

RESEARCH *News*

OFFICE of RESEARCH and SPONSORED PROGRAMS

WELKER NAMED INTERIM ASSOCIATE PROVOST FOR RESEARCH



The Office of Research and Sponsored Programs is delighted to announce that Provost Gordon has created a new position: Associate Provost for Research. Wake Forest Professor of Chemistry Mark E. Welker will fill the position until an on-campus search for a permanent candidate can be completed. Professor Welker will remain on the Chemistry faculty, while serving as interim associate provost half-time.

The Associate Provost will be responsible for:

- assessing and improving the university's research infrastructure;
- developing external funding opportunities that support research, scholarship, and creative work;
- developing mechanisms that encourage greater student involvement in research, scholarship, and creative activities;

- facilitating collaborations across departmental and school boundaries;
- facilitating the publication or exhibition of faculty and student work; and
- advocating the teacher/scholar ideal.

A proposal from Wake Forest's Research Advisory Council and suggestions from professors led to the position's creation.

Professor Welker came to Wake Forest in 1987 and was named Wake Forest Professor of Chemistry in 1999. He has associate appointments in the School of Medicine's Cancer Biology and Biochemistry departments and is a member of the Comprehensive Cancer Center. Continuously funded throughout his career, he has chaired the WFU Research Advisory Council since 1997 and served as a Program Officer for the National Science Foundation's Organic and Macromolecular Chemistry Program in Washington, DC, from 2001-2002. Last year, Governor Mike Easley appointed Welker to the North Carolina Board of Science and Technology.

Professor Welker has assisted the Office of Research and Sponsored Programs for many years, sharing the benefits of his training and experience and the inside line on merit review at federal agencies. We are grateful to him and to Provost Gordon for supporting and advancing the pursuit of external sponsorship for faculty research.

For more information on Professor Welker's inspiring career, see <http://www.wfu.edu/academics/chemistry/faculty/welk-pub.html>. For the Associate Provost's mission statement and welcome, see <http://www.wfu.edu/research/provost.html>.

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MANDATORY HUMAN SUBJECTS TRAINING

Beginning January 2004, the human subjects education requirement will be extended to more researchers. Currently, all investigators who have federal funding and use human subjects in their research must complete the relevant Collaborative IRB Training Initiative (CITI) course prior to commencing their study. As of 1 January 2004, researchers with any external funding must complete a CITI course as well.

- CITI now offers a Social and Behavioral Science Course. Researchers performing non-biomedical research should take Modules 1-6 of the SBR Course. Modules 7-11 should be completed as applicable.
- The BioMed Course has been changed. An investigator conducting biomedical research should complete Modules 1-7 and 14. Modules 8-13 should be completed as applicable.

To pass the course, researchers must answer 75% of the quiz questions correctly. Those who have completed the required modules with a score of 75% or more will receive a signed certificate.

More information can be found on the Office of Research and Sponsored Programs website at <http://www.wfu.edu/rsp/education.html>. Please call 758-5888 with any questions.

IRB FREQUENTLY ASKED QUESTIONS

Q. What is the IRB?

A. IRB stands for Institutional Review Board. The information presented here pertains **specifically to the Reynolda campus**. The Medical Center has its own IRB. If you are conducting research with Medical Center faculty, contact Sarah Mabie, WFUHS IRB, at (336) 716-4542; fax (336) 716-4480 to determine if an application should be submitted through that office.

Q. Who must submit an application to the IRB?

A. Any faculty, staff, or student under Wake Forest University auspices whose research involves human participants must submit an application to the IRB.

Q. When does the IRB meet?

A. The IRB meets the third Monday of the month from September to April. Special meetings are held as needed May through August.

Q. What is considered minimal risk research?

A. Minimal risk research involves no more risk than that normally encountered in everyday life.

Q. What is informed consent?

A. Informed consent is one of the primary ethical requirements underpinning research with human subjects. It assures that prospective human subjects understand the research and can knowledgeably and voluntarily decide whether to participate. As a rule of thumb, the Informed Consent should be written for an eighth-grade level of reading and comprehension.

