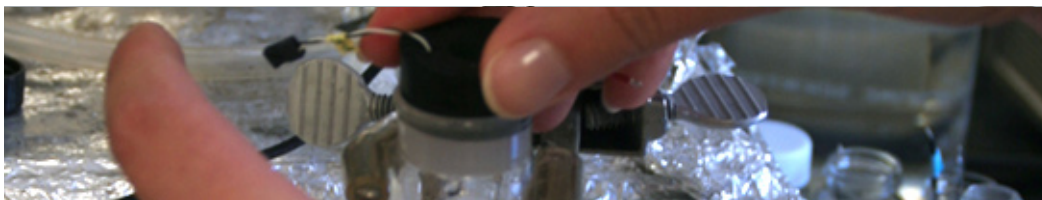


Research and Graduate Studies @ KU

Updates from the Office of Research and Graduate Studies



KU works to establish local life sciences business incubator

Plans were unveiled in June for a Lawrence Regional Life Sciences Incubator, a university and community partnership to be built in 2009-10 on KU's West Campus.

The \$8 million project will make 20,000 sq. ft. of wet-lab space available to university start-up companies and other firms in the early stages of development. The proposed two-story facility is expandable to 40,000 sq. ft. and will be located on Becker Drive, across from the Multidisciplinary Research Building (MRB), the Structural Biology Center (SBC) and the proposed School of Pharmacy building. Nearby are the Higuchi Biosciences Center and the Biotechnology Innovation and Optimization Center.

Under the proposal, one-fourth of the total funding will be provided by the Lawrence-Douglas County Bioscience Authority, the City of Lawrence, and Douglas County. The Authority will own the building and the Lawrence Regional Technology Center will manage it. One-fourth of the total funding will be provided by KU (\$1.5 million) and KU Endowment (\$500,000, in the form of a long-term lease of the land for a nominal fee). Matching funds for these commitments will be sought from the Kansas Bioscience Authority.

More than 1,200 business incubators of all kinds operate currently in the U.S. They provide space and program support at a moderate cost, enabling entrepreneurs to prove a concept, advance product R&D and, ideally, graduate their operations to a larger facility as a viable company.

The proposed Lawrence incubator is seen as an important part of an overall economic development strategy. The goals are to increase research collaborations with KU, recruit and retain companies locally, recruit and retain KU faculty and generate jobs, investment and a larger local tax base.

Plans are also under way to establish a Biomedical Entrepreneurial Research Incubator at the KU Medical Center. The 40,000 sq. ft., \$6.25 million facility will be located in the Breidenthal Research Building, with funding provided by the U.S. Department of Commerce Economic Development Administration (\$3 million) and the Kansas Bioscience Authority (\$2 million). Completion is expected in 2010.

Exhibition continues at The Commons

"Niche: Nature Morte and the Simulated Garden" continues through November at The Commons in historic Spooner Hall.

The exhibition is a mixed media art installation by Marguerite Perret and Bruce Scherting, in collaboration with Betsy Knabe Roe. According to the exhibition brochure, niche "can refer to the place an organism occupies in an ecosystem, or the place a product holds in what marketing professionals sometimes call the consumer ecosystem. The exhibition Niche encompasses both associations. The

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Research and Graduate Studies@KU is produced by the Office of Research and Graduate Studies. For more information, please contact Gretchen Wieland at rgs-news@ku.edu.

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work on display is a hybrid of consumer culture and the natural world.”

The Commons (<http://www.thecommons.ku.edu/>) is a partnership between the Biodiversity Institute, the Hall Center for the Humanities and the Spencer Museum of Art. The Niche installation is made possible by a generous gift from Elizabeth Schultz, an emeritus professor of English at KU. Hours are 9 a.m. to 4 p.m., Tuesday through Saturday. For more information, contact Jordan Yochim, acting director, at (785) 864-2343 or thecommons@ku.edu.

KU Center for Technology Commercialization now ‘open for business’

The combination of the Lawrence campus and Medical Center technology transfer offices **announced in April** officially took effect July 1.

