thePIPER

CMU'S NEWS SOURCE FOR FACULTY & STAFF 10/11 ISSUE

Carnegie Mellon University

CMU Mourns Loss of "Great Friend," Bill Dietrich

PHOTO BY KEN ANDREYO

■ Piper Staff

Longtime trustee, university benefactor and Pittsburgh entrepreneur William S. Dietrich II died of complications from cancer on Oct. 6, 2011, 29 days after making the largest gift in Carnegie Mellon history and one of the largest gifts to higher education. He was 73.

"Carnegie Mellon University will be forever grateful to Bill for his service and philanthropy. Carnegie Mellon and Pittsburgh have lost a great friend," said President Jared L. Cohon.

On Sept. 7, the university announced and celebrated Dietrich's's remarkable and historic $265 million gift. An immediate impact of Dietrich's gift was the naming of the Dietrich College of Humanities and Social Sciences in honor of his inspirational mother, Marianna

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And the Winners Are...

Six Staff Members Earn Andy Awards for Exemplary Efforts

■ Maria Zayas

The Andy Awards, CMU's version of the Oscars and Tonys, recognize Carnegie Mellon staff members in six categories for their exceptional work performance, commitment and extraordinary contributions that greatly impact the university community.

The 17th annual awards were presented during an Oct. 7 ceremony hosted by President Jared L. Cohon and Provost Mark S. Kamlet before a large crowd in McConomy Auditorium.

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PHOTO BY TIM KAULEN

Environmental Health & Safety Director Madelyn Miller receives a congratulatory hug for winning the Andy Award in the Outstanding Culture category, which recognizes an individual for their commitment to building a positive and supportive work environment, particularly with regard to diversity, professional development and work/life balance. Miller also received a service certificate for her 15 years at CMU. More than 500 staff members received service certificates for 5, 10, 15, 20, 25, 30, 35, 40 and 45 years of service. Thirty employees were recognized for their 30-plus years at the university.

Open Enrollment Runs Oct. 31-Nov. 14

The two-week Open Enrollment period for 2012 benefits begins Monday, Oct. 31, and runs through Monday, Nov. 14.

Employees can use HR Connection (www.cmu.edu/hr/benefits/OE/) to review their options and make elections for 2012. One major change this year is that dental and vision plans can now be selected annually rather than every two years.

For more on Open Enrollment, the Benefits Forum and Benefits & Fitness Fair, see page 8.

David Brumley Earns Presidential Award For Innovative Contributions to Cybersecurity

■ Chriss Swaney

David Brumley is headed to the White House.

There, later this fall, he'll receive a Presidential Early Career Award for Scientists and Engineers (PECASE) — the highest honor bestowed by the U.S. government on young scientists and engineers — for his work in cybersecurity.

Brumley, an assistant professor of electrical and computer engineering, was one of 20 nominated by the National Science Foundation (NSF) for the honor, which recognizes scientists and engineers who, early in their careers, show exceptional leadership at the frontiers of knowledge. His award is in recognition of his "innovation and vital research on malware (malicious software) analysis and for strong educational and outreach activities."

Pradeep Khosla, the Dowd University Professor, dean of the College of Engineering and founder of Carnegie Mellon CyLab — where Brumley conducts his cybersecurity research — called Brumley's contributions to eliminating software bugs "dynamic and innovative."

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Q&A: ECE Professor Bruce Krogh Directs Efforts in Rwanda

■ Chriss Swaney

Electrical and Computer Engineering Professor Bruch Krogh is an expert on the theory and application of computer control systems. Soon he'll be an expert on leading a university program abroad.

Krogh, who joined the Carnegie Mellon faculty in 1983, has been named director of Carnegie Mellon in Rwanda, an East African tech-savvy nation that has become one of the most compelling economic development stories in the world. Rwanda has doubled the size of its economy in the past nine years, and has become the technology hub for the entire East African region, which includes Kenya, Tanzania, Burundi and Uganda.

