# Research*News*

## LOWMAN SHARES THE LOWDOWN ON FOUNDATION AND CORPORATE FUNDING

Robert Lowman, associate vice-chancellor for research and adjunct associate professor of psychology at UNC-CH, led two workshops for faculty interested in foundation or corporate sponsors. As federal budgets flatten, researchers seek alternatives to pursue their projects.

### FOUNDATIONS

The nation's 58,000 grantmaking foundations support all disciplines and types of activities. Their trustees are usually wealthy professionals with a moral mission: to return to society some of the good they have drawn. Projects they fund must make a direct difference in areas they prioritize and continue when funding ends. Basic research may be slighted because it's less likely to produce results today and more likely to secure government funding. When proposing research to a foundation, select a problem with an obvious, immediate application; high visibility; a naming opportunity; and relevance to more than one cause or community the foundation champions, especially the underserved. Geography is decisive: about 70% limit giving to their home base, and all favor local projects.

*Personal contact* is essential. Most private foundations will not make a grant without knowing you and will set up opportunities to *see* if you have the energy and commitment to realize the project. You can also call for a meeting, but they expect to be contacted by our Foundation Relations Office. Be sure to clear any approach to a private sponsor with Director Mary Margarett Evans, so you and the university don't look clueless. A $1M gift may be in the works, and here you come with your hand out.

Professor Lowman distinguished between *immature* and *mature foundations*. The former, like Gates, are run by an individual and/or family. Mature foundations, like MacArthur, use expertise to donate wisely and hire profes-

sional staff, often from academia; staff stewardship has also increased as boards worry about lawsuits. Nonetheless, their mantra is "People don't give to causes; people give to people." They need not be fair or consistent; if they believe in you, they may fund what they say they don't and keep funding beyond the typical 3 years. Just don't rush to the money; talk about your ideas and ask questions.

The Foundation Center (http://fdncenter.org/) monitors all with over $1M in assets, though some move their money around, so they won't be listed and deluged with unsolicited proposals from strangers. Some features of this database are free. Particularly valuable are tax forms, which show a complete list of grantees and the amounts they received.

Once you've made contact, the next step is a *letter of inquiry*. In 3 pages, including a 1-page budget, it should describe the project, stressing impact, and an implementation plan. Work with ORSP to ensure the budget is adequate; some foundations simply send you a check, and too bad if you lowballed. They don't want the itemized budget prepared for federal sponsors, but major expense categories. They're reluctant to pay for equipment, infrastructure, or inessential travel, but about 70% now pay operating expenses and may provide for administrative support. More foundations are moving from gifts to grants to demand accountability. A grant includes a detailed work statement, start and end dates, and requires financial and progress reporting.

Most sponsors will now ask for a *formal proposal*. Guidelines often limit you to terse statements of need, capabilities, and outcomes. If none are available, don't ex-

**INSIDE**

**WAKE FOREST**
**U N I V E R S I T Y**

ceed 10 pages. Think journalism; tell a story that justifies the project in human terms. Smaller foundations may prefer a 15-20 minute presentation. Be sure to consider your audience in either case: college graduates not likely to be experts in your field and dedicated to maximal impact. Used to delegating, they want the big picture and the sense that they can trust you.

## CORPORATE

Industrial support is almost exclusively person-to-person, and most problems stem from differences between business and university culture. For example, negotiation is normal in business but suggests mistrust to a professor. If you stay at the table, you can probably get what you want.

Corporate R&D is growing faster than federal or foundation support. By outsourcing, companies gain access to first-rate faculty, who work fairly cheaply; students, their future workforce; and credibility, since university research is perceived as objective. However, university research is slow, and faculty may have difficulty focusing on corporate priorities or keeping secrets.

For faculty, there's quicker turn-around, less red-tape, a chance to see work realized in the marketplace, and internships and career opportunities for students. On the other hand, a corporation may push for more applied work or more work without more pay. Awards are generally smaller than federal awards; sudden priority changes can scuttle the project; contract negotiations are lengthy and complex; and secrecy can interfere with the presentation and publication that support tenure, promotion, and student degrees.

*Contacts* develop at conferences or through former students working in industry. You or they may follow up on a talk or paper addressing common concerns. Just don't start talking money. You're networking with bench scientists who may connect you with officials who control spending. Remember that they may not be able to discuss all aspects of their research, and be cautious in sharing your own insights without an agreement. Seek consulting assignments. Visit the company and ask corporate colleagues to visit you. Ask them to serve on a departmental industrial advisory group to consider mutually interesting ideas and student internships. Eventually, a collaborative project may emerge.