Jim Baxendale is director of the new bi-campus organization, the KU Center for Technology Commercialization (KUCTC). Joining him on both campuses are licensing associates Aswini Betha, Ann Spitz and Christopher Zein, as well as licensing assistant Barb Starrett and licensing administrator Elaine Spielbusch.

More information about KUCTC is available at its new website at www.ctc.ku.edu. The first issue of the KUCTC Newsletter also appeared July 1 and is available at <http://www.ctc.ku.edu/news/newsletters.shtml>.

Teacher learns tech transfer at KU

KU is participating this summer in a program designed to provide local area K-12 teachers with exposure to real-world applications for science, technology, engineering and mathematics.

The new KU Center for Technology Commercialization (KUCTC) is hosting Carrie Lodge, an elementary teacher in the Olathe School District, as a paid intern for eight weeks at the Lawrence and Medical Center campuses. She is on campus as a participant in the UpLink TeacherTech program. Her goal is to learn about KU research and technology and how it’s applied in the private sector. She will then incorporate her observations and experiences into future classroom teaching.

For example, Lodge recently learned about **Quarked!**, an animated web site created at KU by Alice Bean to teach physics to students ages 7-11. Lodge plans to use Quarked! in her second grade classroom this fall. Jim Baxendale, director of KUCTC, will attend Lodge’s class in November during **Global Entrepreneurship Week**.

Lodge is a graduate of Baker University with bachelor’s and M.B.A. degrees. The combination of education and business made her an ideal candidate for TeacherTech.

This is the second year for TeacherTech, a pilot program funded by the Ewing Marion Kauffman Foundation of Kansas City. Ten teachers participated in 2007. This year, 175 teachers applied and 35 were chosen. In addition to Carrie Lodge, the KU Medical Center is hosting nine other TeacherTech participants:

- Joe Berthelsen, Blue Valley North School District
- Gayle Durbin, Bonner Springs School District
- Mary “Penny” Fenning, Olathe School District
- Steve Frager, Independence School District
- Allison Johnson, Blue Valley School District
- Rosanne Lawler, Shawnee Mission School District
- Erin Okerstrom, North Kansas City School District
- Andrew “Andy” Shelly, Desoto School District
- Luke Thompson, Olathe School District

More information about the program and how to apply can be found at <http://www.yf-uplink.org/TeacherTech/>.

Upcoming Events

July 15

Kansas Bioscience Authority Annual Community Stakeholders Meeting – 12:00-1:30 p.m.

Sheraton Overland Park Hotel
Cottonwood Ballroom
6100 College Blvd.
Overland Park, Kan.

Reservations: Ashley Tyrell, (913) 397-8300 or events@kansasbioauthority.org

Sub-awards: A Survivor's Guide of Key Concepts and Principles – 1-4:30 p.m.

Simons Auditorium, West Campus

To register: E-mail resadmin-events@ku.edu with your name, your department or other affiliation and whether you would like to receive Continuing Education credits for attendance.

Sept. 4-6

KU Conference on the Prevention and Treatment of Overweight & Obese Individuals

Marriott- Downtown
200 W. 12th St., Kansas City, Mo., 64105

More information: Kim Johnson at kim@ku.edu or (785) 864-0797, or go to <http://www.ebl.ku.edu/conference/conf2008/Intro2008.htm>

PeopleSoft 9.0 memo to PI's, center directors and research staff

On June 27, Steve Warren, vice provost for research and graduate studies, distributed a memo via e-mail concerning the implementation of PeopleSoft Financials version 9.0. Staff in the Comptroller's office, the Information Technology office, and the RGS research administration and financial services offices have been working on this project for the past year. Fiscal 2008 closed using PeopleSoft version 7.5 and fiscal 2009 opened using version 9.0.

"There are several major changes with this reimplementation, many of which affect the grants portion of the software," wrote Warren. Among them:

- Most of the chart fields used for grant accounting were changed to fit into the university system with the goal of having unified reporting and analysis.
- Projects that were active in version 7.5 and remain active in version 9.0 will have the same project numbers.
- Projects that become active after the go-live date, July 23, will have seven-digit numbers assigned by the system with a preceding three alpha identifier (e.g., NIH0012345).
- In addition, there will be a shared set of funds (KUCR funds are 9XX) and a shared set of accounts.

