

### In this issue...

- 1 [KU to Co-Sponsor NanoFrontiers Symposium at Missouri in June](#)
- 1 ["Thursday Research Topics" Session to Focus on International Issues](#)
- 2 [Advanced Research Computing Facility Dedicated at Nichols Hall](#)
- 2 [KUCTC Inaugural Innovation Fair Includes Student Posters, Awards](#)
- 2 [Continuing Resolution Extends Federal Sequester to Year-End](#)
- 3 [Five KU Researchers Receive Proof of Concept Fund Support](#)
- 3 [KU Energy Conference: April 25](#)
- 4 [Hall Center to Host International Humanities Meeting April 25-27](#)
- 4 [IPSR Hosts Inaugural North American Data Documentation Conference](#)
- 5 [Note: NIH Public Access Policy](#)
- 5 [Postdoc Research Day a Success](#)
- 5 [Keywords Requested for Proposals](#)
- 5 ["Walk Talk Jayhawk" Continues](#)
- 6 [Author Carl Zimmer Discusses Real Science That's Too Scary for Movies](#)
- 6 [NIH Director's Blog Features KU Research Labs Nanoparticles Artwork](#)
- 7 [UPCOMING EVENTS](#)



## KU to Co-Sponsor June 6-7 Conference on Nanotechnology and Research

The 4<sup>th</sup> Annual NanoFrontiers Symposium - a regional conference on nanotechnology and research - is planned for June 6-7 at the University of Missouri-Columbia. KU is a sponsor of the event, along with Iowa State University, the Missouri University of Science and Technology, Missouri State University, the University of Missouri-Kansas City, the University of Missouri-St. Louis, Washington University in St. Louis, and Boeing.

The Symposium will feature nationally known speakers and participants from the National Institutes of Health, the Department of Defense, and other government and industry organizations. Judy Wu, University Distinguished Professor of Physics and Astronomy, is KU's representative on the steering committee.

The symposium provides a platform for nanotechnology researchers and practitioners in various fields to:

- Discuss advances in nanoscience and nanotechnology;
- Identify potential opportunities for commercialization;
- Share entrepreneurial experiences; and
- Connect academia with industry, government agencies, private foundations and venture capitalists

Technical sessions will include nanomedicine, nanomaterials, energy, sensing technologies, and commercialization/regional infrastructure. Presentations will take place in the Christopher S. Bond Life Sciences Center. Posters on nanotechnology as it relates to energy, life sciences and engineering will be on display all day and staffed at various times.

Registration is complimentary and available until May 28 or until capacity is reached. For more information, and to register and make hotel reservations, go to the [NanoFrontiers web site](#).

## April TRT Session Focuses on International Issues

The Office of Research and Graduate Studies offers a monthly "Thursday Research Topics" program that's open to all interested persons. The topic for the April 11 session is "International Travel, Shipping, and Export Controls." The presentation will be led by Susan MacNally, Rex Burkhardt, and Christopher Griffith. TRT begins at 11:10 a.m. and concludes at 11:50 a.m. in the Simons Labs Auditorium. All TRT presentations are recorded and available online for later viewing.

## Advanced Computing Facility Dedicated April 3 at Nichols Hall



Photo courtesy KU Marketing Communications

KU's new Advanced Computing Facility was officially dedicated April 3 with a program, ribbon-cutting, and reception at Nichols Hall. Shown at left are Bob Lim, chief information officer, KU Information Technology (IT); Jim Beach, assistant director for bioinformatics, Biodiversity Institute; Perry Alexander, director, Information and Telecommunication Technology Center (ITTC); Jeff Vitter, provost and executive vice chancellor; and Steve Warren, vice chancellor for Research and Graduate Studies (RGS). Vitter, Alexander, and Beach spoke during the ceremony. KU IT and RGS are collaborative partners in the project with ITTC.

The Advanced Computing Facility dramatically increases research computing power for the life sciences and other KU research programs. It was funded by a \$4.6 million grant from the National Institutes of Health.

## KUCTC Innovation Fair to Showcase Students, Recognize Faculty Entrepreneur

The KU Center for Technology Commercialization will hold its inaugural Innovation Fair on Tuesday, April 30, from 4 to 6 p.m. in the Kansas Union Ballroom. The event will showcase the technological innovations of KU students, and the 2013 Jim Baxendale Commercialization Award will be presented to an outstanding entrepreneurial faculty member.

