

OFFICE of RESEARCH and SPONSORED PROGRAMS

October 2010

RECORD YEAR FOR NEW RESEARCH AWARDS AND SECOND SET OF CENTER PROPOSALS AWARDED

The 2009/2010 academic year at Wake Forest University was remarkable for research and creative work in a number of ways. The Reynolda campus surpassed 10 million in new dollars awarded for research for the first time in its history. In part fueled by a \$3.6 million award for the Character Project to Christian Miller, Will Fleeson, and Mike Furr, the final tally for new dollars awarded was over 14.3 million. In another first, five university faculty members received 6 new awards from the National Endowment for the Humanities. The university has never before received more than one NEH award in a year. These awardees were all recognized at a reception at the President's House in late September. Office of Research and Sponsored Programs staff were also recognized at this event, particularly since their extra work enabled this increase in awards.

In fall 2007, Vice-Provost Mark Welker and the Office of Research and Sponsored Programs held a research retreat to spark development of interdisciplinary collaborative centers. Successful centers enable faculty and students across disciplines, departments, and schools to coalesce their expertise and widen the scope of their research. Centers build a university's reputation and attract funding, new partnerships, and new faculty.

In fall 2009, the first two centers funded under this initiative started their work: the **Translational Science** Center (http://ctsfh.wfu.edu/) and the Center for Bioethics, Health, and Society (http://bioethics.wfu.edu/).

In fall 2010, three new centers and one new center planning group are also receiving their first funding. **The**

Center for Energy, Environment, and Sustainability will start under the direction of Miles Silman in Biology. It will help to catalyze new work in energy technologies and environmental science, while influencing law and policy in these areas. The Center for Enterprise Research and **Education**, under the direction of Ajay Patel, Schools of Business, will conduct research in culturally appropriate training for sustainable micro-enterprise in international settings. Its first project is under way in Nicaragua. The Center for Molecular Communication and Cell **Signaling**, directed by Gloria Muday, Biology, is already helping Wake Forest University develop one of the best cell imaging facilities in the southeast. This group will help modeling and experimental studies of cell-to-cell signaling in many areas, including plant biology, neuroscience, and nutrition. In addition to these three new 5-year center grants, one new center planning grant in Performance and the **Liberal Arts** was awarded to a group of faculty led by Cindy Gendrich in Theatre and Dance. Wake Forest also announced the formation of a Humanities Institute at a reception on October 1. The faculty who serve on an advisory board for this effort are Mary Foskett (Religion), David Phillips (Humanities), Dean Franco (English) and Sally Barbour (Romance Languages).

In 2011-2012, the Provost's Office will again award one-year planning grants of up to \$50K to develop a 5-year operational plan for a new center. It will also receive proposals to implement new centers over the next five years. The Request For Proposals will be issued before January 2011, with proposals due in late spring 2011. See www.wfu.edu/rsp/funding.html.



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DIANE SAMUEL JOINS ORSP

In August, the Office of Research and Sponsored Programs was delighted to gain the expertise of Diane Samuel as Associate Director. Diane prepares and negotiates contracts and subcontracts and provides research administrative support to the Departments of Computer Science and Health and Exercise Science in preparing and submitting proposals. She also acts as primary backup for the IRB Associate Director and ORSP Director.

Originally from Nebraska, Diane received a BA in Business Administration from the University of Nebraska-Lincoln. In 2004, she received her MA in Government from New Mexico State University (NMSU), Las Cruces.

In August 2002, she began her career in research administration in the NMSU College of Agriculture. A year later, she transferred to the university's central research administration office, where she served as Assistant Director, supervising staff and performing pre- and postaward functions for faculty and staff in the Colleges of Agriculture, Engineering, Arts & Sciences, Education, and various departments and units that did not fall under one of the main colleges. In 2007, she became Contracting Officer for NMSU's Physical Science Laboratory in addition to her other duties. She was NMSU's institutional representative in the Federal Demonstration Partnership.

Diane brings her varied skill-set, professional knowledge and experience, energy, and charm to our office, and we are proud to introduce her to the wider community.

NSF GRADUATE RESEARCH FELLOWSHIPS SUPPORT THE BEST AND BRIGHTEST

In 2009, the Physics Department's Eric Peterson was awarded a prestigious National Science Foundation Graduate Research Fellowship. The program provides 3 years' support to entering or first-year students who have demonstrated their potential for significant achievements in science research. Working in Professor David Carroll's laboratory, Mr. Peterson studies the use of inorganic nanoparticles and metallic nanorods as optical antenna to enhance the performance of organic solar cells.

Deadlines are quickly approaching: November 15, Interdisciplinary Fields of Study; November 18, Chemistry, Computer and Information Science and Engineering, Mathematical Sciences, Physics and Astronomy; November 19, Psychology, Social Sciences; November 22, Life Sciences. See http://www.nsf.gov/pubs/2010/nsf10604/nsf10604.htm for details.