CMU will be the first U.S. research university to offer graduate engineering degree programs there.

"Higher education is a key to success in the global economy," said President Jared L. Cohon. "We are pleased to bring our expertise in mounting international programs and our culture of innovation to Rwanda and to contribute to the country's emergence as a regional technology hub."

Rwandan Minister of Education Pierre Damien Habumuremyi said the Rwandan government selected CMU because its academic and research reputation fit with the country's vision of becoming an information and communications technology-led economy.

"CMU is completely in line with our goal of training a critical mass of IT professionals with an innovative and entrepreneurship mind," Habumuremyi said.

With preparations under way, the Piper caught up with Krogh to talk about the program and some of the plans moving forward.

PHOTO BY KEN ANDREYO

BRUCE KROGH SAYS FACULTY MEMBERS FOR THE PROGRAM IN RWANDA ARE BEING RECRUITED AND WILL COME TO PITTSBURGH FOR INITIATION. HE SAID HE PLANS TO HIRE LOCAL RWANDANS FOR ADMINISTRATIVE POSITIONS.

Can you tell us some of the activities that are happening in Rwanda now to prepare for the first group of master's degree students in fall 2012?

Things are moving ahead on several fronts. We are working with the Rwanda Development Board (RDB) and the Ministry of Infrastructure on the design and renovation of the location we will be using until the new campus is built. We also are working with RDB and the National Data Center, which shares the building we will be in, to acquire and install the networking and computing equipment we will be using. The computing infrastructure we will be using is being developed on campus.

New faculty for CMU in Rwanda are being recruited and are coming to Pittsburgh to be initiated as CMU faculty. We will begin receiving and reviewing applications. There are many details being worked out.

How many students do you hope to have for the first class? Will you be recruiting mostly at universities in Rwanda? Are there many universities there?

We are shooting for 40 students for the first class in August 2012. Students from anywhere are welcome to apply, but the intention is to accept students primarily from Rwanda and East Africa in general.

There are several universities in Rwanda, but the two primary universities we expect to recruit from are the National Institute of Science and Technology and the National University of Rwanda.

Will the academic program in Rwanda be the same as the one offered here in Pittsburgh?

We will be offering initially a Master of Science in Information Technology (MSIT). This program is similar to the MSIT degrees offered by several other CMU departments and schools, but it is structured to fit the particular needs of East Africa. Some courses will be identical to existing courses, and some courses will be created especially for CMU in Rwanda.

Who will be teaching and where will the classes be held initially?

Classes will be taught by CMU in Rwanda faculty in Kigali. Our initial location is in a building called Telecom House.

Are there plans for CMU to have a building of its own in Kigali, or a "campus" per se?

Yes. With funding from the African Development Bank, the Government of Rwanda is building a new campus for the Center of Excellence in Information and Communication Technology (ICT). CMU in Rwanda is part of this center and will be located at this campus. We will move to the new site in two years.

Information about this campus can be found at www.afdb.org/en/projects-and-operations/project-portfolio/project/p-z1-iad-006/

ONLINE: FOR MORE ON CARNEGIE MELLON IN RWANDA, GO TO WWW.CMU.EDU/RWANDA.

As I mentioned earlier, new faculty for CMU in Rwanda are being recruited and are coming to Pittsburgh to be initiated as CMU faculty. We are beginning to receive and review applications.

Will students in Rwanda spend any time in Pittsburgh, and will Pittsburgh students have the opportunity to study in Rwanda?

Studying in Pittsburgh is not a standard part of the CMU in Rwanda program, but we do anticipate that a few selected students will come to the U.S. for a semester or for a summer internship.

Students from Pittsburgh (or any other CMU location) would be welcome to take classes in Kigali, provided we have the capacity to include them.

Will you be seeking support and administrative staff from CMU in Pittsburgh to help establish the program there?

