and cooperative agreements)

December 15, 2005: Conferences (R13, U13)

February 25, 2006 (NOT January): Academic Research Enhancement Awards (AREA; R15)

June 1, 2006: Small (R03) and Exploratory/Development Grants (R21)

October 1, 2006: Research Project Grants (R01)

As mentioned above, WFU has contracted with Clinical Tools to submit NIH proposals electronically using healthproposals.net in lieu of Grants.gov for these deadlines.

While form pages and arrangement of information differs in the SF424R&R, neither the Research Plan nor the merit criteria will be very different. Reviewers will still use the Internet Assisted Review (IAR) process before meeting. They are sent applications and related materials on CDs but may also request hard copies. This and other developing procedures aim to get vital review results to applicants and institutes sooner, and NIH believes that submitting critiques before the review meeting helps to ensure fair review.

NEW IN-HOUSE REVIEW SERVICE

ORSP will facilitate individual or, if several are related, study-section review of new submissions and resubmissions. Experienced faculty in the field will read proposals and suggest improvements and offer advice on how to respond to critiques. If interested, contact Research Coordinator Gloria Stickney (<a href="stickney/st

IRB FAQS

Q. What are anonymized data?

A. Anonymized data are prepared so that participants who provide personal information cannot be identified. No codes or links should be available to anyone anywhere. If PIs cannot avoid some links, the amount of personal data they store should be kept to the minimum necessary to achieve the project's purpose and masked as early as possible. Data obtained from another organization should be anonymized before you receive it, but, if not, you must do it. If you destroy the key or another organization holds it and will never give you access, the data have been suitably anonymized.

Q. What is exempt research?

- A. The IRB, not investigators, determines exemptions. Exempt projects fall into 6 categories:
- 1. normal educational practices conducted in established or commonly accepted educational settings
- 2. educational tests (cognitive, diagnostic, aptitude, or achievement), surveys, interviews, or observation of public behavior **unless** data can be linked to participants **and** disclosure would involve risk of criminal or civil liability or damage financial standing, employability, or reputation. Passive observation of children's public behavior is exempt; participant observation of children's public behavior is not. Surveys and interviews involving children are not exempt.
- 3. educational tests, surveys, interviews, or observation of public behavior where participants are elected or appointed public officials or candidates for public office, or federal statutes require confidentiality without exception
- 4. collection or study of existing data, documents, or specimens, if the sources are publicly available or the information is recorded so that participants cannot be identified. Even brief recording of identifiers or codes disqualifies the exemption.
- 5. demonstration programs or procedures designed to study, evaluate, or examine
- 6. taste and food quality evaluation and consumer acceptance studies.

Note: an exemption is not granted because some of the research falls into a category but because *none of the activities fall outside these 6 categories*.

Q. What security measures should PIs consider in handling research data?

A. The PI should consider: 1) where all personal data recorded on paper, computer, audio or videotape will be stored; 2) security procedures for storage or transport; 3) arrangements to prevent theft and restrict access; 4) pass-

word procedures to protect electronic data; 5) how data will be disposed of at the study's end.

Q. What is child assent, and how do requirements vary with age? A. Minors are people under 18, unless emancipated by court order, marriage, or military service. Assent means a child actively shows willingness to participate in the research, rather than just complying with directions and not resisting. When judging whether children are capable of assent, the IRB considers their age, maturity, and psychological state. It may judge for all the children involved or on an individual basis. It also considers the form and content of the information conveyed to prospective participants. For research involving adolescents, the assent procedure may be similar to that for adult informed consent or parental permission. For children whose age and maturity limit full comprehension, PIs may be asked to convey an accurate picture of the experience (e.g., what will happen, how long it will take, whether it will involve any discomfort). Assent procedures should reflect a reasonable effort to enable children to understand what participation would involve. An assent document must be accompanied by a parent/ guardian informed consent form.

Q. When can child assent be waived?

- A. The IRB determines whether child assent is required. Federal regulations identify 3 circumstances when the IRB may waive it:
- 1. if the capability of some or all of the children is so limited that they cannot be consulted;
- 2. if activities may directly benefit the children's health or well-being and are available only in the research context;
- 3. if the research meets the same conditions as those for waiver or alteration of informed consent with adults.

