

AGENDA

Meeting of the Board of Trustees
University of Kentucky
1:00 P.M.
December 1, 2009
18th Floor Patterson Office Tower

Roll Call

Approval of Minutes - (Consent)
Minutes – October 27, 2009

President's Report and Action Items

- PR 1 President's Report to the Trustees
College of Arts and Sciences Report — Dean Mark Kornbluh
PR 2 Personnel Actions (Consent)

Academic Affairs Committee Report

- AACR 1 Candidates for Degrees

Finance Committee Report

- FCR 1 Acceptance of Interim Financial Report for the University of Kentucky for the Three Months Ended September 30, 2009
FCR 2 Energy Savings Performance Contract
FCR 3 Renovate 4-H Camps
FCR 4 Capital Construction Report
FCR 5 Approval of the 2008-09 Endowment Match Program Annual Report
FCR 6 Patent Assignment Report

Investment Committee

Student Affairs Committee Report

University Health Care Committee Report

Other Business

Athletic Association Report – Dermontti Dawson

Adjourn

PR 1

Office of the President
December 1, 2009

1. UK College of Pharmacy Prepares to Open New \$134 Million Building

After two and half years, 225,000 bricks, 7,300 cubic yards of concrete, and 675 tons of reinforcing steel, the new University of Kentucky College of Pharmacy building is scheduled to be completed today. Faculty and staff will begin moving into the \$134 million state-of-the-art academic and research building as soon as Wednesday, December 2, with different areas and units moving throughout the month in preparation for classes to be held in the new facility on January 12. Laboratory researchers moving from the existing Rose Street College of Pharmacy building to the third floor of the new facility will complete their move during the first few months of 2010.

2. UK Parkinson's Researchers Explore Using Pump for Drug Delivery

A team of Parkinson's disease researchers at UK is investigating a promising method for delivering therapeutic drugs directly to patients' brains through an implanted catheter connected to a small, portable pump. The research, funded by the Michael J. Fox Foundation and the Kinetics Foundation, is being led by Peter Hardy, assistant professor of Anatomy and Neurobiology, and Luke H. Bradley, assistant professor of Anatomy and Neurobiology and of Molecular and Cellular Biochemistry, in the UK College of Medicine. The research uses experimental surgical techniques developed by Zhiming Zhang, a UK associate professor of Anatomy and Neurobiology. Zhang has developed a strong program in experimental neurosurgery focused on site-specific delivery of therapeutic drugs into the brain. His methodology has broad potential application for treating a number of neurological disorders, including Parkinson's disease. This method has previously been used to deliver therapeutic compounds, such as GDNF, to the brains of Parkinson's disease patients.

3. Multidisciplinary Research Project on Hydrocarbon Fuels Wins NSF Grant

The National Science Foundation has awarded \$1,984,322 through its Office of Emerging Frontiers in Research and Innovation program to UK for a multidisciplinary energy research project. Titled "Lignin Deconstruction for the Production of Liquid Fuels," the project will focus on the high-capacity processes required for the production of hydrocarbon fuels and chemicals from lignocellulosic biomass. Project investigators include Rodney Andrews, Mark Crocker, and Samuel Morton, UK Center for Applied Energy Research; Mark Meier, Chemistry; Seth DeBolt, Horticulture; and Mike Montross Biosystems and Agricultural Engineering.

4. Molecular Research Center Receives \$10.5 Million in Renewed Funding

A UK multidisciplinary biomedical research center has received \$10.5 million in renewed funding from the National Institutes of Health (NIH). The Center of Biomedical Research Excellence in the Molecular Basis of Human Disease is supported by the National Center for Research Resources (NCRR), a part of the NIH that supports thematic, multidisciplinary Centers of Biological Research Excellence (COBREs) across the country through its Institutional Development Award (IDeA) program. In its first five years, the center provided support for research projects led by 22 junior faculty members in nine different departments mentored by senior faculty researchers. The focus has been on neurodegenerative diseases, cancer, and diabetes. In addition, the COBRE provides four support cores, in microscopy; in synthesizing organic compounds to be used in research; in protein characterization and structural determination; in production of recombinant viruses for research projects; and providing proteomic support.

5. UK's Solar Decathlon Team Finishes Ninth in National Competition

UK's Solar Decathlon team finished ninth in the U.S. Department of Energy (DOE) Solar Decathlon competition, held October 8-16 at the National Mall. The team also received an Honorable Mention award. At the competition, the team's house was evaluated in 10 specific areas: architecture, engineering, market viability, lighting design, communications, comfort, appliances, hot water, energy balance, and home entertainment. The team behind UK's solar house, the "Blues" Team, was an interdisciplinary group comprised of students, faculty, and staff from six colleges and 16 centers and departments within UK. The team was led by Donald Colliver, professor of biosystems and agricultural engineering at the College of Agriculture, and Gregory Luhan, associate dean for research at the College of Design, as well as faculty from the College of Communications and Information Studies and the College of Engineering.

6. UK Pharmacy Students Maintain Nation's Highest Pass Rate on Board Exam

Graduates in the UK College of Pharmacy Class of 2009 achieved a 100 percent pass rate on the NAPLEX, the national pharmacy licensure exam, according to the National Association of Boards of Pharmacy. This marks five out of the last six years graduates of UK's program have had a perfect first-time pass rate. It also means the College maintains its status as having the highest percentage of students with a successful first-time pass rate among 120 pharmacy programs in the U.S. and Puerto Rico. Overall, 120 UK graduates achieved an average NAPLEX score of 124.30 compared to the national average score of 112.51.