The administration of CMU in Rwanda will be based in Kigali. We plan to hire local Rwandans for most of the administrative positions. Of course, the CMU-R staff will work closely with the administrative staff in Pittsburgh in all areas.

Will other master's degree programs be added in the future? If so, what will they be and how soon might they be offered?

We plan to add a Master of Science in Electrical and Computer Engineering in the second or third year.

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CMU Mourns Loss of "Great Friend"

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Brown Dietrich. His gift will benefit and forever change the entire university.

In a letter to the university community about Dietrich's passing, Cohon equated Dietrich with the likes of Andrew Carnegie and the Mellons.

"He was a prominent Pittsburgh entrepreneur and philanthropist, like those he wrote about in his book 'Eminent Pittsburghers.' Bill's business acumen brought him great success in leading his family's company, Dietrich Industries, to become the nation's largest manufacturer of light metal framing for the construction industry.

"Bill's dedication to Carnegie Mellon was unwavering as was his commitment to Pittsburgh," Cohon said.

In addition to his service on the CMU Board of Trustees, Dietrich served on the boards of the Carnegie Museum of Art, the Pittsburgh Ballet Theatre, the UPMC Health System and the University of Pittsburgh.

ONLINE: BILL DIETRICH AND CARNEGIE MELLON UNIVERSITY WWW.CMU.EDU/DIETRICH/

Lester Lave's Legacy Will Endure Through Faculty Chair and Fellowship

■ Chriss Swaney

Lester B. Lave was a visionary researcher and problem-solver. Known for taking chances and jousting with the unconventional, Lave wouldn't just look at a problem, he would dissect it.

Whether it was global climate change or the health of Pittsburgh's rivers, dam safety or truck drivers with diabetes, Lave found all problems fascinating and brought an unusual cache of tools to his work. He had a background in economics and educated himself in engineering and health sciences in order to understand the important problems that affected society. He was founder of the field of study called "life-cycle assessment."

On Oct. 1, during a memorial service lauding Lave's life and contributions, friends, families and colleagues recalled fond memories of what he meant to Carnegie Mellon. It was also announced that the Lave family had established a professorship in economics, engineering and public policy, and a fellowship for doctorial studies on innovative areas in economics, public policy and engineering.

Lave, one of the nation's leading environmental economists, died May 9, 2011, at his home after a four-month struggle with cancer. He was 71. His widow, Judith, is a professor of health economics and former chair of the Health Policy and Management Department at the University of Pittsburgh.

President Jared L. Cohon recalled that one of the reasons he was excited to come to Carnegie Mellon as president was Lester Lave. "It was a privilege to meet Lester and a pleasure to get to know the man behind the legend…. Lester also cared deeply about Carnegie Mellon. He was totally committed to the university and was constantly looking for ways to improve it and promote it."

Cohon said the professorship and fellowship would memorialize Lave's "enormous contributions, as he would want it, supporting future generations of researchers and teachers who strive to match his impact. I thank Lester and Judith for their magnificent generosity which made this possible."

The endowed professorship will have a joint appointment between CMU's Tepper School of Business and the Department of Engineering and Public Policy. The holder of this new faculty chair will be expected to be an accomplished scholar with a strong background in engineering or the natural sciences, and a doctorate in economics with a special interest in public policy issues. In addition to the professorship, the Lave family gift also provides for a fund to support and sustain a fellowship in doctoral studies on new and innovative research areas in engineering and public policy.

Mark S. Kamlet, CMU provost and executive vice president, said, "This is a wonderful way to pay tribute to a remarkable professor and university icon."

In recent years, Lave devoted much of his attention to two problems: green design and the improvement of electricity systems. With colleagues Chris Hendrickson, H. Scott Matthews and Mike Griffin, he helped to build an economy-wide approach to life cycle analysis. He co-founded the university's Electricity Industry Center with colleague M. Granger Morgan, and worked extensively on problems in that industry with Alex Farrell, Marija Ilic, Jay Apt and others.

