

RESEARCH *News*

OFFICE of RESEARCH and SPONSORED PROGRAMS

LORI MESSER APPOINTED NEW DIRECTOR

The Office of Research and Sponsored Programs welcomes a new director, beginning 1 August 2002. Lori Messer comes to Wake Forest from Florida Atlantic University in Boca Raton, Florida, where she served as Assistant Director for Sponsored Research. She has a Bachelor of Science degree in accounting, a Master's degree in public administration, and nine years' experience working in university research administration offices.

Prior to Florida Atlantic University, Lori was a Sponsored Projects Officer at Arizona State University. In this position, she primarily assisted engineering faculty with proposal development, proposal submission, contract/subcontract negotiations, and postaward administration. Lori also prepared and presented classes in Arizona State University's sponsored programs training for faculty and staff, including workshops on the use of FastLane. Before coming to Arizona State, she was an Assistant Director for Postaward Administration at Wright State University in Dayton, Ohio.

Lori is particularly skilled in the area of contract review and negotiations and interested in establishing campus-wide training programs in topics facilitating faculty research. We look forward to her new leadership.

REQUIRED NEW TRAINING PROGRAM FOR HUMAN SUBJECTS RESEARCH

In light of recent events at other universities across the country, government agencies have begun enacting legis-

lation to better control human subjects research. Specifically, they are concerned with review procedures and investigator education. The Reynolda campus Institutional Review Board (IRB) is, therefore, instituting a new policy that will require all principal investigators, advisors, IRB members, and IRB administrators to attain certification in order to conduct human subjects research.

Established in 1990, the Reynolda campus IRB reviews protocols on a monthly basis. It consists of at least a five-member board whose chair is elected by the members. The members are typically suggested by the Director of Research and Sponsored Programs and governed by the Provost's office. They meet on the third Monday of every month; protocols are due by the first Monday to be considered for review.

The IRB and R&SP have reviewed several training programs and concluded that the best choice for the Reynolda campus is an online program called the Collaborative IRB Training Initiative (CITI). CITI is a comprehensive bioethics program created by the University of Miami in collaboration with several other universities and research institutions. It meets all state and national educational program requirements for human subjects research. **All researchers who submit an IRB as well as their advisors must complete the program before a protocol will be accepted by Research and Sponsored Programs for IRB review.**

The link to the registration website can be found at www.wfu.edu/RSP. Please call 758-5888 with any questions.



OUTSTANDING PROJECT PROFILES	2
I NEED MONEY NOW	5
WFU FUNDED RESEARCH	6

OUTSTANDING PROJECT PROFILES

BIG WINNERS IN THE HUMANITIES

Four of Wake Forest's humanities scholars have won highly competitive and prestigious fellowships this year: Sol Miguel-Prendes, Jay Ford, Michaelle Browsers, and David Weinstein.

Sol Miguel-Prendes, Associate Professor of Romance Languages, has been awarded an American Council of Learned Societies (ACLS) Contemplative Practice Fellowship. It is one of ten awarded nationally each year "to advance scholarship and to encourage innovative course research" that will "restore and renew the critical contribution that contemplative practices can make to the life of the mind." Dr. Miguel-Prendes won the single award for literature this year.

The course she is designing, "Contemplative Practices and Literary Creation," is based on research for a book and will be taught initially to advanced undergraduate Spanish students. It examines three central images—the journey, the *locus amoenus*, and the inner city—as they are used in religious and lay texts in Castilian, Catalan, and other European contexts. The course is primarily devoted to the Middle Ages but will incorporate texts extending into the twentieth century.

Dr. Miguel-Prendes credits R&SP emails for apprising her of this fellowship opportunity, and "Julie Edelson's help was crucial" in "reviewing the proposal, making me focus, and teaching me how to highlight my proposal's strengths."

Jay Ford, Assistant Professor of Religion, has been awarded a Japan Foundation Research Fellowship for spring 2003. He will be serving as director for Wake Forest's new exchange program with Kansai Gaidai University in the fall and then reside as a Visiting Research Fellow at the Institute for Religion and Culture of Nanzan University in Nagoya, Japan.

Dr. Ford will investigate "Upaya: Re-Imagining a Central Buddhist Concept in Japan from the Middle Ages to the Present." The important Buddhist doctrine of *upaya* (J: *hoben*), generally translated as skillful means, contends that the historical Buddha used his wisdom and compassion to determine the best means to communicate his teachings to audiences of different spiritual capacities. Dr. Ford will study various literary genres of medieval Japan, including doctrinal treatises, popular Buddhist tales, and ritual texts, to trace the transfor-

mation of this concept within Japanese Buddhism. He hopes that this research will contribute to a broader understanding of the contextual nature of religious concepts and the dialectical process of "meaning making" within changing political, religious, and socio-cultural contexts.