The fair provides an opportunity for students and the public to learn about KU technology, discover opportunities for entrepreneurial collaboration, and network with faculty, students, and company representatives. The focus of the event is a poster session presented by graduate and undergraduate students. A panel of judges will review the posters and students in each division are eligible for 1<sup>st</sup> (\$1,000), 2<sup>nd</sup> (\$750), and 3<sup>rd</sup> (\$500) place prizes.

Poster abstracts are due by April 14. Refreshments will be served during the fair, and participants are asked to register by April 26. Use the [KUCTC Innovation Fair website](#) to submit abstracts and register. For more information, contact Bethany Scothorn, [bethanyscothorn@ku.edu](mailto:bethanyscothorn@ku.edu), at KUCTC.

## Continuing Resolution Extends Federal Sequester to Year-End



AGENCY	SEQUESTER CUTS
National Institutes of Health	\$1,553,000,000
Centers for Disease Control and Prevention	\$303,000,000
Food and Drug Administration	\$209,000,000
National Science Foundation	\$290,000,000
<b>TOTAL (FY 2013):</b>	<b>\$2,355,000,000</b>

Source: Office of Management and Budget, based on FY13 funding levels.

Congress approved another "continuing resolution" in late March that provides funding for the federal government through the end of fiscal year on September 30. This action headed off the possibility of a federal government shutdown, but included the \$85 billion across-the-board sequester spending cuts.

[RGS has a web page](#) that contains information about the sequester as it affects university research and the principal federal funding agencies. More than 2,000 hits on that page were recorded on March 5, the day it was posted.

With the adoption of the continuing resolution, advocacy efforts are shifting to restoring or increasing federal research funding going forward. An example of third-party advocacy is the Research!America graphic, part of its [extensive sequester-related web page](#). Research!America conducts survey research and provides health-related policy analysis.

It is premature to state what immediate impacts the sequester is having at KU, both for research and in other areas. A work group continues to meet, with sub-committees for issues related to employment, students, and financial and regulatory systems. The group is chaired by Steve Warren, vice chancellor for research and graduate studies.

## Five KU Researchers Receive Inaugural Proof of Concept Fund Support

Five KU researchers have been awarded \$50,000 each through the university's competitive new [Proof of Concept Fund](#) for projects that are near the commercialization stage. "The fund supports KU inventions that are close to attracting industry investment," said Julie Goonewardene, associate vice chancellor for innovation and entrepreneurship and president of the KU Center for Technology Commercialization. "It is specifically designed to help high-potential KU technologies further attract industry investors and partners in the immediate future."

The five inaugural awardees are:

- **Cory Berkland**, Chemical and Petroleum Engineering. The project involves engineering a device to deliver dry powder aerosols to mechanically ventilated patients. Prototypes of the device have so far shown promise in delivering steroids, antifungals and antibiotics through a hospital ventilator.
- **Mark Fisher**, Biochemistry and Molecular Biology. The project seeks to develop new protein-based drugs to address protein-folding diseases such as Parkinson's disease.
- **Teruna Siahaan**, Pharmaceutical Chemistry. The project seeks to develop new drugs for multiple sclerosis.
- **Ossama Tawfik**, Pathology and Laboratory Medicine. The project seeks to develop a slide and tissue block valet system, which is a fully automated archival system for storage and retrieval of slides containing vital tissue samples in pathology labs.
- **Judy Wu**, Physics and Astronomy. The project seeks to advance the production of high-sensitivity miniature detectors and sensors used in solar panels and other optoelectronic applications such as touchscreens, displays, and LEDs.

The five will receive support for one year in order to make the technologies more attractive for private investment. The fund supports all areas of technology, including electronics, software, communications and engineering. Supported projects must have industry involvement and, preferably, a monetary or in-kind match from industry partners. Proposals were judged by a panel of KUCTC staff and outside consultants.