Q. When is an Informed Consent required?

A. The consent of any human subject in research is required unless Informed Consent or one of its elements has been specifically waived by the IRB.

Q. Can deception or misrepresentation be used in studies with human subjects?

A. Yes, if the benefits outweigh the risks to the subjects and if there is compelling scientific justification. The subjects must be informed that some information is being withheld until the end of their participation and receive an explanation (debriefing) about the experiment and the reason such manipulation was critical to its success following the project's completion.

Q. What consent materials are required for research with minors?

A. Research with minors requires completion of a parental consent form and a child assent form. The assent form must be written at a level so that participants can understand what they are being asked to do. Assent refers to agreement by a minor or incompetent adult to participate in research. If the child is unable to provide assent or the intervention may be of direct benefit to the child and is only available in the context of the study, parental consent is sufficient.

Q. I've decided to make changes to my research. Must I notify the IRB?

A. Yes. Any substantive changes to the approved protocol, particularly with the Informed Consent or Assent, must be submitted to the IRB on an Amendment Request Form (available on the web).

Q. I'm doing research at a local public school. Are there any additional requirements I must fulfill?

A. Yes. The Winston-Salem/Forsyth County School system and the principal of each school where research will be conducted must approve all studies before data collection can begin.

Q. When are protocols (applications) due?

A. Protocols must be received by 5:00 P.M. on the first Monday of the month to be reviewed that month by the full board. From date of submission, researchers should allow at least one month for IRB review.

Two copies of the protocols should be sent via campus mail or hand-carried to the Office of Research and Sponsored Programs in room 117E Reynolda Hall (next to Human Resources).

Q. *When may I begin my research project?*
 A. Investigators must not begin research until they have received written notification that their protocol has been approved.

Q. *How do I know if my protocol requires a full board review?*
 A. Research that might put participants at risk; noncurricular, interactive research in schools; research involving minors, deception, or interviews or surveys on sensitive topics must be reviewed by the full board.

Q. *How long are IRB approvals in effect?*
 A. An IRB approval is effective for one year. If research activity will continue after one year, the researcher must complete a Continuing Review Form and Continuing Review Summary report and receive IRB approval. RSP will send reminders to researchers 30-60 days prior to the protocol approval expiration date. However, investigators are responsible for requesting a continuation, even if they do not receive a reminder.

Q. *Who must complete the Human Subjects Education program?*
 A. All researchers who conduct research involving human subjects must review an education program. Only researchers who have federal funding are currently required to obtain certification by completing the CITI course. Certification for other researchers is being phased in (please see "Mandatory Human Subjects Training" on p. 2.).

Q. *I met the Human Subjects Education requirements at another university. Must I still complete CITI?*
 A. Maybe. Since each university can determine its own Human Subjects Education program, requirements may vary. For example, some universities only require investigators to read the materials on the NIH website, whereas our IRB has concluded that CITI is the best training option for the Reynolda campus. RSP will review the program and determine whether you have met Wake Forest University's requirements.

Q. *Which modules of the CITI test must be completed?*
 A. The requirements for CITI vary, depending on the type of research. Most Reynolda Campus faculty will complete the SBR (Social and Behavioral Research) Course, Modules 1-6 and Modules 7-11 as applicable. Faculty who conduct research with the Medical School should complete the BioMed Course Modules 1-7 and 14; Modules 8-13 should be completed as applicable.

Q. *How do I know if I've passed the CITI test?*
 A. You must answer 75% of the quiz questions correctly to obtain certification. On a weekly basis, the RSP receives a report on people who have taken the course. Those who have completed the required modules with a score of 75% or more will receive a signed certificate from RSP.

Q. *Where can I find out more information about conducting research involving human subjects at the Wake Forest University Reynolda Campus?*

A. For more information, please visit the RSP website: <http://www.wfu.edu/rsp/irb.html>. IRB applications as well as templates and other forms can be downloaded from this site.

IRB MEETINGS AND DEADLINES

Applications for review must be received by 5:00 P.M. Send 2 copies via campus mail or bring them to the RSP office in 117E Reynolda Hall (next to Human Resources).

