THE NEXT FRONTIER
NEW PROGRAMS, FACILITIES, FACULTY AND RESEARCH TAKE PARKS INTO THE NEXT DECADE OF EDUCATION.

PREMIER PROGRAMS
PHILLIP LIGRANI, PH.D., TO LEAD ENGINEERING AND AVIATION GRADUATE PROGRAMS.

ENGINEERING THE FUTURE
NATIONAL ACADEMY OF ENGINEERS SCHOLAR PROGRAM OFFERS STUDENTS GRAND OPPORTUNITY.
Dear Friends:

2010-11 academic year is off to a great start with very exciting changes to position the college for continued excellence in undergraduate education, while fostering the newly initiated graduate programs in engineering and aviation. We have recruited seven new faculty for fall 2010 including Dr. Phil Ligrani, the Oliver L. Parks Endowed Chair and Graduate Program Director, and Damon Lercel the Executive Director of the FAA funded Center for Aviation Safety Research. The graduate program began with 20 students enrolled in the program. Our faculty continue to engage in funded research, and university and community service while preserving and promoting the hallmark of Parks College education—excellence in the classroom. The Civil Engineering program launched in fall 2009 is moving forward. Laboratories related to the Civil Engineering curriculum are being commissioned. Our students continue to engage in many professional and service oriented activities in the true Jesuit tradition throughout their challenging academic pursuit. Our alumni continue to be engaged with the College in various activities throughout the year for which we are very grateful. I hope you enjoy reading this issue of Parks Today.

With best wishes,

K. Ravindra

K. Ravindra, Ph.D.
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Premier Graduate Programs Evolve

Phillip Ligrani, Ph.D., Oliver L. Parks Endowed Chair and Director of Graduate Programs, aims to “produce internationally competitive students sought after for their expertise.”

Parks College graduate studies launched at the start of the fall 2010 semester with 27 students. Phillip Ligrani, Ph.D. was appointed the Oliver L. Parks Endowed Chair and Director of Graduate Programs and is working to build enrollment and increase student support. Ligrani comes to Saint Louis University from the University of Oxford. An investiture ceremony was held on September 16.

The goal of the graduate program is to “produce internationally competitive students sought after for their expertise,” says Ligrani. Graduate students collaborate with faculty on research in areas such as aviation safety, biomedical engineering, space systems, thermal-fluid sciences, sustainability and structural mechanics and design, the six major areas of research at the college. These efforts address global challenges of the 21st century.

Six research areas cross traditional disciplines, allowing students to work not only with engineering and aviation faculty, but also with faculty from business, medicine, psychology and chemistry. Together, diverse faculty and students bring multiple perspectives to solve challenging problems.

Prestigious graduate fellowship programs are offered and the college is “always looking for new avenues of support especially from industry and private organizations to further expand our graduate programs and attract an exceptional class of students,” says Ligrani.

The programs are designed to be flexible to accommodate the varying interests of students. Some courses are taught by working professionals from area industries and organizations. Some courses may be offered in the evenings to facilitate enrollment of working engineers. Classroom lectures are supplemented by guest lectures, laboratory demonstrations and field trips as appropriate. Students are encouraged to publish their thesis/independent study work for professional conferences and journals.

The graduate programs accommodate both the working professional and the full-time student. Courses and research are tailored to the needs of the student. All paths of graduate study lead to more in-depth knowledge of their academic area of interest and can have a focus of the student’s choice within the six core areas of research.

Ligrani wants Parks graduate programs to be “nationallly and internationally recognized for their excellence,” and is working to provide a stimulating environment for graduate study in both engineering and aviation.
Phillip Ligrani, Ph.D., is the Oliver L. Parks Endowed Chair and Director of Graduate Programs. Before coming to SLU, Ligrani was the Donald Schultz Professor of Turbomachinery in the Department of Engineering Science at the University of Oxford. From 2006 to 2009, he was the Director of Oxford University’s Rolls-Royce University Technology Centre in Heat Transfer and Aerodynamics. From 1994 to 2006, he was a Professor of mechanical engineering, Director of the Convective Heat Transfer Laboratory and Associate Department Chair in the department of mechanical engineering at the University of Utah.

Dr. Ligrani’s research interests include turbomachinery, convective heat transfer, fluid mechanics, micro-fluidics, fractionation and separation science, including SPLITT Fractionation.

