

KU Discovery & Innovation

News from KU Research

March 2016

HIGHLIGHTS

- 1 KU Partners with Honeywell
- 2 Chancellor's Annual Report
- 2 KU on AAU Cybersecurity Site
- 2 Postdocs to Meet at Nichols
- 2 Nobel Recipient Speaks in KC
- 2 Researcher Kudos
- 3 Hall Center Hosts Humanities Lectures in March, April
- 3 Capitol Graduate Research Summit, KU Competition
- 4 KCALSI: Translational Meeting, Patton Trust RFP
- 4-5 Research Notes
- 5 'Startup School' Attracts 60+
- 6 Pipeline Fellows Meet at KU
- 6 'Status of Women in Kansas'
- 6 Symposium on U.S. Military's All-Volunteer Force
- 6 Students Organize Career Fair
- 7 UPCOMING EVENTS



KU and Honeywell representatives gathered for a luncheon and ceremony at the School of Engineering. Sara Rosen, right, and Jim Tracy of KU Research signed the agreement on behalf of KU.

KU to Partner with Honeywell on Research

KU has entered into a new research collaboration that will position faculty and students to work with industry on technologies that enhance national security. A **master collaboration agreement** was signed February 16 with Honeywell Federal Manufacturing & Technologies. The agreement will expedite future research contracts funded through Honeywell, enabling the two organizations to work more closely on research and development projects. It will also promote interaction and exchange between KU researchers and Honeywell personnel.

At the signing ceremony, Sara Rosen, interim provost and executive vice chancellor, said, "KU's Bold Aspirations plan promotes the application of scholarship in service to the state, nation and world. This includes working to ensure the safety and security of civilian populations in the U.S. and elsewhere. This collaboration with Honeywell gives faculty and students an opportunity to engage in research that has far-reaching public impact."

Honeywell manages and operates the **National Security Campus** in Kansas City, MO. It is a government-sponsored, multi-mission engineering and manufacturing enterprise affiliated with the U.S. Department of Energy.

Honeywell is making its first long-term loan of advanced research equipment this spring and is funding a research project at KU's Center for Remote Sensing of Ice Sheets.

"The system will be used in a new project with Honeywell involving collaboration with other universities," said Carl Leuschen, right, associate professor of electrical engineering and computer science. "We'll develop and evaluate new manufacturing and packaging technologies coupled with computer-aided design tools to enable miniaturization and ruggedness of optimized microwave electronics in radar transmitter and receiver designs."



Kevin Boatright
Director of External Affairs
KU Office of Research
kboatright@ku.edu
(785) 864-7240

Chancellor's Report Issues a Call to KU



Chancellor Bernadette Gray-Little, left, issued her online [2016 annual report](#) video presentation March 4. While celebrating KU's 150 years of growth, academic excellence, and research breakthroughs, she also calls on KU students, faculty and staff to focus their

efforts on addressing society's greatest challenges. A number of KU researchers appear in the video and numerous related stories, four of whom are shown below.



Lisa Stehno-Bittel

Chris Beard

Alice Bean

Bala Subramaniam

AAU Cybersecurity Page Cites KU Project

The Association of American Universities (AAU) recently launched a [new webpage about cybersecurity research](#) and education at AAU universities: "Helping Safeguard the Connected World." The site highlights scientific discoveries, behavioral insights, technological breakthroughs, research on the legal and policy implications of cybersecurity, and successful cybersecurity education programs.

Among the initial projects posted on the AAU site is a KU News story released in January: "[KU to train next-generation cybersecurity experts for government.](#)"

The cybersecurity webpage is the second in a series using current events to showcase research on AAU campuses. The first topical page, "[Helping Solve the Fresh Water Puzzle,](#)" featured two related KU research stories.

KU Postdocs Gather March 25 at Nichols

The [KU Postdoctoral Association](#) will hold its regular noon-hour luncheon meeting Friday, March 25 at a new location, the Ron Evans Apollo Auditorium in Nichols Hall. The speaker will be Maureen Purcell, a career coach at SoLwork LLC. Her topic is "Shifting from IQ to EQ: Creating Ongoing Success in the Workplace." RSVP by March 21.

Nobel Laureate to Speak in Kansas City

Randy Schekman, co-recipient of the 2013 Nobel Prize in Physiology or Medicine, will speak at 5:30 p.m. on Thursday, March 24, at the Community Research Reception, an event hosted by the Kansas City University and the Kansas City Area Life Sciences Institute.