Q. How should child assent be documented?

A. Although federal regulations do not require documentation, the Reynolda campus IRB will determine appropriate documentation, if any, based on the child's age, maturity, and degree of literacy. If adolescents are involved in research that would require a consent form if the subjects were adults, the IRB will require a similar form to document assent. If the project involves children who cannot read, the IRB will require a form recording that assent took place. The IRB may also decide that documentation of assent is not warranted.

The January deadline for IRB applications has been pushed back to January 9, 2006. The IRB will meet on Monday, January 30, 2006.

FIVE FUNDING STRATEGIES FOR LEAN TIMES

from Genomics and Proteomics http://genpromag.com/

When the 5-year doubling of the NIH budget ended in 2003, scientists knew that 15% annual increases were over, but they didn't expect a .5% increase for 2006. For the first time in 24 years, the R&D budget will trail inflation, and the success rate for new applications will drop to 21% from 2001's high of 32%. Below, research veterans share tips for weathering hard times.

1. Know your study section. You can suggest which study section reviews your proposal (see <a href="www.csr.nih.gov/"www.csr.

You can also contact NIH-funded colleagues. Search the CRISP awards database (http://crisp.cit.nih.gov). Senior investigators should serve on panels. "That taught me more about grant writing than anything," Rothman says. "You learn what's attractive to panels and the human element of the process."

2. Practice good grantsmanship. While nothing can compensate for lame ideas, bad grantsmanship can torpedo good ones. The *kitchen-sink* problem is common to new PIs. "Desperate to show they have good ideas, they throw in everything," says Wendy Baldwin, former NIH deputy director for extramural research. "Focus on the best."

Senior investigators, Baldwin says, risk the *trust-me* proposal. "If you've written the textbook on a technique, you still have to explain why it's appropriate. You may say, 'I've done good work; fund me, and I'll keep on.' That rarely works; you have to show how you'll make new advances."

3. Read the roadmap. The clearest guide to NIH funding is the Roadmap for Medical Research (http://nihroadmap.nih.gov). Even if you're not applying for a roadmap-based grant, its priorities inform funding at all institutes. "Right now, NIH is emphasizing clinical and disease-related research much more vehemently," says David Korn, senior vice-president of research at the Association of American Medical Colleges. "Cancer, cardiovascular science, mental health, neuroscience, and obesity—those are high national priorities. If you're doing basic re-

search, you must show how it directly benefits health."

Another priority is creating interdisciplinary teams and centers. "NIH is really pushing big, collaborative science." The roadmap cites NIH's stipulation of one PI as a barrier to joint projects. "Scientists think of individual accomplishment and promotions. Rewarding and incentivizing groups has to happen," says Veronica Catanese, who chairs a study section.

Beyond the roadmap, drill into institutes' budget documents and meeting minutes. See www.niaid.nih.gov/ncn/grants/default.htm for resources that include an annotated proposal and a video of a mock study session.

4. Track the trends. It's dangerous to chase funding trends, because they change. You should be driven by passion, not payoff. Still, try approaches with more medical relevance. If you have 2 or 3 projects, choose the hot one rather than pursuing them all in hopes one will stick. Or slightly modify the area of interest. You can't perform surgery but may be able to shift from cancer to heart disease.

Where are trends pointing? Expect increased focus on aging. A funding table (www.nih.gov/news/fundingresearchareas.htm) shows aging, cardiovascular and Alzheimer's disease funds increasing, while lung and ovarian cancer and pediatric AIDS remain flat.

Biodefense, infectious diseases, and systems biology are also priorities. Proteomics is generating a lot of interest, says Professor William Sessa, recent study section chair. How to make such grants more competitive? "Take a single-protein approach to examine signal transduction mechanisms. Another exciting area is biomarkers in sera—can they be independent predictors of disease?"