Michaelle Browsers, Assistant Professor of Political Science, has a pleasant choice. Not only awarded an American Center of Oriental Research (ACOR) Council of American Overseas Research Centers (CAORC) Fellowship for postdoctoral scholars; she also received one of the eight CAORC Multi-country Fellowships for advanced research granted this year. The former supports two months of research at the ACOR facility in Amman, Jordan, and travel to Damascus, Syria, and possibly also to Cairo, Egypt and/or Beirut, Lebanon. For the latter, research must be conducted in at least two countries, and an extended residence at one center is not required. The State Department's Bureau of Educational and Cultural Affairs funds both fellowships.

Dr. Browsers will investigate "Reformation in Contemporary Islamic Thought," undertaking the first systematic examination of the writings of a growing number of important Islamic thinkers who are revising orthodox approaches to traditional Islamic texts. Her research locates these thinkers and the responses to their work in the debate over whether we are witnessing a "growing Islamic fundamentalism" or an "emerging Islamic Reformation" in the Middle East. Very few ACOR awards are granted each year, and clearly, Dr. Browsers's work is both timely and internationally significant.

Also in the Political Science department, **David Weinstein**, Associate Professor, has been appointed Visiting Fellow at Mansfield College, Oxford University, for the second and third terms of 2003. "Finally," he said, "one of my many applications succeeded." Those familiar with Weinstein's successful publication record and previous grant awards, including an NEH summer stipend, will hardly be surprised, but the message from these recent awards is very heartening. No matter how imposing the odds, a good proposal can succeed!

NOMINATIONS FOR NEH SUMMER STIPENDS

Internal Deadline: 16 September

Faculty interested in applying for National Endowment for the Humanities summer stipends must first be nominated by the university. Please submit a one-page project abstract to Research and Sponsored Programs, 117E Reynolda Hall, or as an email attachment to edelsojb@wfu.edu, no later than 5 PM, 16 September, so that the two candidates chosen by the Dean can submit full proposals to the NEH by the 1 October deadline.

Each year, the university may nominate two summer stipend applicants, one of whom must be junior; i.e., hold the rank of instructor or assistant professor. Adjunct faculty, academic applicants with appointments terminating by summer 2003, and independent scholars may apply directly, without nomination.

Each summer stipend provides \$5K for two consecutive, uninterrupted months of full-time independent humanities research. Please contact Julie Edelson, edelsojb@wfu.edu, with questions or for editorial assistance.

URL for more information: <http://www.neh.gov/grants/guidelines/stipends.html>

Successful applicants from 2001: <http://www.neh.gov/news/awards/SummerStipends2002.html>

NEW FACULTY LUNCHEON

The New Faculty Orientation Luncheon will be held on Thursday, 12 September, from 11:30 A.M. to 1:00 P.M. in the Autumn Room of Reynolda Hall. Meet the new Director of Research and Sponsored Programs, Lori Messer, who will discuss internal and external funding opportunities and procedures, explain the services faculty can expect from this office, and introduce the staff. New faculty will have ample opportunity to ask questions.

NSF GRANT FACTS

— From *Federal Grants and Contracts Weekly* 26, no. 19 (13 May 2002)

NSF Stats: National Science Foundation officials reported the following program statistics for fiscal 2001 at last week's National Science Board meeting.

NSF:

- **Reviewed 32,000** proposals from 2,000 colleges, universities, and other institutions;
- **Used 50,000-plus** reviewers, about 9,000 of whom were new;
- **Made 10,000 awards**, a third of the eligible applications received;
- **Awarded on average \$113,600** per year per investigator; and
- **Received 99 percent** of applications electronically, up from 4 percent in 1997.

Applicants requested \$16 billion, \$13 billion more than the \$2.8 billion in available funds. NSF estimates that about \$5 billion in declined proposals would be worth funding if the money were available.

NSF historically has used three types of grant application review: mail-only review, panel review, and a combination of the two. Officials said data show that the mail-only reviews are starting to drop off, while the panel reviews are increasing. The return rate for mail review is 60 percent. Panel review can more easily address multi-disciplinary activities and compare proposals. The products coming out of panels, however, tend to be more conservative.

