# Research & Graduate Studies @ KU

News of Interest to the University Community

Past Issues Subscribe February 2013

#### In this issue...

- I Sequestration Threat Looms
- I Advanced Computing Facility to be Dedicated February 21 at Nichols
- 2 Level I SIG Proposals are Due Now
- 2 "Thursday Research Topic" for February is NIH Salary Cap
- 2 Graduate, Undergraduate Student Research Showcases Coming Up
- 2 Alexander, Moor to Debate "Data and Democracy" at The Commons
- 3 Hall Center to Host International Humanities Meeting in April
- 3 Chancellor's Report Focuses on Bold Aspirations, Flagship Stature
- 4 Biodiversity Institute Celebrates
  Completion of Renovation Project
- 4 Virtual Laboratory Animal Science Conference is February 13-14
- 5 Bold Aspirations Lecturer:Chaunbin Mao on BioNanostructures
- 5 Donna Ginther to Speak on "Race, Ethnicity, and NIH Research Awards"
- 5 KU Supports 2013 Midwest Enzyme Chemistry Conference
- 5 Undergraduate Research Awards Go to 58 Outstanding KU Students
- 6 KU Postdoctoral Research Day, STEM Career Fair, Travel Awards
- 7 UPCOMING EVENTS



## **Federal Funds Sequestration Threat Looms**

The possibility of an immediate and unprecedented 5.1% sequestration of federal funds for research and other programs is more and more likely, according to Steve Warren, vice chancellor for research and graduate studies. Unless deferred or repealed, the cut to all non-defense discretionary accounts will take effect March 1.

"These automatic cuts would have a drastic impact on funding agencies," said Warren in an announcement with Paul Terranova of the KU Medical Center. "They must be achieved in the current federal fiscal year," which "effectively turns them into 10.2% cuts in current spending between March 1 and October 1, 2013."

Federal agencies have not yet released plans or provided guidance for dealing with a sequestration. Warren's advice to investigators is to not reduce grant spending. It could be counterproductive, he said, since "projects that are not spending up to the level of their currently authorized level could be most at risk."

Chancellor Gray-Little and other KU leaders are working with higher education associations to communicate to Congress the severe impact these cuts would have, not only at universities but across the country. "There remains a chance sequestration will either be delayed again or, better yet, abandoned," said Warren. "However, we consider the threat of sequestration to be real and serious at this time."

# **Advanced Computing Facility Dedication Set**



On February 21, KU will dedicate a new facility (left) that dramatically increases research computing power for the life sciences and other KU research programs.

The Advanced Computing Facility project was funded by a \$4.6 million grant from the National Institutes of

Health. It is a collaborative effort of the Office of Research and Graduate Studies, the Information and Telecommunication Technology Center, and KU Information Technology.

A 10 a.m. ceremony in the Apollo Room at Nichols Hall will be followed by a ribbon-cutting and reception in the Atrium. To attend, please RSVP by February 15 with **Pam Farr**, 864-7354.

### Final Reminder: February 15 is Deadline for Strategic Initiative Grant Proposals

Online application forms for **Strategic Initiative Grant program** Level I proposals (and the smaller Level II proposals) are available at **http://www.provost.ku.edu/sit-grant-program**. The deadline for the third and final review cycle of the academic year is Friday, February 15 at 5 p.m.

#### Training: TRT Presentation to Focus on the NIH Salary Cap



The Office of Research and Graduate Studies offers a monthly "Thursday Research Topics" program that's open to all interested persons. On Thursday, February 14, in the Simons Labs Auditorium, the topic is "The NIH Salary Cap: What It is and How to Manage It." The presentation will be made by Alicia Reed, pre-award grants officer in RGS, and Linda Carlyle, Higuchi Biosciences Center. All TRT presentations are record and made available online for later viewing.

### Undergraduate, Graduate Students to Showcase Research in February, March

Three events are coming up this month and next that provide an opportunity for KU students to present research findings in a competitive environment.