All cost centers for F&A return have been changed to reflect the department affiliation of the PI's. The conversion document is available at http://www.comptroller.ku.edu/financial_systems_administration/people_soft_9/RGS_Cost_Center_Conversion.xls.

[financial_systems_administration/people_soft_9/RGS_Cost_Center_Conversion.xls](http://www.comptroller.ku.edu/financial_systems_administration/people_soft_9/RGS_Cost_Center_Conversion.xls).

"As you can imagine," wrote Warren, "a conversion from one version to another of major enterprise software is a challenge regardless of the changes made. In this case, the amount of data to be converted and validated, particularly for sponsored proposals, awards, active projects and F&A return cost centers is many thousands of lines. That doesn't account for the time required to assure proper setup of various processes such as payments, deposits, F&A, budgets, etc."

DEMIS reporting availability is expected to track financial activities for the converted data, noted Warren.

"However, this is a large project that will realistically have some problems at the outset and possibly for several months," he wrote. "Training is anticipated early in July for departmental personnel who will no longer have access to enter into version 7.5 after June 30."

Warren described version 9.0 as an "important financial system upgrade," one that "will bring a substantial payoff, including a number of new capabilities. Nevertheless, you should anticipate some inevitable challenges in the short run. I request your patience as well as your assistance in working with the RGS staff to identify any problems in processing and in data conversion."

Concerns or questions about the conversion related to specific projects should be addressed to Nick Stevens ndstevan@ku.edu or Robert Kerley rkerley@ku.edu. Assistance with project balances and projections may be addressed to Barbara Armbrister barmbrister@ku.edu.

KU makes two appointments in support of research technology

Dilawar Grewal will join KU Information Services in August as director of research IT services and will lead the formation of that department. He will work closely with KU's academic units, libraries, the Office of Research and Graduate Studies (RGS) and research centers to develop and advance research technology services.

Also, Donald F. (Rick) McMullen will join RGS in August as director and senior scientist for research computing. He will be responsible for developing a comprehensive research computing environment and identifying and acquiring resources necessary to pursue competitive research and creative activity at KU. He and the existing Research Computing Technologies group will be in the Multidisciplinary Research Building on KU's west campus.

"Research is central to KU's mission," said Denise Stephens, vice provost for information services. "We have to make sure faculty in all disciplines have the tools they need to conduct that research productively. Increasingly, this requires IT resources that facilitate interdisciplinary and inter-institutional collaboration, plus the leadership and expertise to manage those resources effectively."

"Research IT is too complex, too vast in scope and too important for any one organization on campus to manage," said Steve Warren, vice provost for research and graduate studies. "These two appointments in two key offices give KU strong collaborative leadership that will benefit our researchers and the work they do."

Grewal is currently assistant vice provost for research and technology at East Tennessee State University, where he is also director of technology and an adjunct faculty member in the College of Education. He previously served for more than 10 years at Texas A&M University in research IT-related positions, including director of research development. He earned a doctorate from Texas A&M in 1994.

McMullen is director and principal scientist in the Pervasive Technology Laboratories at Indiana University. He has been at Indiana since 1990 in a series of IT and research positions and is an adjunct faculty member in its computer science department and School of Informatics. Before going to Indiana, he worked in academia and industry, including positions at the Supercomputer Computations Research Institute at Florida State University and American Cyanamid Co. as a research scientist and process chemist. McMullen received a doctorate in chemistry from Indiana in 1982.

University of Kansas Cancer Center opens innovative Phase I clinical trial

Marking an important milestone in the development of new cancer treatments, officials from the University of Kansas Cancer Center announced the opening of a Phase I clinical trial using a new ovarian cancer drug developed by KU researchers.

The drug, Nanotax, is a reformulation of the commonly used chemotherapy drug, Paclitaxel. Negative side effects associated with Paclitaxel are attributed to the solvent that it is mixed with in order to be administered to patients.