Schekman, a cell biologist at the University of California, Berkeley, and a Howard Hughes Medical Institute Investigator, received the Nobel Prize (along with James Rothman and Thomas Südhof) for their groundbreaking work on cell membrane vesicle trafficking. At the event, Schekman will speak on "The Importance of Basic Research and How it Impacts Science."

The reception will take place at the Kauffman Foundation Conference Center, 4801 Rockhill Road, Kansas City, MO. [Registration is required online](#) by March 18.

Researcher Kudos

- Physics graduate students **John Martens** and **Donald Lee-Brown** have been chosen to attend the 66th [Lindau Nobel Laureate Meeting](#) this summer in Lindau, Germany. The U.S. delegation will include about 55 young scientists. The award, sponsored by the National Science Foundation, includes travel expenses, registration and pre-event programming. The six-day meeting, dedicated to physics, features in-depth exchanges with more than 30 Nobel laureates.
- The Center for Latin American & Caribbean Studies and its community partners have received a [Latino Americans: 500 Years of History grant](#) supported by the National Endowment for the Humanities and American Library Association. During April, [events, exhibitions and viewings](#) will take place on campus, in Topeka and at the Lawrence Public Library.
- Congratulations to the 49 KU [recipients of \\$1,000 Undergraduate Research Awards](#). The competitive grants support students as they work with faculty on research and creative projects. The program is coordinated by the Center for Undergraduate Research and funded by the College of Liberal Arts and Sciences, the Office of Research, Undergraduate Studies and the Office of the Provost. More than 1,450 student projects have been funded through the program since 1986.

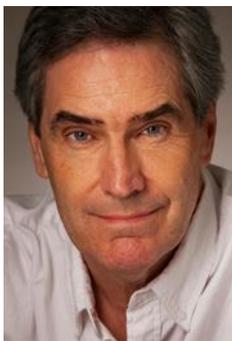
Three Humanities Lectures in March, April

The final three presentations in the Hall Center's year-long **Humanities Lecture Series** are scheduled for March and April. All programs are free and open to the public.



On Tuesday, March 22, at 7:30 p.m. Hannah Britton, left, will speak at The Commons in Spooner Hall on **"Human Trafficking in the Heartland."**

Britton, associate professor of political science and women, gender, and sexuality studies, is coordinator of the Anti-Slavery and Human Trafficking Initiative at KU. She is also director of the Center for the Study of Injustice at the Institute for Social Policy & Research.



On Thursday, April 7, at 7:30 p.m. Michael Ignatieff, left, will speak at the Lied Center Pavilion on **"The Better Angels of Our Nature: Is Moral Progress Possible?"**

Ignatieff is the Edward R. Murrow Professor of Practice at Harvard's John F. Kennedy School of Government. Between 2006 and 2011, he served as an MP in the Parliament of Canada. He was later the leader of the Liberal Party of Canada and an unsuccessful candidate for prime minister in 2011.



On Thursday, April 14, at 7:30 p.m. Robin D.G. Kelley, left, will speak at the Lied Center Pavilion on **"Mike Brown's Body: A Meditation on War, Race, and Democracy."**

Kelley is the Gary B. Nash Professor of American History at UCLA. His lecture concerns the 2014 killing of Mike Brown in Ferguson, MO, and the wave of anti-police protests that followed. Kelley views Brown as "a casualty of a war originating over 500 years ago, a war to colonize, dispossess, enslave, and deny rights of citizenship to African Americans."



THE 13TH ANNUAL CAPITOL GRADUATE RESEARCH SUMMIT took place February 2 in Topeka. **BioKansas**, an organization that represents the biosciences network in Kansas, presented cash awards to graduate students from six participating Kansas universities. Poster presentations were judged based on quality and commercialization potential. The KU Lawrence recipient was Rouzbeh Khajehdehi, second from right, a doctoral student in Civil, Environmental and Architectural Engineering. Other participating KU students were Mackenzie Cremeans, Geology; Emily Carlson, Pharmacology and Toxicology; Jessica Juanico, Applied Behavioral Science; Michaela McNiff, Pharmaceutical Chemistry; Venkat Motupalli, Engineering Management; Brock Ternes, Sociology; and Renae Waters, Bioengineering.

Graduate Research Competition is Set

KU's annual **Graduate Research Competition** will take place Tuesday, March 29 during the afternoon at the Kansas Union. It is a campuswide event focusing on graduate student research, and provides graduate students the opportunity present their research to faculty judges and peers from across the university.

Students make oral or poster presentations, with prizes awarded by the Office of Graduate Studies. Participants with presentations in engineering or the social/behavioral/physical/biological sciences may participate in the Sigma Xi Research Paper competition. The top early and advanced graduate students will be recognized at the Sigma Xi award ceremony in May.