Deadline for Submission	IRB Meeting Date
Monday, 11/3/03	Monday, 11/17/03
Monday, 12/1/03	Monday, 12/15/03
Monday, 1/5/04	Tuesday, 1/20/04
Monday, 2/2/04	Monday, 2/19/04
Monday, 3/1/04	Monday, 3/15/04
Monday, 4/5/04	Monday, 4/19/04

IRB members for 2003-2004 are:

Dr. Anthony Marsh, Chair
Health & Exercise Science

Dr. Deborah Newsome
Education

Dr. Cecil D. Price (medical protocols only)
Student Health Services

Dr. Michael Hazen
Communication

Dr. Cathy Seta
Psychology

Dr. Barbara Flynn
Babcock Graduate School of Management (alternate)

Dr. James Schirillo
Psychology

Dr. Robert Evans
Education

Dr. Angela Hattery
Sociology

Dr. Steven Folmar
Anthropology

Ms. Annette Scippio, Executive Director
Leadership Winston-Salem (outside member)

Did you know? Every university department submitted an IRB application between 1998-2003.

ALL THAT'S NEW!

At RSP's annual New Faculty Orientation luncheon, Associate Dean *Claudia Thomas Kairoff* celebrated the recent spate of humanities fellowship winners to encourage all faculty to buck the odds and apply.

Wake Forest Professor of Chemistry *Mark Welker*, our first Associate Provost for Research, noted the improvement of services since he first came to Wake Forest in 1987. From a cubicle in the Reynolda Hall basement that at one point he found vacated and locked, RSP's Director and 5 staff members, with the collaboration of Grants Manager *Debbie Hellmann*, Institutional Review Board Chair and Associate Professor of Health and Exercise Science *Tony Marsh*, and the Office of Technology Asset Management (OTAM) now assure cutting-edge assistance with all aspects of the sponsored research enterprise.

In defining research, Professor Welker quoted from the Plan for the Class of 2000: "By Teacher Scholars, we mean faculty passionately committed to teaching and actively engaged in advancing their fields of specialty." He emphasized teaching through research in his list of "things you can do early in your career to improve your research, scholarship, or creative activity":

- Set the bar high; high expectations yield high outcomes;
- Mentor; directing independent study, honors and graduate theses, and undergraduate and graduate research makes the greatest teaching impact;
- Get mentored; every proposal that leaves the university should be read by someone other than its author;
- Visit agencies and volunteer to review for journals and agencies;
- Travel and present your work; and
- Use your leaves wisely as a chance to accomplish high-impact scholarship.

RSP Director *Lori Messer* praised faculty success in securing \$4-5M in sponsored program support in each of the last 5 years. This office is responsible for grants, cooperative agreements, and contracts that are typically awarded to the university on behalf of the principal investigator (PI); however, the PI is responsible for technical direction and financial administration.

Assistant Director *Stephen Williams* described some of the ways the office can help:

- Correct interpretation of guidelines;
- Budget preparation;
- Form preparation;
- Administrative authorization;
- Electronic submission or copying, collating, and mailing.

Early receipt of proposals ensures that they will go out com-

plete, authorized, and on time. The proposal routing form can be found at www.wfu.edu/rsp/proposal.html.

Dr. *Julie Edelson* also assists faculty in three ways. First, she proofreads proposals and makes suggestions about their form and expression. Second, she can search the Community of Science database for promising sponsors. Third, she composes emails, flyers, and this newsletter to inform faculty of funding opportunities and other germane information.

Internal Funds. *Kandise Connor*, Coordinator of Research Services, manages internal funds and special projects. Internal awards include the Archie Fund for the Arts and Humanities; the Science Research Fund; the Social, Behavioral, and Economic Science Research Fund; the Cross-Campus Collaborative Research Fund with the Medical School; and the Publication and Research Fund, administered by the Graduate School. Guidelines are posted at www.wfu.edu/rsp/funding.html.