Bala Subramaniam, distinguished professor of chemical and petroleum engineering, Valentino Stella, distinguished professor of pharmaceutical chemistry and co-leader of the KU Cancer Center's Drug Discovery and Experimental Therapeutics Research Program, and Roger Rajewski, director of the Biotechnology, Innovation and Optimization Center at KU, developed technology that broke Paclitaxel down into a nanoparticle form. This reformulation allows it to be mixed with water and then administered to patients in the abdomen, an innovative approach for delivery that KU researchers believe dramatically boosts survival rates, compared to the drug being delivered intravenously.

"Though Paclitaxel is an effective drug, its side effects are incredibly difficult for patients," said Roy Jensen, director of the KU Cancer Center. "By removing the source of the negative side effects, we believe Nanotax will be a less toxic treatment."

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The technology developed by researchers at KU was licensed to CritiTech, Inc., a Lawrence-based biotechnology firm, who filed the new drug application with the Food and Drug Administration (FDA). Collaborating with CritiTech, researchers at KU formulated the drug and developed the clinical trial that will take place at the University of Kansas Hospital's Cancer Center and Medical Pavilion.

Kathy Roby, associate professor of anatomy and cell biology at the University of Kansas Medical Center and member of the KU Cancer Center, tested Nanotax in mice. The mouse studies indicated the new delivery method allows the drug to stay in the abdomen where the cancer has spread, rather than be absorbed throughout the body.

Nanotax represents the first KU "bench to bedside" drug, meaning it was discovered and tested by KU scientists and is now being taken into a clinical trial with patients at the KU Cancer Center. This marks an important achievement toward meeting key criteria for obtaining National Cancer Institute (NCI) designation.

"With the discovery, development and clinical trial of Nanotax, we move closer to our goal of being the No. 1 academic producer of anti-cancer drugs and obtaining NCI designation for this region," Jensen said. "Ultimately, we want to offer more cancer treatment options for patients closer to home."

The American Cancer Society estimates that 15,520 deaths will occur in 2008 from ovarian cancer, which causes more deaths than any other cancer of the reproductive system. Only 19 percent of ovarian cancer cases are detected early.

The Nanotax clinical trial offers an additional option for ovarian cancer patients who have limited choices for treatment. The trial will enroll a very small number of patients.

KU announces conference on the prevention and treatment of overweight & obese individuals

Researchers, educators, government agencies, foundations, industry and others are promoting efforts to prevent and treat obesity at the community level. To highlight these efforts, the 10th Annual Obesity Conference will be held in Kansas City September 4-6. Dr. James Hill from the University of Colorado Health Sciences Center and director of American on the Move will be the opening speaker.

Keynote speakers include the Surgeon General of the United States, Professor at the Stanford Prevention Research Center Dr. William Haskell, Dr. Eddie McAuley and Dr. Steven Blair.

Presentation and session topics will include intervention strategies for Hispanic youth, the contribution of faulty metabolism to weight gain, the association between economics and obesity, calcium and dairy in weight management, appetite regulation, resistance training for weight management, the effects of physical activity on academic achievement, parental roles in weight management of children and youth and findings from brain imaging and diet intake studies. The conference will also feature poster presentations from evidence-based programs, such as the results of the DREW study on the dose-response to various levels of physical activity (i.e., is "more" better?).

Being overweight or obese increases the risk of developing hypertension, dyslipidemia, type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea and respiratory problems and some cancers (endometrial, breast and colon).

For more information, please contact Kim Johnson at kim@ku.edu or (785) 864-0797, or go to the event's homepage at <http://www.ebl.ku.edu/conference/conf2008/Intro2008.htm>.

Researchers & Grad Students in the News

Science, engineering education project receives \$2.9 million

<http://www.news.ku.edu/2008/july/3/partnership.shtml>

KU researchers and graduate students will work to instill a love for science, math and engineering in K-12 students in Kansas. The National Science Foundation has announced it will award \$2.9 million over five years to the Kansas Partnership for Graduate Fellows in K-12 Education program at KU.