Some of his recent academic recognitions include: Distinguished Editorial Review Board membership for Springer Publishing Corporation, NASA Space Act Tech Brief Award, the Carl E. and Jessie W. Menneken Faculty Award for Excellence in Scientific Research and the “Professor of the Year” award at the University of Utah for outstanding classroom instruction.

In October 2010, Ligrani was honored with an appointment of Distinguished Advisory Professor at Inje University in Korea. The appointment is made to foster closer relations and academic exchanges between SLU and Inje University and to further provide arrangements to support research collaborations. The invitation to visit Inje University, which is located in Gimhae, near Pusan, came from Professor Dae Hee Lee of Inje University, a long-time collaborator with Ligrani. Inje University shares SLU’s dedication to a holistic approach to education.

During his trip to China and Korea, Ligrani was also invited to visit Seoul National University, KARI (Korea Aerospace Research Institute), KAIST (Korea Advanced Institute of Science and Technology), and the Shanghai Jiao Tong University, located in Shanghai, China.

Ligrani was also involved in technical discussions in Korea with individuals from the Korea Maritime Institute, Kumoh National Institute of Technology, the Korea Institute of Geoscience and Mineral Resources, the Korea Nuclear Engineering and Technology Institute and Sogang University. These universities and institutes have strong engineering programs and conduct vital research in the field.
New EXPERTISE at Parks Today

New faculty additions in the engineering and aviation departments contribute to enhanced research and education.

Many new faculty members joined the Parks College community. The college welcomed new additions to the Aerospace and Mechanical, Biomedical and Aviation Science departments. The faculty bring new areas of expertise in research and teaching.

New faculty also assist departments in teaching the recently launched graduate programs in engineering and aviation, as well as teach in undergraduate programs.

From sustainable design to computational solid mechanics, the new faculty add diversity and depth to the research at the college for a dynamic student experience. Faculty research is continuously poised to make significant contributions to the engineering and aviation industries.

Also joining the Parks community are new staff members Diane Lawrence, executive assistant to the Dean, Kathy Barbeau, finance coordinator, and Damon Lercel and Michelle Reichert of the Center for Aviation Safety Research. The aerospace and mechanical engineering department also has a visiting researcher, Chris Ashabranner from National Geospatial Intelligence Agency.
Megan Hart, Ph.D.
Hart focuses her research in areas of soil movement, clays, stormwater control, natural resource management, damage and assessment, water pollution, sustainable design and undergraduate education.

David Henthorn, Ph.D.
Henthorn’s research areas are in biomaterials, biomedical microdevices, protein-polymer interactions, and new materials in biotechnology. Recent projects have focused on continuous monitoring of nutrients and metabolites.

Riyadh Hindi, Ph.D.
Hindi’s research focuses on structures, reinforced and prestressed concrete, bridges, seismic, cyclic and fatigue damage, live load distribution, experimental, finite elements, non-linear behavior.

Phillip Ligrani, Ph.D.
Ligrani’s expertise is in areas such as turbomachinery, convective heat transfer and fluid mechanics. He is also working in microfluidics, fractionation, and separation science, including SPLITT Fractionation.

Jeff Ma, Ph.D.
Ma conducts research in areas such as computational solid mechanics, manufacturing, CAD/CAM, modeling and simulation of metal cutting processes and modeling and simulation of tire-soil interactions.

Raymond LeBeau, Ph.D.
LeBeau specializes in computational fluid dynamics. His research includes the simulation and optimization of low Reynolds number flow control techniques, including techniques and numerical modeling of outer space atmospheres.

Damon Lercel
Lercel is the Program Director of the Center for Aviation Safety Research. Lercel’s research is in the area of aviation safety, particularly focusing on business benefits of safety management systems.
Santa Lands at Parks
A Parks College tradition continued in the 2010 holiday season. The Santa Fly-In was held at the Parks hangar at the St. Louis Downtown Airport.

It was almost a decade ago when the first Santa Fly-In was held at the Parks hangar, a tradition started by alumni Leonmarie Benner, William Hopper, Andy Thurmond and Terrence Kelly. The event grows each year and alumni, faculty, staff, family and friends continue to gather to celebrate the season.

The fly-in is held the first Saturday of December and this year, a new addition expanded the event. The Parks College family holiday party was combined with the fly-in and faculty and staff from all departments took part in welcoming Santa to SLU.