If so, write an explicit *statement of work*, which will be part of the legal agreement between the company and the university. It should specify deliverables, mutually agreeable performance standards, and a timetable; a year seems long to the corporate world, so set milestones. Don't agree to a budget over the

phone or by email. Work with ORSP to develop realistic numbers.

You may think the deal is now closed, but for the university, *negotiations* are only starting. Never negotiate your own contract. You have no legal background, and you'll be dealing with a professional; you have no legal authority to bind the university, and you may want the money so badly that you are willing to compromise university interests or even state law.

Involve *ORSP* immediately to determine potential conflicts of interest. You must secure the right to publish without company approval, although prior review and slight delays in filing patents are standard. Companies may claim that if they paid for research, they own it, but intellectual property should not be a deliverable. Universities want title to all discoveries made by their personnel and reasonable return for licenses granted. They want substantial payment upfront, while the company will want to withhold funds until a final report or product is delivered. Companies want the right to terminate for any reason; universities want notice and payment for work performed.

Once the contract is signed, *communicate* often. Invite partners to visit, warn them of problems quickly, and avoid their competitors. If the company asks for work outside the contract's scope, develop a supplemental agreement. Make sure that you, not the company, control the research agenda in your laboratory. Protect yourself and your students from conflicts of interest and commitment.

## BUSH '07 BUDGET: OPPORTUNITIES, CUTS
from *Federal Grants and Contracts Weekly* 30, 8 (9 February 2006)

The Bush administration's proposed 2007 budget focuses on "American Competitiveness," "National Security Languages," and "Advanced Energy." The National Science Foundation is up for an 8% increase, with a promise to double its budget over 10 years. The Energy Department's Office of Science would see a 14% boost, while the Education Department gains $380 million to strengthen math and science programs and about $155 million to support teaching, at every level, of foreign languages, especially Arabic, Chinese, Farsi, Japanese, Korean, Russian, and Urdu.

Overall, grant programs would be flatfunded, and biomedical research takes a backseat to the physical sciences and engineering. The Bush plan would freeze the National Institutes of Health budget at $28 billion. NIH calculates it would fund 9,337 new and competing research project grants, 275 more than this year, but with the lowest success rates in years—from 11% to 25%.

## HISTORY'S O'CONNELL WINS FELLOWSHIP IN FLORENCE

Assistant Professor of History Monique O'Connell has earned one of only 15 annual fellowships supporting a year's residence at Villa I Tatti, Harvard University's Center for Italian Renaissance Studies in Florence. Gaining access to libraries and scholars in related fields, she will complete a book, *Venice's Maritime Empire: Conflict and Negotiation in the Renaissance.* It will explain how, from the 12th century to 1797, the wealthy but small city-state of Venice dominated a fragmented and fragile empire stretching over 300,000 miles. The inner workings of the *stato da mar* and their role in the larger scheme of Venetian history have been eclipsed by recent scholarship's attention to terra-ferma and a vision of the republic as a place where assimilation and co-operation prevailed over conflict and antagonism. This approach fails to explain how Venice overcame the enormous administrative problems created by physical and cultural differences.

O'Connell's book will demonstrate how the administration of this improbable empire worked in practice, showing that Venice relied on negotiation through patronage, family connections, and its judicial system to bridge geographic distance, local and regional particularism, and multiple languages, religions, and legal traditions. It intersects with the large literature on the early modern state as well as anthropological and historical literature on the function of patronage and clientage in a political society. It extends study of Renaissance statecraft to areas outside the Italian peninsula and the growing field of Mediterranean studies. More generally, Venice offers a comparative example for scholars of later empires, both the early modern British and Spanish Atlantic empires and more modern colonial empires from the 19th century on.

O'Connell acquired her preliminary data at archives in Venice, Rome, Zadar (Croatia), and London, studying administrative correspondence and legislative, judicial, and election records, supported by grants from the Delmas Foundation, the Renaissance Society of America (RSA), and a National Endowment for the Humanities (NEH) Summer Stipend. In addition, she has co-edited an electronic edition of Venetian republic election registers that allows scholars to trace the careers of officials.

---

## NEW FACULTY ORIENTATION: *THIS* WAY IS UP!

Associate Provost for Research and William L. Poteat Professor of Chemistry **Mark Welker** and the Office of Research and Sponsored Programs hosted a luncheon to introduce new faculty to mentors and other campus research resources to begin the New Year.