ONE WINDOW SHUTS; ANOTHER STAYS OPEN

The National Institutes of Health (NIH) is eliminating the postdeadline error-correction window. Implemented in December 2005 to ease the transition from paper, it allowed applicants to correct errors or insert missing elements identified by the NIH warning system *after submission*. However, from 25 January 2011, all applications submitted after 5 P.M., applicant's time, on the due date will be subject to the NIH late policy and may not be accepted for review (see NOT-OD-10-123).

Note that the *predeadline viewing window* remains open! For 2 business days following receipt of an error-free application *prior to deadline*, investigators can view the assembled image (just as reviewers will see it), reject it, and submit a corrected application. PIs are strongly encouraged to take advantage of this opportunity by submitting early.

NIH will continue to accommodate for system problems that threaten or prevent on-time submission of an individual application, if appropriately documented and verified by NIH support staff, and widespread system problems, severe weather, or disasters that close institutions.

The eSubmission team looked at ~45,000 applications to identify common errors. Over 700 times, budget end dates occurred before start dates, but more frequent errors stemmed from checking the wrong boxes on the cover form; not including all the required attachments; and inattention to formatting guidelines, especially page limits, and special instructions noted in the announcement. To prepare for the elimination of the postdeadline window, the team is:

- specifying actions needed to address warnings/errors;
- downgrading errors to warnings if missing information is not critical for processing or review; and
- clarifying special requirements in announcements.

Two common questions about rejecting applications:

- Who has the authority to reject an application? Institutional Signing Officials can reject it within the viewing window. PIs will be notified when the action has taken place.
- Should I reject my application before submitting a changed/corrected application? Yes, it is safer. If you change, say, the project title and submit a changed/corrected application without first rejecting the previous one, then 2, basically duplicate applications move forward to NIH staff once their viewing windows elapse. It is simpler to reject an application up front than to officially withdraw a duplicate application later.

OUTSTANDING PROJECT PROFILE: CHARACTER STUDY

Christian Miller, Zachary T. Smith Faculty Fellow and Associate Professor of Philosophy, leads the team awarded \$3.67 million over 3 years by the John Templeton Foundation (http://www.templeton.org) to conduct the Character Project (http://www.thecharacterproject.com). Psychology Co-Directors are Professor William Fleeson and Associate Professor R. Michael Furr, McCulloch Faculty Fellow. Angela Knobel, Assistant Professor of Philosophy at the Catholic University of America, is Theology Director; Business Manager Joshua Seachris, who administered the Templeton Research Fellows Program at Oxford University from May 2009 to August 2010, will secure his PhD in philosophy from the University of Oklahoma in December 2010. The psychology initiative is supported by Program Coordinator Kathleen McKee and postdoctoral researcher Eranda Jayawickreme.

The project will conduct an array of ambitious intra- and extramural activities to deepen our understanding of character. Dr. Miller will write A New Theory of Character, developing a conceptually coherent framework supported by empirical research in social and personality psychology. Drs. Fleeson and Furr will investigate the consistency of character; its internal causal structure; its relationship to normal personality; the role of virtue in knowledge of ourselves and others; and the role of emulation in virtuous behavior. The directors, postdoctoral fellows, and graduate and undergraduate students involved in the research will meet biweekly over the term of the award to plan, implement, read, and discuss their work.

Three "New Frontiers" funding competitions on the existence and nature of character and the relationship between character traits and beliefs, desires, identities, emotions, behavior, and situations extend the enterprise, prioritizing junior faculty investigators:

- 6-10 awards ranging from \$50K-200K for up to 2 years for psychological research;
- 5-6 awards ranging from \$40K-100K for up to 1 year for philosophical work; and
- 3-4 awards ranging from \$40K-100K for up to 1 year for work in theology.

The request for proposals (RFP) for the first is linked to the website; RFPs for the others will follow in spring 2011.

Conferences begin with an *Initial Research Workshop*, 2 days in June 2012 when the 6-10 Psychology of Character awardees will discuss their preliminary results; PIs in the other areas will be required to attend; and other participants will include the external referees of the research grant competition; the Project Leader, Directors, and staff;

WFU faculty and students; and other interested scholars.

A 2-week summer seminar at WFU in June 2013 will address "Character: New Perspectives and Empirical Discoveries." Dr. Miller will convene 15 graduate students and pretenure faculty from any field of study to discuss recent work in the psychology of character and its relevance to philosophical and theological thinking about human behavior to advance their future research and teaching. Attendees will be chosen based on demonstrated interest and promise of productivity. Each will receive a stipend plus travel and lodging costs.

Timed to begin at the end of the seminar, a 3-day Final Research Colloquium in June 2013 will present "Conclusions about Character: Results from Psychology, Philosophy, and Theology." The PIs of all 14-20 funded projects will speak before external referees; the Project Leader, Directors, and staff; the 15 participants in the Summer Character Seminar; the 9 Character Essay Prize winners; WFU faculty and students; and other interested academics. The colloquium will provide feedback, suggest avenues for future research, and disseminate results. All PIs will submit a chapter-length summary of their central findings for 2 edited volumes.

