



## Zoonoses and National Biosecurity Symposium well attended

The Kansas City Life Sciences Institute's recent Zoonoses and National Biosecurity Symposium, jointly sponsored with Kansas State University School of Veterinary Medicine and University of Missouri School of Veterinary Medicine attracted approximately 150 people to hear nine speakers with expertise in various areas of zoonotic disease. The free symposium was held in conjunction with the Central Veterinary Conference (CVC) and open to the public and CVC's 6,500 attendees.

"We were very pleased with the turn-out. Clearly the subject matter was of great interest, drawing a standing-room-only crowd. Working together with our two Schools of Veterinary Medicine – K-State and MU – to bring timely information to the Veterinary community is important to the life sciences initiative and we hope to do more symposiums in the future," said Bill Duncan, president, KCALSI.

### SYMPOSIUM SPEAKERS

Front row, left to right: **Juergen A. Richt, DVM, PhD**, Lead Scientist, Veterinary Medical Office, Virus and Prion Disease of Livestock Research Unit, National Animal Disease Center, USDA-ARS; **Elizabeth Lautner, DVM**, Director, National Veterinary Services Laboratories; **Alfonso Torres, DVM, MS, PhD**, Associate Dean for Public Policy, College of Veterinary Medicine, Cornell University.

Back row, left to right: **Keith Gary, PhD**, KCALSI Director of Program Development; **Roger W. (Bill) Stich, PhD**, MU Associate Professor of Veterinary Pathobiology; **Roman Ganta, PhD**, K-State Professor of Medicine/Pathobiology; **George C. Stewart, PhD**, MU Chairman, Department of Veterinary Pathobiology, Bond Life Sciences Center; **T.G. Nagaraja, PhD**, K-State Professor of Medicine/Pathobiology; **Deborah Anderson, PhD**, MU Assistant Professor of Veterinary Pathobiology. Not pictured is **RRR (Bob) Rowland, PhD**, K-State Professor of Medicine/Pathobiology.

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The Kansas City Area Life Sciences Institute relies on its Scientific Advisory Committee (SAC) – a group of five internationally respected scientists – to provide critical outside input and guidance in coordinating the regional life sciences initiative. The SAC meets in Kansas City annually and via teleconference, as needed. Their collective insights alert the Institute to emerging and future areas of life science research. They review and assess the productivity and success of Institute research programs

and initiatives, provide an executive summary for the Institute directors as to the strengths and weaknesses of ongoing research programs and make recommendations for improvements, continuation or termination of funding; and assist with the identification and recruitment of scientists to perform peer review evaluation of Institute research initiatives or opportunities.

## WHEN BRILLIANT MINDS MEET: SCIENTIFIC ADVISORY COMMITTEE MAKES ANNUAL VISIT TO REGION



### THE FIVE MEMBER SAC COMMITTEE INCLUDES:

Standing left to right:

**D. Craig Brater, M.D.**, Dean, Indiana University School of Medicine, Walter J. Daly Professor, Indianapolis

**David M. Livingston, M.D.**, Emil Frei Professor, Harvard Medical School and Deputy Director of the Dana-Farber/Harvard Cancer Center, Boston

**Barbara Meyer, Ph.D.**, Howard Hughes Investigator and Professor of Genetics and Development, University of California, Berkeley

Sitting left to right:

**Jim E. Riviere, D.V.M.**, Burroughs Wellcome Fund Distinguished Professor of Pharmacology, Director-Center for Chemical Toxicology Research and Pharmacokinetics, Director-Biomathematics Program of the College of Physical and Mathematical Sciences, North Carolina State University, Raleigh

**Dr. Webster Cavenee**, Director, Ludwig Institute for Cancer Research, University of California, San Diego

### KCALSI SAC MEMBER ELECTED TO INSTITUTE OF MEDICINE

KCALSI Scientific Advisory Committee member, Dr. Webster Cavenee was elected as a Member of the Institute of Medicine (IOM). Established in 1970 by the National Academy of Sciences, the Institute has become



recognized as a national resource for independent, scientifically informed analysis and recommendations of human health issues. With their election, members

make a commitment to devote a significant amount of volunteer time as members of IOM committees, which engage in a broad range of studies on health policy issues.