"His work will go on as doctoral students will continue to work on the same kind of problems with the help of this new endowed professorship and fellowship," said Morgan, a University Professor and head of the Department of Engineering and Public Policy (EPP). "His legacy is the impact through his students and the new ways they'll think about important issues."

"Lester Lave was famous for taking risks and going against conventional wisdom," said Matthews, a student of Lave's in the early 1990s and now a CMU professor of civil and environmental engineering and engineering and public policy. "He taught us that if you are making the easy decision, it is probably a short-term decision. The good, hard decisions often mean taking risks and not following the pack," Matthews said.

"Lester decided early on that he was going to dedicate his career to using the tools of economics to solve problems that really matter to millions of people," said Apt, executive director of the Electricity Industry Center, and professor of technology in the Tepper School and EPP. "He had a practiced eye for important issues, and applied clear and rigorous thinking to problems that ranged from air pollution to the value of cancer testing on rodents, to the structure of markets for electricity.

He always counseled his students and colleagues to tackle important problems and when you are sure you are right never to bow to pressure."

Lave first rose to prominence in the mid-1970s, when he and doctoral student Eugene Seskin used statistical methods to demonstrate that air pollution in American cities was causing significant increases in the death rate. The book, "Air Pollution and Human Health," was contested by industry, but the findings were ultimately supported by subsequent research.

A beloved teacher and respected administrator, he served for eight years as head of Carnegie Mellon's Department of Economics and was an acting dean for the Tepper School of Business. His academic appointments spanned the Tepper School, the Department of Engineering and Public Policy and the Heinz College. He also was an adjunct professor at the University of Pittsburgh and a senior fellow with the Brookings Institution.

Lave was past president of the Society for Risk Analysis. He was a member of the Institute of Medicine of the National Academies and served on and chaired many academy committees. He performed similar academic leadership roles for committees of the American Association for the Advancement of Science, the American Medical Association and the Office of Technology Assessment. He was a founding member of Pittsburgh's Group Against Smog and Pollution.

In 2010, he received the prestigious Richard Beatty Mellon Environmental Stewardship Award from the Air and Waste Management Association. The award is given to an individual whose contributions of a civic nature have aided in pollution control and for developing increased interest for the cause of air pollution control and waste management to improve the environment.

Born in Philadelphia, he grew up in southern California. Lave studied economics at Reed College in Portland, Ore., and the Massachusetts Institute of Technology before earning a doctorate at Harvard University in 1963.

Qatar Campus To Offer Programs in Biological Sciences and Computational Biology

■ Jocelyn Duffy

Carnegie Mellon University in Qatar has launched two new undergraduate degree programs in biological sciences and computational biology in collaboration with Weill Cornell Medical College in Qatar (WCMC-Q). Students will receive their degrees from Carnegie Mellon.

Ilker Baybars, dean of Carnegie Mellon Qatar, said the campus is excited about the partnership and the new degree programs.

"Graduates will be uniquely qualified to solve problems and contribute to cutting-edge research in fields such as biomedicine, health care and global health," Baybars said.

Dr. Javaid I. Sheikh, dean of WCMC-Q, said the bachelor's degrees in biological sciences is an important contribution to Qatar's vision of becoming a knowledge-based society by 2030.

"These joint programs are a shining example of increasing collaboration among Qatar Foundation's institutions to reflect the vision of Her Highness Sheikha Moza Bint Nasser," Sheikh said.

The bachelor's degree in biological sciences and the bachelor's degree in computational biology will be offered in collaboration with their associated departments at Carnegie Mellon in Pittsburgh — the Department of Biological Sciences in the Mellon College of Science and the Lane Center for Computational Biology in the School of Computer Science. As part of its new incoming class this fall, Carnegie Mellon Qatar has enrolled six transfer students into the new biological sciences program.