In addition, 9 essays on the psychology, philosophy, and theology of character, accessible to nonacademic audiences, will be awarded \$3K. They must be published or forthcoming in a popular publication with a circulation of at least 12,000 between June 2010 and May 2013, with special consideration to those that discuss research connected to the Character Project. These awards will be presented at a banquet on the last evening of the Final Research Colloquium.

The Character Project reflects Wake Forest's crossdisciplinary expertise and interest in such challenging questions as:

- Do character traits such as honesty and compassion exist?
- If so, how prevalent are they, and how are they related to our underlying psychology?
- Should ethical theory be based on virtuous character traits?
- How can we improve our character and overcome our flaws?
- Should thinking about human and divine character be central to theological ethics?

These investigations will provide substance and direction to our efforts *for humanity*.

NEW NSF GRANT PROPOSAL GUIDE, JANUARY 2011

The National Science Foundation is implementing a new Grant Proposal Guide in January 2011 (http://www.nsf.gov/pubs/policydocs/pappguide/nsf11001/gpg_index.jsp). Changes include:

Cover Sheet replaces Performing/Research Organization with Project/Performance Site Primary Location information. If the project will be performed somewhere other than Wake Forest, additional geographic information must be provided.

Supplementary documentation now makes clear that a mentoring plan is not required for postdoctoral researchers listed as Senior Personnel in the budget. In addition, all proposals must describe plans for data management and sharing of research products or explain the lack of need. FastLane will not permit submission of a proposal missing a Data Management Plan, which is reviewed as intellectual merit or broader impacts or both.

Inclusion of voluntary cost sharing is prohibited, although awardees remain subject to the OMB A-21 memo regarding committing and tracking faculty effort. All organizational resources necessary to the project must be described in the Facilities, Equipment, and Other Resources section in narrative form and must not include any quantifiable financial information.

Failure to submit all required sections of the proposal may result in return without review.

Project Summary now encourages use of separate headings for the merit review criteria.

All components of collaborative proposals must meet deadline or risk return without review.

Revised Budgets must now be submitted via the FastLane Revised Proposal Budget Module, not Proposal File Update Modules.

Review information is provided to PIs solely to improve research methods and future submissions.

Renewal proposals must be developed as if the applicant were applying for the first time, and all expiring awards should compete again.

COLOR ME CAUTIOUS

from Grantseeker Tips 288 (8 June 2010)

Based on the capabilities enabled by electronic proposal submission:

- Should you use color figures and photographs?
- Should you use sound or video clips?
- Should you link to supporting websites?

NSF says...

Color. For cost and technical reasons, NSF cannot reproduce proposals in color. PIs who want to include graphics whose interpretation depends on color must submit the required number of copies of the entire paper proposal, including the Cover Sheet, in addition to the FastLane submission. However, since many NSF proposals are electronically reviewed, PIs are strongly encouraged to contact the Program Officer, who is responsible for reviewing the color materials and determining whether or not to send paper copies out for review.

Links. You can include them, but reviewers are not required to consult them.

NIH says...

Graphics. Many applicants don't know that most study section members receive black-and-white photocopies of the proposal. However, assigned reviewers receive originals of the appendices (why 5 copies are requested) and usually copies of the original proposal. If you need color to make your point, place a copy of the item in an appendix and note it in the text.

Education Department says...

Color. No. **Links.** Applicants are advised that the research narrative must be self-contained, and reviewers are under no obligation to view URLs.

NEH says...

Although generally silent on the topic, one program, NEH Fellowships for Advanced Social Science Research on Japan, allows sample visual materials as a 1-page pdf, not .jpg or other common graphic formats.

Bottom line: Talk to the Program Officer. In general, why use anything other than gray scale when you don't know whether reviewers or agencies will use color printers? Further, consider document size and uploading. It may take several tries to get some very basic figures to look normal after being uploaded in grants.gov, although they look fine in the original pdf. Carefully key figures, graphs, schematics, and the occasional photo to the narrative, and don't rely on them as a substitute for clear, concise writing.

INSTITUTIONAL REVIEW BOARD

Since Wake Forest began using the electronic Institutional Review Board system, eIRB, 3 years ago, ~500 applications have been successfully submitted. While new users may find the learning curve steep, the advantages for researchers, research participants, and the institution are clear. In a continuing effort to promote human subjects protection and regulatory compliance, let's review the process from research idea to closure of an IRB-approved study.

Determine whether your project needs review. If your research involves people, it may qualify as human subjects research, which must be approved by the IRB. Publication of results is not a valid criterion for deciding if the activity is research or requires IRB approval. Please consult Office of Human Research Protections decision charts (http://www.hhs.gov/ohrp/humansubjects/guidance/decisioncharts.htm#c1) and Pam Moser to confirm whether or not your project needs IRB approval.

Complete the required education modules (CITI). This self-paced online tutorial takes 4-6 hours; certification is good for 5 years. When registering, be sure to choose WFU (not WFUHS) as your affiliation and the Human Subjects Research curricula (not Responsible Conduct of Research). Most modules have quizzes, and you must score 80% to pass. To register, go to http://www.citiprogram.org. If you completed a CITI course in human subjects research at another institution, please contact Pam Moser.