Earlier this year, Dr. Cavenee was awarded the Inaugural Princess Takamatsu Memorial Award Lectureship by the American Association for Cancer Research, and the

2nd Annual Albert Szent-Györgyi Prize for Progress in Cancer Research by the National Foundation for Progress in Cancer Research by the National Foundation for Cancer Research.

He is a Past-President of the American Association for Cancer Research, a member of the Institute of Medicine of the National Academy of Sciences, a Fellow of the American Academy of Microbiology and a Fellow of the International Union Against Cancer. His work on the genetic basis of cancer predisposition and progression has been recognized with many honors and awards, most notably the Rhoads Award of the American Association for Cancer Research and the Charles S. Mott Prize of the General Motors Cancer Research Foundation.

Dr. Cavenee received his Ph.D. from the University of Kansas Medical School and then did postdoctoral work at the Jackson Laboratory, MIT and the University of Utah. His research is directed at defining the genetic lesions in human cancer, determining their physi-

ological significance and using such information for therapeutic approaches. His current interests include the malignant progression of astrocytic tumors, the mechanisms underlying intracerebral hemorrhage, the differentiation pathways of astrocytes, the basis of androgen independence of prostate tumors and the role of fusion transcription factors in pediatric neoplasms.

He has served on the Board of Scientific Counselors of the National Cancer Institute and the National Institute of Environmental Health Sciences. Dr. Cavenee is a member of the American Society for Human Genetics, American Society for Microbiology, American Association for the Advancement of Science, American Association for Cancer Research; and an elected fellow of the International Union Against Cancer, the American Society of Clinical Investigation, the American Academy of Microbiology, and the American Association of Neurological Surgeons and Congress of Neurological Surgeons. He has published more than 275 scientific papers and is on the editorial boards of several journals.

# 2008 Kansas City Area Life Sciences Annual Dinner



## Translational Research: Bridging Science & Healthcare

### \$25,000 Platinum

Verbal recognition from the podium during the dinner program

Sponsorship of a Platinum level event – such as keynote speaker; VIP reception; or co-sponsorship of upcoming Research Symposium

Written recognition in all Annual Dinner communications, including media releases

Dinner table seating for 2 tables of 10 with the most prominent seating

6 VIP cocktail reception invitations

15 complimentary valet parking tickets

Foremost recognition in media publicity, including your logo in multiple Kansas City Business Journal ads

Logo exposure and company link from Annual Dinner event web site

Logo and profile featured in dinner program

Logo exposure in ballroom during entire evening event

Most prominent position in all sponsor signage

Plaque presentation

Feature article in *The Bulletin* (KCALSI's magazine, 2K+ distribution) showcasing your company

Wednesday evening, April 16 at the Hyatt Regency Crown Center

The Annual Dinner provides the Community leadership with an update on the progress made in the region's life sciences.

Become a Sponsor and take advantage of the opportunity to be recognized by our region's life sciences industry leaders and share your successes.

Sponsorships and tables available on-line at [www.kclifesciencesday.org](http://www.kclifesciencesday.org).

### \$15,000 Gold

Written recognition in all Annual Dinner communications, including media releases

Logo exposure and company link from Annual Dinner event web site

Dinner table seating for 1 table of 10 with priority seating

2 VIP cocktail reception invitations

7 Valet parking passes

Predominant acknowledgement and logo in dinner program

Elevated exposure on all sponsor signage

Placement of your logo in multiple Kansas City Business Journal ads

Scrolling logo exposure during dinner dining

### \$5,000 Silver

Written recognition in all Annual Dinner communications, including media releases

Dinner table seating for 1 table of 10

Recognition on sponsor signage

Acknowledgement in dinner program

Listing in sponsor section of Annual Event web site

### \$150 Individual tickets

Complimentary cocktails

Complimentary parking



## Kansas City Science Initiative Materials Resource Center Up and Running:

### SMART WAREHOUSING AND FEDEX JOIN KCSI PARTNERSHIP



With the 2007-08 school year well underway, the Kansas City Science Initiative (KCSI) has made great strides with implementation of the systemic science education reform program in all Kansas City Missouri School District (KCMSD) elementary schools.