Students pursuing the bachelor's degree in biological sciences will undertake a rigorous, quantitative course of study that requires substantial laboratory experience. The program will equip students for graduate study, medical school, or jobs in industry, government or academic research.

Students completing the bachelor's degree in computational biology will be highly trained in one of the most rapidly growing areas in modern biology. Computational biologists, who apply computer science techniques to complex biological problems, will be prepared for work in biomedical imaging, genomics and population genetics, among other important areas.

The new programs draw on the unparalleled expertise of two world-class institutions. Carnegie Mellon, known internationally for its researchers who solve real-world problems, was the first university in the United States to offer an undergraduate degree in computational biology. Founded in 1898, Weill Cornell Medical College in New York is among the top-ranked medical research centers in the United States.

Students who are enrolled in Carnegie Mellon Qatar's three existing undergraduate programs — business administration, computer science and information systems — will be able to take courses in biological sciences or computational biology. This interdisciplinary opportunity will enable them to develop an understanding of key issues in biological sciences that directly impact their disciplines.

STUDENTS PURSUING THE BACHELOR'S DEGREE IN BIOLOGICAL SCIENCES WILL UNDERTAKE A RIGOROUS, QUANTITATIVE COURSE OF STUDY THAT REQUIRES SUBSTANTIAL LABORATORY EXPERIENCE.

Once fully established, between 20 and 25 students are expected to enroll in the programs annually. The core curriculum will include mathematics, the physical and life sciences, computational biology and laboratory courses. According to their degree path, students may take advanced electives in neuroscience, immunology, computational biology, as well as liberal arts classes. Students attending other universities at Qatar Foundation also will be able to cross-register for various courses in the biological sciences.

"These new degree programs are a milestone in complementing the efforts of our partners with whom we are working to enhance health care research education and I am especially proud of the collaboration across Qatar Foundation's international partners that has made it possible," said Fathy Saoud, president of Qatar Foundation (QF) for Education, Science and Community Development.

"Graduates with a mix of modern biology, computational biology and business skills will be paramount in the operational research functions of QF's Sidra Medical and Research Center, whose opening we are eagerly anticipating in 2012. Through a unique joint collaboration between two university campuses in Education City, modern biological sciences, particularly computational biology, will be offered for the first time in the Middle East," Saoud said.

Continuing Carnegie Mellon's longstanding tradition of undergraduate research, degree-seeking students will have the opportunity to engage in a 10-week discovery-based research program at Carnegie Mellon Qatar, WCMC-Q, Sidra Medical Research Center or other Qatar research institutions.

"Undergraduate research is at the heart of Carnegie Mellon's biological sciences program. Our students learn critical thinking and problem-solving skills that they are able to apply to any career that they may choose," said Fred Gilman, dean of the Mellon College of Science. "Our students and alumni cite undergraduate research as one of the best parts of their education. We are excited to bring these opportunities to Carnegie Mellon's Qatar campus."

Qatar Campus Sets Enrollment Record

Carnegie Mellon in Qatar's first-year class of 107 students includes 41 Qatari nationals, the most Qataris since the campus opened in 2004.

"We're excited to see the rise of Qatari students enrolled at Carnegie Mellon," said Jarrod Mock, director of admission for the Qatar campus. "Our efforts are continuously aimed at growing the number of qualified Qatari nationals. We embrace the opportunity to provide a world-class education to the Qatari youth, and we look forward to seeing how they will impact their nation in the future."

Mock said prospective students from 65 nations applied for admission this year. The current undergraduate enrollment (335 students) represents 39 countries. One hundred eighty-one are majoring in business administration, 79 in information systems, 69 in computer science and six in the new biological sciences program.

CMU Submits Pittsburgh Campus Master Plan for City Approval

■ Bruce Gerson

After 16 months of development and approximately 80 meetings with campus groups, neighborhood organizations and residents, Carnegie Mellon has submitted its 10-year master plan for the Pittsburgh campus to the City of Pittsburgh to begin a months-long review and approval process.