- On Thursday, February 14, the **Annual Capitol Research Summit** is scheduled from 10 a.m. to 1 p.m. at the State Capitol in Topeka. Graduate students from KU's Lawrence and Medical Center campuses will be joined in making poster presentations by students at Kansas State University and Wichita State University.
- On Wednesday, February 20, the **Undergraduate Research Day at the Capitol** will take place from 11 a.m. to 2 p.m. at the State Capitol in Topeka. Ten KU students have been selected to join their peers from the other Kansas Board of Regents public four year universities in making poster presentations to share with legislators and others.
- On Wednesday, March 13, the **Graduate Student Research Competition** will take place from 1 4 p.m. in the Kansas Union. Students from across campus will present their research on a variety of topics, both through posters and oral presentations and posters.

Faculty, staff, and students are encouraged to attend these free programs and support KU's student researchers.

### The Commons: "Data and Democracy: Our Technology, Our Future"





On Wednesday, February 20, at 7:30 p.m., The Commons in Spooner Hall will host a debate about the data deluge, our growing reliance on silicon and algorithms, and the outsourcing of decision-making to artificial "thinking machines." Perry Alexander (left), professor and director of the Information Technology and Telecommunication Center, will be joined by James Moor (right), a professor of intellectual and moral philosophy at Dartmouth College. The program will be moderated by Leonard Krishtalka, professor and director of the Biodiversity Institute.

Alexander and Moor will speak from opposing positions. Moor will speak about human relationship and reliance on technology from a conditional dystopian perspective. Alexander will deliver the Utopian counterpoint. Audience participation is highly encouraged, as the second portion of the event will rely upon questions from attendees.

The Commons is a partnership among the Biodiversity Institute, the Hall Center for the Humanities, and the Spencer Museum of Art. The Commons explores the relationships between nature and culture across the sciences, humanities and the arts. More information on **The Commons** is online, or e-mail **thecommons@ku.edu.** 

# Hall Center to Host International Humanities Meeting on Campus in April



The Consortium of Humanities Centers and Institutes, an international organization with more than 150 members in the U.S., Europe, and Asia, will hold its 2013 annual meeting at KU's Hall Center for the Humanities on April 25-27. The Consortium's five most recent annual meetings have been held at the Australian National University in Canberra, the University

of Toronto, Brown University, the University of Edinburgh, and Washington University in St. Louis.

Established in 1988, the Consortium "serves as an arena for the discussion of issues germane to crossdisciplinary activity in the humanities and as a network for the circulation of information and best practices related to the organizational and management dimensions of humanities centers and institutes."

The focus of the meeting is "Humanities, Publics, and the State." According to Victor Bailey, professor and director of the Hall Center, participants "will explore a number of important themes: the relationship between the humanities and the state across the globe, the public role of the arts, the future of the public university, the humanities and the public good, the public knowledges that exist beyond the academy, and the role of digital research in connecting diverse publics."





Christopher Newfield (left), professor of English at the University of California, Santa Barbara, and Helen Small (right), tutor and fellow in English literature at Pembroke College, Oxford University, are featured speakers at the meeting. Newfield will speak on "The Future of the Public University" and Small will speak on "The Humanities and the Public Good." KU panelists are Paul Sneed, assistant professor of Spanish and Portuguese, and Arienne Dwyer, professor of anthropology and co-director of the Institute for Digital Research in the Humanities.

Sessions of the annual meeting will take place primarily at The Commons in Spooner Hall. Other programs are also scheduled for the Hall Center, Adams Alumni Center, the Spencer Museum of Art, the Spencer Research Library, and Nelson-Atkins Museum of Art in Kansas City. The meeting is open to the public and a **preliminary schedule is online**.

### 2013 Chancellor's Report Focuses on Bold Aspirations, Flagship Stature



Chancellor Bernadette Gray-Little released her **2013 Chancellor's Report** on February 5, along with a **six-minute video**. Both the video and the report focus on the KU strategic plan – Bold Aspirations – as well as the distinction and special responsibilities associated with being the state's flagship university. In the video, she notes:

"Our scholars and researchers expand the boundaries of human understanding in all disciplines – from electron detection, which has applications for renewable energy technologies; to the prevalence of obesity in rural communities; to award-winning science fiction writing that helps us better understand ourselves.

"We're working to expand scholarship in every discipline, because we know ideas and discoveries truly can change the world. They also change lives, such as those of the children who will benefit from the work of a team led by Wayne Sailor and Amy McCart. They earned a KU-record \$24.5 million grant to improve the teaching of students, including those with disabilities.