One critical piece of the KCSI program is the establishment of a materials resource center. The inquiry-centered science curriculum modules take between six and eight weeks of instructional time. During this time, some materials are consumed and need to be replaced.

The philosophy behind a materials resource center is to lift this burden from teachers so that they are not purchasing supplies with their personal funds or on their personal time, allowing them to focus on the important task of teaching.

The KCSI materials center handles purchasing, delivery, pick up and refurbishment of the modules and related materials, thus relieving teachers of this responsibility. This arrangement also ensures materials are kept up-to-date and teachers always receive a fully stocked module to utilize in their classroom.

The Kansas City Area Life Sciences Institute is proud to announce that **Smart Warehousing** and **FedEx** have partnered to support KCSI's materials resource center.

**Smart Warehousing**, a Lenexa-based warehousing and distribution company, combines extensive experience in logistics, warehousing and technology to offer their

clients custom solutions utilizing state-of-the-art web based systems and flexible space.

Their personnel prepare the curriculum modules for distribution to schools, arrange for delivery and pick up, inventory and refurbish the materials and store the modules until their next use. In addition, the company's online inventory management system further enables KCSI to track module use and maintain adequate supplies of consumable materials.

**FedEx** signed on as the official trucking company for KCSI. The company works closely with **Smart Warehousing** to provide the best pricing possible for delivery and pick up of the curriculum modules.

The KCSI strategic plan has always included a materials resource center, although it was expected that KCSI would need to lease warehouse space, source warehousing equipment and hire personnel to staff the operation. Therefore, the commitment by **Smart Warehousing** and **FedEx** to partner with KCSI is a tremendous boost, providing significant savings for the program.

**Additional financial support is needed to purchase curriculum materials and expand the range of KCSI professional development courses for teachers.** To make a contribution or for more information about the program, please contact KCSI project manager Nicole Riegel at 816-753-7700 or [nriegel@kclifsciences.org](mailto:nriegel@kclifsciences.org).

## Nearly 600 Teachers Participate in KCSI Training



Since August, nearly 600 KCMSD teachers have been trained on the grade-specific science curriculum modules they'll be utilizing in their classrooms in the coming months.

KCSI contracted with the University of Missouri – Kansas City to develop this “first use” training course, as well as related teacher and student assessments.

Union Station partnered with KCSI to provide space for the training sessions and covered parking costs for the teachers.

Delta Education generously provided lunch for the teachers during each session.

*Special thanks to these KCSI partners for their support!*



# UpLink: Connecting Businesses and Classrooms to Inspire the Next Generation of METS Professionals

This year, greater Kansas City welcomed UpLink, the area's first-ever community hub connecting businesses and K-12 education with an emphasis on math, engineering, technology and science (METS).

Operated by YouthFriends and funded by the Ewing Marion Kauffman Foundation, UpLink encourages and inspires students to explore, study and seek METS-related careers by seamlessly connecting business with students, teachers and classrooms through three key programs:

- **YouthFriends:** Connects K-12 students to school-based mentors and e-mentors, with a particular emphasis on mentors from METS fields
- **LaunchPad:** Introduces students to METS careers through job shadowing, student internships and volunteer classroom speakers
- **TeacherTech:** Strengthens classroom education by connecting teachers to eight-week, paid summer externships in METS-related fields

## Gaining Insight Through Externships

This summer, 10 area teachers and employers participated in the pilot year of TeacherTech. In addition to employers receiving top-notch summer employees for key projects, teachers also benefited greatly by receiving exposure to real-world applications and advancements in METS fields and the workplace in general—knowledge they're already incorporating into their classrooms.

Angela Beshears, a math teacher in the North Kansas City School District who worked as a curriculum developer for American Century Investments, believes TeacherTech externships provide a great opportunity for teachers to gain first-hand knowledge to benefit students.

"This was a great opportunity for me to experience the business culture and see how math is applied in the real world," she said. "Sharing this experience with my students is invaluable."