7. UK HealthCare Sets New System to Speed Treatment of Heart Attacks

Heart attack patients won't go to the emergency room as part of a new UK HealthCare plan designed to help those patients receive faster treatment. Instead, in most cases, heart attack sufferers will be taken straight to the cardiac catheterization lab in the UK Gill Heart Institute, where a team will be waiting to break through the life-threatening blood clot that is causing the attack. As part of the new protocol, when responding to someone who may be having a heart

attack, specially trained paramedics will administer a painless test called an electrocardiogram, or EKG, which can help detect a heart attack. If the test and other warning signs indicate the patient is in the midst of a heart attack, the paramedics will activate the cardiac catheterization team on their way to the UK Gill Heart Institute. Once the patient arrives, the cardiac catheterization team, led by a physician who specializes in treating heart disease, will assess the patient and the EKG to determine whether they should perform an emergency angioplasty, a minimally-invasive procedure to open blocked blood vessels. Patients who are not believed to be having a heart attack will be taken to the emergency department for further assessment.

8. UK Encourages Consensus-building with Forum on Coal in Kentucky

On November 5, a daylong event featured a variety of speakers focusing on the past, present, and future impacts of coal on Kentucky, with representatives of environmental groups, the coal industry, and researchers. “A Forum on Coal in Kentucky” was designed to bring together all sides in the controversies surrounding coal in Kentucky. The event also marked the launch of a film project by the UK Center for Visualization and Virtual Environments, which will conduct interviews and film clips over the next several months about coal's impact across the state. Among the speakers were Jason Bailey, research and policy director for Mountain Association for Community Economic Development; Kentucky House Majority Leader Rocky Adkins; state Sen. Robin Webb; former Kentucky Governor Paul Patton; Tom Fitzgerald, director of the Kentucky Resources Council; Joseph W. Craft III, president and CEO of Alliance Coal Co.; and bestselling author Jeff Goodell, who wrote *Big Coal*. The forum was organized by the UK College of Engineering Department of Mining Engineering and the Vis Center, with support from a grant from the Kentucky Cabinet for Energy and Environment. The grant is also supporting the Vis Center's film project.

9. Support from Congressmen Rogers and Davis Lead to Coal-to-Liquids Grant

Congressmen Harold “Hal” Rogers and Geoff Davis announced that a \$2 million grant will be awarded to UK's Center for Applied Energy Research for the development of coal-to-liquids technology. Advances in this technology will reduce dependence on foreign oil and open new markets for Kentucky's coal mining economy.

10. Markey Researchers Study Protein's Ability to Maintain Stem Cell Health

Researchers at the UK Markey Cancer Center are investigating the ability of a protein called SLIT2 to maintain healthy levels of a type of stem cell, called hematopoietic stem cells. These cells, found in bone marrow, give rise to every type of blood cell in the body. The research, led by Dr. Gary Van Zant, professor of Internal Medicine in the UK College of Medicine, has broad implications in a number of areas in medicine. However, its most immediate application could be in helping cancer patients undergoing chemotherapy. Chemotherapy can reduce the population of hematopoietic stem cells, which are normally self-regenerating. This can result in a shortage of specialized blood cells, such as platelets, which play a key role in blood clotting. Currently, chemotherapy-induced platelet deficiency (or thrombocytopenia) is treated with platelet transfusions, which are very expensive. SLIT2 – first discovered in fruit flies and subsequently found throughout the animal kingdom, including humans – is secreted by cells

and binds to a receptor (called Robo) on the same cell or adjacent cells. The SLIT2-Robo signaling pathway plays a key role in determining the positioning of cells.

11. Lyman T. Johnson Group Presents Sanford Roach with Inaugural Legacy Award

Sanford T. Roach was the inaugural recipient of the Legacy Award presented during the 19th annual Lyman T. Johnson Homecoming Awards Banquet on October 30. Roach was selected based on his lifelong efforts to promote education, athleticism, and civic responsibility throughout Kentucky. Roach served as head basketball coach at Lexington's old Paul Laurence Dunbar High School for 24 years, amassing a 512-142 record and twice advanced to the state championship game. He was the first African American to be named to the University of Kentucky Athletic Association Board. He also was the first African American to serve as a principal of an integrated elementary and secondary school in Fayette County. A native of Danville, Roach earned a degree in natural sciences from Kentucky State University and a master's degree in education from UK in 1955 as well as an Honorary Doctorate of Humanities from UK in 2002. The Lyman T. Johnson UK Alumni African-American Constituent Group hosts the event each year to commemorate the memory of Johnson, who in 1949 was the first African American admitted to the University of Kentucky.

12. UK Students Commemorate the 20th Anniversary of the Berlin Wall's Fall

To mark the 20th anniversary of the destruction of the Berlin Wall – and the subsequent reunification of East and West Germany – UK provided students the opportunity to relive the events of November 9, 1989 through re-enactments and first-hand accounts of the historic event. The Division of German Studies and the College of Arts and Sciences created a replica section of the Berlin Wall, built to the same height and width specifications as the original, on the lawn of the Student Center Plaza. Students had the opportunity to graffiti tag the wall just as the young people of East and West Berlin did. At noon, the wall tumbled down as students destroyed sections of the replica to symbolize the destruction of the original. Later in the day, a documentary titled “The Berlin Wall” was shown at the Max Kade German House on East Maxwell Street. The Kade House also hosted a roundtable discussion that featured eyewitness accounts from members of the UK community who were on the scene in 1989, in both East and West Berlin.