The plan will be reviewed by the Department of City Planning, the Planning Commission and City Council, and several public hearings regarding the plan will be held. It is hoped the plan will be approved by the end of March 2012.

The master plan is a set of blueprints that will guide development of the Pittsburgh campus through 2022. The City of Pittsburgh Zoning Code requires all universities and hospitals to submit a new master plan for city council approval every 10 years. These plans become a legal zoning document for any new building projects and enables projects in the plan to proceed along a streamlined review process.

The plan aims to maximize areas of opportunity, including recently acquired properties along Forbes Avenue toward Craig Street, and to continue to establish connections between campus and university sites in Oakland.

The plan also proposes creating a more pedestrian-friendly Forbes Avenue by reducing Forbes to one lane of traffic in each direction between Margaret Morrison St. and Craig St. Bicycle-only lanes would be added on Forbes along with wider sidewalks and additional trees. Modified traffic signals and signage would encourage and direct pedestrians to use designated street crossings.

"One of the visions of the plan is that Forbes becomes the 'Main Street' of campus, rather than a highway dividing the campus," said Bob Reppe, CMU's director of design for Campus Design and Facility Development. "The center of campus would be configured much like a traditional town square and serve as an entrance to the university."

The plan can be downloaded from the Campus Design and Facility Development website at www.cmu.edu/cdfd.

Students Hope To Spin Bright Idea Into Bicycle Business

Two industrial design majors hope to turn their bright idea into a business venture that literally sheds new light on the biking industry by making nighttime riding safer for bicyclists.

Juniors Jonathan Ota and Ethan Frier, avid bikers who are studying at Technische Universiteit/Eindhoven in the Netherlands this fall, came up with the idea of inserting LED lights into the rims of their bicycle wheels to increase their visibility in traffic and among pedestrians. Drilled holes with attached diffusers let the light shine through.

"We noticed that current products illuminate bikers from the front and rear, but do little from the side," Ota explained. "They also do little to differentiate bikers from the environment, especially in the city with so much visual confusion."

Jonathan Ota and Ethan Frier inserted LED lights into the rims of their bicycle wheels to increase their visibility in traffic and among pedestrians.

See the video: Project Aura: Bicycle Safety Lighting System

Read their blog: http://surg2011.tumblr.com

Greenlighting Startups: www.cmu.edu/startups

To pursue their idea they applied for and received a Small Undergraduate Research Grant (SURG) and "Project Aura" was born. The LED lights are powered by pedaling — a generator is attached to the front hub of the bicycle — and they change colors, from red to white, giving a sense of speed and motion as you pedal faster.

"We wanted to keep with the paradigm drivers and pedestrians are familiar with: red means stop or braking, and white are akin to headlights of a car, indicating the existence of something," Ota said. "We wanted to make a cool product that people will want to use, and in the process of using it, will make them safer."

Frier gives credit to the SURG program for helping to bring their idea to fruition.

"The SURG made our project possible. In design, you are always coming up with fantastic ideas, but as students, we are often limited financially to fully pursue them. The SURG allowed us to explore our idea to the fullest extent," Frier said.

The students thought their presentation at last May's Meeting of the Minds and their final video would spell completion of the project, but 110,000 page views later they've reconsidered. Now, after winning the student category for transportation design in the Core77 Design Awards, they're looking to commercialize their idea with the help of CMU's expertise as one of the fastest-growing entrepreneurial universities.

Ota and Frier said CMU's help has been invaluable.

"The resources at Carnegie Mellon have made the process accessible," Ota said. "There are actual people you can talk to who are familiar with what you're going through.

"The Technology Transfer Office helps you get in touch with experts in your field. Project Olympus, another great resource, offers very welcoming, warm and neutral third-party advice."