Santa was flown in via helicopter piloted by Parks alumnus William Hopper, 1986 aircraft maintenance management graduate and owner of Helicopter Services Technologies (HeliSat).
Saint Louis University and the American Society of Civil Engineers (ASCE) hosted the St. Louis Infrastructure Symposium on Oct. 14 in the Busch Student Center at SLU.

The half-day event was attended by over 100 people and began with welcome remarks from K. Ravindra, Ph.D., P.E., the Interim Dean of Parks College, Riyadh Hindi, Ph.D., P.Eng., Professor of Civil Engineering for SLU and Adam Spector, P.E., ASCE President and event moderator.

Welcome remarks emphasized the importance of an event focusing on infrastructure needs, referencing President Obama who said, “Our infrastructure is woefully inefficient and it is outdated. For years we have deferred tough decisions and today our aging system of highways, byways and air routes and rail lines hinder our economic growth.”

Speakers from agencies were introduced by Saint Louis University Civil Engineering students. Agencies such as The Metropolitan St. Louis Sewer District, MoDOT, Missouri American Water Company, St. Louis
Area Earthquake Hazards Mapping Project and U.S. Army Corps of Engineers made presentations expressing the importance of improving the city’s infrastructure, which included major regional projects and funding needs.

The audience was included in a poll regarding which infrastructure need they would spend their dollars on. Highways and bridges (MoDOT) won the vote with thirty-seven percent, followed by levees and river navigation (U.S. Army Corps of Engineers) at 30 percent. A discussion followed the poll results.

The event will be held next fall and all attendees will receive professional development hours. For more information contact Special Projects Coordinator, Brooke Lund at 314-977-7820.
Forming Engineers of the Future

Saint Louis University’s new Grand Challenge Scholars program gives students the opportunity to make the world a better, more inclusive place. Students can be a part of a unique learning experience, one that can significantly enhance their education and set them apart as nationally recognized engineers.
Saint Louis University Offers Unique Program Forming Engineers of the Future

SLU is one of a select few engineering programs in the United States to offer the Grand Challenge Scholars program. It is an elite program designed to prepare students to be the next generation of problem-solvers, addressing the grand challenges facing society this century. John Woolschlager, Ph.D., chair of the civil engineering department, is the GCSP coordinator.

As a Grand Challenge Scholar, the student receives a certification on their transcript from the National Academy of Engineers.

The prestigious National Academy of Engineering endorses the program as a pipeline to create engineers with the necessary skills, cross-disciplinary knowledge, entrepreneurial spirit, global perspective and sense of mission needed to serve and lead this country. SLU is ideally suited to educate these future leaders.

National Academy of Engineering Identifies Key Challenges of the 21st Century

The National Academy of Engineering (NAE), with some of the most accomplished engineering and scientific experts in the world, provides engineering leadership and service to the nation. The NAE has proposed 14 grand challenges facing the planet in the 21st century. The committee states, “As the population grows and its needs and desires expand, the problem of sustaining civilization’s continuing advancement, while still improving the quality of life, looms more immediate.”

Grand Challenges of the 21st Century

- Provide energy from fusion
- Make solar energy economical
- Manage the nitrogen cycle
- Restore and improve urban infrastructure
- Provide access to clean water
- Develop carbon sequestration methods
- Prevent nuclear terror
- Engineer better medicines
- Enhance virtual reality
- Secure cyberspace
- Reverse-engineer the brain
- Advance health informatics
- Advance personalized learning
- Engineer the tools of scientific discovery
INNOVATIVE MINDS AT SLU

Students use their entrepreneurial skills to form award-winning ideas.
Parks College Wins Competition at Annual KEEN Conference

On Oct. 7-8, 2010, faculty and staff from Parks College attended the KEEN Annual Conference. During the Conference K. Ravindra, Ph.D., Parks Interim Dean, Susan Bloomfield, Parks College Development Director and Sridhar Condoor, Ph.D., professor in the aerospace and mechanical engineering department, participated in a competition hosted by the Kern Engineering Entrepreneurship Network to create a new paradigm for teaching entrepreneurship.

Saint Louis University lead a team of five schools - Boston University, Gonzaga University, Kettering University, Lawrence Tech and Worcester Polytechnic Institute and went on to win the competition. This network of schools will have an opportunity to present a major proposal to the Kern Foundation during early 2011.