13. UK Art Graduate Wins International Award for Student Achievement

Art graduate Luke Achterberg has been awarded the prestigious International Sculpture Center's (ISC) Outstanding Student Achievement in Contemporary Sculpture Award for 2009. Achterberg garnered the international award for his sculpture "Relative," a painted steel sculpture measuring 207 inches long by 88 inches tall by 52 inches wide. The artwork is the result of three years of research, work, and active study for Achterberg in UK's Master of Fine Arts program. The ISC established the annual award program to recognize young sculptors and to encourage their continued commitment to the field. It also was designed to draw attention to the sculpture programs of the participating schools which totaled a record number this year including more than 170 universities, colleges and art school sculpture programs from 16 countries for a nominated total of 441 students. As a winner of the ISC award, Achterberg's piece is part of

“Grounds For Sculpture's Fall/Winter Exhibition,” which will be on view through January 10, 2010 in Hamilton, N.J. Achterberg's work will also be included in the “Grounds For Sculpture's 2009 Fall/Winter Exhibitions Catalogue” and was featured in the October 2009 issue of Sculpture magazine. The work also will be featured in the first of what is expected to become an annual traveling exhibition that will visit arts organizations across the country.

14. Engineering Student Samuel Nicaise Receives Astronaut Scholarship

Space Shuttle Astronaut Robert “Hoot” Gibson presented electrical engineering senior Samuel Nicaise with a \$10,000 scholarship from the Astronaut Scholarship Foundation (ASF) during a public presentation and ceremony held October 15 in the Student Center. The Astronaut Scholarship is one of the largest monetary awards given in the United States to science and engineering undergraduate students based solely on merit. Seventeen awards were dispersed this year through the ASF to outstanding college students majoring in science, engineering or math. More than \$2.8 million has been awarded in scholarships to date, \$101,000 to UK students. These well-rounded students exhibit motivation, imagination and intellectual daring, as well as exceptional performance, both in and outside, the classroom. Nicaise, of Covington, plans to pursue a doctorate and work on the cutting edge of photovoltaics and nanotechnology.

15. Dedication Ceremony Is Held for UK's New Science Laboratory

An information showcase and dedication ceremony was held for the new Science Library in the Margaret I. King Building on October 7. The facility includes three floors of library space and computing resources, a reference collection, a computer lab, a service desk which also provides IT assistance, a major library print collection, a large map collection, information kiosks, and a lounge area with snacks and drinks for patrons. The facility is home to a collection that contains a variety of materials related to astronomy, chemistry, geological sciences, mathematics, physics, and statistics, as well as the Map Collection, which is international in coverage and composed of maps, aerial photos, atlases, and gazetteers. Officials hope the facility will enter phase two of renovation in the coming years and renovate the fourth and fifth floors of the King Building, as well as integrate the university's engineering collection.

16. Kentucky Geological Survey Provides Online Access to Oil and Gas Records

The Kentucky Geological Survey (KGS) reached a major milestone by making Kentucky oil and gas drilling records readily available to the public. KGS completed a decades-long project to scan all of the records and make them accessible at the KGS Web site. The records, which are used by industry, government agencies, and private land owners are crucial for exploring new oil and gas resources and are important for other geologic purposes, such as determining ground water and coal resources, environmental issues, and rock properties.

17. UK Office of Adult Student Services Hosts Record Crowd at Workshop

A record 85 prospective adult students attended the UK Office of Adult Student Services' Back to School Workshop on Thursday, November 6. The event was designed to inform and answer questions for those who want to come back to college or want to start from scratch later in life. The Office of Adult Student Services is also the point of contact for Project Graduate, a statewide program that is a partnership between UK and the Council on Postsecondary Education and supported by the Lumina Foundation. Its mission is simple: to bring Kentucky adults who earned 90 or more credit hours but never finished their degrees back to college. Universities across the state are involved. Since the partnership's inception nearly two years ago, 44 Project Graduate students have returned to UK to complete their degrees.

18. Composer John Mackey Attends UK Symphony Band's Performances

Award-winning composer John Mackey visited School of Music for the performances of his music for band, including "Redline Tango," "Aurora Awakes," and "Strange Humors." The composer's music was featured in two free public concerts performed by UK Symphony Band and UK Wind Ensemble at the Singletary Center for the Arts. UK Wind Ensemble was conducted by Professor John Cody Birdwell, director of UK Bands, and the UK Symphony Band was directed by Professor George Boulden, associate director of UK Bands. Also joining the UK Symphony Band for the concert was the Eastern Kentucky University Wind Ensemble, conducted by Professor Joe Allison, director of EKV Bands.

19. UK Art Museum Offers 'American West' Etching and Lithograph Exhibit

The UK Art Museum opened the exhibition "Exploring the American West: Karl Bodmer and George Catlin," a collection of 48 hand-tinted etchings and lithographs that provides a historical record of the Native American way of life during the westward expansion of the United States. The exhibition will run through December 20. An accompanying display of Native American artifacts from the William S. Webb Museum of Anthropology features objects from the Plains tribes. The collection on display is part of the Wells Fargo Advisors LLC's corporate art collection. The exhibition is sponsored by the Bluegrass Complex of Wells Fargo Advisors LLC.

20. Networking Event Draws More than 125 Faculty Entrepreneurs, Investors

The fall "Bench2Business" networking event drew more than 125 faculty entrepreneurs, community members, and Bluegrass Angels and included remarks by UK President Lee T. Todd, Jr. and Mayor Jim Newberry. The event showcased student entrepreneur teams from the UK Entrepreneurs Club and Dunbar High School. Each team gave a presentation on their energy saving technologies that propose new ways to harness wind energy and create energy savings among networked computers. The fall B2B event was sponsored by the UK Office for Commercialization & Economic Development, the Bluegrass Business Development Partnership, and Commerce Lexington.