Mark Fisher was also recognized in April as one of two KU researchers whose technology was featured at the annual [University Research & Entrepreneurship Symposium](#). This showcase of the most promising university-based inventions was held in Cambridge, MA and is designed to introduce a select group of cutting-edge university technologies to investors and entrepreneurs, with the goal of securing funding for new startup companies and converting university technologies into new products and cures. Over the past five years, 13 companies have received nearly \$100 million in funding due to presentations at the symposium.

Only 33 technologies were chosen for presentations this year, and KU was one of only seven institutions to earn multiple presentation slots, joining Harvard University, Johns Hopkins University, the Massachusetts Institute of Technology, the Mayo Clinic, the University of Pittsburgh, and the University of Wisconsin-Madison. Last year, KU had three projects at the symposium, one of only four institutions with multiple presentation slots.

Fisher was joined at the symposium by Heather Desaire, Chemistry, and Melinda Toumi, an entrepreneur with the UMKC School of Business FastTrac Program. They are developing new protein production technologies that are broadly applicable to many areas of biomedical research.

## Reminder: KU Energy Club to Hold Energy Conference April 25 at The Oread

The [2013 KU Energy Conference](#) will be held Thursday, April 25 at The Oread hotel in Lawrence. The all-day conference will be hosted by the KU Energy Club, a student organization that strives to promote collaboration between academia, industry, and the public sector on energy-related issues. The conference will include a research symposium, keynote speakers, and panel discussions. For more information, contact student [Austin Abitz](#), (913) 575-1503.

## Hall Center to Host International Humanities Meeting April 25-27



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.

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](#).

## Institute for Policy & Social Research Hosts Inaugural Data Conference



The [Data Documentation Initiative \(DDI\)](#) is an international metadata standard for the observation and measurement of human activity. Although primarily used by quantitative social scientists, an increasing number of scientists in other disciplines are embracing DDI to document and manage their data and metadata.

On April 2-3, KU's Institute for Policy & Social Research hosted the first [North American DDI Conference](#). It was an opportunity for those using DDI and those interested in learning more about it to come together and learn from each other. Patterned after the successful 2012 European DDI conference in Bergen, Norway, the conference attracted researchers and data professionals in the social sciences and other disciplines. Shown welcoming the group at Alderson Auditorium (left) is Steve Warren, vice chancellor for research and graduate studies.

Jay Greenfield of Booz Allen Hamilton was the keynote speaker. He is the semantic architect for a DDI Lifecycle-based metadata system that supports the National Children's Study. Other session presentations featured the use of DDI in research programs and data repositories, recent developments in DDI, and demonstrations of new DDI tools. The [full program for the conference is online](#).

The conference took place at KU thanks in part to a \$6,500 grant from the Alfred P. Sloan Foundation. Larry Hoyle, senior scientist at the Institute for Policy & Social Research, received the grant and Deborah Ludwig, assistant dean of collections and scholar services for KU Libraries, was the co-investigator. The grant supported the conference and helped reduce the registration fee for graduate students. Both KU Libraries and the Sloan Foundation sponsored the conference.

## Research Administration: NIH Public Access Policy

Investigators with current NIH grant awards should be aware that, beginning July 1, 2013, NIH will delay processing of non-competing continuation awards if publications arising from the grant are not in compliance with the NIH public access policy. Compliance with this policy has been a condition of all grants and cooperative agreements since 2008. From the NIH Public Access Policy website <http://publicaccess.nih.gov/>:

“The NIH Public Access Policy ensures that the public has access to the published results of NIH funded research. It requires scientists to submit final peer-reviewed journal manuscripts that arise from NIH funds to the digital archive PubMed Central *upon acceptance for publication*. The Policy requires that these papers are accessible to the public on PubMed Central no later than 12 months after publication.”

In order to avoid award delays, investigators are encouraged to use the resources available on this NIH site to ensure their publications are compliant with the NIH policy. In addition, RGS Pre-Award Services will begin using a new tool created by NIH, the Public Access Compliance Monitor (PACM). This tool will allow RGS to track publications that do not meet the public access requirements. Once the publications have been identified in the PACM, RGS will notify the authors and provide assistance in bringing those publications into compliance. If you have any questions about this please contact Nancy Biles, [nbiles@ku.edu](mailto:nbiles@ku.edu), (785) 864-5042.

