

Research News

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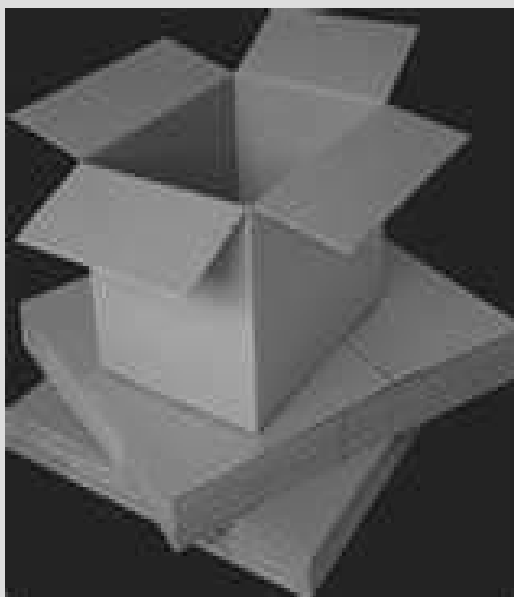
OFFICE of RESEARCH and SPONSORED PROGRAMS

April 2011

MOVING UP

During the summer, you will no longer find the Office of Research and Sponsored Programs on the first floor of Reynolda Hall. The week of Commencement, we will move temporarily to the Autumn Room on the second floor, while space on the third floor is renovated. It should be completed in early August.

Dedicated to faculty services, the new space will house ORSP, the Teaching and Learning Center, the Professional Development Center, the Humanities Institute, and the Institute for Public Engagement. It will have two small conference rooms and a new classroom. We also gain individual office spaces and a reception area. Although Julie Edelson will continue to work from home, you have only to email or phone her to secure her undivided attention or to schedule a meeting.



As a result of moving, the office may have to close at times.

More than ever, we need your cooperation in alerting us as soon as you know when you will be submitting a proposal, so we can accommodate you.

As in the past, ORSP will be closed on Monday, May 16, for Commencement.

ORSP began life in the basement of Reynolda Hall; now we're headed for the top.

CENTERS AND CENTER PLANNING GRANTS

Center and Center Planning Grant applications are due in the Provost's Office by 5 P.M. Friday, May 28. For more information, including guidelines, see: <http://www.wfu.edu/rsp/funding.html>.

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WAKE FOREST
UNIVERSITY

SUMMER SALARY

Salary for summer work on sponsored projects can be requested for May, June, July, and August. Faculty must complete and submit a Faculty Summer Research Salary Additional Compensation Pay Request form (<http://www.wfu.edu/hr/forms/index.html>) to Human Resources by May 16, June 16, July 15, and August 17. If you miss a deadline, your pay can be added to the next month's check. However, beginning this summer, the latest you can submit a request is September 16.

Faculty must certify their effort, so when allocating pay among the summer months, consider whether you reasonably expect to devote the projected level of effort. For example, if you will finish your university-funded, 9-month appointment by Friday, May 6, you may work on a sponsored project from the following Monday, May 9, through Friday, August 26. This period encompasses approximately 16 weeks or 77 days of possible work. The average work month has 22 days, so 3 months of work comprise 66 days. You could take up to 11 days of vacation during that period and still certify 3 total months of effort.

Please remember that pay should match effort. If you are going to take a week of vacation in a month or spend a week on your teaching duties, then do not request more than 75 percent summer salary in that month.

CONGRESSIONAL DISTRICT

The correct congressional district for the Reynolda Campus is the 12th. Please be sure that all proposals requiring identification of a congressional district show NC-012. The medical school is in the 5th district.

REQUIREMENT FOR POSTDOCTORAL FELLOWS WITH MEASURABLE EFFORT ON NIH-FUNDED PROJECT REPORTS

Postdoctoral fellows being paid for 1 month or more from an NIH grant should contact ORSP to get an eRA Commons ID. Faculty are asked to advise their postdocs of this [requirement](#).

COGNOS REPORTS

Faculty with external funding are encouraged to review their monthly financial reports regularly. If you do not have access to these reports, please call ORSP, and we will have them printed for you.

We also urge you to check salary reports at least once a semester to make sure that all of your staff and students' pay is being charged to the appropriate projects. If you discover any discrepancies, please contact Human Resources. Checking salary reports throughout the semester helps to ensure that effort reports will be correct when they are printed at the end of the semester.