21. Sanders-Brown Researchers Test New Approach to Slowing Alzheimer's

Researchers from the UK Sanders-Brown Center on Aging are testing an intriguing new approach to slowing down the progression of Alzheimer's disease (AD) using Intravenous Immune Globulin (IGIV), also known as gammaglobulin. IGIV is currently used to treat primary immunodeficiency disorders but is not currently approved for treating AD, which is one of the leading causes of dementia in the elderly. Initial research in experimental models and patients suggests that immunotherapy targeting beta amyloid (the protein that forms the core of plaques in the brain) may provide a more effective way to treat AD. Antibodies that bind to beta amyloid are present in IGIV, which is made from the blood of several thousand healthy adults. This new effort seeks the public's participation in testing IGIV in a major clinical trial that is jointly funded by the National Institute on Aging and Baxter International Inc.

22. NIH Grant Permits Markey to Recruit Researchers on Gastrointestinal Cancer

The UK Markey Cancer Center received \$1.4 million from the National Institutes of Health to recruit two junior tenure-track faculty members to conduct translational research focused primarily on gastrointestinal (GI) cancer. The two-year grant will help to build expanded capacity in the development of prevention and treatment strategies, said Dr. B. Mark Evers, director of the Markey Cancer Center. The new faculty members will be integrated into a highly collaborative, interdisciplinary group of investigators focused on the diagnosis, prevention, and treatment of GI cancer. This group consists of basic and clinical scientists, including molecular and cell biologists, clinician-scientists (surgeons, gastroenterologists and medical oncologists), GI pathologists, epidemiologists and biostatisticians, as well as investigators in the UK College of Pharmacy with successful programs in drug design and delivery.

23. College of Arts & Sciences Inducts Six into Hall of Fame

Six people, including two UK faculty members, were inducted into the UK College of Arts & Sciences Hall of Fame at ceremonies held October 30 at the Lexington Convention Center. The 2009 inductees are Ernest Steele, who earned his bachelor's and master's degrees in mathematics from UK in 1948 and 1950; William H. Jansen II, who earned his degree in anthropology in 1971; Dr. Olson Huff, who received his bachelor's degree in chemistry in 1957; Sandra Helton, who earned her bachelor's in mathematics in 1971; Wimberly Royster, who received his doctorate in mathematics in 1952, and served as chair of UK's Math Department from 1963 to 1969; and William Y. Adams, who served as chair of the Department of Anthropology twice during his 26 years at UK.

24. Jackson and Linne Are Chosen as UK's 2009 Homecoming Royalty

Barb Jackson, daughter of David and Margaret Jackson of Westmont, Illinois, and Justin Linne, son of John and Beth Linne of Grosse Pointe, Michigan, were crowned the 2009 UK Homecoming queen and king during halftime ceremonies at the UK versus Mississippi State Homecoming game. Jackson is a senior special education major and was sponsored in the Homecoming royalty candidacy by Chi Omega sorority. Linne is a senior integrated strategic communications major and was sponsored by Phi Sigma Kappa fraternity.

25. Student Awards and Achievements

Kristyn Mickley, Nursing, was awarded one of 40 Tylenol Scholarships presented by the company. The \$5,000 scholarship is presented to students with outstanding leadership qualities and academic performance.

26. Faculty and Staff Awards and Achievements

Glen Aiken, Plant and Soil Sciences, was elected Fellow in the Crop Science Society of America.

Kerri Lynn Ashurst, Family and Consumer Sciences, received a \$100,000 grant from Kansas State University for "Operation: Military Kids."

Ernest Bailey, Teri L. Lear, and James MacLeod, Veterinary Science, received the 2009 Prestigious Research Paper Award for their contributions to the Science paper "Genome Sequence, Comparative Analysis and Population Genetics of the Domestic Horse (*Equus caballus*)."

Dibakar Bhattacharyya, Membrane Sciences, received the 2009 Clarence "Larry" G. Gerhold Award by the Separations Division of the American Institute of Chemical Engineers. The Gerhold Award is presented annually in recognition of outstanding contributions in the research, development or application of chemical separations technology.

Deborah Borrowdale-Cox, UK Art Museum, was named the Kentucky Art Education Association's 2009 Museum/Higher Education Art Educator of the Year. As the director of museum education at the UK Art Museum, Borrowdale-Cox oversees programs at the museum as well as outreach to the region that provides art education to more than 10,000 students a year. The 2009 Museum/Higher Education Art Educator of the Year Award was presented at the association gala, held at the museum October 16.

Sheila Botts, Pharmacy Practice and Science, was inducted as a Fellow of the American College of Clinical Pharmacy (ACCP). In addition, she was recognized as a Best Paper Finalist at the ACCP Annual Meeting held in October.

Craig Carter, Livestock Disease and Diagnostic Center, was named Kentucky Veterinarian of the Year by the Kentucky Veterinary Medical Association.

Joseph Chappell, Plant and Soil Sciences, received a \$6 million grant from the National Institute of General Medical Sciences. He is the contact project director for the multi-university study "Advancing Drug Development in Medicinal Plants Using Transcriptomics and Metabolomics."

Nancy Cox, College of Agriculture Administration and Kentucky Agricultural Experiment Station, was honored with Bluegrass Tomorrow's Vision Award. Cox was recognized for her long-term vision in support of the Bluegrass and its signature equine industry.

Louis J. Drapeau, Risk Management, currently serves as vice chairman of the Board of Directors of the Disaster Recovery Institute International (DRII). DRII is the largest certifying body for Business Continuity Management (BCM) professionals in the world, with more than 7,500 certified professionals in 90 countries. He was invited by DRII's Chinese Affiliate, DRI China, to speak at their Sixth Annual Business Continuity Management Forum, "BCM 2009, China," in Beijing November 9. His topic was "Empowering Business Resilience through BCM and Enterprise Risk Management." DRII has experienced tremendous growth in the Pacific Rim

countries of Japan, Malaysia, China, and Australia. Global companies operating in that part of the world are increasingly interested in improving their BCM plans.