Students and faculty are encouraged to attend and be exposed to the breadth and depth of graduate student research taking place at KU. Individual poster presentations will be made from 1 – 3 p.m. in the Kansas Union Ballroom. Three-person panels of oral presentations will be made in various conference rooms located throughout the building. The event is free and open to the public.

Translational Medicine Meeting at UMKC

The Kansas City Area Life Sciences Institute (KCALSI), in cooperation with Saint Luke's Hospital and the University of Missouri-Kansas City (UMKC), will present the annual [Regional Translational Medicine Meeting](#) April 21-22. The goal of this meeting is to stimulate new collaborations across the region between academic institutions and industry.

The [agenda is available online](#). The meeting will begin at UMKC at 11 a.m. on the 21st. Highlights of the day include presentations by Lynda Bonewald on musculoskeletal diseases, Peter Koulen on novel ways to diagnose chronic diseases and Jerry Wyckoff on *in silico* drug discovery approaches. There will also be presentations on new cancer approaches and a novel method for insulin administration using light. The day will conclude at 5:15 p.m. after a presentation by Maria Meyer on Kansas City's entrepreneurial ecosystem. A reception will follow.

On the 22nd, presentations will begin at 7:30 a.m. at Saint Luke's. Internationally renowned cardiologist John Spertus will discuss the vision of translational medicine in clinical care. Other presenters will be James Case on improving the accuracy of diagnostic testing and David Cohen on evaluating the cost effectiveness of novel interventions. Additional presentations will include precision medicine and shared decision making tools in outcomes research. The second day concludes at 12:30 p.m.

The meeting is free and open to interested researchers, but [online registration is required](#). The meeting moves each year. The 2015 meeting was held at KU in Lawrence.

KCALSI Announces Patton Trust RFP

The Kansas City Area Life Sciences Institute (KCALSI) has issued a Request for Proposal (RFP) for its [Patton Trust Research Grants program](#). All full-time researchers at KCALSI key stakeholder institutions (including KU) are eligible to submit proposals in response to this RFP.

A letter of intent is due by 5 p.m. on March 30. The full application deadline is 5 p.m. on April 27. Proposals must be focused specifically on the genetic basis of diseases that predominantly affect *children*. The funding date for successful proposals is July 1.

Proposals are invited for multidisciplinary collaborative research development grants consistent with the scope of this specific RFP. Awards are limited to \$50,000 for one year

and are intended to utilize investigator and facility strengths leading to highly competitive future proposals directed toward government or private agencies. KCALSI seeks to support research development grants capable of generating critical preliminary data needed to develop competitive proposals for submission to external agencies.

The number of awards made is dependent on available KCALSI resources. Funding for this grant program is provided by the Paul Patton Trust, whose trustees are Ted McCarter and William Evans Jr. of Bank of America, N.A.

Research Notes

Per Diem Rates for Travel

Effective April 1, KU will begin using the federal continental U.S. (CONUS) and outside the continental U.S. (OCONUS) travel per diem rates for the KU Research business unit. Of special importance to note:

- The [online listing](#) of new per diem/lodging rates;
- Rates will be updated each year on April 1, October 1;
- KU Research will use systematic quarter-day calculation for per diem;
- KU Research travelers may opt to claim actual expenses in lieu of per diem, but reimbursement for actual expenses may not exceed the U.S. Department of State per diem allowance. Only allowable expenses with actual receipts will be reimbursed.
- Travel authorizations for travel ending after April 1 should be created or modified and use the new rates;
- The old travel expense rates will continue to be available until August 1 for use on expense reports covering travel that ended prior to April 1;
- For international travel, major cities are included for countries and each country also has an "Other" category for cities not individually listed;
- [Online FAQ](#) for answers to general questions; and
- [Smart phone apps](#) are available.

More [information will be available soon online](#) at the KU Research site. Address immediate questions to [Karen Schaller](#), assistant director of accounting and reporting in KU Research Financial Services, 864-4702.

Research Notes

Limited Submissions Policy Revision Takes Effect

The university policy on **Institutional Endorsement of Proposals when Submissions are Limited by External Funding Agency** has been revised. Implementation will begin March 15 with a new Notice of Intent (NOI) process for limited submissions.

The intent of the new process is to reduce principal investigator (PI) burden, streamline the selection process, and allow more time for proposal preparation. The revised policy has been endorsed by the Faculty Senate Committee on Research.