5. Extend value. Catanese's study section receives many genomics and proteomics proposals. "We're particularly interested in disease diagnostics and information managing techniques that apply across disciplines." Research that validates best methods speeds discovery. To lend clinical relevance to your basic genomic or proteomic project, solve technological problems. "A lot of the technologies for both were put out quickly. We've found their limitations," Sessa says. Do more than collect data; show how you'll use them to explain regulatory mechanisms that keep cellular processes balanced.

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ANTHROPOLOGY

Kenneth Robinson

- Archaeology Field School for Teachers, Museum of Cape Fear, \$14,174
- Naked Run and Stewarts Creek Outfall Corridors, Mt. Airy, Adams-Heath Engineering, Inc., \$4,952

BIOLOGY

William Smith, Ecological Facilitation by Rhododendron caucasicum Extends the Betula litwinowii Alpine Treeline, Caucasus Mountains of Georgia, National Science Foundation (NSF), \$29,212

CALLOWAY SCHOOL OF BUSINESS AND ACCOUNTANCY

George Page West, Kauffman Campuses Initiative – Entrepreneurship and Liberal Arts: Building Campus Culture and Developing an Integrated Educational Model, Ewing Marion Kauffman Foundation, \$460,000

CHEMISTRY

Rebecca Alexander, Dissecting Protein and Nucleic Acid Contributions to Efficient tRNA Aminoacylation, National Foundation for Cancer Research, \$50,000

Christa Colyer, Real-time Bioaerosol Sensor with Airborne Taggant Applicator, Department of Homeland Security, \$80,000

Paul Jones, Oxidative Radical Cyclizations Mechanistic and Synthetic Investigations, NSF, \$233,700

Angela King, Urban Systemic Program in Science, Mathematics, and Technology Education Program: SCIMAX, NSF, \$82,263

COMPUTER SCIENCE

Errin Fulp, Firewall Architectures for High-Speed Networks, Department of Energy, \$51,334

Victor Paul Pauca, Computational Methods for Quantum Molecular Dynamics, National Institute of Standards and Technology (Targacept), \$90,806

EAST ASIAN LANGUAGES AND CULTURES

David Phillips, *Back to the Future or Forward to the Past?* Graham Foundation, \$5,000

HEALTH AND EXERCISE SCIENCE

Michael Berry, Exercise and Disability in COPD Patients, NIH, \$460,570

Gary Miller, Does Weight Loss Following Laparoscopic Roux-en-Y Gastric Bypass Improve Physical Function? NIH, \$18,833

Patricia Nixon, Antenatal Steriods and Blood Pressure in Children: Prenatal Events – Postnatal Consequences, NIH, \$56,909

Jack Rejeski, with Paul Ribisl and Gary Miller, SHOW Grant – Look Ahead, NIH, \$105,045

LAW

Robert Walsh, *Professionalism Program*, North Carolina State Bar, \$10,000

PSYCHOLOGY

Terry Blumenthal, A Simple Measure for Studying Gating Deficits, NIH, \$14,000

Michael Furr, *Impulsivity Models: Behavioral Mechanisms*, NIH, \$9,404

ROMANCE LANGUAGES

Candelas Gala, Spanish Poetry and Painting and Sciences, University of Minnesota, Program for Cultural Cooperation between Spain and United States Universities, \$3,000

WFDD

Jay Banks, Replace Consoles and Digital Storage Servers, Department of Commerce, \$79,943

UPCOMING EVENTS

6 January Orientation Luncheon for New Faculty; 12:00

PM, Autumn Room, Reynolda Hall, by invitation

16 February 2 workshops: Building Industrial Partnerships and A

Guide to Foundation Grant Funding will be offered by Bob Lowman, associate chancellor for research at UNC-Chapel Hill. In FY05, Bob worked with nearly 2,700 faculty, who won extramural grants and contracts in excess of \$579 mil-

lion.

INTERNAL DEADLINES

10 February Archie Fund for the Arts and Humanities

10 February Cross-Campus Collaborative Research Support

Fund

24 February Science Research Fund

Social, Behavioral, and Economic Sciences Re-

search Fund

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