Susanna Barchack, a chemistry teacher in the Raytown School District, agrees. Barchack spent her summer working as a research and design technical assistant for Bayer HealthCare's Animal Health Division.

"This position gave me the opportunity to implement regulatory lab practices in the classroom," she said. "I hope it helps my chemistry students develop a feel for what scientists do on a day-to-day basis."

Jenn Dolson, who worked this summer to develop a Mini-Med School program with doctors and researchers at the University of Kansas Medical Center, enjoyed knowing that her knowledge was valuable to her employer.

"As we developed the Mini-Med curriculum, I think I was a good resource for the doctors on what will work in the classroom with students, and what methods are usually unsuccessful," Dolson said.

## High Demand

Even with minimal marketing during the pilot year, more than 200 area teachers submitted applications for the externships offered this summer. That number is expected to triple in 2008, with a goal of placing at least 50 teachers in externships next summer.

Area employers are encouraged to participate in UpLink to help advance METS education in Greater Kansas City. Companies can participate in LaunchPad and YouthFriends any time throughout the year—and employers still can get involved in TeacherTech next summer. For more information, contact Client Services Director, Rachel Plotkin, at 816.842.7082 or visit [yf-uplink.org](http://yf-uplink.org).

Kansas City Life Sciences Institute is a Founding Partner in this solution for advancing METS education and workforce development in Greater Kansas City.

## 2007 TeacherTech Externs



**Susanna Barchack**, Raytown School District  
Employer: Bayer Animal Health  
Job Title: Research and Design Technical Assistant

**Joseph J. Berthelsen**, Blue Valley School District  
Employer: SPC TelEquip  
Job Title: Product Standardization Coordinator

**Angela Beshears**, North Kansas City School District  
Employer: American Century Investments  
Job Title: Curriculum Developer

**Steve Cassity**, Hickman Mills School District  
Employer: Walz Tetric Advertising  
Job Title: Agency Marketing System Analyst

**Jennifer Dolson**, Raytown School District  
Employer: University of Kansas Medical Center  
Job Title: Program Developer

**Wait Gomez**, Kansas City, Missouri School District  
Employer: Black & Veatch Corp.  
Job Title: Scientific Writer/Technical Researcher

**Michelle Nixon**, Blue Valley School District  
Employer: Science City at Union Station Kansas City  
Job Title: Space Science Education Program Developer

**Michele Radio**, Blue Valley School District  
Employer: YouthFriends  
Job Title: Peer Coach

**Ron Robinson**, Kansas City, Missouri School District  
Employer: KCP&L  
Job Title: Program Coordinator

**Betsy Wilkin**, Olathe School District  
Employer: Kansas University Physicians, Inc.  
Job Title: Policies and Procedures Coordinator

## EDUCATION NEWS

### REMINGTONS PLEDGE \$5 MILLION TO MO WESTERN STATE UNIVERSITY

Wes and Patsy Remington have pledged \$5 million to Missouri Western State University in an effort to further St. Joseph's science and technology industry. The gift will start the "Beyond Excellence" initiative, to overhaul the university's science and technology education programs, which includes construction of a science incubator and renovating the university's science and mathematics buildings. Wes Remington founded several animal health companies (Tech-America Group, Inc.; Syngene, Inc.; Agri Laboratories; Phoenix Pharmaceuticals; and Phoenix Scientific which was sold to Teva Pharmaceutical and is today IVX Animal Health) and Pete & Mac's Recreational Resort for Pets. Wes Remington was recently awarded the 2007 Iron Paw Award at the KC Animal Health Corridor Homecoming event.

### BAYER/KU FORM ALLIANCE FOR MBA PROGRAM

Bayer Animal Health announced that it has formed an alliance with the University of Kansas (KU) School of Business to offer a unique MBA program tailored to the animal health industry. Once accepted into the program, students would work for Bayer Animal Health as part of a rotational executive development program while pursuing their MBA with the KU School of Business.