Ginny Ellington, Family and Consumer Sciences, received the Outstanding Career and Technical Educator Award from the Association for Career and Technical Education Region II.

Jody Ensmen, Health & Wellness Program, was named the Work-Life Supervisor of the Year. The award is given to one supervisor each year who is highly regarded by his or her employees for consistently supporting the work-life needs of employees.

Diane R. Follingstad, Psychiatry and Center for Research on Violence Against Women, has received the American Academy of Forensic Psychology's Distinguished Contributions to Forensic Psychology Award for 2009. The award is given in recognition of long and distinguished history of both scholarly contributions and professional service to the field.

David W. Horohov and Amanda Adams, Veterinary Science, received a two-year U.S. Department of Agriculture Agricultural and Food Research Initiative grant for \$200,000 to study the effect of age on equine dendritic cell interactions with *Rhodococcus equi*.

Daniel K. Howe, Veterinary Science, received a three-year, \$500,000 grant from the U.S. Department of Agriculture Cooperative State Research, Education and Extension Service to study the genome sequence of *S. neurona*.

Wuyang Hu and Timothy Woods, Agricultural Economics, have been selected by University of Kentucky Experiment State to receive the 2009 Research/Extension Impact Award for their work on Kentucky Food Systems, Consumers, and Marketing.

Mikael D. Jones, Pharmacy Practice and Science, has been selected as the recipient of the American College of Clinical Pharmacy's 2010 New Educator Award. The annual award recognizes an ACCP member, who in less than six years since completing their training, has made outstanding contributions to the discipline of teaching and to the education of health care practitioners. The ACCP New Educator Award will be presented during the Opening General Session of the 2010 ACCP Spring Practice and Research Forum in Charlotte, North Carolina in April 2010.

Janet S. Kurzynske, received a \$700,000 grant from Cooperative State Research Education and Extension for Children, Youth and Families at Risk Capacity Building Program.

James MacLeod, Veterinary Science, received a three-year, \$500,000 grant from the National Science Foundation to study the exon splice pattern characterization of the whole mRNA transcriptome.

Lee Meyer and Jennifer Hunter, Agricultural Economics, in collaboration with Kentucky State University, have been awarded a three-year \$749,883 grant from the U.S. Department of Agriculture's Know Your Farmer, Know Your Food Initiative for development and implementation of an education program for beginning farmers and ranchers.

Reddy Palli, Entomology, was elected vice president-elect of the Integrative, Physiological, and Molecular Insects Systems Section of the Entomological Society of America. The society has more than 5,700 members worldwide and is the largest professional organization of entomologists in the world.

Ken Roberts, dean emeritus, Pharmacy, received the Kentucky Society of Health-Systems Pharmacists (KSHP) Special Pharmacy Achievement Award in recognition of his outstanding accomplishments in the profession of pharmacy. The award was presented at the KSHP Fall Meeting in October.

Arturo Alonzo Sandoval, Art, took Best of Show honors for his artwork on exhibit as part of "Fiber Focus 2009" at Art Saint Louis. Sandoval was selected as the Best of Show winner for

his piece "Pattern Fusion No. 9." The artwork is made from recycled auto industry Mylar and recycled library 35mm microfilm and was the result of research into new materials. Sandoval's work took Best of Show honors over eight merit award winners at the exhibition selected by juror Alice Zrebiec, consulting curator of textile art for the Denver Art Museum. All awards were presented during the show's opening reception held September 25. "Fiber Focus 2009" was on display through October 15 at Art Saint Louis.

Marianne Smith-Edge, Family and Consumer Sciences, received the American Dietetic Association Medallion Award.

Kumble Subbaswamy, Provost, was inducted into the UK Chapter of Phi Kappa Phi during ceremonies on campus in Memorial Hall November 2. Phi Kappa Phi is the nation's oldest, largest, and most selective all-discipline honor society. Former Kentucky Governor Martha Layne Collins was also inducted.

Christopher Thompson, College of Agriculture Division of Regulatory Services, was awarded the Distinguished Service Award by the Dairy Processors Association of Kentucky.

Peter J. Timoney, Veterinary Science, was inducted into the UK Gluck Equine Research Foundation Equine Research Hall of Fame.

Thomas Tobin, Veterinary Science, was awarded the 2008 Industry Service Award by the National Horsemen's Benevolent and Protective Association.

Ann Vail, Human Environmental Sciences, received a \$442,686 grant from the Kentucky Cabinet for Health and Family Services for SNAP-Ed, Supplemental Nutrition Assistance Program – Education.

Ole Wendroth, Plant and Soil Sciences, was elected Fellow in the Soil Science Society of America.

Ronald J. Werner-Wilson, Family Studies, received a \$60,867 grant from the Kentucky Cabinet for Health and Family Services for a Healthy Marriage Child Support Community Demonstration Project.

Bob Wiseman, Facilities Management, recently received an Environmental Commission Award from the Lexington-Fayette Urban County Government.

PR 2

Office of the President
December 1, 2009

Members, Board of Trustees:

PERSONNEL ACTIONS

Recommendation: that approval be given to the attached appointments, actions, and/or other staff changes which require Board action; and that the report relative to appointments and/or changes already approved by the administration be accepted.

Background: The attached recommended appointments and/or other staff changes require approval by the Board of Trustees in accordance with Part VIII-B of the Governing Regulations of the university. These recommendations are transmitted to the Board by the appropriate provost/executive vice president through the president and have the president's concurrence.

Under the Governing Regulations, the authority to make certain appointments and/or other staff changes is delegated to the president or other administrators who are required to report their actions to the Board. These items of report follow the recommendations requiring Board approval.