Reed McManigle, senior manager of business development and licensing for the Center for Technology Transfer and Enterprise Creation (CTTEC), said CTTEC has offered help on several fronts. He referred the students to a local alumnus who runs his own product design firm to get some tips on making the system easier to manufacture. He's also referred them to several sources on "micro-financing." CTTEC has offered advice on filing a provisional patent application as well.

"Jonathan and Ethan are excited about taking this to the next level," said Kit Needham, senior business adviser for Project Olympus. "During their semester abroad in the Netherlands, they are going to be refining and improving their prototype and researching commercialization options. Project Olympus will be helping them explore these options."

"Before Project Aura, Jonathan and I weren't considering a startup, but the success of the project has introduced us to a new landscape," Frier said. "The resources on campus have made it possible. I honestly don't think we could have done this project anywhere but at Carnegie Mellon."

This past summer, CMU launched its Greenlighting Startups (www.cmu.edu/startups/) initiative, a collection of five business incubators that aims to accelerate the university's proven track record of turning innovative research by award-winning faculty and world-class students into successful commercial enterprises. The five entities providing resources to budding entrepreneurs are CTTEC, Project Olympus, the Donald H. Jones Center for Entrepreneurship, the Quality of Life Technology Foundry and the Open Field Entrepreneurs Fund.

Wanted: CMU Students

PHOTO BY KEN ANDREYO

PHOTO BY TIM KAULEN

Carnegie Mellon students continue to be highly sought after by employers. More than 300 companies, many of them represented by CMU alumni, came to recruit Carnegie Mellon students for internships and full-time positions last month during Career Week (left), which included the Employment Opportunities Conference, the Technical Opportunities Conference and the Business Opportunities Conference in the University Center's Wiegand Gymnasium. The following week, GE representatives networked with students (right) while on campus participating in an executive training program in software engineering hosted by the Software Engineering Institute. The Career and Professional Development Center reports that the average entry-level salary for CMU students who graduated in 2011 was $71,245, 40 percent higher than the national average.

Carnegie Mellon University
Greenlighting Startups™

Student Startups Showcased at Venture Fair

Budding entrepreneurs Sanna Gaspard, a CMU Ph.D. student in biomedical engineering, and Doug Bernstein, a senior biomedical engineering major, were award winners at the 3 Rivers Venture Fair, which highlighted Greenlighting Startups at PNC Park in late September. The event showcased breakthrough innovations for an audience of venture capitalists, private investors, investment bankers, and leaders in business, finance and entrepreneurship.

Gaspard, founder of the medical device startup Rubitection, took first place for her patent-pending, low-cost, non-invasive device capable of detecting early stage pressure ulcers. She credits CMU business incubators Project Olympus and the Center for Technology Transfer and Enterprise Creation (CTTEC) for helping her with funding for her product and company, and testing her device.

Bernstein, founder of Peca Labs, won third place for his patient-specific artificial heart valve for right ventricle reconstruction in pediatrics. Peca Labs is a medical device company focusing on rare pediatric and cardiovascular conditions. Bernstein said CTTEC was "immensely helpful in the development" of his company.

Sanna Gaspard's award-winning non-invasive device for detecting ulcers.

And the Andy Award Winners Are... Continued from page one

Steve Audia

Innovation

Steve Audia, technical manager and coordinator for the Entertainment Technology Center (ETC), was recognized for his highly inventive solutions and his numerous and diverse accomplishments and contributions.

"In support of faculty, staff and students here at ETC, Steve is an inventor, systems integrator, IT manager, researcher, contract negotiator, tinkerer, evangelist, hardware designer, strategist, and detail-oriented and once-a-year teacher, because he just loves it," wrote Mk Haley, associate executive producer and a faculty member in the ETC, in her nominating letter.

Supporting letters from ETC Executive Producer Don Marinelli and ETC Program Director Drew Davidson further enumerate Audia's resourcefulness and contributions.