MIXED MESSAGES FOR NEXT YEAR

- From *Federal Grants and Contracts Weekly* 26, no. 29 (22 July 2002)

Derailed by security concerns, lawmakers have made a slow start on next year's agency appropriations. However, House and Senate appropriators have not been shy about exceeding administration funding requests in a variety of domestic areas. Following are a few examples:

- A House-passed appropriations bill increases funds to the National Endowment for the Arts by \$10M to \$126M and the National Endowment for the Humanities, \$5M to \$131M.
- A Senate bill to fund the justice department provides level funding for violence against women programs, which the administration would cut, and more money for juvenile justice.
- For commerce programs, the bill increases funds for the National Institute of Standards and Technology, restores the Sea Grant College program, which the administration proposed eliminating, and creates a new ocean health research initiative.
- A House agriculture bill would increase funding for distance learning grants to \$35M, up from this year's \$27M and the department's request.

DOUBLING FOR NIH ON TRACK

Senate appropriators approved a fiscal 2003 spending bill that includes a record \$3.7B increase for the National Institutes of Health. The final installment of a 5-year doubling of the agency's budget would bring the NIH total to \$27.2B. The Senate still must take up the bill; house appropriators have not yet produced a bill.

SENATE MEASURE WOULD RESCUE ED PROGRAMS

The Senate appropriations subcommittee approved a fiscal 2003 bill that would boost federal education funding next year by about \$4.2 B and preserve about 40 discretionary programs that the White House seeks to eliminate. Among those the Senate measure would rescue are Star Schools (\$28M); school counseling (\$33M); physical education (\$28M); civic education (\$30M); gifted and talented (\$13M); dropout prevention (\$15M); teacher technology training (\$68M); foreign language assistance (\$14M); community technology centers (\$32.5M); arts in education (\$30M); and Eisenhower math/science consortia (\$15M).

THE FOUR RS FOR PROPOSAL WRITING SUCCESS

- From *Foundation Grants Alert* 15, no. 5 (May 2002)

Review, rewrite, reword, revise. Abiding by these four Rs can help in drafting a successful grant request, says Jill Pranger, Certified Fund Raising Executive. Before the writing begins, you must "be confident and know your organization," Pranger said. Have text about the organization—its mission, facilities, and commitment—in boilerplate language that you can use over and over. (*RE&SP can tailor boilerplate documents about Wake Forest for your grant; contact Edelson with your requirements.*)

Pranger has a few suggestions that will make the proposal easier to read:

- Change passive voice to active voice: "The problem will be solved by our innovative methods" to "Our innovative methods will solve the problem."
- Remove all cliches, trite phrases or expressions. Stale language indicates stale thinking.
- Shorten long lists.
- Never use *etc.* If you have something to add, spell it out.
- Keep paragraphs short and focused.
- Use headings to break up the text and format them consistently to highlight the proposal's organization.
- Use underlining, bold, italics, and different fonts sparingly. Too much emphasis is no emphasis.

However pressing the deadline, make sure you take a break for awhile, Pranger says, so you can return to the proposal with fresh eyes. Also have colleagues read and comment. "Then revise again. *Every* word in the proposal should be directed to the goal."

I NEED MONEY NOW

Faculty frequently contact us seeking funds for a fairly immediate project. Unfortunately, the grants process takes time.

First, the appropriate sponsor's deadline has to work in your favor. Second, even a straightforward humanities fellowship application will demand an extensive literature search to determine that the project does not duplicate recent publications and has broad relevance to the contemporary field.

References must be available to write their recommendations within a proscribed period. Colleagues enlisted to comment on the text may not be able to respond in a heartbeat, and their feedback may change the entire approach.

A more complex research proposal, requiring pilot data, collaborator input, and technical assistance, can take months or years to complete. All the considerations cited above apply, and, in addition, budget items have to be priced out; the department consulted; compliance assurances secured; and R&SP needs at least a week to route the finished product for signatures. Remember, the university is formally awarded the funds and responsible for the project.

Advance planning is essential to securing an external grant. When you need money more quickly, look to internal funds, separate competitions for which are held every fall and spring in the humanities, social sciences, and sciences, with an annual competition for collaborations with the medical school. You might also look into gifts from local agencies and foundations. Talk to Marty Edwards, Director of Foundation Relations, for sound advice on how to proceed.