Action taken: Approved Disapproved Other _____

AACR 1

Office of the President
December 1, 2009

Members, Board of Trustees:

CANDIDATES FOR DEGREES

Recommendation: that the president be authorized to confer upon each individual whose name appears on the attached list the degree to which he or she is entitled, upon certification by the university registrar that the individual has satisfactorily completed all requirements for the degree for which application has been made and as approved by the elected faculty of the University Senate and the Academic Affairs Committee of the Board of Trustees.

Background: In order that the degrees may be conferred upon the individuals completing requirements in December as soon after the close of the semester as possible, it is recommended that the Board of Trustees give its approval contingent upon certification by the university registrar that all requirements have been satisfactorily completed.

For details on degree candidate listings,
please contact

Jacque Hager
Registrar's Office
Room 10 Funkhouser Building
University of Kentucky
Lexington, KY 40506-0057
859-257-7157

Action taken: Approved Disapproved Other _____

FCR 1

Office of the President
December 1, 2009

Members, Board of Trustees:

ACCEPTANCE OF INTERIM FINANCIAL REPORT FOR THE
UNIVERSITY OF KENTUCKY FOR THE THREE MONTHS ENDED
SEPTEMBER 30, 2009

Recommendation: that the Board of Trustees accept the University of Kentucky consolidated financial report for the three months ended September 30, 2009.

Background: The consolidated financial report includes the financial activities of the University of Kentucky and its affiliated corporations, consisting of the University of Kentucky Research Foundation, The Fund for Advancement of Education and Research in the University of Kentucky Medical Center, University of Kentucky Athletic Association, University of Kentucky Mining Engineering Foundation, University of Kentucky Business Partnership Foundation, University of Kentucky Humanities Foundation, University of Kentucky Equine Research Foundation, University of Kentucky Center on Aging Foundation, and Central Kentucky Management Services.

As of September 30, 2009, the University had realized income of \$764,918,000 representing 31 percent of the 2009-10 estimate of \$2,439,691,000. Expenditures totaled \$591,527,000 or 24 percent of the approved budget.

Action taken: Approved Disapproved Other_____

FCR 2

Office of the President
December 1, 2009

Members, Board of Trustees:

ENERGY SAVINGS PERFORMANCE CONTRACT

Recommendation: that the Board of Trustees approve initiation of an energy savings performance contract.

Background: Energy savings performance contracting, as enabled by Kentucky Revised Statutes 56.774, is a cost-effective process for completing building energy upgrades. The energy service company (ESCO) guarantees that utility savings generated by facility upgrades are sufficient to pay back the capital investment over a set period (generally 11 to 12 years). If the project does not provide these returns on the investment, the ESCO is responsible for the difference.

The project will reduce the university's overall energy consumption through (1) upgrades to lighting systems to the latest electric saving technology; fume hood controls; HVAC systems; steam and chiller plant controls; and building envelopes; (2) installation of motor speed drives (VFD's) to save energy during mild weather conditions; energy management software to monitor usage in real time; and automatic utility metering devices; (3) replacement of old plumbing fixtures to the latest water saving technology; (4) replacement of old motors with new high efficiency motors; (5) repair of pipe insulation; and (5) behavioral modification of end users. These are just a few of the possible energy conservation measures.

The project scope for the first phase is \$25 million.

The ESCO selected via a year-long RFP process which included a trial audit of 10 buildings was AMERESCO from Louisville, Kentucky.

Action taken: Approved Disapproved Other _____

FCR 3

Office of the President
December 1, 2009

Members, Board of Trustees:

RENOVATE 4-H CAMPS

Recommendation: that the Board of Trustees approve the initiation of the “Renovate 4-H Camps” capital project.

Background: The College of Agriculture Cooperative Extension Service and 4-H Youth Development operate 4-H Camping Centers in Nicholas, Pulaski, Laurel, and Hopkins counties. The Centers provide camping facilities and programs for youth ages 9 to 14.

These facilities have been in use since the mid-1960's and are in need of repair and modernization. The proposed project will renovate existing cabins by upgrading utility infrastructure, improving finishes, and installing energy efficient heating and air conditioning systems. The project also will include replacement of existing bunks and mattresses in all the camps. Additionally, a new cabin will be built that will house 28 campers and 4-H staff.

The scope of the project is \$2 million and will be funded with state bonds authorized by the 2008 Kentucky General Assembly.

Action taken: Approved Disapproved Other _____

FCR 4

Office of the President
December 1, 2009

Members, Board of Trustees:

CAPITAL CONSTRUCTION REPORT

Recommendation: that the capital construction report for the three months ending September 30, 2009 be accepted. This report refers only to projects that had activity within this quarter.

Background Under House Bill 622 enacted in the 1982 session of the Kentucky General Assembly, the University is authorized to enter into architectural, engineering, and related consultant contracts for the purpose of accomplishing capital construction at the University of Kentucky.