"We're adding to the talent at KU by recruiting 12 distinguished Foundation Professors to contribute to our strategic initiatives and raise our stature. And through cost savings from the Changing for Excellence review, we'll hire 22 additional faculty members. Our scholars are working on multidisciplinary strategic initiatives and tackling global challenges ... from the need for sustainable prosperity to the discovery of new treatments and cures. All of which fulfill our unique role as a flagship university."

### **Biodiversity Institute Celebrates Completion of Renovation Project**



The KU Biodiversity Institute held tours, a dedication ceremony, and a reception February 12 to celebrate completion of a two-year, \$3.5 million renovation. The project has modernized the laboratories in historic Dyche Hall (left) for 21<sup>st</sup> century research and student training about the life of the planet.

Chancellor Bernadette Gray-Little spoke at the ceremony, as did Steve Warren, vice chancellor for research and graduate studies, and Leonard Krishtalka, director and professor of ecology and evolutionary biology.

In the new facilities, KU faculty, staff and students, and visiting scholars will be able to conduct innovative research in biodiversity science, from discovering and documenting the diversity of the world's plants and animals; to exploring their genetics, anatomy, and evolution; to forecasting the potential spread of diseases and harmful invasive species; to investigating the environmental consequences of decreasing water on the Great Plains.

Through a partnership of federal, state, and private resources, the Biodiversity Institute created eight new laboratory spaces that will greatly increase the research capacity and capabilities of the institute. The renovation:

- Created an integrated five-laboratory complex where students and faculty can extract and sequence genetic material in a clean, secure environment, and clone ancient DNA from the institute's vast historical collections of animals and plants;
- Installed a liquid nitrogen cryogenic facility to preserve the institute's irreplaceable and growing collection of tissues of worldwide animals and plants for genetic research;
- Established two new biotic analysis laboratories where scientists and students can study and analyze an animal's external, internal, and skeletal anatomy with the most modern tools;
- Installed a modern Geographic Information Systems laboratory for modeling and forecasting environmental phenomena, such as the potential spread of diseases and pests, and the effects of climate change on animals, plants and ecosystems, both past and present; and
- Established a modern, five-fold-larger data server room to provide the secure storage, computational analysis, and global
  access to terabytes of biodiversity information.

The National Science Foundation awarded the Biodiversity Institute \$1.5 million for the project through a program entitled Academic Research Infrastructure: Repair and Renovation. The institute was the nation's only university biodiversity organization chosen for such a project. Some of its research facilities were more than 45 years old. KU provided \$2 million for electrical, HVAC and cyber connectivity. Private funding helped equip the laboratories and create new spaces to accommodate graduate student research.

"Antiquated research infrastructure kept the Biodiversity Institute from advancing its national and international leadership and innovation in biodiversity research, informatics and research-training," said Krishtalka, "particularly at a time when biodiversity science is recognized as one of society's grand challenge research imperatives of the 21<sup>st</sup> century. This federal, state and private investment in our scientists and students will enable us to tackle more complex research problems facing science and society, from discovering the diversity of Earth's animals and plants, to forecasting the effects of climate change on this biodiversity, to informing its conservation and wise use."

### Virtual Laboratory Animal Science Conference Scheduled February 13-14

This live, two-day, online-only program will be available at 1055 Malott Hall, hosted by the Office of Research Integrity and the Institutional Animal Care and Use Committee. The theme of the conference is "Animal Wellbeing and Welfare Science," and the goal is for researchers and others to learn about recent advances in the field. The **complete schedule of sessions** is available online. Participants can come and go as they wish. It is also possible to view the program from your own computer. You can register for CEU credit at **www.lasconference.com**. If you don't need CEU credit, the log-in link is **http://vshow.on24.vshow/BCL2013LAS**, the password is kulawrence, and the e-mail is **iacuc@ku.edu**. For more information, or if you have questions, contact Kim Iles, **kimiles@ku.edu**, 864-8841.

### **Bold Aspirations Lecturer: Chaunbin Mao on BioNanostructures**



Chaunbin Mao (left), the Edith Kinney Gaylord Presidential Professor of Chemistry and Biochemistry at the University of Oklahoma, is an upcoming Bold Aspirations Lecture Series speaker. His talk is scheduled for 4 p.m. on Thursday, February 21, at The Commons in Spooner Hall. His topic is "Genetically Engineering BioNanostructures to Develop NanoBiotechnology and Nanomedicine." The presentation is sponsored by the Office of the Provost and is open to the public.