Obtain an eIRB account. Once you have fulfilled the CITI requirement, you may request an eIRB account. Email irb@wfu.edu noting full name, WFU user id and ID card number, and department. Students provide the month and year of anticipated graduation. New users receive an automated email within 1 business day with instructions about changing their DEACNET password and logging in to eIRB (http://eirb.wfubmc.edu). Use Internet Explorer as your browser and, if off-campus, connect via VPN.

Prepare and submit an eIRB application. On the first page of a new application, select the research team from pick lists. Principal Investigators, student Co-PIs, Co-Investigators, and Study Coordinators can complete the application, but only the PI can submit it. Upon submission, notifications are automatically sent to all team members' WFU email addresses, prompting them to agree to participate. Each study team member must log in to eIRB, complete the brief conflicts of interest form, and upload a biosketch, CV, or resume. The application cannot progress until all team members electronically agree to participate.

Respond to the review process. After an initial administrative review, the application may be returned with *concerns*. If you adequately address them, the application will be sent

to a Board reviewer, who may have additional concerns that you must address. This part is like tennis—when the application is in your court, the IRB cannot interact with it, and when you return it, you cannot make any revisions until it is sent back to you. Progress can come to a screeching halt here. Do your best to address every concern, be consistent, and proofread carefully. If you don't understand a concern, contact Pam Moser. Every time your application is returned, it goes to the end of the queue. Board reviewers strive to be prompt, but they are faculty volunteers with a full-time job. Once the application is approved, and the IRB Chair signs the approval memo, it is active. Research determined to have *greater than minimal risk* must be reviewed by the full board at its regular monthly meeting.

Conduct your IRB-approved study. Your study must be conducted as approved; to make changes, you must submit an amendment (see below). The IRB approval memo is linked at the right side of the study workspace heading. The IRB-approved and watermarked informed consent document is found under the attachments tab; only this version should be photocopied for participants. The approved version of the protocol is also among the attachments.

Change and/or renew your study. If changes are needed, choose new amendment on the study workspace. Describe the rationale and types of changes: protocol, informed consent, team members, or other. An amendment can propose more than one change, but only one amendment can be in process at a time. In addition, IRB approval is for a specified period. Study team members receive email reminders 60 and 30 days prior to the expiration date and may choose new continuing review or close the study. Continuing review (CR) applications should be submitted at least 3 weeks before study expiration. Only IRB-requested changes can be made during this process; study team changes require an amendment before or after the CR process.

Close your study. If your study is completed or was never initiated, you should close it, especially if you or your students are leaving the university; your eIRB access depends on an active WFU email account (alumni accounts don't qualify). Choose Study Team Close on the left side of the workspace. Be sure to include the number of subjects actually enrolled. If you are still analyzing data, your final report must describe how any individually identifiable data was deidentified. You must state that the data cannot be directly or indirectly linked to individuals; for example, any ID numbers are not student ID or social security numbers and no key links coded data to individuals.

For more information, see www.wfu.edu/rsp/irb or contact Pam Moser at x5888 or irb@wfu.edu.

CIRCLES MAKE CENTERS

The week of 20 September, Dr. David Bauer worked with participants in the CRADLE and ExPERT programs and led several seminars open to all faculty. Two addressed related topics, Developing Teams and Quality Circles. These strategies are crucial to the thrust toward Centers and Institutes, which gather many talents to deliver the best possible projects for external sponsorship.

The late 20th century witnessed an irreversible change to the ivory-tower, lone-genius model of scholarship as well as sage-on-the-stage pedagogy. All disciplines now interact to deepen and enlarge the discourse whether it concerns cancer or Chekhov. Multidisciplinary projects share, not only expertise, but equipment, space, student assistance. They imply that several minds agree on the idea's feasibility and take responsibility for its realization. Individuals may play for exercise, but teams play to win.

You know that your project needs spectroscopy or knowledge of Old Norse, but what personal skills does it need? Begin by assessing your own skills: are you a Creator, Advancer, Refiner, Executor, or Flexer? Creators have a million ideas but may not be able to settle on any of them. Advancers recognize the value of an idea but may ignore barriers to successful implementation. Refiners are devil's advocates; they assure careful consideration but may lead the team away from high-risk, high-reward ideas. Executors spot potential pitfalls and minimize inefficiencies and errors but may lose sight of the goal and pursue irrelevant strategies. Flexers view team activities to see what is missing, moving the group toward its objectives and resolving conflicts, but other members, more strongly committed to a specific role, may not listen. Who do we send to talk to the Program Officer? The Advancer, who will convey our enthusiasm and pursue advice with questions. Who edits the grant proposal? The Refiner, but the Flexer gets the last

A winning grants team will balance these profile patterns and divide tasks by interest and skills: brainstorming; investigating sponsors, grantees, and reviewers; making preproposal contact; updating the literature search; refining project design; budgeting; and setting up a quality circle.