Students Honored at Innovation Encounter

On Oct. 29, 2010, a team from Saint Louis University, led by Condoor attended the Innovation Encounter at Lawrence Tech and won the Most Innovative Product Design prize. The prize included a custom designed trophy and $1000 in prize money. The team members included Parks undergraduate students Gregory Keogh, Michael Kelly, Dominique Turk and Lyle Wilson.

The Innovation Encounter is an inter-collegiate competition for inventive problem-solving. The Innovation Encounter is a fast-paced competition. University teams are challenged to find the ideal, innovative solution to a problem posed by the Innovation Sponsor, Visteon. Teams have access to expert coaches, webinars and a toolkit. The winning prize goes to the most innovative solution.

Students Win SLU Idea to Product® Competition

On Nov. 13, 2010 the winners of the 2010-11 Saint Louis University Idea to Product® Competition (I2P) were announced and a team including many Parks College students took first place, winning $1000. Michael Kelly, Gregory Keogh and Dominique Turk won with their idea, entitled the R-Pen Marker System. Winning ideas are eligible to compete in the next round, the Missouri-Illinois I2P competition to be held at Saint Louis University on March 4-5, 2011.

Four additional teams were recognized at the competition. The second place $800 prize was awarded to Hotelratedrop.com, represented by Mike Golomb. The third place $600 prize went to SEADS, represented by John Boysha. The fourth place $400 prize was awarded to two teams--Nonpareil Bride, represented by Shelley Hintman, and Visual Search, represented by Jeremy Pollock.

Idea To Product® is an international competition with branches in Asia and Europe as well as many campuses in the United States. The program is based at the University of Texas at Austin. It is a three-tiered idea competition beginning at the campus level, then the two-state level and on to the global forum.

I2P is a unique academic competition looking at ideas at their earliest stages. Its approach makes it possible for people across the campus to develop and present ideas, obtain feedback and start the process of invention commercialization and venture creation. I2P also benefits the larger technology and financial communities by providing an opportunity to get an early view of new, cutting-edge ideas, thereby jump-starting the development process.

If you are an inventor, entrepreneur or innovator, contact Susan Bondie Bloomfield at 314-977-8431 or blooms@slu.edu. The engineering entrepreneurship program is looking for expertise to strengthen their program offerings.
Hypertension is a worldwide health problem that is increasing exponentially. One in four Americans have hypertension, also known as high blood pressure. The condition can increase one’s risk for heart attack or stroke. A Saint Louis University biomedical engineering faculty member recently received a grant to conduct research on hypertension from the National Institutes of Health.

Jessica Wagenseil, D.Sc., assistant professor, is a co-principal investigator with Robert Mecham, Ph.D. of the Washington University Medical School’s Department of Cell Biology and Physiology. The four-year grant, titled “Vessel stiffening, hypertension and vascular extra-cellular matrix” was funded in September 2010.

Recent evidence suggests that there is a correlation between vessel stiffening and hypertension, but there have been few experimental models to investigate the cause and effect relationship. Wagenseil and Mecham’s project aims to expound the mechanisms that lead to large artery stiffening and explore the temporal relationship between arterial stiffening and the development of hypertension in animal models. They are specifically focusing on animal models in which the amount of extra-cellular matrix proteins—stiffness of the arterial wall—have been altered genetically.

The National Institutes of Health focus on “turning discovery into health,” and Wagenseil and Mecham plan to use their research to help advance the field of medical science and ultimately save lives.
Jessica Rozycki, a junior at Parks majoring in aerospace engineering, is the 2010/2011 recipient of the Patrick P. Lee Engineering Term Scholarship.

The scholarship is awarded to one highly-qualified Parks engineering student; Rozycki was chosen to receive the $25,000 scholarship for the academic year. Her dedication to be a top student and involvement in many extra-curricular activities made her an outstanding candidate for the award. Rozycki said “I am eternally grateful. It was truly a blessing and I am thankful for the Patrick Lee Foundation every day.”

Rozycki was president of the FSAE Parks Racing Team, current president of the Association of Parks College Students and a social chair and active member of the Society of Women Engineers.

She also works as a lab assistant and a student technician in the machine shop.

The Patrick P. Lee Foundation was formed by Patrick P. Lee in 2005 as a broad-based charitable organization dedicated to promoting awareness through education and research. Based on strong philanthropic values and a passion for community outreach, the Foundation seeks to align itself with those organizations that share the same passion.