Mao and his research group exploit the use of genetically modifiable bionanostructures in the development of nanobiotechnology and nanomedicine. In recent years, his group has studied three natural bionanostructures related to bacteria, including phage, flagella and pili. His talk will focus

on the genetic engineering of these bionanostructures and their integration with functional abiotic nanomaterials for nano/bio-materials synthesis/assembly, cancer and stem cell targeting, tumor tissue homing, cancer imaging and treatment, stem cell-based therapy, drug/gene delivery, and tissue regeneration.

### Donna Ginther to Speak on "Race, Ethnicity, and NIH Research Awards"



Donna Ginther, a professor of economics and director of the Center for Science Technology & Economic Policy at KU's Institute for Policy & Social Research, will deliver the Byron T. Shutz Award Lecture on Monday, February 18, at 3:30 p.m. at the Hall Center. Her topic is "New Results on Race, Ethnicity and NIH Research Awards: A Case Study in Big Data for Knowledge (BD2K)." The program is free and open to the public.

Prior to joining the KU faculty, Ginther was a research economist and associate policy adviser in the regional group of the Research Department of the Federal Reserve Bank of Atlanta. She previously taught at Washington University in St. Louis and Southern Methodist University. Her major fields

of study are scientific labor markets, gender differences in employment outcomes, wage inequality, scientific entrepreneurship, and children's educational attainments.

### **KU Supports 2013 Midwest Enzyme Chemistry Conference**

Audrey Lamb, an associate professor of molecular biosciences at KU, is program chair for the 33<sup>rd</sup> Midwest Enzyme Chemistry Conference, scheduled for October 12 at Loyola University in Chicago. The conference draws participants from more than a dozen states, including faculty members, graduate students, postdoctoral fellows, and industrial researchers. At the 2012 meeting, Lamb was joined by two of her doctoral students, Anindita Basu and Blake Balcomb.

According to Lamb, the conference serves as a "forum for scientific exchange and collegial interactions among researchers working at the forefront of enzymology and its interface with biomedical and pharmaceutical science." Posters are encouraged from all participants. Oral presentations are selected from abstracts submitted online by August 16. Registration for the conference, which is supported in part by the Office of Research and Graduate Studies, is also online, and free. Registration deadline is September 13.

### **Undergraduate Research Awards Go to 58 Outstanding KU Students**

KU's new Center for Undergraduate Research has announced 58 recipients of the annual Undergraduate Research Award, enabling students to work on advanced research projects this spring under the guidance of faculty mentors. Awards are funded by the College of Liberal Arts and Sciences, the Office of Research and Graduate Studies, and the Office of the Provost. Proposals were selected on the merit of the applicant's proposal, the applicant's academic record, and the recommendation from a faculty member who is familiar with the applicant and the proposed project.

The announcement was made by John Augusto, director of the Center for Undergraduate Research. Information about all 58 recipients is **available online**.

#### Postdoctoral Research Day and STEM Career Fair to Feature KUMC Lecturer



The KU Postdoctoral Association (KPA) is sponsoring a Postdoctoral Research Day and STEM Career Fair on Friday, March 15 in the Kansas Union. Postdocs from KU's Lawrence and Medical Center campuses will share their research and network with representatives from industries related to science, technology, engineering, and mathematics.

The all-day program begins at 9 a.m. in Woodruff Auditorium with remarks by Steve Warren, vice chancellor for research and graduate studies. This will be followed by a plenary lecture by Danny Welch, professor and chair of cancer biology at the KU School of Medicine. The title of his talk is "Metastasis Suppressors: Functioning at the Interface of the Tumor and Stroma." This will be followed by a series of competitively selected presentations by postdocs, with a cash prize for the most outstanding presentation.

A free lunch will be provided from noon to 1 p.m. in the Big 12 Room for postdocs who register by the March 8 deadline at the **KU Postdoctoral Association web site**. From 1-4 p.m., postdoc poster presentations and a STEM Career Fair with industry representatives will take place in the Ballroom. The top poster will receive a cash prize.

Abstracts for oral and poster presentations should be submitted by 5 p.m. on February 15 at **KUPostdocs@gmail.com**. All research presentations and the career fair are open to the public. The event is supported by the Office of Research and Graduate Studies and Coca Cola.