For the period July 1, 2009 thru September 30, 2009:

There were three new contracts this quarter:

Project 2296.1	Repair, Upgrade, Improve Building Systems – Hospital (Elevator Upgrades for KY Clinic) Oracle Elevator, \$833,835 (<i>Construction</i>)
Project 2277.3	Replace Emergency Generators & Fire Pump – UK Good Samaritan Hospital Messer Construction Co., \$1,520,000 (<i>Construction</i>)
Project 2302.0	Upgrade, Renovate, Improve or Expand Research Labs (Renovate Research Labs in Chemistry-Physics Bldg.) Omni Architects, \$186,000 (<i>Design</i>)

Three contracts were completed this quarter:

Project 2239.2	PCF – Hospital GMP # 2 – Parking Garage Gilbane Construction Co., \$32,266,781
Project 2252.0	Upgrade Cancer Center Radiologic Facilities – Hospital Woodford Builders, \$5,052,173
Project 2298.1	Expand/Renovate Kentucky Clinic – Outpatient Clinic Messer Construction Co., \$2,131,067

Two amendments were as follows:

Project 2252.0	Upgrade Cancer Center Radiologic Facility - Hospital - Additional design services to include replacement of Air Handling Unit #2 and upgrades to the three building elevators. (+) \$26,893
Project 2297.1	Digital Village Building 2 - Additional research and design services necessary to provide a photovoltaic system. (+) \$37,800

Twenty-two change orders greater than \$25,000 were as follows:

- Project 2234.0 Expand & Upgrade Livestock Disease Diagnostic Lab
- Provide dense graded aggregate (DGA) fill under the building's concrete slabs. (+) \$45,000
- Project 2235.0 Construct Biological Pharmaceutical Complex Building
- Provide dedicated exhaust duct system and roof fan for basement vivarium laundry dryers. (+) \$28,403
 - Provide alternate shaft caps, structural walking surfaces and cement board in lieu of fire retardant plywood for the ten shafts extending thru the building and into the Penthouse floor. (+) \$143,046
 - Provide for ceiling modifications at Floor 5 to construct beam wraps, addition of storefront smoke separation and addition of a large architectural grill with plenums above. (+) \$58,339
 - Provide ceiling modifications to include rulon cubes and plenum boxes with associated ductwork. (+) \$55,804
 - Provide for relocation of the tower drives from the top of the tower to inside the CUP building for safety reasons. (+) \$31,007
- Project 2239.0 Construct Patient Care Facility
- Provide for payment of shift premium required to accelerate pan removal under the 4th and 5th decks. (+) \$35,236
 - Provide for sidewalk stabilization as well as removal and reinstallation of a distilled water line that conflicts with excavation for the new foundation. (+) \$27,497
 - Provide an additional 2 feet of height to the Penthouse elevator. (+) \$43,756
 - Provide for replacement of an existing ADS plastic storm pipe with a ductal iron pipe to meet code. (+) \$67,697
 - Provide for the purchase and installation of fifty six control dampers required for proper functioning of the Air Handling Units that were purchased directly by UK. (+) \$50,436
 - Provide for the installation of ground bars and associated ground wiring in 110 locations data and electrical closets. (+) \$69,287
 - Provide for deletion of the demolition of existing 36" storm drain and the new 36" storm drain. (-) \$73,319
 - Provide for installation of cast-in-place concrete anchors in the 5th floor. (+) \$367,335
 - Provide for addition of a smart panel to tie the exterior controls for the fountain system and site lighting into the existing Tridium system. (+) \$28,293
 - Provide one Edgestar door controller per door. (+) \$127,027
 - Provide for replacement of Luminaire F55 light with Luminaire F56. (+) \$29,323
 - Provide fit-out of additional office spaces in the basement of the Patient Care Facility. (+) \$191,975
 - Provide for deletion of fiber and coax to work stations throughout the podium. (-) \$80,087
 - Provide for amendment of Turner's contract to allow for payment of prevailing wage rate determined by the Kentucky Labor Cabinet. The rates

included in the original bid documents were increased by the State prior to contract signing. (+) \$626,061

Project 2239.2 PCF – Hospital GMP # 2 – Parking Garage
- Reduce the contract value due to liquidation of remaining monies from the GMP (Guaranteed Maximum Price). (-) \$163,105

Project 2299.1 Convert Hunt Morgan Space to Class Lab
- Provide a new cell culture room in laboratory 215. (+) \$29,344

Action taken: Approved Disapproved Other _____

FCR 5

Office of the President
December 1, 2009

Members, Board of Trustees:

APPROVAL OF THE 2008-09 ENDOWMENT MATCH PROGRAM ANNUAL REPORT

Recommendation: that the Board of Trustees accept the 2008-09 Endowment Match Program Annual Report. The report will be provided as a separately bound document.

Background: The Research Challenge Trust Fund (RCTF) was established in 1997 with the passage of House Bill 1, the *Kentucky Postsecondary Education Improvement Act*. The RCTF is designed to encourage research activities at the University of Kentucky and the University of Louisville. The Endowment Match Program, also known as 'Bucks for Brains,' is one of several programs created as part of the trust fund. Pursuant to the Council on Postsecondary Education's Endowment Match Program Request and Reporting Procedures, the Board of Trustees must review and approve the annual report on UK's participation in the program. The annual report and additional information about the program is available online at:

<http://www.research.uky.edu/ca/rctf/index.html>

Action taken: Approved Disapproved Other _____

FCR 6

Office of the President
December 1, 2009

Members, Board of Trustees:

PATENT ASSIGNMENT REPORT

Recommendation: that the Board of Trustees accept the patent assignment report for the period July 1 through September 30, 2009.

Background: At its March 1997 meeting, the Board of Trustees authorized the University of Kentucky Research Foundation to conduct all future copyright and patent filings and prosecutions. Quarterly reports on patent and copyright applications are to be submitted to the Finance Committee of the Board.