A quality circle is a group that you and your team convene as a mock study-section. First, you should have some knowledge of the actual review process. Will it be ad hoc, by a panel, or both? What expertise will be represented? Are reviewers trained? What is the review setting, and how much time is spent? What are the criteria? How are scores tabulated?

In forming your own circle, choose 4-5 people who reflect panel expertise. Include a good reader, unfamiliar with the field, for an overall impression. Assure they are comfortable but focused. With the invitation, provide information on the scoring system, type of application, and the program description. You may also send the proposal, but if it will be read in less than 30 minutes, it might be read aloud at the meeting to accurately model timeframe and conditions. If participants read it in advance, ask them to bring it and their scores for each section, with positive areas highlighted, and suggestions for the areas be improved. You may not attend and just receive these results. If present, you may not interrupt, but at the end of discussion, you may ask questions. You may open the meeting by providing information learned from preproposal contract, successful grantees, or past reviewers.

Facilitators are responsible for keeping the group on task and re-inforcing a constructive learning atmosphere. The role may rotate through the group. Reviewers first present their positive impressions then suggest areas for improvement, starting with the title: does it accurately describe the project? Is it dynamic or passive? They will grade the abstract and move through the sections of the proposal, first noting the good qualities and then the elements that don't seem to work as well. Common problems include participants who give their own opinions instead of assuming the role of the review panel; a tendency to emphasize the negative because we are trained as critics; time spent in an area may not equate with the points it's worth; and the authors may become defensive and discouraged. Firm facilitation can solve each.

Note that the quality circle is not entirely about the success of your proposal. It speaks to institutional climate: no proposal leaves Wake Forest University without preproposal contact and stringent review. Sponsor decisions consider both research environment and institutional commitment, and they are not just talking about keeping the lights on. You always have one team working for you: ORSP. All together now!

Compliance Hotline: Call 1-877-880-7888 or email www.tnwinc.com/Reportline/International/ to report suspected violations of laws, regulations, rules, policies, procedures, ethics, or other information anonymously. The operator, who is not a university employee, will report your concerns to the University Compliance Office.

THREE CENTERS AND AN INSTITUTE

Two years ago, the Vice-Provost initiated a competition to develop Centers and Institutes in areas of strength that would profit from cross-departmental infrastructure. The first competition created the Center for Bioethics, Health, and Society and the Translational Science Center. This year's awards established the Centers for Enterprise Research and Education; Energy, Environment, and Sustainability; and Molecular Communication; as well as the Humanities Institute.

The Center for Enterprise Research and Education (CERE) is directed by Ajay Patel, GMAC Chair in Finance of the Schools of Business; Anthropology Professor Jeanne Simonelli; Religion Professor Ulrike Wiethaus; and Elizabeth Gatewood, Visiting Professor of Entrepreneurship. It builds on WFU projects and training programs in Benin, Kenya, Uganda, Tanzania, Nicaragua, and the Chiapas region of Mexico to establish WFU as the leader in entrepreneurial research, practice, and education in developing countries. Its first task is to develop a comprehensive methodology to assess the needs of entrepreneurs and Small and Medium Enterprises (SMEs) for education and enterprise development programs and to determine the impact that culture, political systems, religion, environmental conditions and participant differences have on those needs. Its ultimate goal is to identify training and micro-enterprise development models that are appropriate and effective in different cultural settings.

The Center for Energy, Environment, and Sustainability (CEES) is directed by Miles R. Silman, Associate Professor of Biology; Richard Williams, Reynolds Professor of Physics; Daniel Fogel, Executive Professor of Strategy, Schools of Business; and William K. Smith, Charles H. Babcock Professor of Biology. The world needs the leadership and engagement of universities to remediate energy and environmental problems because they generate new knowledge and technology, gather deep and varied expertise, and train future leaders. In CEES, 60 faculty and staff across 16 departments and academic and administrative units coalesce in 3 areas of urgent concern: renewable energy research; biodiversity and ecosystem services; and policy, enterprise and ecosystem markets. It will conduct research and scholarly activities, education, and public engagement to generate new research teams and new ways of thinking.

The Center for Molecular Communication (CMC) is directed by Biology Professor Gloria Muday; Rebecca Alexander, Associate Professor of Chemistry and Co-Director of the Undergraduate Research & Creative Activities (URECA) Center; Mathematics Professor Edward Allen;

and Leslie Poole, Professor of Biochemistry and Director of the Center for Structural Biology. It teams investigators in the life, physical, computational, and mathematical sciences to tackle basic questions about molecular communication among and within the cells of living organisms ranging from insects to plants to humans. CMC will enhance opportunities to secure external funds for research and needed equipment by linking the College, Graduate School, and School of Medicine and building connections to Winston-Salem State University, North Carolina A & T State University, and Salem College. Members will share research, instrumentation, teaching, and mentoring resources to advance all areas of the university's mission, enhancing our national profile and attracting exciting new faculty and students.