OPEN ACCESS

Z. Smith Reynolds scholarly communication librarian Molly Keener published, with Cathy Sarli, scholarly communications specialist at Washington University School of Medicine's Becker Medical Library, "[Public Access Support Programs at Libraries: A Roadmap for Success](#)" in *College and Research Libraries News*. It discusses ways that libraries can assist authors, who, since 2008, have been required to submit peer-reviewed manuscripts based on NIH-funded research to PubMed Central as soon as they are accepted for publication. Texts must be available in full within 12 months, and authors are also required to demonstrate compliance with this policy in NIH proposals, applications, and progress reports.

Recognizing the need for institutional awareness and guidance, libraries have implemented a wide range of services, such as education and training, personal consultation, websites, and third-party submission services. Some programs address other scholarly communication questions, including author rights, copyright, and publishing models.

Our library webpage, [Open Access: Transforming the Scholarly Publishing Landscape](#), offers general guidance, including [NIH Public Access Policy Resources](#), information on authors' rights and copyright, and a mechanism for asking specific questions.

OUTSTANDING PROJECT PROFILE

Assistant Professor of Psychology Wayne Pratt has just won an Academic Research Enhancement Award (AREA) from the National Institutes of Health. The AREA program seeks to promote hands-on student participation in meritorious research and to strengthen the institution's research environment. Dr. Pratt's success caps a patient, thoughtful, determined effort that took strategic advantage of Wake Forest resources.

Meso-Accumbens Serotoenergic Involvement in Appetitive and Consummatory Behaviors will elucidate the functions of serotonin receptors in rat midbrain and ventral striatum motivational circuitry to gain new information essential for developing and refining pharmacological weight-control treatments. The project will also train and mentor promising undergraduate and Master's students in biomedical research. Dr. Pratt's students have consistently co-authored papers and presented results stemming from their research at the annual meeting of the Society for Neuroscience.

The World Health Organization now considers obesity one of the top five health concerns in developed nations. Over 65 percent of the US adult population is overweight, and 5-7 percent of annual medical expenditures, or over \$75 billion, are obesity-related. Obese individuals are at elevated risk for diabetes, hypertension, heart disease, stroke, and certain kinds of cancer. The causes of the recent epidemic are complex and include genetic predisposition, sedentary lifestyles, and the proliferation of highly palatable and calorically dense foods. A tendency to overeat helped our ancestors to survive regular famines but is dangerous with the ready availability of diets high in fat and sugar.

Many drugs that are effective at reducing food intake and treating obesity target serotonin tone in the central nervous system. Unfortunately, all have been withdrawn from the market due to increased cardiovascular risk. Recent work suggests that serotonin receptors in the hindbrain and the hypothalamic regions, which modulate food intake based on energy need, mediate some of these effects. However, eating based on the palatable properties of food is thought to be regulated by other brain regions; specifically, the



neural reward circuitry that also mediates the addictive properties of drugs. This project will test the hypothesis that serotonin receptors in the rat nucleus accumbens and ventral tegmentum regulate food consumption and food-seeking behaviors.

Dr. Pratt began his quest for external support by securing a CRADLE Fellowship in 2007. Working with Dr. David Bauer over the next two years to leverage preproposal contact and the quality circle, he secured two internal awards to acquire preliminary data: a grant from the Social, Behavioral, and Economic Science Research Fund, *Assessing the role of nucleus accumbens shell serotonin 2c, 6, and 7 receptors in hunger- and palatability-induced food intake and motivation of the rat*, and another from the Cross-Campus Collaborative Research Fund for *Assessing the involvement of striatal and hypothalamic CB1 receptors on food intake and gene expression in the rat*. Both projects resulted in peer-reviewed publications co-authored with Wake Forest undergraduate and MA students.

His first NIH submission was to a special American Recovery and Reinvestment Act competition that turned out to be more competitive than usual. When it didn't make the cut, he listened carefully to the critiques and his mentors in revising it. When the revision scored well, and the PO was confident it would be funded, but time dragged on, he readied another revision. Happily, the funding came through. Dr. Pratt is a fine example of both the teacher/scholar and imaginative persistence paying off.

MAKING TIME AND TALKING TO STRANGERS

NEW FACULTY ORIENTATION

Vice-Provost Mark Welker and the Office of Research and Sponsored Programs held their annual luncheon to apprise new faculty of resources in support of their creative and scholarly activities. The sharp end of the research enterprise—Director Lori Messer; Associate Director Diane Samuel; Pam Moser, Associate Director for Faculty Research Compliance and Support; Assistant Director Stephen Williams; Editor, Researcher Julie Edelson; and Research Services Coordinator Susan Edwards—pointed to the [ORSP website](#) for detailed information.