Director **Lori Messer** described ORSP services. Her responsibilities include setting research administration policies; authorizing requests for external research funds; developing contracts and subcontracts; and handling budgets and guideline interpretation for the Health and Exercise Science department.

Assistant Director **Stephen Williams** handles preaward activities for all other departments except Biology. **Gloria Stickney**, coordinator of research services, administers the internal Science; Social, Behavioral, and Economic Science; and Cross-Campus Collaborative Research Funds in addition to setting up and reconciling accounts and preaward activities for Biology. **Henny Wakefield**, Institutional Review Board coordinator, assists this committee that approves, suspends, or disapproves research involving human participants for both student and faculty projects. **Julie Edelson** edits proposals; writes the *Research News*; and disseminates information on funding opportunities.

**Bernadine Barnes**, associate professor of Art History and National Endowment for the Humanities grant recipient, spoke on survival: how to prioritize research in a crowded schedule. In the humanities, publishing is vital to both tenure and external sponsorship. Strive for clarity; don't give up if asked to revise; have others critique your work; and become a reviewer to learn what succeeds. Realize that publishing an article can take 18 months, which might be deadly if your tenure committee meets earlier. Be clear about your department's expectations: what kind of publications count, what journals are preferred. Relationships deeply matter in academia; be open with your chair and other experienced colleagues.

**Mike Berry**, professor of Health and Exercise Science and currently PI or co-PI on 5 sponsored projects, agreed. Collaborative efforts drive science; the NIH Roadmap urges interdisciplinary research. How do you find research partners? First, talk to ORSP or consult the abstracts of funded projects on its website ([www.wfu.edu/rsp](www.wfu.edu/rsp)). Second, attend seminars, even slightly outside your field, posted on the Graduate School's website ([www.bgsm.edu/graduate/seminars.html](www.bgsm.edu/graduate/seminars.html)). Community of Science databases available from ORSP's website allow you to search EXPERTISE in your area and MEMBER INSTITUTION (WFU). Read about their research, make a plan, and approach them.

## WHO CAN BE A PRINCIPAL INVESTIGATOR REVISITED

In the last issue, we noted who can be a PI on the Reynolda campus. We recently updated this policy. Now, nontenure-track faculty, including lecturers, instructors, and visiting assistant or associate professors *can* be a PI. Visiting faculty may only submit proposals if their appointment at WFU will continue through the first year of the grant.

Faculty advisors whose pre- or postdoctoral research assistants are interested in applying for fellowships must be willing to serve as the PI, for internal purposes. They will be required to submit the routing form and to take responsibility for overseeing the research of their students or staff.

─────────────────────────

## MISSING RECORDS THWART MISCONDUCT INVESTIGATIONS

from *Office of Research Integrity Newsletter* 14, 1 (December 2005):5

Poor data management and failure to sequester research records created serious problems in institutional investigations reviewed by ORI in 2005. These problems are addressed by the new PHS regulation, 42 CFR 93.106(b)(1), which states the conditions under which institutions or ORI might consider the destruction, absence, or withholding of research records as evidence of misconduct.

"HHS regulations require institutions to maintain research records for 3 years after the final annual or expenditure report," said Alan Price, director, Division of Investigative Oversight. "**It would seem prudent for institutional officials to make their scientists aware of HHS record-keeping requirements**, which may be needed to support their research whether or not it is challenged."

Several years ago, one institution returned sequestered research records to the respondent after finding evidence of misconduct but before informing ORI of the outcome. ORI asked to review them, and institutional officials had to ask the respondent, who had moved away, to return them. When he did, the key evidence was absent. He said the institution lost it; the institution had no copy or record of it, and ORI was unable to pursue a misconduct finding.

This year, similar problems of missing records arose in 4 cases. In one, a postdoctoral fellow was known to keep poor laboratory notebooks and other records, contrary to written institutional policy. The fellow had been formally reprimanded 3 years earlier and, again, one year before allegations. Available records were insufficient for the institution to make a finding, and ORI determined that claims could have arisen from incompetence, error, or misconduct and were therefore irresolvable.

In another case, the institution found misconduct by a graduate student. The mentor knew this student had failed to keep notebooks or other organized records, and many electronic records were not sequestered for several weeks after allegations, remaining in the hands of the complainants. Given the lack of documentation and extensive problems between mentor and student, ORI found that misconduct could not be verified.