The WFU Humanities Institute developed from a Center Planning Grant into an NEH Challenge Grant proposal, submitted in May. Associate Professor of Humanities David Phillips, Mary Foskett, Zachary T. Smith Associate Professor of Religion; Associate Professor of English Dean Franco; and Professor of Romance Languages Sally Barbour discovered in developing successful mechanisms to support collaborative, interdisciplinary humanities research and scholarship the benefits of an institute as permanent infrastructure for national visibility. Programming will include funding for faculty seminars, guest speakers, university symposia, seed grants for collaborative research, and the university- and community-based Winston-Salem Partners in the Humanities. A director will be named this fall and begin serving in January. A fall call for proposals will support new research and creative activities in the spring, and in March, a two-day symposium will feature Edward Ayers, who will give a keynote address on new directions in humanities research. Professor Ayers, President of the University of Richmond, is a historian who won the Bancroft Prize for In The Presence of Mine Enemies: War in the Heart of America, 1859-1863 (2004), and The Promise of the New South: Life after Reconstruction (1993) was a finalist for both the Pulitzer Prize and a National Book Award. National Professor of the Year in 2003, he helped to found the Virginia Center for Digital History and served as its director until 2001.

The intent of the centers program is to spark and sustain significant intellectual and practical innovations that require expertise and energy from disparate sources. Centers should build Wake Forest's reputation for spirited and imaginative engagement among faculty, students, and the wider community. Each of the initiatives described above builds on diligent collaborative planning to realize these aims.

NEW FACULTY BOOKS

March—September 2010

ART

Brunette, Peter. *Michael Haneke*. University of Illinois Press, 2010.

O'Neill, Morna, and Michael Hatt. Edwardian Sense: Art, Design, and Performance in Britain, 1901-1910. Yale University Press, 2010.

COMMUNICATION

Dalton, Mary. Hollywood Curriculum: Teachers in the Movies. 2nd rev. ed. Peter Lang, 2010.

Mitra, Ananda. *Digital Communications: From E-Mail to the Cyber Community*. Chelsea House, 2010.

——. Digital Games: Computers at Play. Chelsea House, 2010.

——. Digital Music: Computers that Make Music. Chelsea House, 2010.

——. Digital Research: Inventing with Computers. Chelsea House, 2010.

——. Digital Security: Cyber Terror and Cyber Security. Chelsea House, 2010.

———. Digital Video: Moving Images and Computers. Chelsea House, 2010.

Rogan, Randall, and Frederick Lanceley. Contemporary Theory, Research and Practice of Crisis and Hostage Negotiation. Hampton Press, 2010.

COUNSELING

Gladding, Samuel. *Counseling Dictionary*. 3rd ed. Prentice Hall, 2010.

———. Family Therapy: History, Theory, and Practice. 5th ed. Pearson, 2010.

Henderson, Donna, and Charles Thompson. *Counseling Children*. 8th ed. Brooks/Cole, 2010.

DIVINITY

Leonard, Bill. *The Challenge of Being Baptist*. Baylor University Press, 2010.

EAST ASIAN LANGUAGES AND CULTURES

Yaohua Shi, et al. *Integrated Chinese*, Level II, Part II, Character Workbook. 3rd ed. Cheng & Tsui, 2010.

——. Integrated Chinese, Level II, Part II, Textbook. 3rd ed. Cheng & Tsui, 2010.

ECONOMICS

McNeil, Mary. Demanding Good Governance: Lessons from Social Accountability Initiatives in Africa. Washington, DC: World Bank, 2010.

EDUCATION

Cunningham, Patricia, et al. Developing Readers and Writers in Content Areas. 6th ed. Allyn & Bacon, 2010.

ENGLISH

McNally, John. *Creative Writer's Survival Guide*. University of Iowa Press, 2010.

Wilson, Eric. *The Mercy of Eternity: A Memoir of Depression and Grace.* Chicago: Northwestern University Press, 2010.

HISTORY

O'Connell, Monique, et al. Rulers of Venice, 1332-1524: Governanti di Venezia, 1332-1524: Interpretations, Methods, Database. ACLS Humanities E-Book. http://htdl.handle.net/2027/heb.90021, 2009.

I AW

Green, Michael. Restatement Third, Torts: Liability for Physical and Emotional Harm. American Law Institute Publishers, 2010.

Nickles, Steve. Bankruptcy Code and Related Materials, 2010-2011. West, 2010.

Shapiro, Sidney, and Rena Steinzor. *The People's Agents and the Battle to Protect the American Public*. University of Chicago Press, 2010.

Wright, Ronald, and Marc Miller. *Criminal Procedures: Cases, Statutes, and Executive Materials (2010 Supplement)*. 3rd ed. Aspen Publishers, 2010.

LIBRARY

Pressley, Lauren. Wikis for Libraries. Neal-Schuman, 2010.

NEW FACULTY BOOKS

March—September 2010, continued

Smith, Susan Sharpless. Web-based Instruction: A Guide for Libraries. 3rd ed. American Library Association, 2010.

MUSIC

Borwick, Susan. And Ain't I a Woman! Treble Clef Music Press, 2009.