## ANIMAL HEALTH AND NUTRITION

### MWI VETERINARY SUPPLY, INC. SELECTS KANSAS CITY FOR EXPANSION

MWI Veterinary Supply, Inc., one of the largest animal health distributors in the U.S., announced their expansion in KC. MWI leased a 105,000-square-foot building in Edwardsville, KS. The move will require the hiring of 30 employees. MWI's announcement marks one of the largest national corporations to choose the Kansas City market for an expansion or relocation since the launch of the KC Animal Health Corridor in August 2006.

### USAHA ANNOUNCES HEADQUARTERS RELOCATION TO ST. JOSEPH, MO

The United States Animal Health Association announced the relocation of its headquarters to St. Joseph, MO, from Richmond, VA, and is conducting operations from the new offices. USAHA added three jobs as a result of its move, and expects to add more in the future. Established in 1897, the USAHA aims to protect animal and public health by eliminating live stock disease. Its 1,400 members include state and federal animal health officials, national allied organizations, regional representatives, and individual members.

### HILL'S PLANT TO BE CONSTRUCTED IN EMPORIA, KS

Hill's Pet Nutrition will build a new pet food manufacturing plant in Emporia, KS. Construction on the new

\$100 million plant is scheduled to start early next year and begin production in 2009. Hill's will continue to operate its global headquarters, pet nutrition center and canned pet food manufacturing facility in Topeka, KS.

### INTERVET AND LIPOXEN TEAM UP IN VETERINARY INSULIN MARKET

Intervet and Lipoxen PLC announced an exclusive worldwide development and licensing agreement to develop a sustained-release insulin for the veterinary health market. The agreement will enable Intervet to access Lipoxen's PolyXen drug delivery technology. Lipoxen will get an upfront payment from Intervet, and will receive milestone payments and royalties. Lipoxen is currently developing a human sustained-release insulin which is expected to enter clinical development prior to the end of 2007.

### FORT DODGE ANNOUNCES \$40 MILLION EXPANSION

Fort Dodge Animal Health, a \$1 billion company specializing in vaccines, medicines and other products for pets and livestock, announced it will be the first private-sector and an anchor tenant in the 92-acre Kansas Bioscience Park in Olathe. As part of the transaction, the Kansas Bioscience Authority is providing 30 acres of land within the Olathe park and up to \$3.5 million for the Fort Dodge project. The 150,000 square-foot facility is expected to open in 2009 and will eventually employ 200 top-level scientists and other researchers.

### FORT DODGE'S CORCORAN NAMED ANIMAL PHARM 2007 LIFETIME ACHIEVEMENT AWARD WINNER

E. Thomas Corcoran, president of Fort Dodge Animal Health, was awarded the Animal Pharm 2007 Lifetime Achievement Award. Among the many products launched during Corcoran's 22 years at Fort Dodge is West Nile-Innovator (vaccine against equine West Nile Virus); LymeVax (first canine Lyme disease vaccine); Fle-O-Vax (first vaccine against feline immunodeficiency virus—FIV); and Pro-Heart 6 (sustained-release microsphere-based injectable heartworm product.)

## PEOPLE

### MU APPOINTS OLSON VETERINARY MEDICINE DEAN

Neil Olson, DVM, Ph.D., associate dean for research and graduate studies at the College of Veterinary Medicine at North Carolina State University, has been appointed as dean of the University of Missouri-Columbia College of Veterinary Medicine.

### Julia Zeitlinger Joins Stowers Institute

Julia Zeitlinger, Ph.D., a postdoctoral fellow in the lab of Richard Young, Ph.D., in the Whitehead Institute for Biomedical Research at M.I.T., has joined the Stowers Institute for Medical Research as an Assistant Investigator. Dr. Zeitlinger's research uses the fruit fly *Drosophila melanogaster* to understand the gene regulatory networks that underlie cellular differentiation. Dr.

Zeitlinger earned a B.Sc. in Human Biology from King's College London, U.K., and a Ph.D. in Molecular Biology for her work with Dirk Bohmann, Ph.D., at the European Molecular Biology Laboratory in Heidelberg, Germany.