In two other cases, records were also sequestered late, remaining with either the complainant or respondent. Investigating committees basically deferred to the complainant and did not carefully examine or document the evidence for ORI. In the end, it was insufficient for the institution or ORI to consider findings.

─────────────────────────

## INTELLECTUAL PROPERTY PRIMER

from *Grantseeker Tips* 176 (17 January 2006)

### Copyright

You can copyright expressions in words or numbers (books, poems, scripts, databases); musical compositions (melodies, sheet music, arrangements); dramatic productions, pantomime, and dance movements (video, film, notation); visual works (photographs, sculptures, paintings, technical drawings, audiovisuals on disks or tapes); or building designs. Copyrights last for the author's life plus 70 years.

Copyright a work by attaching the copyright symbol, author's name, and date. You gain additional legal clout if you register with the US Copyright Office (www.copyright.gov/register); registering usually costs $30. For WFU's copyright policy, see http://www.wfu.edu/rsp/pdf/copyrt.pdf.

### Patents

A patent allows you to exclude others from making, using, or selling your invention. To get a US patent, you must apply to the Patent and Trademark Office (www.uspto.gov) and convince the examiner that your invention is new, novel, and not obvious. Begin by contacting the Office of Technology Asset Management. The cost of a US patent may exceed $10,000, including filing and attorney fees. Patents are good for 20 years from application.

Most federal grants award invention rights to the inventor; under WFU policy, the university will own the rights to inventions developed by employees and students (see http://www1.wfubmc.edu/OTAM/Faculty%2BResources/Patent%2BPolicy.htm. When Florida researchers offered the government patent rights to a nutritional sports drink developed on federal funds, it declined. The drink is marketed as Gatorade.

## INSTITUTIONAL REVIEW BOARD UPDATES

### Medical Center Account Open to Reynolda Campus Researchers

Reynolda campus researchers working with Bowman Gray campus researchers may now send protocols to WFU Health Sciences IRB by contacting Lori Messer, human protections administrator and ORSP director, at 336/758-5888 or messerlj@wfu.edu. She will send a Medical Center Account Request form and a Confidentiality Agreement to the Reynolda campus researcher. ORSP will route the completed forms to the WFUHS office, which will notify the PI and ORSP when the account is established.

As of February 2006, the Medical School is requiring that all new IRB applications be completed online. To use eIRB, its online application, submission, and review system, the PI must have access to its intranet, which is currently accessible to WFUHS employees only. At a date to be announced, the WFUHS IRB plans to include amendments, continuing reviews, and safety events in the online system.

### ORSP Working on Online Submission and Review

ORSP is exploring a new database system for online submission and review of IRB proposals. In spring 2005, we began looking at commercial programs and talking to vendors and have now assembled a project team composed of IRB members and faculty from various departments. They will help to evaluate the programs and develop training for researchers and the IRB. ORSP hopes to pilot the system with 2 departments in fall 2006 and to begin accepting online submissions from all departments no later than 2007-2008.

### What's New for 2006-2007?

The IRB strives to facilitate Reynolda campus research within federal regulations and guidelines issued by the Office of Human Research Protection (OHRP). As it creates or revises policies and procedures, it will keep the research community apprised on a *What's New for 2006-2007?* page on its website (www.wfu.edu/rsp/irb).

The page will debut in May. It will list changes and link to text recommended by the IRB and approved by the Associate Provost for Research. Among these changes will be additional examples of key personnel; assent guidelines for research involving minors and cross-cultural research; guidelines on how and where to store electronic research data; and tips for faculty advisors by department.

Researchers will also be able to click on any topic on the *Policies and Procedures* and *Investigators Guide* contents pages and go directly to the relevant section. FAQs, searchable by keyword, will include answers to FAQs previously published in *Research News* and on the IRB website. Please check the IRB website for all the changes that will be in effect 1 July 2006.

### Tips on Writing Better Informed Consent/Assent

OHRP is always concerned that consent forms be written in language that participants and their legally authorized representatives can understand. No one can guarantee that another individual has understood a written or spoken message, but PIs must strive to use simple rather than complex language or jargon. A Checklist for Easy-to-Read Informed Consent is posted at www.wfu.edu/rsp/irb/forms.html. *See also* Assent Guidelines for Research Involving Minors on *What's New in 2006-2007?*

### Standard Approval Measures to be Updated

The Psychology department is updating the list of approval measures WFU researchers commonly use for the fall 2006 semester. While having a measure designated *approved* does not constitute blanket approval, investigators do not have to include multiple copies of measures that have been approved - for example, the Caffeine Consumption Questionnaire - with every research protocol. The standard measures can be accessed at www.wfu.edu/rsp/irb/standards.html.