——. "Gloria" for SATB divisi, Handbells, and Organ, with Optional Children's Choir. MorningStar Music, 2010.

—. O Love that Wilt Not Let Me Go. MorningStar Music, 2009.

Locklair, Dan. *Music of Dan Locklair*. [Compact Disc] Loft Recordings, 2010.

PHILOSOPHY

Young, Julian. Friedrich Nietzsche. Cambridge University Press, 2010.

POLITICAL SCIENCE

DeVotta, Neil. *Understanding Contemporary India*. 2nd ed. Lynne Rienner, 2010.

Lee, Wei-chin. *Taiwan's Politics in the 21st Century: Changes and Challenges*. World Scientific Publishing Company, 2010.

PROVOST EMERITUS OFFICE

Wilson, Edwin Graves. *History of Wake Forest University*, 1967-1983. Vol. 5. Wake Forest University, 2010.

RELIGION

Neal, Lynn, and John Corrigan. *Religious Intolerance in America*. University of North Carolina Press, 2010.

Wiethaus, Ulrike. (Ed.) Seven Rites of the Lakota. Yonno Press, 2009.

ROMANCE LANGUAGES

Morosini, Roberta. Boccaccio Geografo. Polistampa, 2010.

SOCIOLOGY

Hattery, Angela. *Prisoner Reentry and Social Capital*. Lexington Books, 2010.

STUDENT LIFE

Zick, Kenneth. West to Donegal Bay: A Novel of Irish Islands. BookSurge, 2010.

FUNDED FACULTY RESEARCH

April—September 2010

ANTHROPOLOGY

Kenneth Robinson

- Archeological Investigation, Salisbury Town Well, Historic Salisbury Foundation, \$1,695
- Reconnaissance Survey, Muster Ground, Abingdon, VA, Town of Abingdon, \$14,933

Stephen Whittington, Samurai and Kimonos: Japanese Culture, Center for Global Partnership/Japan Foundation, \$2,350

BIOLOGY

William Conner, Acoustic Aposematism, Mimicry, and Sonar Jamming in the Bat-Moth Arms Race, National Science Foundation (NSF), \$120,000

Susan Fahrbach, Role of Nuclear Receptors in Neural Plasticity, NSF, \$140,000

Anita McCauley, Acquisition of Accessories to Upgrade a Confocal Microscope, NSF, \$258,251

Gloria Muday

- with Jacquelyn Fetrow, COMPUTER SCIENCE AND PHYSICS, Arabidopsis 2010 Project Collaborative Research: Modeling Biological Networks in Arabidopsis through Integration of Genomic, Proteomic, and Metabolomic Data, NSF, \$272,450
- Teaching Plant Genetics with Tomatoes, American Society of Plant Biology, \$30,000

Wayne Silver, with Susan Fahrbach, *Undergraduate Neuroscience Training Cooperative between WFU and WSSU*, National Institutes of Health (NIH), \$199,168

William K. Smith, A Research Network for Sustaining Barrier Island Ecosystems in a Changing Global Environment, NSF, \$100,000

Cliff Zeyl, Collaborative Research: Genomics of Adaptation in an Experimental Yeast Population, NSF, \$185,159

CHEMISTRY

Ulrich Bierbach, Novel DNA-Metalating Hybrid Anticancer Agents, NIH, \$231,408

Christa Colyer, Affinity-based CE Studies to Facilitate Bioprobe Design and Microbe Detection, NSF, \$113,000

Lindsay Comstock, *Probing Biological Methylation through Co*factor Mimicry, North Carolina Biotechnology Center (NCBC), \$75,000

Patricia Dos Santos, Novel Strategies to Develop Antibiotics to Gram-positive Bacteria, NCBC, \$74,998

S. Bruce King

- Proteomic Profiling of Cancer-Related Redox Signaling Pathways, NIH/WFUHS, \$20,000
- with Daniel B. Kim-Shapiro, PHYSICS, Nitroxyl/ Nitric Oxide-Producing Reactions of Hydroxyurea and Related Compounds, \$330,126
- Development and Evaluation of Acyloxy Nitroso Compounds as Nitroxyl Donors, Cardioxyl Pharmaceuticals, Inc., \$42,805

Abdessadek Lachgar, Second US/Africa Summer School on Materials, European Office of Aerospace Research and Development, \$4,000

COMMUNICATION

Allan Louden, with Alessandra Beasley Von Burg, Benjamin Franklin Trans-Atlantic Fellows Summer Institute, US Department of State, \$214,500

Ananda Mitra, SPARC: Study to Prevent Alcohol-Related Consequences, NIH, \$11,772

COMPUTER SCIENCE

Jacquelyn Fetrow, also PHYSICS

- Computational Modeling of Dendritic Cell Maturation, NIH/WFUHS, \$84,112
- Analysis of Redox Modulated Signaling Networks in Response to Ionizing Radiation, NIH/WFUHS, \$45,968
- Integrin Function in Cartilage, NIH/WFUHS, \$8,590