KU researcher calls for approval of wireless gadgets that use 'white space'

<http://www.news.ku.edu/2008/july/2/whitespace.shtml>

Research shows that the digital revolution has lifted the need for unoccupied gaps in the TV spectrum and opened white space for use by a new generation of personal electronic devices.

New turnpike signs tout KU's academic, athletic prowess to travelers

<http://www.news.ku.edu/2008/july/1/turnpikesigns.shtml>

Travelers on the Kansas Turnpike will learn a little bit about the academic and athletic excellence of KU thanks to two new signs installed July 2. The signs tout KU's status as an international research university, as well as its recent men's basketball and Orange Bowl championships.

Sea anemone researcher at KU sits on 'supreme court' of species identification

<http://www.news.ku.edu/2008/june/30/fautin.shtml>

Daphne Fautin, professor of ecology and evolutionary biology, has been a commissioner for the International Commission on Zoological Nomenclature, the world's top body overseeing the naming of species, since 2006. She helps police the scientific naming of living things.

KU announces Fall 2008 Undergraduate Research Award winners

<http://www.news.ku.edu/2008/june/27/undergrad.shtml>

Thirty-five students have received Undergraduate Research Awards for summer and fall 2008 semesters. The awards support original, independent research by undergraduates enrolled on the Lawrence campus.

Governor, legislators and KU celebrate expansion of pharmacy school

<http://www.news.ku.edu/2008/june/23/pharmacy.shtml>

With a growing shortage of pharmacists straining Kansas' health care system, KU earlier this year proposed an expansion of its pharmacy school -- the only one in the state. Gov. Kathleen Sebelius was joined at the KU School of Medicine-Wichita by pharmacists, legislators and KU students and teachers to ceremonially sign the bill making the expansion possible.

KU research on aging receives \$7.5 million grant extension

<http://www.news.ku.edu/2008/june/23/grantextension.shtml>

Researchers are hoping to better understand what happens in the muscles and brain during the aging process. The goal of the research is to discover how to slow or even reverse the aging process. The National Institutes of Health has given KU \$7.5 million for a five-year period. This is the second NIH extension of the project titled "Role of Reactive Oxygen Species in Aging."

Professor to research and compare community music programs

<http://www.news.ku.edu/2008/june/19/bergees.shtml>

Martin Bergee, professor of music education and music therapy, was principal investigator for a music education research proposal that recently earned full funding from the National Association of Music Merchants Foundation. The study, titled "Galvanizing factors of communities chosen to be one of the Best 100 Communities for Music Education," is part of the foundation's Sounds of Learning Phase V initiative.

KU School of Business doctoral program announces student awards

<http://www.news.ku.edu/2008/june/17/business.shtml>

Nine students in the School of Business doctoral program earned recognition and \$27,050 in cash awards for outstanding teaching and research skills at the doctoral commencement banquet May 17. Three students selected for teaching positions at major universities also were honored.

KU gives Kansas middle school teachers hands-on experience in 'doing science'

<http://www.news.ku.edu/2008/june/16/science.shtml>

The Middle School Science Academy-- Research Experiences gives teachers a four-week immersion in modern scientific or engineering research in a laboratory at KU. Many middle school teachers have had little exposure to university-level research. This summer, the teachers will be doing science, not just learning about science.

Undergrad named a research competition finalist

Undergraduate physics and geology major Alex Krejci has been named a finalist in the competition for the Vanderbilt Prize for Undergraduate Research in Physics and Astronomy, awarded in a national competition by Vanderbilt University. Alex received his prize for work in the area of Astrobiophysics with Prof. Adrian Melott, specifically computations to help determine the effects of increases in the high-energy cosmic ray flux on the Earth's atmosphere and biota. He will receive \$500, an expense-paid trip to Vanderbilt for the awards ceremony, and a chance to compete for the first prize.

Research Administration

NIH announces changes to enhance peer review

On June 6, National Institutes of Health (NIH) Director Elias A. Zerhouni announced critical changes to enhance and improve the NIH peer review system. The Implementation Plan Report consists of four main priorities:

- Recruit, train and reward the best possible reviewers;
- Align structure of applications, review criteria, summary statements and the rating process to improve quality and transparency of reviews;
- Ensure balanced and fair reviews across scientific fields and scientific career stages while reducing unnecessary burden on applicants; and
- Implement a system for continuous review and improvement of peer review.