PROPOSAL VS. SCHOLARLY WRITING

— Adapted from *Grantseeker Tips* no. 84
(29 April 2002)

Many in academia try to write grant proposals as they would journal articles. However, proposal writers cannot assume their readers will be conversant with the subject in question. Panel readers are seldom experts in the special areas presented in the proposal. Reading your proposal is an obligation, not a choice.

Proposals are often read by only a few people, sometimes in less than half an hour. Plowing through a stack of proposals leads to early fatigue; they are generally scanned quickly before their merits are judged. Proposals cannot depend on footnotes, extensive bibliographies, or multiple appendices. Attempts at subtlety or humor are misplaced.

Given these conditions, little wonder that many proposals are rejected because they fail to catch the reviewers' interest. You catch the reviewers' interest by telling your story, documenting the frequency and severity of your need, and showing how it matches the sponsor's needs. Tell them what to think about your ideas; don't modestly suggest. Use document design techniques to facilitate skim reading: bullets, lists, white space, and headings directly derived from the guidelines and merit criteria. Make your major points immediately.

Keep this caveat in mind as you write: "You might have said it, but they didn't get it."

FALL AND SPRING INTERNAL FUNDING DEADLINES

18 October	Archie Science Research Fund
15 November	Social and Behavioral Sciences Research Fund
2003	
28 February	Archie Science Research Fund
14 March	Cross-Campus Collaborative Research Fund
28 March	Social and Behavioral Sciences Research Fund

WFU FUNDED RESEARCH

March Through July 2002

ANTHROPOLOGY

Kenneth Robinson and Joe Ned Woodall

- *Archeological Survey, Electrical Substation, Madison County* \$2,978, French Broad EMC
- *Archeological Survey, 100-acre Borrow Pit near Wade, Cumberland County*, \$7,074, BMCO
- *Archeological Testing, Whittier Sewer Systems Improvements, Jackson and Swain Counties*, \$29,910, McGill Associates
- *Archeological Investigations, Cape Fear and Yadkin Valley Railroad Station*, \$1,073, Cumberland County
- *Archeological Survey along the Cape Fear River, Fayetteville*, \$11,999, State Historic Preservation Office
- *Preliminary Archeological Survey of Riverpark, Davie County*, \$999, Cooleemee Historical Association
- *Archeological-Geophysical Survey, Bennett Place State Historic Site*, \$4,749, Bennett Place
- *Archeological Survey, Uwbarrie National Forest*, \$15,363.10, National Forests in North Carolina
- *Archeological Investigation, Cedar Creek Business Park, Cumberland County*, \$23,531, Moorman, Kizer, Reitel, Inc.
- *Phase 1 Archeological Survey, 17-acre Borrow Pit, New Hanover County*, \$7,335, PLT Construction

These surveys will identify archeological resources, assess their significance, and make recommendations involving their avoidance or protection.

BIOLOGY

Kathleen A. Kron, *The Origin and Diversification of Vaccinieae: Using Molecular and Morphological Data to Determine Major Clades of the Blueberry Tribe*, \$6,000, NSF

Dr. Kron's is the first rigorous study of the evolutionary relationships in Vaccinieae, a widespread, ecologically, economically, and systematically important group of woody plants.

Gloria K. Muday, *Regulation of Auxin Transport by Phosphorylation and Flavonoids during Gravitropism in Arabidopsis*, \$68,373, NASA

To understand how plants change their growth and developmental patterns in response to gravity, the project combines the use of Arabidopsis plants, whose gene mutations alter auxin transport; transgenic plants; and computer-aided analysis.

William Kirby Smith, *Alpine Tree Stability: Mechanisms of Conifer Tree Seedling Establishment*, \$86,594, NSF

Ecophysiological measurements on conifer seedlings will be used to explain the stability of a transitional zone at the upper limit to tree growth in the south-central Rocky Mountains.

Clifford W. Zeyl, *REU Supplement to Genetic Architecture of Adaptation in Laboratory Yeast Populations*, \$5,700, NSF

Funds support undergraduate student assistance in the ongoing research to determine whether adaptive mutations have independent or interactive effects on fitness.

CALLOWAY SCHOOL OF BUSINESS AND ACCOUNTANCY

George Page West, *Venture Science E-Teams for a Liberal Arts Institution*, \$2,000, NCIIA preaward

The new Center for Undergraduate Entrepreneurship will partner science and business students to promote innovative product development and marketing.

CHEMISTRY

Christa Colyer, *Noncovalent Infrared Labels as Facilitators of Protein Determination by Capillary Electrophoresis*, \$201,423, NSF

Dr. Colyer will pursue alternative methods of fluorescence labeling to improve the efficiency of protein assays.