─────────────────────────────

## NIH DELAYS R01 GRANTS.GOV DEBUT WHILE R03 and R21 GO ELECTRONIC 1 JUNE

from *Federal Grants and Contracts Weekly* 30, 9 (16 February 2006)

The National Institutes of Health have postponed electronic submission via Grants.gov for investigator-initiated research projects (R01s) to February 2007. The R01 competition could draw 16,000 applications at one time, the total Grants.gov routed in 2005 and not without problems. Major research institutions represented by the Council on Governmental Relations urged a slower transition until the process is adequately tested and grantees have a chance to learn it.

Effective 1 June, however, NIH, AHRQ, and CDC will no longer accept paper applications for R03 (small research grants) and R21 (exploratory research grants) (*see* http://grants.nih.gov/grants/guide/notice-files/NOT-OD-06-046.html.

NIH also announced a new policy to accommodate multiple principal investigators on team projects. It will be piloted using electronic forms in October 2006.

For the schedule, *see* http://era.nih.gov/ElectronicReceipt/files/Electronic_receipt_timeline_Ext.pdf ; on multiple investigators, http://grants1.nih.gov/grants/multi_pi/index.htm.

## PROPOSAL BUDGET TIPS

Preparing a budget can be the most intimidating aspect of a proposal, but with your input, ORSP can prepare it for you. To begin, it should support tasks in a well-defined scope of work. The tips below explain some common budget categories (*see* www.wfu.edu/rsp/budget.html).

**Fringe benefits.** The fringe rate for staff salaries and faculty academic-year salary is 30.25%; this rate should be used in all proposals for grants that start on or after 1 July 2006. The faculty summer salary rate is 10%. Fringe benefits are not calculated for graduate and undergraduate students.

**Publications**. In some disciplines, faculty are expected to pay for color graphics in publications and reprints and must include these costs in the budget.

**Tuition.** Unless the sponsor does not allow it, tuition should be requested in every budget that includes at least 1 semester of a graduate student's time. According to WFU policy, budgets under $100K per year should add 5% of total direct costs, before tuition, and over $100K per year, $5K per year per student, before tuition, should be included for tuition.

**Indirect costs**. Also called *overhead* or *F&A*, indirect costs should be requested in every budget, unless forbidden or limited by the sponsor. The Reynolda campus rate is 56% of salaries and wages, not including fringe benefits.

**Modular budgets.** Certain NIH budgets must be aggregated in $25K modules. A detailed budget must also be attached to the routing form for internal use and should equal the amount requested in the modular budget. A modular budget justification lists project staff, their percent of effort, and role on the project and explains any differences in the number of modules between years. Provide no other information. These NIH programs consider a detailed budget noncompliant.

Be sure to follow **sponsor guidelines** when formulating your budget. Some costs may not be allowable; some may not be allowable as direct costs except under certain circumstances; for example, office supplies, postage, and clerical salaries. These costs must be specifically justified on a Cost Accounting Exceptions Form (*see* www.wfu.edu/rsp/pdf/ CAS%20exceptions.pdf).

NSF policy specifies that **cost share**, or matching, should not be included unless required; this policy may hold for other sponsors. If the sponsor asks you to cut your budget, and you cannot still perform the scope of work, ask to reduce or modify it before requesting cost share.

If you're still not sure about what or how much to include in budget categories, talk to colleagues who have external funding. Finally, if you are **collaborating with another institution, including WFUHS**, be sure someone at that institution prepares a budget and submits it to ORSP on the appropriate forms.

---

### SBIR/STTR

Under the Small Business Innovation Research (SBIR) program, federal agencies with research budgets over $100M annually disburse $2.2B in grants and contracts to small, high-tech firms, and the total keeps rising. University faculty participate as consultants or subcontractors; about 33% of phase I SBIR projects have a university link.

The Small Business Technology Transfer (STTR) program requires small businesses to partner with nonprofit research institutions. The nonprofit teammate must conduct at least 30% of the work. Five agencies with annual extramural R&D budgets of at least $1B provide 0.3% to support STTR projects.