Next Steps:

- An Ad hoc Peer Review Task Force, chaired by NIH Deputy Director, will be formed to develop detailed plans and oversee initial implementation.
- A new entity will be formed within the Division of Program Coordination, Planning and Strategic Initiatives to oversee Continuous Review of Peer Review.

For more information about enhancing peer review at NIH and to learn about the implementation plan, visit <http://enhancing-peer-review.nih.gov>.

NIH policy on submission of additional grant application materials

An applicant organization may need to submit additional application material to NIH following the submission of the original grant application. A recent NIH notice clarifies the existing policy regarding submission of the additional grant application material before the peer review meeting, during the initial peer review phase, or after the peer review meeting.

The additional materials must be submitted to the NIH with the consent of the applicant organization's designated institutional signing official (AOR). NIH requires that the applicant organization include the AOR in the correspondence; the AOR is not necessarily required to submit the application materials. It is acceptable for the PD/PI or Contact PI for multiple PD/PI applications to send such materials with the

concurrency of the AOR. Materials sent without evidence of such concurrence will not be accepted.

For further discussion and/or assistance, the investigator is encouraged to contact the appropriate KU staff that assisted with the proposal submission.

View the full notice at <http://grants.nih.gov/grants/guide/notice-files/NOT-OD-08-082.html>.

Sub-awards: A Survivor's Guide of Key Concepts and Principles

Tuesday, July 15, 2008

1:00-4:30 p.m.

Simons Auditorium, West Campus

This video workshop was originally scheduled for Sept. 11, 2007, but was cancelled due to technical difficulties. A recording of the original broadcast will be shown.

Workshop Description:

Drawn from NCURA's seven-week online tutorial, this broadcast is intended as a review for mid-level research administrators and will provide enough basic information to help those who are new to the world of subcontracting to survive. The faculty, who designed and developed NCURA's tutorial, will share a number of case studies, discuss the "do's and don'ts" and dispel myths that may have created high anxiety in those new to this arena.

Faculty will touch on the following areas:

- Key concepts and terminology associated with sub-awards
- An overview of the typical flow of activity from the time a proposal is first put together by the prime recipient through the awarding of both prime awards and sub-awards to their closeout
- Factors to consider when issuing a sub-award
- Elements of a sub-award
- Basic principles of a sub-award negotiation
- Terms and conditions--do they all "flow down?"
- Administering sub-awards

Handouts will be available by e-mail to those who register. To register, send an e-mail to Research Administration Events (resadmin-events@ku.edu) with your name, your department or other affiliation and whether you would like to receive Continuing Education credits for attendance. Attendees are welcome to bring snacks and drinks. There is a soda machine near Simons Auditorium.

Faculty:

- David Mayo, associate director, Office of Sponsored Research, California Institute of Technology
- Steve Erickson, director, Office for Research Compliance and Intellectual Property Management, Boston College
- Ruth Farrell, associate vice president for research administration, University of Vermont

Staff Fellows named in Research and Graduate Studies

Kristi Billinger, assistant manager of Proposal Services, and Susan Sloop, associate director of the Higuchi Biosciences Center, submitted a joint proposal to the Staff Fellows Program, an initiative sponsored by the provost's office. Both have been selected as 2008-2009 Staff Fellows.

A synopsis of their proposed program:

During a period of reduced funding from federal, state and industrial sponsors, it is important to streamline research procedures to reduce administrative costs. By refining existing protocols, we hope to facilitate a smooth and efficient proposal submission process, thus enabling faculty to obtain additional funding. Increasing easy access to research-related information would meet the needs of the university community in this constantly changing research environment. RGS and HBC staff plan to review current grant administration procedures, familiarize themselves with available information management resources, conduct a needs assessment of stakeholders and recommend and/or develop new procedures and data management practices.

Visit the Staff Fellows site at <http://www.provost.ku.edu/policy/staff/docs/staffFellowIntro.pdf> to learn more about the program.