### KCALSI BOARD OF DIRECTORS ADDS L. PATRICK JAMES, M.D.

Kansas City Area Life Sciences Institute (KCALSI) announced the addition of L. Patrick James, MD, to its Board of Directors. Dr. James currently serves Quest Diagnostics, Inc, as Senior Managing Director, Lenexa Business Unit, where he is responsible for the integration team for Physician and Hospital services. He earned his medical degree with honors from St. Louis University; performed his internship and residency training in anatomic and clinical pathology with board certification at the National Naval Medical Center, with post-graduate training in Cytopathology with board certification at Johns Hopkins Hospital.

### INTERNATIONAL PHARMACEUTICAL EXPERT JOINS KU CANCER CENTER

Sitta Sittampalam, Ph.D., has been named deputy director of the University of Kansas Cancer Center's Office of Therapeutics, Discovery and Development. Previously, Dr. Sittampalam served as the head of Eli Lilly and Company's Lead Optimization Biology Laboratory and as a Senior Research Advisor of the cell technology group where he helped build a repertoire of tools for modern drug discovery through the integration of quantitative biology, statistical experimental design and molecular pharmacology principles with leading high throughput screening technologies. Dr. Sittampalam authored a quantitative biology manual, Assay Guidance Manual Version 4.1, used as a primary source by the National Institutes of Health.

### VETERINARIAN DAN RICHARDSON TO LEAD K-STATE OLATHE INNOVATION CAMPUS

Dr. Dan Richardson, current vice-president and chief animal welfare veterinarian of the Hill's Pet Nutrition Center and a nationally-known expert in biosciences and animal health, is joining Kansas State University in January as head of the university's Olathe Innovation Campus. Richardson will work with area education leaders to establish and develop opportunities for students to learn about careers in animal health. Dr. Richardson, who has received numerous awards for clinical and teaching excellence, is an internationally recognized speaker with expertise in nutrition and veterinary orthopedics.

## RESEARCH

### STOWERS' CONAWAY LAB DEMONSTRATES MECHANISM BY WHICH TRANSCRIPTION FACTOR CONTROLS GENE EXPRESSION

Stowers Institute for Medical Research's Conaway Lab – led by Investigators Joan Conaway, Ph.D., and Ron Conaway, Ph.D., – has published findings that shed light on the role of the much-studied transcrip-

tion factor YY1 in gene expression. YY1 is known to be important for turning “on” and “off” a significant number of genes, including genes that control cell division, cell differentiation, and development. Because of these contributions to cell cycle control, YY1 may eventually prove to be a good target for cancer therapy – but only if more can be learned about its functional mechanism. Yong Cai, Ph.D., Research Specialist I, and Jingji Jin, Ph.D., Senior Research Associate, are the paper’s coequal first authors. The paper describes data showing that transcription factor YY1 works with a chromatin remodeling complex INO80.

### **MU RESEARCHERS STUDY CRYOPRESERVED EGGS, COLLABORATE ON CANCER SURVIVORS’ FERTILITY**

MU is participating in a new \$20 million, 5-year NIH program designed to investigate every aspect of fertility preservation for women with cancer. The project, led by Teresa Woodruff, professor of obstetrics and gynecology at Northwestern University, includes more than 15 different institutions across the country. MU researcher John Critser will receive approximately \$1.25 million over five years to study cryopreservation methods of human eggs. Current methods are not efficient and there are many challenges in the cryopreservation process.

### **MIDWEST RESEARCH INSTITUTE LAUNCHES CENTER FOR BIOLOGICAL SAFETY AND SECURITY**

To address the growing demand for expertise in laboratory services, Midwest Research Institute has launched its Center for Biological Safety and Security (CBS2). An increased national and international demand for high level biosafety laboratories needed for research in a variety of industries, including biodefense, agriculture, food safety, and vaccine development, has created the need for highly-trained and experienced biological safety personnel who are able to provide diverse technical support capabilities. MRI’s CBS2, strategically located in Frederick, MD, near the hub of the nation’s biological defense research, addresses the demand and provides laboratory consulting services to government, private industry and academic clients. Though located in Maryland, the CBS2 can reach more than 250 MRI biological scientists in Kansas City to provide added capacity to meet expanding customer needs.