Patrick P. Lee, (Parks ’59, aerospace engineering) holds a bachelor of science degree from Saint Louis University and received an honorary doctor of humane letters degree from Canisius in 2010.

An inventor and engineer early in his career, Lee used his business savvy and leadership skills to found Enidine Incorporated, one of the world’s premier manufacturers of shock absorption and vibration isolation products located in Buffalo, New York. As Enidine prospered, other companies with synergistic product lines were acquired and eventually a holding company, International Motion Control (IMC) was formed. For over 40 years, IMC continued to grow into a worldwide conglomerate with manufacturing facilities located in the United States, Germany, United Kingdom, Japan, Korea and China and with a network of over 300 independent distributors.
Dear Alum:

Our hosting responsibilities at the 2009 NIFA SAFECON earned the Parks College NIFA SAFECON student committee $14,500.00. We decided that we wanted to make an impact with the SAFECON earnings. As we are professional pilot students, we know the challenges of completing course work due to flight fees. The committee has donated this money to Parks College in order to create an Aviation Science Emergency Flight Fee Endowed Scholarship.

For many students, flight fees can be a hindrance to completing their education and graduating. This fund would help address that issue and help many aviation science students graduate. Perhaps you’ve been in this position and know how frustrating it can be to be so close and not have the means to finish, to have to return for one, maybe two years before you can complete the course.

The student committee is asking for your support of this new fund. We have earned and donated over half of what is needed to create this endowment. Now, we are challenging you to match the amount we earned hosting the 2009 NIFA National SAFECON competition. Help us to make an impact and support Parks College aviation students by endowing the Aviation Science Emergency Flight Fee Endowed Scholarship!

Sincerely,

Melissa Goetz
Chairman,
Parks College NIFA SAFECON Student Committee

During this past season of giving; we want to thank you for your support! As you can see in the letter above, our students see how important giving back is, or should I say “paying it forward.” These students have seen some of their classmates struggle and now want to help the next generation of students.

I’ve always been a proponent of the idea of “paying it forward” as I have lived a wonderful life full of opportunities and assistance of some kind. Someone’s caring words of advice, an unexpected check in the mail or an outright gift. Each of these things, no matter how large or small, at the right time, has made a huge impact in my life, which made me appreciate the good things even more. Saying thank you was not enough for me, even though the giver has assured me that no return gift or thank you was necessary. So, many years ago, when I heard about the idea of paying it forward, I knew that this was something I needed to embrace for the rest of my life.

Paying it forward is not always easy; it takes opening your eyes and looking for an opportunity. It doesn’t always mean money out of your pocket, but sometimes stretching your pocketbook doesn’t hurt either. Helping a neighbor who needs a helping hand; volunteering your time to a cause you are passionate about (non-profits always need support); or smiling and having a positive attitude in a tough situation so that others can use your strength to be better people. We can all make a difference in someone’s life. This is one of the reasons that I am the Development Director at Parks; I find many opportunities to pay it forward.

If I can ever be of assistance to you to pay it forward, feel free to call me. Together we can make a difference.

Wishing you health and happiness in the new year!

Susan Bondie Bloomfield, Parks ’76
SURE Program
The Summer Undergraduate Research Experience (SURE) launched in Summer 2010. Students across disciplines participated in the 10-week program, completing research projects chosen from over 30 topics. A stipend was provided for each student and they were required to work 40 hours per week to complete their research. The program is designed as both a pipeline for graduate programs at Parks, as well as an opportunity for students to expand their knowledge in their area of interest.

BME Students Research and Internship Event
Cecil Thomas, Ph.D., biomedical engineering professor, hosted an event showcasing students’ summer internships and research. Students presented their experiences such as the SURE program (Brittany Corley) and a Stanford program coordinated by the American Heart Assoc. (Krishi Peddada), photographed below.

Engineers of the Future
John Woolschlager, Ph.D., Chair of the Department of Civil Engineering, and two Civil Engineering students, Ryan Hughes and Diana Byrne, attended the Engineer of the Future 3.0 Conference hosted by the University of Illinois at Urbana-Champaign in cooperation with the Olin School of Engineering.

At the conference, students, faculty and corporate leaders gathered to discuss the theme of unleashing student engagement for the transformation of engineering education.