Errin Fulp, Information and Infrastructure Initiative (14), US Department of Energy, \$23,882

FUNDED FACULTY RESEARCH

April—September 2010, continued

Victor Pauca, with Robert Plemmons, Challenging Ocular Image Recognition (COIR), Intelligence Advanced Research Projects Activity/Carnegie Mellon University, \$193,015

Robert Plemmons, also **MATHEMATICS**, Novel Imaging Tools for Improved Space Object Identification, Air Force Office of Scientific Research (AFOSR), \$10,084

William Turkett, with Errin Fulp, NeTS: Small: RUI: Motifdriven Function and Association Discovery in Computer Networks to Support Management, NSF, \$359,968

GRADUATE SCHOOL OF ARTS AND SCIENCES

Lorna Moore, Graduate Research Fellowship Program, NSF, \$81,000

HEALTH AND EXERCISE SCIENCE

Michael Berry, Standardized Rehabilitation for ICU Patients with Acute Respiratory Failure, NIH/WFUHS, \$94,553

Anthony P. Marsh

- Co-Core Leader for Clinical Research in the Pepper Center, NIH/WFUHS, \$12,057
- Demo II: Loss of Adipose Tissue and Physical Function Responses to Exercise, NIH/WFUHS, \$100,891

Stephen Messier

- with Garry Miller and Shannon Mihalko, Intensive Dietary Restriction with Exercise in Arthritis, NIH, \$588,938
- with Shannon Mihalko, Toward Reduction of Knee Injuries in the Military (TRAILS), Army Research Office (ARO), \$598,844

Gary Miller, Intentional Weight Reduction and Physical and Cognitive Function, NIH/WFUHS, \$16,297

Walter J. Rejeski

- Co-Core Leader for Clinical Research in the Pepper Center, NIH/WFUHS, \$21,455
- Intervening on Spontaneous Physical Activity to Prevent Weight Regain in Women, NIH/WFUHS, \$57,983
- Longitudinal Methods for Complex Interactions in Elderly Populations, NIH/WFUHS, \$17, 228

LIBRARY

Susan Smith, Biblical Recorder Digitization Outsourcing Project, State Library of North Carolina, \$75,000

Lynn Sutton, Single Threads Unbraided: A Celebration of the Work of A.R. Ammons, North Carolina Humanities Council, \$7,690

MATHEMATICS

Jennifer Erway, Second-Order Methods for Large-Scale Optimization in Compressed Sensing, NSF, \$49,659

PHYSICS

David Carroll

- Nanotubes in Tumor Imaging and Therapy, NIH/WFUHS, \$22,500
- PureLux, PureLux, Inc., \$42,722

Oana Jurchescu, Low-cost Organic Electronics: Let Molecules Do the Work, Oak Ridge Associated Universities, \$5,000

Daniel B. Kim-Shapiro

- with S. Bruce King, **CHEMISTRY**, Effects of Nitric Oxide in Sickle Cell Blood, NIH, \$342,491
- A Multifunctional Blood Substitute (MBS) for Field Resuscitation of Polytrauma, ARO/University of Pittsburgh, \$15,000
- Enzymatic Activity of Myoglobin as a Nitrite Reductase that Regulates Hypoxic NO, NIH/University of Pittsburg, \$25,955
- Noncompetitive Supplemental Application for R37 HL58091, NIH, \$10,000

Freddie Salsbury, Targeting the MSH2-Dependent Apoptotic Pathway, NIH, \$322,924

Richard T. Williams, fs Laser Studies of Scintillation Processes and Materials, US Department of Energy/Regents of the University of California, \$50,256

FUNDED FACULTY RESEARCH

April-September 2010, continued

PHILOSOPHY

Christian Miller, with R. Michael Furr and William Fleeson, **PSYCHOLOGY**, *Character: New Fronts in Philosophy, Theology, and Psychology*, Templeton Foundation, \$3,676,273

POLITICAL SCIENCE

Sarah Lischer, Going Home to Fight? Explaining Refugee Return and Violence, International Peace Research Institute, Oslo, \$13,305

PSYCHOLOGY

William W. Fleeson, with R. Michael Furr, *Integrating Process and Structure in Borderline Personality Disorder*, NIH, \$311,841

R. Michael Furr, Binge Drinking: Individual Differences in the Capacity to Alter Drinking Patterns, NIH/University of Texas HSC at San Antonio, \$178,584

SCHOOLS OF BUSINESS

Andrea Seaton Kelton, with Ya-wen Yang, Effects of IT Capacity and IT Governance on Audit Quality, PricewaterhouseCoopers, \$10,000

SOCIOLOGY

Robin Simon, Comparative Analysis of the Impact of Children on Parents' Well-Being, NSF, \$29,393

THEATRE AND DANCE

Cynthia Gendrich, Enduring Question: Why Do People Laugh? National Endowment for the Humanities, \$24,800

Christina Tsoules Soriano, Effect of Modern Dance on Balance and Mobility in a Group of Adults with Early-to-Middle State Parkinson's Disease, Winston-Salem State University, \$3,700

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