### **STOWERS’ XIE LAB DEMONSTRATES DUAL INTRINSIC AND EXTRINSIC CONTROL OF STEM CELL AGING**

The Stowers Institute’s Xie Lab has published recent findings that reveal some of the factors underlying the aging of stem cells. The paper was published in the Oct. 11 issue of *Cell Stem Cell*. Lei Pan, Predoctoral Researcher, and Ting Xie, PhD, Associate Investigator, are the paper’s first and last authors, respectively. It is widely postulated that a decrease in the number and activity of stem cells contributes to the aging of human tissue. The control of stem cell aging has, until now, been poorly understood, but the Xie Lab has demonstrated that specific factors are associated with an age-dependent decline in the function of stem cells and their microenvironment.

### **KU/MAYO CLINIC TEAM UP IN NCI-FUNDED INVESTIGATIONAL CANCER TRIAL**

The University of Kansas Cancer Center and the Mayo Clinic Cancer Center are working together on a National Cancer Institute (NCI) funded investigational agent that is designed to prevent cancer. The project represents an opportunity to leverage the strengths of two research entities to fast track a new cancer prevention therapy to patients as they develop an exploratory clinical trial. Several investigational formulations of the drug will be developed at KU under the direction of Roger Rajewski, Ph.D., Director of the Product Development Core, Higuchi Biosciences Center. The investigational formulations will then be tested in clinical trials at the Mayo Clinic in Rochester, MN. This joint research grant focuses on a drug designed from a naturally-occurring anti-cancer agent found in vegetables such as broccoli, cauliflower and cabbage.

### **FDA APPROVES MU KNEE-INJURY DEVICE**

BioDuct Meniscal Fixation Device – a new knee-surgery device investigated by University of Missouri-Columbia researchers – has been approved by the FDA for use in humans. Use of the device will help to repair meniscus tears, which were previously defined as irreparable. Herb Schwartz, president and CEO of Schwartz Biomedical, LLC, and James Cook, MU professor of veterinary medicine and surgery and William C. Allen Endowed Scholar for Orthopedic Research in MU’s College of Veterinary Medicine, developed the device. In his research, Cook found that the device will significantly improve healing of avascular meniscal tears both biologically and biomechanically, which should lessen the long-term effects of meniscus injuries, including osteoarthritis.

### **MU RESEARCHERS USE SOYBEANS TO MAKE NANOPARTICLES**

A team of MU researchers have discovered how to make gold nanoparticles using gold salts, soybeans and water. No other chemicals are used in the process, which carries major environmental implications for the future. The gold microspheres hold promise in cancer detection and treatment and for the production of “smart” electronic devices in the computer and telecommunications industry. The MU research team found that by submersing gold salts in water and then adding soybeans, gold nanoparticles were generated. The resultant nanoparticles are produced through a totally green process and exhibit remarkable size uniformity that has created a very positive response in the scientific community. Researchers have filed a patent for the new process and developed a new company, Greennano Company.

### **STOWERS’ POURQUIÉ LAB DEMONSTRATES ROLE OF GROWTH FACTOR IN VERTEBRAE FORMATION**

The Stowers Institute’s Pourquié Lab has demonstrated the role of fibroblast growth factor (FGF) in the embryonic process of somitogenesis, an event required for vertebrae formation. The findings are posted on the web site of the journal *Development* and appeared in

the November print issue. The Pourquié Lab has long studied the formation of vertebrae, and the lab team has made significant contributions to the currently accepted “clock and wavefront” explanation of somitogenesis. Dr. Pourquié also is an investigator with the Howard Hughes Medical Institute and a Professor in the Department of Anatomy & Cell Biology at the University of Kansas School of Medicine.

### **MRI AND DYCOR TECHNOLOGIES LTD ALIGN FOR GROWTH OPPORTUNITIES**

Officials at MRI and Dycor Technologies Ltd, a Canadian company based in Edmonton, announced that MRI has made a strategic investment in Dycor that will provide opportunities for the two companies to work together on research and development in the areas of chemical and biological detection and energy. Both MRI and Dycor have research and development expertise in the biological and chemical detection and energy sectors.