Students Address Clean Water Issues
Civil engineering students address the issue of clean water in agriculture. Students built water filters in Megan Hart, Ph.D.’s freshman engineering course. They had two hours to complete the project designed to provide a clean water source for farming.

Dr. Hart described the importance of projects building the water filters: “Freshman engineering is designed as a hands-on, project-based learning course which allows students to identify a problem and create a solution. It was great to see the students working together to solve an identified need.”

The students were to provide a clean water source for livestock consumption. The scenario involved a farm with a contaminated pond due to an upscale condominium development built near the farm.

Students were provided with proper materials and specifications to create the filters. They followed environmental regulations and submitted plans to the farmer, Dr. Hart, for review.

BMES Conference 2010
Faculty, staff and students from the Biomedical Engineering Department attended the annual Biomedical Engineering Society Conference in Austin, Texas held October 6-9, 2010. The conference theme “Engineering New Frontiers in Medicine and Biology” included several prominent invited lectures, workshops and multiple platform and poster sessions throughout the four-day event.

Faculty attendees included professors Barnett, Bledsoe, Harkins, Henthorn, Miller and Wagenseil. Post-doctoral researcher Dr. Mayzar Amin and research assistant Vicki Le from Dr. Wagenseil’s lab also attended, as well as undergraduate students Eric Marin (SURE), Brittany Corley (SURE), Leah Vandiver, Jessica Stukel, Ben Minden-Birkenmaier, Laura Markkors (ECE), Laura Marquardt (BME ’10) and Becca Scott (BME ’10). Graduate students I-Hsin Li, Wenda Zhou, Ryan Williamson and Shruti Sahu presented at the BMES conference.

Seven students from the National Science Foundation-funded Research Experience for Undergraduates program BE@SLU presented their research projects—Jessica Stukel and Ben Minden-Birkenmaier (SLU), Katy Dzurisin (U. of Akron), Mallory Smyth (Vanderbilt), Connor Mulcahy (U. of Minn.), Daniel Stern
Numerous alumni were in attendance–Kate Stuart, Ph.D., Sarah E. Stabenfeldt, Ph.D., Rebecca Scott, Laura Marquardt, Tricia Huber, Lisa Actis and Susan (Westerfield) Foy.

Dr. Wagenseil co-chaired the Cardiovascular Engineering session, Vascular Structure and Function II: Growth and Remodeling. Dr. Miller co-chaired the Respiratory Engineering session, Mechanobiology in the lung.

Dr. Barnett participated in the BME Council of Chairs Educational Workshop. It concentrated on examining the integration of life and engineering sciences within the curriculum through laboratories, modeling and problem solving. He also attended the BME Council of Chairs and AIMBE Academic Council meetings.

Patent Obtained by Parks Faculty Member

Mechanical engineering professor Arif Malik, Ph.D. received a U.S. Patent from the Patent and Trademark Office on August 10, 2010. The patent is entitled “Analytical Method for Use in Optimizing Dimensional Quality in Hot and Cold Rolling Mills.” It describes a new computational technique that can be applied to rolling mill control systems to improve the thickness uniformity and flatness quality of rolled metal sheet, including steel, aluminum and copper alloys.

Student wins award at Black Box competition

Brandon Coventry, a junior in the Electrical and Computer Engineering Department, won second prize in the Black Box competition held at Missouri University of Science and Technology on November 13, 2010. The competition was sponsored by the Institute of Electrical and Electronics Engineers (IEEE) Saint Louis Section. Students from Missouri University of S & T, Washington University at Saint Louis, Southern Illinois University at Carbondale, Southern Illinois University at Edwardsville, University of Missouri at Columbia and Saint Louis University were eligible to compete.

Kyle Mitchell, Ph.D. of the ECE department was one of the judges.

Aviation Researchers Receive Top Honor

Researchers in the Center for Aviation Safety Research at SLU collaborated on a project studying factors that influenced undergraduate students in their decision to enter aviation and choose a college. Damon Lercel and Richard Steckel won first place in the University Aviation Association Student Virtual Poster Contest for their project titled: Factors that Influence an Undergraduate Student to Choose a Career in Aviation, and Enroll in the Aviation Science Program at Parks College.

Aviation Appointment

Bill Irwin has been appointed to a full time faculty position in the Department of Aviation Science.

New Department Chairs

Swami Karunamoorthy, D.Sc. was appointed chair of the Department of Aerospace and Mechanical Engineering. As chair, he will work to mentor tenure-track faculty, build Parks graduate programs and strengthen assessment efforts.