## Postdoctoral Research Day and STEM Career Fair a Success



The **KU Postdoctoral Association (KPA)** held a successful Postdoctoral Research Day and STEM Career Fair (left) March 15 at the Kansas Union. Postdocs from KU's Lawrence and Medical Center campuses shared their research and networked with representatives from industries related to science, technology, engineering, and mathematics. Featured keynote speaker was

Danny Welch, professor and chair of cancer biology at the KU School of Medicine. The event was supported by the Office of Research and Graduate Studies and Coca Cola.

## Keywords Requested for Sponsored Project Proposals

In response to the university's strategic plan, *Bold Aspirations*, RGS is working to better enable KU researchers to pursue multidisciplinary strategic initiatives. As part of this effort, RGS Pre-Award Services staff are starting to ask investigators submitting proposals for sponsored project funding to select keywords describing the project from a standardized list. Use of standardized keywords will improve RGS tracking and reporting of research, and will facilitate collaboration by grouping researchers with similar interests. If you have any questions about this please contact Nancy Biles, [nbiles@ku.edu](mailto:nbiles@ku.edu), (785) 864-5042.

## “Walk Talk Jayhawk” a Healthy Option for KU Researchers, Others

Unclassified Senate has organized a new walking (and talking) program this spring. The idea is to help KU staff get fit while building camaraderie and cross-campus connections. “Walk Talk Jayhawk” meets every Tuesday through May 7. All KU staff are invited to participate. Participants meet at noon for 20-minute group walks. Weekly walking meet-up sites include: Jayhawk Statue in front of Strong Hall; Phog Allen Statue in front of Allen Field House; South Side Patio of the Pharmacy Building on West Campus; in front of Building “A” at LSRL (15<sup>th</sup> and Wakarusa); and the lobby of Regnier Hall at KU Edwards Campus. Check the [Facebook page](#) for details on meet-up sites each week, or contact Claudia Bode, [bode@ku.edu](mailto:bode@ku.edu), (785) 864-1647.

## Author Carl Zimmer Discusses Real Science That's Too Scary for the Movies



Nationally known science writer [Carl Zimmer](#) (left) spoke at the KU Edwards Campus in Overland Park on March 27 on the topic of “Monsters and Science.” An audience of more than 125 community members and students learned about everyday things going on in the natural world that make some of the scariest science fiction movies seem tame.

An insect being turned into a “zombie” and devoured by a parasite is not for the squeamish, but scientists are learning about antibiotics secreted by the parasite that could help treat tuberculosis in humans. “It’s not impossible that this bizarre monster might eventually save somebody’s life,” said Zimmer.

“People often feel that a science like biology is too hard to understand and too abstract to care about,” observes Zimmer. “Showing people that real life is more exciting than monsters on the silver screen is a powerful way to turn people towards science.”

Zimmer is the author of a number of popular books, notably *A Planet of Viruses*; *Parasite Rex: Inside the Bizarre World of Nature’s Most Dangerous Creatures*; and *Evolution: Making Sense of Life*. A book-signing followed his presentation. Earlier on the 27<sup>th</sup>, he gave a workshop on science writing to students in the UKanTeach program at Lawrence.

Zimmer spoke as part of the Science for the People Lecture Series, presented by KU’s [Center for STEM Learning](#), formerly the Center for Science Education. The center, directed by Steve Case, has offices at both the Lawrence and Edwards campuses and oversees [UKanTeach](#), a collaboration between the College and the School of Education.



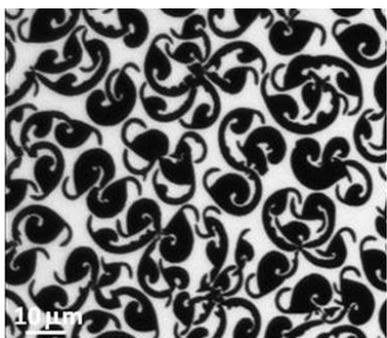
Tinker



Mooney

Two additional presentations in the series are scheduled this month. On Wednesday, April 17, Robert Tinker, founder and president emeritus of the [Concord Consortium](#), will speak on “Educational Technology and the New Generation Science (and Engineering) Standards.” Concord’s mission is “to ignite large-scale improvements in teaching and learning through technology.” On Wednesday, April 24, [Chris Mooney](#), a science policy journalist and author of *Storm World: Hurricanes, Politics, and the Battle Over Global Warming*; and *The Republican War on Science* will speak on “The Science of Why People Deny Science and Reality.” Both talks are free and open to the public at 7:30 p.m. in the Regnier Hall Auditorium at KU Edwards Campus.