Action taken: • Approved • Disapproved • Other _____

PATENT ASSIGNMENT
QUARTERLY FOR THE PERIOD THROUGH SEPTEMBER 30, 2009

Patents

The following assignments on behalf of the Board of Trustees of the University of Kentucky Research Foundation have been executed:

- 1. U.S. Patent Application Serial Number: (to be assigned)**
Filed: June 3, 2009
Title: “Non-Contact Method for Quantifying Changes in the Dynamics of Microbial Populations”
Inventors: Dr. Ahmad Salaimh, Martin Evans, and Jeffrey Campion (Internal Medicine), and Belal Gharaibeh and Kozo Saito (Mechanical Engineering)
Technical Description: This invention relates to methods for quantifying changes in viable microbial populations. In particular, the invention relates to real-time methods for quantifying such alterations in microbial populations and for rapid quantification of viable microorganisms *in situ*. The invention finds use in a variety of applications where living organisms, suspended in a liquid medium, are quantified, including evaluation of antimicrobial agents and/or microbial growth enhancers.
Summary: Measurement of microorganisms is important in many settings, such as the evaluation of processes for destroying or limiting the growth of microorganisms; wastewater treatment; and food safety. Current methods of measurement are slow, requiring the prolonged incubation of samples. The inventors have developed a faster method which involves measuring the amount of heat produced by microorganisms in a sample.

- 2. U.S. Patent Application Serial Number: (to be assigned)**
Filed: June 12, 2009
Title: “Methods and Compositions for Genetic Transformation of Chloroplasts”
Inventors: Dr. Indu Maiti (Kentucky Tobacco Research and Development Center)
Technical Description: This invention relates to transformation of plant cells for expression of desired proteins or peptides, including expression in multi-cellular plants. In particular, the invention relates to novel methods and compositions for plastid transformation of plant cells, and for expression of foreign DNA of interest in plant cells, including in multi-cellular plants.
Summary: Advances in biotechnology have provided the ability to utilize plants as factories for efficiently producing commercially and pharmaceutically important proteins. While chloroplasts are naturally highly efficient protein factories, scientists have, until now, failed to harness this efficiency to produce commercially and pharmaceutically important proteins. The inventor has developed a method of using the chloroplast to develop these proteins; a method which should increase the efficiency of plants as protein factories.

- 3. U.S. Patent Application Serial Number: (to be assigned)**
Filed: July 24, 2009
Title: “Amidated Dopamine Neuron Stimulating Peptides for CNS Dopaminergic Upregulation”
Inventors: Drs. Luke Bradley, Don M. Gash, and Greg A. Gerhardt (Anatomy and Neurobiology), and John D. Glass (outside inventor)
Technical Description: This invention relates to novel proteins, derived from glial cell-line-derived neurotrophic factor (GDNF), which are useful for treating brain diseases and injuries that result in dopaminergic deficiencies.
Summary: Several diseases of the brain, including Parkinson’s, are related to a harmful reduction in the activity of the neurotransmitter dopamine. GDNF, a growth factor present in the brain, is known to increase the activity of dopamine in the brain. However, GDNF is unstable, being rapidly broken down in the brain. Consequently, the resulting increase in dopamine activity is transient. The inventors have developed a stable compound derived from GDNF that maintains the ability to stimulate dopamine activity. This compound may be useful in treating diseases such as Parkinson’s.
- 4. U.S. Patent Application Serial Number: (to be assigned)**
Filed: August 3, 2009
Title: “Cascaded Photovoltaic and Thermophotovoltaic Energy Conversion Apparatus with Near-Field Radiation Transfer Enhancement at Nanoscale Gaps”
Inventors: Drs. Mathieu Francoeur, Rodolphe Vaillon and M. Pinar Menguc (Mechanical Engineering)
Technical Description: This invention relates to photovoltaic and thermophotovoltaic devices. More specifically, the invention provides an energy conversion apparatus with a cascaded arrangement of photovoltaic and thermophotovoltaic devices that use near-field radiation enhancement. The invention also provides a method for forming the cascaded arrangements.
Summary: Photovoltaic devices, such as solar panels, convert light energy to electrical energy. However, some of the energy contained in light is lost in the conversion to electrical energy, and is instead converted to heat energy. The inventors have devised a means of increasing the efficiency of photovoltaic devices by coupling them with thermophotovoltaic devices, which capture heat energy from the photovoltaic devices and convert it to electrical energy. The electrical energy recovered from heat can be added to the electrical energy converted from light energy, increasing the output over that of an uncoupled photovoltaic device.
- 5. U.S. Patent Application Serial Number: (to be assigned)**
Filed: August 28, 2009
Title: “Methodology and Technology for the Production of Improved Coal-Derived Fly Ash for the Production of Metal Matrix Composites”

Inventors: Drs. Thomas Robl, John Wiseman and Brock Marrs (Center for Applied Energy Research)

Technical Description: This invention relates to metal matrix composite materials, and in particular to such composite materials incorporating ash-derived ceramic particles from coal combustion.

Summary: Fly ash is collected as a waste product of coal burning. Some of the fly ash is subsequently used in products such as cement, but much is also discarded in landfill. The inventors have discovered methods of treating fly ash and mixing it with metals to form useful composite materials, thus reducing the waste from burning coal.

6. **U.S. Patent Application Serial Number: (to be assigned)**

Filed: September 16, 2009

Title: “Plants and Plant Products Useful for Biofuel Manufacture and Feedstock, and Methods of Producing Same”

Inventors: Drs. Seth Debolt, Darby Harris and Jozsef Stork (Horticulture)

Technical Description: This invention relates to methods of selecting and/or producing plants that have beneficial saccharification properties. Plant cellulose or biomass obtained from plants with beneficial saccharification properties can more easily be converted to biofuel, and can be a more digestible feedstock.

Summary: Cellulose, the fibrous material in plants, is a potential source of biofuels such as ethanol. However, converting cellulose to ethanol involves expensive chemical pretreatment. The inventors have discovered a method of genetically modifying a plant whose cellulose is more easily converted to ethanol, lowering the cost of deriving ethanol from plants. The cellulose produced also is more digestible for livestock.

Patent Activities

Fiscal Year to date as of September 30, 2009

Number of Patent Applications	6
Number of Patents Issued	0
Patent Income	\$391,930.78