Future limited submission announcements will include a link to an NOI form, below, to be completed by PIs who are interested in the opportunity. The announcement will include a deadline for NOI submission, typically no later than one week after the opportunity is announced. Respondents will only be asked to provide the PI's name and the names of other KU team members on the NOI form.

The screenshot shows a web form titled "Limited Submission Opportunity Notice of Intent (NOI)" from KU Research. It includes fields for Agency (Gordon and Betty Moore Foundation), Program Title (Moore Inventor Fellows), KUCR Post (02/11/2016), and Date. The "PI Information" section has a red warning: "** Please note all fields are required. **". It contains input fields for Last Name and First Name, and a larger text area for Known Team Members with a note: "** If no additional KU Co-PIs or Senior Personnel, please enter 'None' "**.

As an alternative to completing the NOI form, PIs may also submit their NOI information to kuclimitedsubs@ku.edu.

If the number of NOI received by the deadline does not exceed the number of allowed proposals, all investigators will be encouraged to proceed and will be directed to Pre-Award Services or their preferred research center for assistance with proposal submission. Investigators who have submitted an NOI will only be asked to submit a pre-proposal for consideration by an internal review committee if the number of NOI received exceeds the number of allowed proposals.

If you would like to be added to the distribution list for limited submission announcements, please send your request to kuclimitedsubs@ku.edu. Following email distribution, all limited submission announcements are **posted at the KU Research website**.



Above: Wally Meyer, School of Business, addresses the group.



Left: Student entrepreneurs Nikki Galvis and Austin Barone

Below: Guest lecturer and KU alumnus Wilton Risenhoover



'Startup School @ KU' Attracts 60+

More than 60 students, faculty and staff attended the first session of **Startup School @ KU** on the evening of March 2 at the Bioscience & Technology Business Center. The free informative program provides participants with a fundamental understanding of how to launch a successful company and further develop entrepreneurial skills.

The opening lecture was on key components of successful startups. The presenter was Wilton Risenhoover, a serial entrepreneur who advises early stage companies on fundraising and technology. His background includes a B.S. degree in computer science from KU.

Startup School @ KU continues on March 9, 23, 30 and April 6, 13. Registration is now closed.

Based on a model used at Stanford, the **curriculum** features a flipped classroom approach, a variety of guest lecturers, and extensive discussion based on the readings and personal experiences.

This is the second edition of Startup School @ KU this year. It was open to all KU faculty and staff, as well as students in the Department of Electrical Engineering and Computer Science. Sponsors are KU Innovation and Collaboration, the School of Engineering, and the Center for Entrepreneurship in the School of Business.



THE 2016 CLASS OF **PIPELINE FELLOWS ENTREPRENEURS** began the first of four learning modules February 24 at KU. They spent the day at the Bioscience & Technology Business Center (BTBC) but also toured Allen Fieldhouse, above. Pipeline is a rigorous, regional year-long business leadership development program. It blends workshop modules, expert advice and access to a network of entrepreneurs. KU is a Pipeline university member, as is Washington University in St. Louis, the University of Missouri-Columbia and the University of Nebraska at Lincoln. One Pipeline Network Adviser is Julie Nagel, interim associate vice chancellor for innovation and entrepreneurship. This year's class includes Blake Hawley, president and CEO of Integrated Animal Health, a company based at the BTBC Main Facility Phase II.

Kansas 'Status of Women' Report Released

The **Women's Foundation**, an organization in Kansas City, MO, that promotes equity and opportunity for women of all ages, has released the findings of a new research report on the "Status of Women in Kansas."

The project was commissioned from KU's Center for Science Technology & Economic Policy, part of the Institute for Policy & Social Research. The team producing the 87-page report was led by Donna Ginther, professor of economics and director of the center. **The full text is available online.**

"We've appreciated the opportunity to dive into the data and analyze various key indicators affecting women in Kansas," said Ginther. Indicators include employment and income, education and child care, health, poverty and social insurance, and leadership. "The research is clear," she said. "There are many opportunities and issues that must be addressed if the aspirations of women are to be fulfilled."

The Women's Foundation released the findings March 8 at a news conference at the State Capitol. Participants included Rep. Melissa Rooker of Fairway, who expressed support for a government "that uses research to identify real problems and real solutions which can be used to increase economic development for women and all of Kansas."

New KU Center Hosts First Symposium

KU's new **Center for the Study of the U.S. Military**, part of the Institute for Policy & Social Research, will host its first symposium on Thursday, April 28 at the Kansas Union. The topic is the all-volunteer force (AVF).

Beth Bailey, Foundation Distinguished Professor of history, is director of the center. She is a military historian who came to KU in 2015 from Temple University.