### **IDENTIGEN’S “FIRST DNA-BASED MEAT TRACEABILITY SYSTEM” INTRODUCED IN U.S.**

IdentiGEN’s DNA TraceBack<sup>®</sup> system, a proprietary meat identification and traceability system based on DNA analysis, has been approved by the United States Department of Agriculture’s Agricultural Marketing Service as a Process Verified Program. The system enables retailers, meat producers, meat processors and food-service outlets to respond to the growing international consumer demand for more information about where and how their meat is produced. The DNA TraceBack system uses IdentiGEN’s proprietary ID-GENerator™ technology to create large numbers of unique DNA profiles at a cost of pennies per pound. Its implementation requires few modifications to current handling and processing procedures for fresh beef and pork. The IdentiGen process has been in use in leading international grocery retailers, but is new to North American.

### **NBAF: MANHATTAN SITE ADVANCES TO NEXT PHASE**

The Department of Homeland Security’s Science and Technology directorate announced that five sites advanced to the next phase in the competitive process to select the location of the proposed National Bio and Agro-Defense Facility (NBAF). Among the five finalists were one of three entries submitted from the Kansas City region – Kansas State University in Manhattan. The other four finalists include: Flora Industrial Park, Madison County, MS; Texas Research Park, San Antonio, TX; Umstead Research Farm, Granville County, NC; University of Georgia/South Milledge Ave., Athens, GA. The next step in the selection process is to conduct an environmental impact statement (EIS) of the sites as part of the National Environmental Policy Act.

#### STAY INFORMED ABOUT LIFE SCIENCES!

To subscribe to our monthly online newsletter @ a Glance, or to submit life science news, please e-mail [info@kclifesciences.org](mailto:info@kclifesciences.org).

If you have missed the recent issues, visit:  
[www.kclifesciences.org/Default.aspx?tabid=394](http://www.kclifesciences.org/Default.aspx?tabid=394)

think<sup>KC</sup>one

# Life Sciences CALENDAR

#### North American Veterinary Conference

Jan. 7-11, 2008 | Orlando, FL  
Information: [www.tnavc.org/mynavc](http://www.tnavc.org/mynavc)

#### InvestMidwest

Feb. 19-20, 2008 | St. Louis, MO  
Information: [cwalsh@stlrca.org](mailto:cwalsh@stlrca.org)

#### KCALSI Annual Dinner

Wed. April 16, 2008 | Hyatt Regency Crown Center  
Information: [www.kclifesciencesday.org](http://www.kclifesciencesday.org)

#### BIO International Convention

June 17-20, 2008 | San Diego, CA  
Information: [www.bio2008.org](http://www.bio2008.org)

## Our Mission

#### TO COORDINATE THE REGIONAL LIFE SCIENCES INITIATIVE BY:

Fostering and solidifying relationships between the academic and private sector life sciences communities

Assisting collaborative research efforts through identification and qualification of funding opportunities, proposal review facilitation, resource allocation, and maintaining accountability

Overseeing and managing fundraising and marketing activities

Assisting in life sciences advocacy efforts at the local, state, and national levels

Providing support to economic development and technology transfer/commercialization organizations.

#### STAKEHOLDER INSTITUTIONS

Children's Mercy Hospitals and Clinics  
Kansas City University of Medicine and Biosciences  
Kansas State University  
Midwest Research Institute  
Saint Luke's Hospital  
Stowers Institute for Medical Research  
University of Kansas-Lawrence  
University of Kansas Medical Center  
University of Missouri-Columbia  
University of Missouri-Kansas City

## BE COUNTED: PUT YOUR COMPANY ON THE KC LIFE SCIENCES MAP!

The Kansas City Area Life Science Institute, KCSourcelink, the Kansas Bioscience Authority, and KansasBio are supporting a research effort at Virginia Tech and would like to encourage life science entrepreneurs and executives to complete an online survey. The survey data will visualize entrepreneurial origins of companies.

To include your firm on the map, please answer the online survey at:  
[www.kclifesciencesday.org/survey](http://www.kclifesciencesday.org/survey)

Participants will receive a copy of the KC Life Science poster.