## NIH Director’s Blog Features KU Research Lab’s Nanoparticles Artwork



Francis Collins, director of the National Institutes of Health, cited a KU research project in his [March 28 blog](#). Referring to the image at left, he wrote:

“These eye-catching spirals may resemble a trendy print from Diane von Furstenberg’s Spring Collection, but they’re actually a close-up of lung surfactant—a lipid-protein film that coats the inside of the air sacs in the lungs, making it easier to breathe. Made using fluorescence microscopy techniques, this image shows what happens to the surfactant (black) when it interacts with carbon nanoparticles.

“Scientists found that carbon nanoparticles rearrange the surfactant molecules from kidney bean shaped clusters into solid spirals. Since carbon nanoparticles may be effective drug delivery vehicles, it’s important to know how these molecules alter the surfactant—and whether these changes are harmful. The verdict is still out on whether disrupting the surfactant triggers breathing problems, but we can still be mesmerized by the image.”

The source of the image was Prajnaparamita Dhar, KU assistant professor of chemical engineering. It was created by two students in her lab – Ashleigh Steckly and Ming Li Tan – and [recently won first place in the Biophysical Society’s Art of Science Image Contest](#), held in Philadelphia. The carbon nanoparticles used for the image were obtained from Laird Forrest’s lab in Pharmaceutical Chemistry.

## Upcoming Events

News of interest to the research community. Additional details are available at the [KU Calendar](#).

### April 12

Conference: "Global Water: Drought, Conservation, & Security in the 21<sup>st</sup> Century"  
Spooner Hall, The Commons

### April 17

"Why Big Data Will Never be Big Enough to Handle the Social," Nancy Baym, Microsoft Research New England  
Noon – Idea Café  
Spooner Hall, The Commons

Lecture: "Educational Technology and the New Generation Science (and Engineering) Standards," Robert Tinker  
7:30 p.m.  
Regnier Hall, Auditorium, KU Edwards Campus

### April 18

Bold Aspirations Lecture: "The Promise of Improvisational Health Ensembles: Stories from the Junction of Arts, Science, and Aging," Anne Basting, UW-Milwaukee  
11 a.m.  
Spooner Hall, The Commons

Lecture: "Exploring the Spatial Turn in the Digital Humanities: Maps, Deep mapping, and Immersive Geo-Virtual Reality," Trevor Harris, West Virginia University  
7:30 p.m.  
Spooner Hall, The Commons

### April 24

Lecture: "The Science of Why People Deny Science and Reality," Chris Mooney  
7:30 p.m.  
Regnier Hall, Auditorium, KU Edwards Campus

### April 25-27

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

### April 27

16<sup>th</sup> annual Undergraduate Research Symposium  
Afternoon and Evening  
Kansas Union

### April 30

KU Center for Technology Commercialization  
Inaugural KUCTC Innovation Fair  
4 – 6 p.m.  
Kansas Union, Ballroom

### May 18

KU Doctoral Hooding Ceremony  
Lied Center

### June 5-7

NanoFrontiers Symposium 2013  
All Day  
Bond Life Sciences Center  
University of Missouri - Columbia

### June 20

Research Symposium: "Integrating Technology into Translational Research"  
Kansas City Area Life Sciences Institute (KCALS) and Frontiers: The Heartland Institute for Clinical and Translational Research  
Kansas City University for Medicine and Biosciences

### August 26

KCALS Animal Health Research Symposium  
Kansas City (MO) Convention Center

### October 1 *[Rescheduled from May 7]*

KCALS Annual Dinner  
Sheraton Kansas City (MO) Hotel at Crown Center

### November 20

BioResearch Central Summit, presented by KCALS, Missouri Bio, and KansasBio  
Ritz Charles Convention Center, Overland Park, KS

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, [IOA@ku.edu](mailto:IOA@ku.edu), 1246 West Campus Road, Room 153A, Lawrence, KS 66045, (785) 864-6414, 711 TTY.