"When the U.S. ended the draft and moved to an all-volunteer military in 1973," says Bailey, "most political and military leaders assumed that if the U.S. again fought a long, major war the nation would reactivate the draft. It is now the right time, in the wake of costly wars in Afghanistan and Iraq, to evaluate the AVF."

The **symposium agenda** will address four key questions:

- Is the AVF fair?
- Is it efficient and sustainable?
- Does it promote militarism, and how well does it provide for the national defense?
- What are alternatives to the AVF?

The symposium begins at 8:30 a.m. in the Centennial Room and continues to 4:30 p.m. It will feature a variety of national experts with diverse perspectives on the AVF.

From 6 - 7:30 p.m., a public conversation on the AVF is scheduled for the KU Alumni Center. Bailey will moderate a panel that includes Lawrence Korb, assistant secretary of defense under President Reagan; Lawrence Wilkerson, a former chief of staff to Secretary of State Colin Powell; Bernard Rostker, a former undersecretary of defense and director of Selective Service; and Maj. General (Ret.) Dennis Laich, executive director of the AVF Forum.

All events are free and open to the public. Registration is requested at the center's website.

Event's Focus is Non-Academic Careers

Graduate students in Ecology & Evolutionary Biology and Molecular Biosciences have organized an ambitious full-day symposium and career fair on Saturday, April 2 at the Kansas Union. **SEARCH (Scientists Exploring non-Academic caReer CHOICES)** features presenters from KU, industry and government, notably Meredith Drosback, assistant director for education and physical sciences with the White House Office of Science and Technology Policy. Registration has reached capacity. KU Research is a **sponsor**, as are EEB, the two graduate student organizations, the Higuchi Biosciences Center, the Biodiversity Institute, Student Senate, the Kansas Biological Survey, and the Genetics Society of America.

Upcoming Events

Additional events and details are available at the [KU Calendar](#).

ONGOING

[KU Libraries Exhibition: "Eastern Front 1914-1918: An Exploration of the Conflict"](#)

Watson Library, Haricombe Gallery

[KU Libraries Exhibition: "Easter 1916: Rebellion and Memory in Ireland"](#)

Spencer Research Library, Exhibit Space

MARCH 10

[Celebration of Books: Humanities, Social Sciences, Arts Faculty](#)

4 – 6 p.m.

Hall Center for the Humanities

MARCH 22

[Humanities Lecture Series: Hannah Britton, "Human Trafficking in the Heartland"](#)

7:30 p.m.

Spooner Hall, The Commons

MARCH 23

[Resident Fellows Seminar: Elizabeth MacGonagle, "Remembering Slavery in Africa"](#)

Noon

Hall Center for the Humanities

MARCH 25

[KU Postdoctoral Association: Maureen Purcell, "Shifting from IQ to EQ: Creating Ongoing Success in the Workplace"](#)

Noon – 1 p.m.

Nichols Hall, Ron Evans Apollo Auditorium

MARCH 29

[Center on Assets, Education, and Inclusion Symposium: "Parachutes & Ladders: Education & Social Mobility in the U.S."](#)

10 – 11:30am

Kansas Union, Big 12 Room

[2016 Graduate Research Competition](#)

1 – 4 p.m.

Kansas Union, Ballroom and Conference Rooms

MARCH 29

[WWI Lecture Series: Robert Blobaum, "A Minor Apocalypse: Everyday Life in Warsaw during the First World War"](#)

7 p.m.

Kansas Union, Alderson Auditorium

APRIL 2

[Symposium: Scientists Exploring non-Academic Career Choices \(SEARCH\)](#)

8:30 a.m. – 4:30 p.m.

Kansas Union

APRIL 7

[Humanities Lecture Series: Michael Ignatieff, "The Better Angels of Our Nature: Is Moral Progress Possible?"](#)

7:30 p.m.

Lied Center, Pavilion

APRIL 14

[Humanities Lecture Series: Robin D. G. Kelley, "Mike Brown's Body: A Meditation on War, Race, and Democracy"](#)

7:30 p.m.

Lied Center, Pavilion

APRIL 21-22

[Kansas City Area Life Sciences Institute Regional Translational Medicine Meeting](#)

University of Missouri – Kansas City, St. Luke's Hospital

APRIL 28

[KU Center for the Study of the U.S. Military: Symposium on the All-Volunteer Force](#)

8:30 a.m. – 4:30 p.m.

Kansas Union, Centennial Room

[KU Center for the Study of the U.S. Military: Public Conversation on the All-Volunteer Force](#)

6 – 7:30 p.m.

KU Alumni Center, Summerfield Room

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