Director Andrea Ellis described the services of the [Professional Development Center](#), which provides and facilitates classes on a myriad of topics. Through the PDC, Melissa Clodfelter, the Divinity School's Director of Vocational Formation, offers her services as a leadership coach to help faculty maximize their potential, and Tomma Guastaferrro, Operations and Marketing Specialist, can assist in coordinating, implementing, and publicizing special projects, such as workshops or symposia.

The [Teaching and Learning Center](#) under Managing Director Catherine Ross is another resource. It creates opportunities, such as reading groups, workshops, and walks, to share expertise, innovations, and the challenges of teaching in and across disciplines. It also offers confidential consultation at an instructor's request. It runs competitions for Course Development Grants and the Faculty Teaching Initiative Fund.

Two recently tenured faculty spoke on their success strategies. **Adam Friedman, Education**, acknowledged the challenge of Wake Forest's unique mix of high-level teaching and research. Colleagues at other institutions may teach more or submit more grants, but our teacher/scholar ideal makes demands in both areas.



His advice? First, set aside two hours a day for research and writing. On less inspired days, fill out your Institutional Review Board (IRB) application or Skype with colleagues, but protect this time from answering emails or grading tests. Second, submit your manuscripts to the top journals early. Even if you don't get published immediately, you will gain invaluable feedback.

Third, take advantage of Wake Forest resources. ORSP is knowledgeable and responsive. Adam described its CRADLE program as boot camp; consultant Dave Bauer is a great teacher who drives your natural discipline along optimal pathways, especially preproposal contact. Fourth, go to conferences, introduce yourself, and establish collaborations and relationships you can draw on for feedback.



Monique O'Connell, History, referenced but did not recommend a film called *Tenure*. According to the Netflix blurb: "Despite his outstanding intellect"—and his title—"associate professor Charlie Thurber . . . has never received university tenure. . . . But a beautiful new teacher"—said to be "running unopposed for tenure"—"shakes up Charlie's plans." Monique noted the naïve public perception of academic pursuits.

Monique suggests that even 15 minutes a day of “iron concentration” on writing is a crucial habit. A full paper will more likely grow from paragraphs than a blank page. She feels you can overdo class preparation; if a question arises for which you don’t have the answer, you can look it up and report later. Fifteen minutes dedicated to writing has the bigger pay-off.

Her second suggestion concerns colleagues. Again, the Harvard study found that the most satisfied students sought detailed feedback. Students who studied alone but discussed the material in groups even once a week grasped it better and felt more engaged. Monique participates in a multidisciplinary reading club. Members read aloud their problem paragraphs for feedback and to discuss specific research questions. Remember that grant and journal reviewers are not always experts in your field, and the oblique or broad perspective can be both fruitful and refreshing. However, when a certain area of expertise was not well represented on campus, Monique constructed a Skype group to support discussion and collaboration.

The clear conclusion? Let ORSP, PDC, and TLC provide opportunities for collaboration and consultation and help you save time.

HEWAMANNE WINS NHC FELLOWSHIP

Assistant Professor of Anthropology Sandya Hewamanne has been awarded a prestigious National Humanities Center residential fellowship. Located in the Research Triangle Park, the center supports the best work in every area of humanistic investigation. Forty fellows are chosen in an annual competition that typically draws more than 500 applications.

Dr. Hewamanne will write a book analyzing how Sri Lanka’s Free Trade Zone workers negotiate competing local values and global cultural flows to forge new identities upon their return to their native villages. Since 2003, she has conducted ethnographic research in 41 former workers’ village homes to determine how they use the new sense of self and political consciousness acquired in the FTZ. The book will add a crucial missing piece to studies of globalization’s effect on communities, extending studies on how identities form and shift, and contributing to the body of knowledge on agency, resistance, NGO politics, transnational networks, sexuality, and empowerment.

FACULTY BOOKS October 2010—February 2011

ART

David Faber, and Daniel Mendelowitz. *A Guide to Drawing*, 8th ed. Wadsworth Publishing, 2011.

Morna O’Neill. *Walter Crane: The Arts and Crafts, Painting, and Politics, 1875-1890*. Yale University Press, 2010.