Terrence Kelly, M.S. was appointed chair of the Department of Aviation Science. Professor Kelly has been in the interim chair position since last fall. Moving forward, he will focus on the graduate program, renewal of AABI accreditation, and development of both undergraduate programs.

Huliyar Mallikarjuna, Ph.D. was appointed as the chair of the Department of Electrical and Computer Engineering. Mallikarjuna will work to further build enrollment, strengthen programs and address other important initiatives.

Gold Medal for All-Star Physics Team

The SLU All-Star Physics team – John Sanders, won a Gold Medal in the 2010 University Physics Competition, an international contest held by the American Physical Society and the American Astronomical Society.

Parks Gives Back

Parks College adopted two families for Christmas and donated presents, as part of 100 Neediest Cases, sponsored by United Way and the St. Louis Post-Dispatch.
Alden Wilcox (Parks ‘51, aerospace engineering) retired from the aviation industry in 2009 and spends time working on two vineyards. He and his wife of 58 years, Muriel, have 13 grandchildren. He lives in Montgomery, Pa.

Lt. Col. Harold Neher (Parks ‘56, aeronautical administration) is retired from the U.S. Air Force. He and his wife, Sally celebrated their 50th wedding anniversary with a trip to China, which included a visit with their daughter, Rebecca, and her family in Suzhou and a cruise down the Yangtze River. They live in Poquoson, Va.

Robert Tydeck (Parks ‘60, aircraft maintenance engineering) is retired in Port Richey, Fla., after 40 years as a program and project manager in support of Apollo and space shuttle programs.

Howard Reitenbaugh (Parks ‘64, aerospace engineering) retired from the U.S. Air Force and from teaching. He lives in Huntingdon, Pa., and is Pennsylvania state director for Bugles Across America.

Robert Williams (Parks ‘67, aircraft maintenance engineering) is a liaison engineer for the Camber Corp., providing support to the Corpus Christi (Texas) Army Depot for Helicopters.

John Thomas (Parks ‘68, aerospace engineering) Lives in Port Orange, Fla., and is restoring a 1929 Parks P2A Biplane, which was built and used as a trainer at Parks College.

Andrew Hesketh (Parks ‘74, aerospace engineering) is an enterprise skills manager for Boeing’s test and evaluation division in St. Louis. He also is proud owner of 1956 Beechcraft Bonanza.

Michael Gaffney (Parks ‘81, aerospace engineering), just named the new director of F.I.T. Aviation LLC, brings to his new post almost 30 years of experience in aviation management, education and executive consulting. A Master Flight Instructor and Master Ground Instructor, he has been interim director of F.I.T. Aviation since April 1, and prior to that he was director of aviation training.

Kevin Wolf (Parks ‘89, aerospace engineering) is a major in the U.S. Air Force Reserves on extended active duty with the Ninth Air Force at Shaw Air Force Base and is a reserve deputy sheriff with Richland County, S.C. He and his wife of 20 years, Karen, have two children Adam and Hannah.

Roy Remington (Parks ‘05, aviation management and professional pilot) of the consulting engineering firm of Crawford, Murphy & Tilly Inc. (CMT) has recently completed the American Association of Airport Executives (AAAE) Certified Member Program and has been awarded certified member status. Candidates in the C.M. Program obtain this designation by passing an examination that measures the candidate’s comprehensive knowledge of airport management.

Remington has been employed by CMT since 2006 where he is an airport planner assigned to the firm’s St. Louis Aviation Group. Remington currently serves as project manager on a variety of projects and lends expertise in areas of passenger and cargo commercial service, environmental coordination, airside operations, instrument approach procedure development, airspace analysis, master planning, site selection, and technical justification documentation.

Remington is a May 2005 graduate with bachelor of science in aeronautics. Remington is a member of the American Association of Airport Executives and Missouri Pilots Association. Remington currently lives in Saint Louis, MO.

CMT is a consulting engineering firm with over 260 employees founded in 1946 and provides engineering and project management services for aviation, highway, bridge, water, wastewater, and land development.