Both programs aim to realize innovative technologies. They follow the same general format: a 1-year, $100K pilot phase; and 2-year, $750K phase II awards for which successful phase I teams compete. Firms must find private or other federal funds to support phase III, which moves the innovation to the marketplace.

SBIR and STTR vary widely by agency. Some programs award contracts; others grants; NIH awards both. Some agencies repeat categories and topics; others don't. Award size and duration vary. Proposal review practices are diverse.

The General Accounting Office gives SBIR high marks. It "is achieving its goals to enhance the role of small businesses in federal R&D, stimulate commercialization of research results, and support the participation of small businesses owned by women and/or disadvantaged persons." It did express concern over "duplicate funding for similar projects" at different agencies, which means applicants seeking SBIR/STTR support should shop more than one.

# WFU Funded Research, 1 November 2005 - 28 February 2006

**ANTHROPOLOGY**
**Kenneth Robinson**

- *Survey of a 325-Acre Tract on River Road, Cumberland County, NC*, Prestige Homes, $19,914
- *Archaeological Survey of the Spooner Creek Development Area, Carteret County, NC*, Waterfront Lifestyle Properties, $7,490

**Stephen Whittington,** *Development of a Long-Range Conservation Plan for Museum of Anthropology Collections*, National Endowment for the Humanities, $5,000

**BIOLOGY**
**Susan Fahrbach**, *FIBR: BeeSpace – Interactive Environment for Analyzing Nature and Nurture in Societal Roles*, National Science Foundation (NSF, UIL), $109,248

**Kathleen Kron**, *Ericaceae in the Central Andes: Bolivia and Adjacent Peru*, NSF (NY Botanical Garden), $7,000

**William K. Smith**, *Global Change and Natural Stabilization of Barrier Island Sanddune Ecosystems,* North Carolina Sea Grant, $8,684

**Cliff Zeyl**, *Evolutionary Advantage, Recombination, and Adaptation in Experimental Yeast Populations*, NSF, $104,000

**CHEMISTRY**
**S. Bruce King**, *Nitric Oxide-Producing Reactions of Hydroxyurea*, National Institutes of Health (NIH), $273,107

**Abdessadek Lachgar**

- *Design and Self-Assembly of Cluster-based Materials*, NSF, $120,000
- $16,000 Supplement to partially support a one-day workshop at the Third International Conference of the African Materials Research Society organized by the University Hassan II in Marrakech, Morocco

**COMMUNICATION**
**Ananda Mitra**, *Alcohol-Related Problems Among College Students*, NIH (WFUHS), $11,296

**COMPUTER SCIENCE**
**Stan Thomas**, with **David John**, *A Consortium to Promote Computational Science and High-Performance Computing*, Appalachian State University, $11,250

**Todd C. Torgersen**, *Innovative Methods for High-Resolution Imaging and Feature Extraction*, Army Research Office, $82,743

**EDUCATION**
**Joseph Milner**, *Model Clinical Teaching Network*, UNC General Administration, $37,603

**ENGLISH**
**Jefferson Holdridge**, *Wake Forest Series of Irish Poetry, Volume 2*, National Endowment for the Arts, $8,000

**Connor O'Callaghan**, *Dillon Johnston Writer's Reading Series*, North Carolina Humanities Council, $1,200

**HEALTH & EXERCISE SCIENCE**
**Peter Brubaker**, *ACTION – A CHF Trial Investigating Outcomes of Exercise Training*, NIH (WFUHS), $3,171

**Anthony Marsh**, *Optimizing Body Composition for Function in Older Adults (OPTIMA)*, NIH (WFUHS), $37,561

**Shannon Mihalko**, *Recovery Strategies Following Breast Cancer Treatment,* US Army (WFUHS), $32,733

**Jack Rejeski**, *Lifestyle Interventions and Independence in Elders (LIFE),* NIH (WFUHS), $73,017

**HISTORY**
**Monique O'Connell**, Villa I Tatti Fellowship for year-long study in Florence, Italy

**PHYSICS**
**David Carroll**, *Charge Transfer Nanocomposites: The Effects of Scale Hierarchy*, Air Force Office of Scientific Research, $151,000

**George M. Holzwarth**, *Kinesin Force-Velocity Curves When 1, 2, or 3 Motors Transport a Single Load*, Dreyfus Foundation, $20,000

**Daniel B. Kim-Shapiro**, *Nitrite and Nitric Oxide in Sickle Cell Blood*, NIH, $103,680

**Research** *News*