BUSINESS

George Kaufman, and Robert Bliss, eds. *Financial Institutions and Markets: The Financial Crisis—An Early Retrospective*. Palgrave Macmillan, 2010.

Samuel J. Mantel, , Jack R. Meredith, Scott M. Shafer, and Margaret M. Sutton. *Project Management in Practice*, 4th ed. Wiley, 2010.

James McGuigan, Charles Moyer, and Frederick Harris. *Managerial Economics: Applications, Strategy and Tactics*, 12th ed. South-Western College Publishers, 2010.

James Reeve, Carl S. Warren, and Jonathan Duchac. *Accounting Using Excel for Success*. South-Western College Publishers, 2010.

Carl Warren, James Reeve, and Jonathan Duchac. *Accounting*, 24th ed. Cengage Learning, 2011.

COMMUNICATION

Allan Loudon. *Navigating Opportunity: Policy Debate in the 21st Century*. International Debate Education Association, 2010.

Ananda Mitra. *Alien Technology: Coping with Modern Mysteries*. Sage, 2010.

DIVINITY

B. Diane Lipsett. *Desiring Conversion: Hermas, Thecla, Ase-meth*. Oxford University Press, 2010.

ENGLISH

Jefferson Holdridge, ed. *The Wake Forest Series of Irish Poetry*, vol. 2. Wake Forest University Press, 2010.

Scott Klein, ed. *Tarr*, by Wyndham Lewis (Oxford World’s Classics). Oxford University Press, 2010.

HISTORY

Susan Rupp, et al. *Everyday Life in Russian History: Quotidian Studies in Honor of Daniel Kaiser*. Slavica Publications, 2010.

LAW

Marion Benfield, and Michael Greenfield. *Sales: Cases and Materials*, 6th ed. Foundation Press, 2011.

Michael Curtis, J. Wilson Parker, et al. *Constitutional Law in Context*, vols. 1 & 2, 3rd ed. Carolina Academic Press, 2010-2011.

Michael D. Green, et al. *Toxic and Environmental Torts: Cases and Materials*. West Law, 2010.

POLITICAL SCIENCE

Ben Eggleston, Dale Miller, and David Weinstein, eds. *John Stuart Mill and the Art of Life*. Oxford University Press, 2010.

SOCIOLOGY

Angela Hattery, and Earl Smith. *Prisoner Reentry and Social Capital: The Long Road to Reintegration*. Lexington Books, 2010.

Ian Taplin. *The Modern American Wine Industry: Market Formation and Growth in North Carolina*. Studies in Business History, no. 1. Pickering & Chatto Publishers, 2011.

THEATRE

J.K. Curry, ed. *The Prop's the Thing: Stage Properties Reconsidered*. Theatre Symposium, vol. 18. University of Alabama Press, 2010.

FUNDED FACULTY RESEARCH October 2010—February 2011

ANTHROPOLOGY

Sandya Hewamanne, National Humanities Center Fellowship

BIOLOGY

David J. Anderson, *LTREB: Evolutionary Ecology of Seabird Reproductive Life Histories*, National Science Foundation (NSF), \$180,000

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

William Kirby Smith, *CBIN: A Research Network for Sustaining Barrier Island Ecosystems in a Changing Global Environment*, NSF, \$100,000

CENTER FOR ENERGY, ENVIRONMENT & SUSTAINABILITY

Abdessadek Lachgar, *Acquisition of a Powder X-ray Diffractometer for Research and Education at Wake*, NSF, \$362,054

Miles Silman, *Field Laboratory for Integrated Ecosystem Service Science in Upper Amazonian Peru*, Gordon and Betty Moore Foundation, \$238,513

CHEMISTRY

Patricia Dos Santos, *Targeting Bacillithiol and Thiol-based Redox Homeostasis in Bacillus anthracis*, North Carolina Biotechnology Center (NCBC)/Wake Forest University Health Sciences (WFUHS), \$13,010

COMPUTER SCIENCE

Errin Fulp

- *Modeling Mobile Agent Populations and Movement for GENI*, US Department of Energy (DOE)/Battelle Memorial Institute, \$9,487
- with Kenneth Berenhaut, Mathematics, *Modeling Mobile Agent Populations and Movement for CEDS*, DOE/Battelle Memorial Institute, \$190,147
- *DigitalAnts in Heterogeneous Enclaves*, DOE/Battelle Memorial Institute, \$10,000
- *Beyond Snorting: Extending Malicious Activity Detection with SVMs*, DOE/Lawrence Livermore National Laboratory, \$33,662