IRB. *Henny Wakefield* is Administrative Coordinator for the Institutional Review Board, which oversees all research involving human subjects. With *Rebecca Jones*, she receives applications and coordinates the initial review; takes meeting minutes; communicates IRB actions; monitors the completion of human subjects education; and maintains records in accordance with federal regulations. Instructions for IRB proposals are posted at www.wfu.edu/rsp/compliance.html. *Researchers should not begin collecting data without securing written approval from the Institutional Review Board.*

Postaward Administration. *Debbie Hellmann* is Manager of Grants Accounting. She is responsible for assigning grant numbers, setting up budgets in the Wake Forest system; reviewing and approving charges; billing sponsors; preparing financial reports to the sponsor; and providing PIs with monthly financial reports via NVision. See www.wfu.edu/administration/fas/grants/index.html for more details and contact information.

OTAM aims to enhance faculty, university, and community benefit from research through technology transfer. In its 4 years, it has arranged 44 license and option agreements; assisted the creation of 5 new start-up companies; received over \$45 million in licensing revenues; accrued 3.2 million in shares of stock in 13 companies; issued 41 patents; and earned \$1.8 million in new research funding. Director *Spencer Lemons* encourages faculty to contact OTAM when they have a discovery or invention with commercial potential or are preparing to publicly disclose a new discovery or invention through a paper, abstract, poster, or discussion (see www.wfubmc.edu/research/tech).

PROPOSAL WRITING WORKSHOP: 12 FEBRUARY

RSP has invited Dr. Robert A. Lucas, Director of the Institute for Scholarly Productivity in San Obispo, CA, to conduct a workshop, “Breaking Through the Barriers to Writing Proposals,” on Thursday, 12 February. The all-day session is designed to help faculty conquer writing blocks to achieve more professional grant proposals. Topics include:

- Confronting myths about writing;
- Overcoming the major obstacles to writing;
- Varying patterns to sustain momentum; and
- Managing a successful grant application.

Dr. Lucas received his PhD in English from the University of Illinois. He taught English language and literature at the University of Michigan before becoming a program representative in its Division of Research Development and Administration. He was Director of Research Development at California Polytechnic State University for 10 years, and Associate Vice-President for Graduate Studies, Research, and Faculty Development for 7 years before establishing his independent institute.

Dr. Lucas has published over 90 papers, chapters, and articles on proposal writing and grants administration in journals ranging from *Science* to the *Journal of Irreproducible Results*. He is nationally known for his book, *The Grants World Inside Out* (Illinois UP, 1992), and his tongue-in-cheek column, “Ask Ann Granters,” in the National Council of University Research Administrators (NCURA) newsletter. He has served on the editorial boards of several journals and on grant review panels for such organizations as the Department of Energy and the GTE Foundation.

Dr. Lucas has helped to develop proposals for millions of dollars. He has presented workshops on proposal and scholarly writing at over 100 colleges, universities, and medical centers.

The workshop will run from 9 A.M. to 4 P.M., with an hour lunch break. Space is limited and registration required. Participants are strongly encouraged to attend the entire program. Please contact Henny Wakefield (wakefihk@wfu.edu; X5888) for more information and to register.

EDITING ASSISTANCE

Did you know that you can ask RSP’s Julie Edelson (PhD Comparative Literature, Cornell University, 1974) to edit your proposal? Just email it as an attachment at least 1 week prior to the deadline; however, the sooner she sees it, the more likely she is to make a significant contribution to its language, order, and responsiveness to the sponsor’s guidelines.

ERIC WILSON, ENGLISH, WINS NATIONAL HUMANITIES CENTER FELLOWSHIP

Associate Professor of English Eric G. Wilson is among 42 scholars to win a National Humanities Center Residential Fellowship for 2003-2004. The award provides financial support and a stimulating environment for the best new work in the humanities at the center in Research Triangle Park.

Dr. Wilson will work on his new book, *The Occult Current: A Romantic Poetics of Electricity*. It argues that Coleridge and other British and American Romantic writers who responded to him—including Percy Bysshe Shelley, Mary Shelley, Ralph Waldo Emerson, Margaret Fuller, and Walt Whitman—combined alchemical speculation and the science of electromagnetism to inspire an ecological vision and a corresponding naturalist poetics. The study examines the neglected alchemical and scientific subtexts of these writers’ literary works, leading to a wider theory relating human consciousness and natural processes, words and things, and magic and science.