David Steck (Parks ‘06, mechanical engineering) married Elizabeth Heger on March 20, and they live in Manchester, Mo. He is a project engineer at Nooter Eriksen.
Two Alum Chosen for Key Boeing Positions

Boeing Company recently appointed nine leadership positions at the vice president of engineering level to help drive engineering excellence and ensure program success across the company. Two of the nine appointees are Parks aerospace engineering graduates. **Bill Carrier (Parks ‘81)—Structures.** Carrier was previously director of mechanical/structural engineering in Boeing St. Louis. **Keith Leverkuhn (Parks ‘81) — Propulsion Systems.** Leverkuhn was vice present/general manager of Propulsion Systems for Boeing Commercial Airplanes. The new engineering leaders are all recognized authorities in technical fields critical to aerospace development. They will work closely with program managers and chief engineers to help ensure the technical integrity of their products by providing technical guidance in their various areas of expertise. This guidance will be provided in a number of ways, including direct and active involvement in key system requirements and criteria definition, critical design and production readiness reviews, technical risk assessments and issues resolution, and any other important engineering challenges that may arise.

Are you looking for a new job? Are you thinking about changing careers? SLU can assist.

Career Services can help whether you are conducting a job search or you want to find a career that brings greater fulfillment. We offer career counseling and assessments so that you can become aware of your life themes, interests and work values to move in a career direction that will bring satisfaction to your daily life.

Throughout the job search, a career counselor can assist with resume and cover letter development, establishing interviewing skills, and creating a job search plan that will network you into a new job.

Submit class notes to Laura Wheeler at wheeler@slu.edu.
Bouckaert graduated from SLU’s Institute of Technology in 1956 with a bachelor of science degree in industrial engineering. Bouckaert also completed graduate work at Ohio State and SLU. After graduation, he served in the Air Force for three years as a pilot and engineering officer. Bouckaert later joined the Nooter Corporation, a steel and alloy plate fabricating firm, as a sales engineer.

During his career, he helped with the restructuring of Nooter and the formation of CIC Group, Inc., which is a holding company of diversified commercial and industrial businesses. He held positions as President, Chairman of the Board and CEO of Nooter. In 1999, after 40 years with the company, Bouckaert retired. His work on steel and alloy fabrication techniques has been internationally published. Bouckaert is a member of the Parks College executive board.
If there has been one constant of every military conflict over the past 50 years, it has been U.S. air superiority. America’s ability to dominate the air has served as a key strategic advantage in national security. Few individuals have done more to ensure America’s air supremacy than Joseph J. Lusczek, Jr. If an aircraft is currently being used by the Air Force, it is likely this 50-year veteran of the civil service played a vital role in its development.

During his illustrious career, he planned, led and participated in the conceptual design and justification of requirements for the Short Range Attack Missile, F-15 fighter, B-1 bomber, A-10 Close Air Support aircraft, Air Launched Cruise Missile, F-16 fighter, C-17 transport, B-2 bomber, F-22 fighter and F-35 strike fighter. He is internationally known and recognized as an aircraft conceptual design authority.

Lusczek is a 1961 aeronautical engineering graduate of Parks College. He has a master of arts in public administration from the University of New Mexico.
Happy New Year!

**JANUARY**  
LEADERSHIP ACADEMY*  
McDonnell Douglas Hall  
3450 Lindell Blvd.

**FEBRUARY 11**  
EARTHQUAKES: MEAN BUSINESS  
Busch Student Center,  
20 N. Grand Blvd.

**FEBRUARY 20-26**  
NATIONAL ENGINEERS WEEK  
McDonnell Douglas Hall

**FEBRUARY 26**  
BILLIKEN BEAMS  
SLU West Pine Gym

**FEBRUARY**  
LEADERSHIP ACADEMY*  
McDonnell Douglas Hall

**MARCH 9-10**  
SAHI CONFERENCE  
Safety Across High  
Consequence Industries  
Busch Student Center

**MARCH 17**  
SAINT PATRICK’S EVENT  
6 - 8 p.m.,  
McDonnell Douglas Rotunda  
To register, visit:  
http://alumni.slu.edu/stpats2011

**MARCH**  
LEADERSHIP ACADEMY*  
McDonnell Douglas Hall

**APRIL**  
LEADERSHIP ACADEMY  
RECEPTION*  
McDonnell Douglas Rotunda

**MAY 5**  
SENIOR DESIGN CONFERENCE  
McDonnell Douglas Hall  

* Leadership Academy dates not confirmed. Please check website.

For the latest alumni news and events:  
parks.slu.edu/alumni