Victor Paúl Pauca

- *Implicit Geometry and Linear and Nonlinear Tensor-Based Compression and Restructuring of High-Dimensional Multimodality Data Sets*, US Department of Defense (DOD)/Boeing Company, \$69,449
- with Robert J. Plemmons, Computer Science and Mathematics, *Challenging Ocular Image Recognition (COIR)*, Intelligence Advanced Research Projects Activity (IARPA)/Carnegie Mellon University, \$79,053

DIVINITY

Mark Jensen, *Interdisciplinary Conversations: A Theology of Embodiment*, Duke University, \$12,000

Neal Walls, *Renewing Ministers, Revitalizing Congregations*, Cf Foundation, Inc., \$30,000

ECONOMICS

Michael Lawlor, *HELP PD II*, National Institutes of Health (NIH)/WFUHS, \$16,322

HEALTH AND EXERCISE SCIENCE

Jeffrey Katula, *HELP PD II*, NIH/WFUHS, \$35,050

Anthony P. Marsh, *Physical Exercise to Prevent Disability, Pilot Study*, *LIFE Field Center*, NIH/WFUHS, \$241,761

Walter J. Rejeski

- with Jeffrey Katula and Peter H. Brubaker, Health and Exercise Science, *LIFE DMAQC (Data Management, Analysis, and Quality Control Center)*, NIH/WFUHS, \$143,987
- with Gary D. Miller and Paul Ribisl, *Look Ahead*, NIH/WFUHS, \$50,200

INNOVATION, CREATIVITY, & ENTREPRENEURSHIP

William Conner, *Student Ambassador to the National Collegiate Innovators Alliance*, National Collegiate Inventors and Innovators Alliance, \$6,000

MATHEMATICS

Jeremy Rouse, *The Distribution of Fourier Coefficients of Modular Forms and Arithmetic Applications*, NSF/University of Illinois, \$51,530

PHYSICS

David Carroll

- *MURI: Self-Assembled Soft Optical NIMS*, Air Force Office of Scientific Research (AFOSR)/Kent State University, \$57,841
- *Purelux Optimization*, PureLux, Inc., \$23,543

Martin Guthold, with Jed Macosko and Keith D. Bonin, Physics, and Christa Colyer, Chemistry, *Accelerating Drug Discovery: Front-end Library Screening for Biological Relevance*, NCBC, \$183,400

Oana Jurchescu, *Nondestructive Deposition of Electrical Contacts on Organic Semiconductors*, National Institute of Standards and Technology, \$123,341

Daniel B. Kim-Shapiro, *Storage Lesions in Banked Blood Due to Disruption of Nitric Oxide Homeostasis*, NIH/University of Pittsburgh, \$130,348

Freddie Salsbury

- *Computational Biosciences from the Cancer Center Support Grant*, NIH/WFUHS, \$5,833
- *Targeting the MSH2-Dependent Pathway*, NIH, \$315,436

Timo Thonhauser, Kavli Institute for Theoretical Physics (KITP) Scholar 2011-2013, University of California at Santa Barbara

Richard T. Williams, *fs Laser Studies of Scintillation Processes and Materials*, DOE/Regents of the University of California, \$13,000

POLITICAL SCIENCE

Luis Roniger, Exile, *Transnational Migration, and the Transformation of Public Culture: Argentina, Chile, Uruguay, and Paraguay*, Bi-National Science Foundation, \$7,797

PSYCHOLOGY

William W. Fleeson, with R. Michael Furr, Psychology, *Integrating Process and Structure in Borderline Personality Disorder*, NIH, \$283,440

Janine Jennings, *LIFE DMACQ*, NIH/WFUHS, \$19,446

Wayne Pratt, *Meso-accumbens Serotoenergic Involvement in Appetitive and Consummatory Behaviors*, NIH, \$314,128

RELIGION

Nelly van Doorn Harder, *Faculty Workshop: Health as Metaphor and Reality in Religions in Asia*, East-West Center, \$7,000

Ulrike Wiethaus, *Cherokee MedCaT Academy Medical Career and Technology: Enriched Student Experiences in Health Careers*, Burroughs Wellcome Fund, \$173,535

SCHOOLS OF BUSINESS

Len Preslar, *Wake Forest Schools of Business Biotechnology Conference and Case Competition*, NCBC, \$2,500

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.

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