SURVEY RESEARCH CENTER

Based on discussions among the president, deans, and faculty, a task force convened in February 2001 to determine the degree to which a university-wide and nationally recognized Center on Community and Survey Research would enhance the university’s missions.

The center is now becoming a reality. With generous start-up funding from the Medical School and an initial survey contract in place and Ananda Mitra, Associate Professor of Communication, as Interim Director, the center has taken residence in a house at the intersection of Reynolda and Polo Roads. Professor Sally Shumaker, Director of the Office of Intercampus and Community Program Development and Associate Dean of Faculty Services and Career Development (Medical School), who chaired the task force, is putting together a cross-campus steering committee.

Once the center is fully operational, it will provide academic opportunities that include a seminar series; training in survey methodology for undergraduate and graduate students; assistance with study design; cross-listed courses in survey methodology; and research on emerging survey methodologies, such as web-based data collection. The center will also reach out to the community by working with local businesses, institutions, foundations, and nonprofit organizations. The center expects to open in January.

NIH ROADMAP

- From *Federal Grants and Contracts Weekly* 27, no. 37 (6 October 2003)

National Institutes of Health officials plan to speed biomedical advances by funding priorities that transcend individual institutes. After a year of consultation that involved more than 300 academic, industry, and government leaders, the “NIH Roadmap for Medical Research” proposes a \$2 billion investment over 5 years, with most funding slated for extramural grants.

NIH is expected to direct \$130 million to roadmap initiatives in fiscal 2004 with the belief that they can jumpstart progress by removing obstacles—financial, technological, or bureaucratic—to investment in areas of extraordinary promise or need.

The 28 recommended initiatives fall under 3 themes:

1. *New Pathways to Discovery*: 5 “implementation groups” will direct efforts to develop metabolomics technology and national technology and bioinformatics centers, including a molecular libraries group, a structural biology group, and a nanomedicine group;
2. *Research Teams of the Future*: 3 implementation groups will support high-risk, interdisciplinary research and public/private partnerships; and
3. *Re-engineering the Clinical Research Enterprise* aims to standardize and streamline federal policies pertaining to clinical research.

The new initiatives will bypass the traditional project-oriented, peer-review process, often criticized for discouraging innovation. Candidates will be identified and evaluated by experts on the basis of their exceptional creative abilities—not necessarily a long track record—without a standard application. Awardees will receive up to \$500,000 a year for 5 years.

Revvig up clinical trials will also entail new approaches. A cadre of NIH “clinical research associates,” composed of community-based practitioners, will receive specialized training.

While NIH has the authority to plan the roadmap, congressional action will determine its fate. In addition to funding, explicit encouragement from Congress may be needed to help individual institutes make the case to their constituencies, which generally would rather see them focus on their specific disease-oriented missions than pool funds for common efforts.

The roadmap is available at <http://nihroadmap.nih.gov>.

CROSS-CAMPUS COLLABORATIVE RESEARCH SUPPORT FUND (CCCRSF)

DEADLINE: 23 JANUARY 2004

The Cross-Campus Collaborative Research Support Fund (CCCRSF) was established to stimulate pilot research projects between School of Medicine and Reynolda Campus faculty. Its goal is to assist faculty research and to generate extramural funding for both institutions.

CCCRSF awards are restricted to collaborative efforts between full-time, tenured or tenure-track faculty (including 9-month appointments) and research support staff with adjunct faculty appointments, with preference to projects that are not yet competitive for external funding. A maximum of \$15,000 over a 12-month period will be awarded for each project. Applications are evaluated on scientific merit, originality, significance, and potential to generate extramural funding. In addition, the benefit of, and need for, the collaboration itself will be primary considerations.

For guidelines and application form, see <http://www.wfu.edu/RSP/collab.html>.

GUIDELINES AS THE PROPOSAL TEMPLATE

The harried reviewer, a teaching scholar and advisor just like you, sits down at 10 P.M. with 100 proposals. The first has its own unique style; it begins with a florid description of how the author first became interested in the subject: “As I was walking to St. Ives...” The second opens with a bold heading, PROJECT NARRATIVE, and a subhead, A. Basic Questions Examined by the Study, straight from the NEH fellowship guidelines and in happy conformity with the reviewer’s checklist. Which one gets the nod?