#### Travel Awards Available for Postdoc Attendance at Conferences

The KU Postdoctoral Association (KPA) is offering two travel awards of \$500 each to help reimburse postdocs for the cost of attending scientific or professional development conferences any time during 2013. The deadline for application is 5 p.m. on Thursday, February 28, via e-mail at **KUPostdocs@gmail.com**. A panel of KU faculty members will judge all applications, and participation in KPA activities will be one consideration in the selection process. Awardees will be announced by March 31. Questions about the application procedure should also be sent to **KUPostdocs@gmail.com**.

The travel award application form is available for download at the **KU Postdoctoral Association web site**. You are asked to submit the following information:

- Full name
- Lab / PI and department
- E-mail address and phone
- Project title / scientific subject area
- Details of the conference you plan to attend, i.e., name, date, location, whether you are applying for a poster/talk
- Description of your involvement with the KPA, i.e., the approximate number of meetings attended, whether you are an officer, whether you are helping with the Postdoctoral Research Day on March 15, etc.
- Current CV, limited to three pages
- Letter of support from your PI confirming attendance at the conference
- Project description, 500 words maximum, describing your work and its significance in broad terms
- Description, 500 words maximum, of how attendance at this conference will further your educational, scientific and/or professional development

### Hall Center to Celebrate Faculty Books March 5

The Hall Center for the Humanities will host a celebration of books published in 2012 by humanities, social science, and arts faculty on Tuesday, March 5, from 4 – 6 p.m. The event is sponsored by the Friends of the Hall Center and consists of a reception, a display of books, and a brief program featuring faculty authors who will talk about their recent books and take questions from the audience. The public is invited but an RSVP is required by February 26 at hallcenter@ku.edu.

#### **Upcoming Events**

News of interest to the research community. Additional details are available at the KU Calendar.

#### February 14

KUCR Thursday Research Topic: "The NIH Salary Cap – What It is and How to Manage It" 11:10 a.m. to 11:50 a.m. Simons Labs Auditorium

Graduate Student Capitol Research Summit 10 a.m. – 1 p.m. State Capitol, Topeka

#### February 18

Byron T. Shutz Award Lecture: "New Results on Race, Ethnicity and NIH Research Awards: A Case Study in Big Data for Knowledge (BD2K)," Donna Ginther 3:30 p.m.

Hall Center for the Humanities

#### February 20

Undergraduate Student Capitol Research Summit 11 a.m. – 2 p.m. State Capitol, Topeka

#### February 21

Dedication: Advanced Computing Facility Project 10 a.m.

Nichols Hall

Bold Aspirations Lecture: "Genetically Engineering BioNanostructures to Develop NanoBiotechnology and Nanomedicine," Chaunbin Mao 4 p.m.

The Commons, Spooner Hall

#### March 5

Celebration of Books Published by Humanities, Social Sciences, and Arts Faculty in 2012 4 – 6 p.m.

Hall Center for the Humanities

#### March 13

Graduate Student Research Competition 1 – 4 p.m. Kansas Union

Humanities Lecture Series: "An Evening with Edwidge Danticat"

7:30 p.m.

Kansas Union, Woodruff Auditorium

#### March 15

KU Postdoctoral Research Day and STEM Career Fair 9 a.m. – 4 p.m.

Kansas Union, Woodruff Auditorium and Ballroom

Plenary Lecture: "Metastasis Suppressors: Functioning at the Interface of the Tumor and Stroma," Danny Welch

Kansas Union, Woodruff Auditorium

#### March 18-22: KU Spring Break

#### April 25-27

2013 Annual Meeting of the Consortium of Humanities Centers & Institutes: "Humanities, Publics, & the State" Hall Center for the Humanities

The University of Kansas prohibits discrimination on the basis of race, color, ethnicity, religion, sex, national origin, age, ancestry, disability, status as a veteran, sexual orientation, marital status, parental status, gender identity, gender expression and genetic information in the University's programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Executive Director of the Office of Institutional Opportunity and Access, <a href="LOA@ku.edu">LOA@ku.edu</a>, 1246 West Campus Road, Room 153A, Lawrence, KS 66045, (785) 864-6414, 711 TTY.