S. Bruce King, *Reactions of Hydroxyurea with Sickle Cell Hemoglobin*, \$31,169, NIH

The project aims to explain the molecular mechanisms of the reaction between hydroxyurea and sickle cell hemoglobin. Results should inform the design and application of superior treatments for this painful disease, which afflicts one in 600 Americans of African descent.

Paul B. Jones, *Photoinduced Electron Transfer and Photo-reduction in Room-Temperature Ionic Liquids*, \$35,000, ACS

Dr. Jones seeks to combine the environmentally friendly qualities of photochemistry with the recyclable qualities of ionic liquids to develop synthetic procedures that generate little organic chemical waste.

Richard A. Manderville, *DNA Damage and the Mutagenicity of Ochratoxin A*, \$175,605, NIH

Ochratoxin A (OTA), widely found in food products, has been implicated in a fatal kidney disease, but exactly how it damages DNA and causes cancer is not known. This study will provide the first comprehensive analysis of OTA's interaction with DNA at the molecular level and demonstrate its mutagenic capacity.

EDUCATION

Joseph O. Milner, *Triad Writing Project*, \$25,000, National Writing Project

The Triad site of the North Carolina Writing Project trains teacher consultants in writing theory and practice, emphasizing writing at all levels and in all disciplines.

HEALTH AND EXERCISE SCIENCE

Stephen P. Messier, *Glucosamine/Chondroitin and Training Exercise Study (GATES)*, \$175,000, Nutricia

This 2-phase, short-term preliminary study will compare 1) the effects of glucosamine hydrochloride and chondroitin sulfate (GHCS) to a placebo; and 2) the additive effects of exercise in improving the mobility of older adults with knee osteoarthritis.

Stephen P. Messier and Gary D. Miller, *Gene Polymorphisms*, \$30,169, NIH

The association between certain gene types and participant response to lifestyle interventions in 2 previous trials will be probed. Those trials examined the effects of dietary weight loss and/or exercise on physical function and disability in older adults with knee osteoarthritis.

MATHEMATICS

Robert J. Plemmons

- *Innovative Computational Methods for Inverse Problems in Optical and SAR Imaging*, \$185,000, ARO
High-resolution images are essential to important applications in defense, law enforcement, engineering, science, and medicine. The project will result in a variety of new, robust, and efficient algorithms to extract meaningful information from degraded images.
- *Post-Detection Processing and Inverse Problems in Ground-Based Imaging*, \$55,000, AFOSR
Dr. Plemmons serves as Senior Scientific Consultant to establish a major research and development program in ground-based imaging for the Air Force Research Laboratory.

PHYSICS

Gregory Cook, *Improved Initial Data for Black-Hole Binaries*, \$48,375, NSF

Dr. Cook is working to generate new, more astrophysically realistic initial data on binary black holes to assist in the detection of gravitational wave signatures from distant astronomical events by newly operational worldwide observatories.

Daniel B. Kim-Shapiro, *Effects of Nitric Oxide in Sickle Cell Blood*, \$314,142, NIH

The overall goal is to elucidate the biochemical and biophysical aspects of nitric oxide (NO) in sickle cell blood to evaluate its use as a treatment for the disease.

OFFICE *of* RESEARCH *and* SPONSORED PROGRAMS
336.758.5888

LORI MESSER
Director
336.758.4910
messlerlj@wfu.edu

STEPHEN L WILLIAMS
Assistant Director
336.758.4909
williasl@wfu.edu

JULIE EDELSON
Researcher, Editor
336.727.0464
edelsojb@wfu.edu

KANDISE CONNOR
Coordinator of Research Services
336.758-4189
connork@wfu.edu

WILLIAM FORD
Coordinator of IRB
336.758.5700
fordwe@wfu.edu

DIANNE WEAVIL
Administrative Assistant
336.758.5195
weaviljd@wfu.edu

RESEARCH *News*

September 2002

Research News is published by the Office of Research and Sponsored Programs three times a year. No part of this publication may be reproduced without written permission. For information or reprints of articles, contact Julie Edelson at 336.727.0464 or P.O. Box 7528 Reynolda Station, Winston-Salem, NC 27109.

RESEARCH *News*

Office *of* Research *and* Sponsored Programs
Wake Forest University
P.O. Box 7528
Reynolda Station
Winston-Salem, NC 27109