In drafting your proposal, find the sponsor’s guidelines on the web; copy and paste them into a blank document. Some pdf files can be copied by clicking on the T (for text tool) and then right-clicking on the page.

Let’s try this technique with the Social, Behavioral, and Economic Research Fund guidelines (see www.wfu.edu/RSP/ssrif.html).

PROJECT DESCRIPTION

A. Objectives: (one page)

1. What the research will accomplish
2. Hypothesis
3. Rationale

B. Background and Significance: (one page)

1. Most pertinent previous work
2. Current state of the field
3. Preliminary data
4. Gaps that the proposed project fills

You get the idea: fill in the blanks. Your task and, more important, that of the reviewer are simplified. Your request becomes transparent, even if your project's ideas are rather tricky.

BECOMING A REVIEWER: WHY AND HOW

Faculty seeking external support often wonder how to pinpoint the perfect panel or study section and gain an inside line on its sometimes unstated priorities and procedures. While reading the abstracts of funded proposals is helpful, not all agencies make them available.

We suggest that you go *inside* by volunteering to review proposals for the programs in which you may be interested and for the journals that you read. It's simple - just send your CV with a cover letter to the program officer or editor. At the NEH, for example, see www.neh.gov/grants/index.html and click on *How do I become a panelist or peer reviewer?* At NIH, go to grants1.nih.gov/grants/peer/peer.htm for information on the peer review process and links to review group rosters. For further assistance, contact Julie Edelson at edelsojb@wfu.edu.

WFU FUNDED RESEARCH

July - October 2003

ANTHROPOLOGY

Kenneth Robinson

- *Shackleford Borrow Pit, Wilson County, NC*, PLT Construction Co., \$6,994.13
- *Hickory Creek Sewer Pipeline, Cleveland County, NC*, Odom and Associates, \$5,501

BIOLOGY

Miriam Ashley-Ross, *From Water to Land: Salamanders as a Model for Understanding the Evolution of Tetrapod Locomotion*, NSF, \$69,920

Jim Curran, with **Rebecca Alexander**, Chemistry, *Research Infrastructure in Minority Institutions (RIMI)*, NIH, WSSU Subcontract, \$16,225

CHEMISTRY

Rebecca Alexander, with **Jim Curran**, Biology, *Research Infrastructure in Minority Institutions (RIMI)*, NIH, WSSU Subcontract, \$16,225

Abdessadek Lachgar, *Inter-American Materials Collaboration: Hybrid Inorganic-Organic Materials*, NSF, \$61,000

COMMUNICATION

Mary M. Dalton, documentary film on Seagrove folk potter Crystal King, North Carolina Arts Council, \$2,500

COMPUTER SCIENCE

Errin Fulp, *Firewall Architectures for High-Speed Networks*, Department of Energy, \$48,532

COMPUTER SCIENCE AND MATHEMATICS

Robert Plemmons

- *Innovative Computational Methods for Inverse Problems in Optical and SAR Imaging*, ARO Supplement, \$43,443
- *Enhancement of Research and Development*, ARO Supplement, \$50,000
- *Enhancement of Research and Development*, ARO Supplement, \$736,022

GRADUATE SCHOOL

Gordon Melson, Graduate Research Fellowship Program, NSF, \$38,000

HEALTH AND EXERCISE SCIENCE

Michael Berry

- *Exercise and Regional Fat Metabolism After Menopause*, NIH, \$9,699
- *Claude D. Pepper Older Americans Independence Centers*, NIH, \$10,564
- *Exercise and Disability in COPD Patients*, NIH, \$707,474

Paul Ribisl, *Look Ahead*, NIH, \$110,732

PHYSICS

Martin Guthold, *Novel Single Molecule Aptamer Selection Method*, NIH/NCI, \$64,311

UNIVERSITY POLICE

Ken Overholt, Victim Services, Governor's Crime Commission, \$57,123

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News

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