This past year alone, Audia has built and deployed a "renderfarm" for students; negotiated a software license down by 98 percent by getting the provider excited about what students would do with the technology; helped design and build an interactive spacebridge as part of the portal into the department; created clever solutions to deal with chronic power dips and losses that minimize equipment damage and automated restarts; and has built and distributed a file management system that allows the entire department to access project files, archives and class materials all in one place.

Marinelli added that when considering the exhaustive list of Audia's work, it is important to note that he not only contributes to the Pittsburgh facility, but also to facilities in the Silicon Valley and Osaka, Japan.

PHOTO BY TIM KAULEN

Steve Audia and his nominator Mk Haley

PHOTO BY TIM KAULEN

Renee Camerlengo and her nominator Randy Weinberg

Renee Camerlengo

Outstanding Commitment to Students

Renee Carmerlengo, assistant dean of Student Affairs and director of Special Projects, was nominated by Randy S. Weinberg, teaching professor of information systems. Weinberg praised Camerlengo for being a consistent source of reliable support for students, who through encouragement, engagement, responsiveness and advising has helped students make important academic and personal decisions.

"My most memorable experience with Renee occurred upon the unexpected death of an IS student in 2009. Renee's sensitive and compassionate interactions with the family, the student's friends and classmates and his instructors (including myself) were simply touched beyond words," Weinberg said in his nomination letter. "She arranged immediate after-hours support sessions for the student's classmates, arranged student transportation to and from the final service in Ohio, and arranged for a lovely memorial program on campus…. I was grateful that Renee attended our diploma ceremony in 2010, at which time we presented the family with a posthumous diploma in the student's name."

In a supporting letter, Gina Casalengo, dean of Student Affairs, wrote that Camerlengo is "a passionate advocate for students no matter their experience at Carnegie Mellon. She takes the time and makes the effort to build relationships with students to ensure she is positioned to best support students during their four years at the university, while recognizing that the work she does with students during their tenure at CMU translates to an impact that extends well into their lives as alumni of the institution."

Masterful Mentors

PHOTO BY LOUIS STEIN

The College of Fine Arts recently hosted two special guests, world-renowned concert pianist Byron Janis (pictured at right) and Academy Award winner composer Stephen Schwartz (A '68) (pictured above). Janis, who has continued to perform despite arthritis in both hands and wrists, presented at the School of Music Convocation and hosted a screening of his documentary, "The Byron Janis Story." He also gave a master class in Kresge Theatre, where he instructed several students, including Luis Hernandez, pictured at right.

PHOTO BY TIM KAULEN

Schwartz gave a master class for junior and senior musical theatre students while in town to see a performance of "Wicked," for which he wrote the music and lyrics. The three-time Oscar winner said directors and casting agents are always impressed with graduates of the School of Drama.

Stanley Krowitz

Outstanding Community Contributions

Stanley Krowitz, University Center administrator, was nominated for his efforts in ensuring that all University Center events occur seamlessly and without a hitch, all with an enduring smile.

Emily Rathbone, events associate for Alumni Relations, nominated Krowitz on behalf of the teams in Alumni Relations and University Events.

"He never sweats under pressure, is quick to help no matter how small or large the take is and does it all with a smile on his face…. If it weren't for him, our events wouldn't be as great as they are. Stanley is a very humble person and deserves to be recognized for his outstanding work," Rathbone wrote.

According to Monica Galmarini, associate director of Conference and Events Services, Krowitz' heart is definitely in his work.

"He goes above and beyond every day; working behind the scenes making sure that the University Center runs smoothly, always glad to do whatever is asked of him. He will even offer to help you when it isn't necessarily his responsibility or in his job description," Galmarini said.

PHOTO BY TIM KAULEN

STANLEY KROWITZ AND HIS NOMINATOR EMILY RATHBONE

PHOTO BY TIM KAULEN

MADELYN MILLER WITH HER HUSBAND, DAVE

Madelyn Miller

Outstanding Culture

Madelyn Miller, director of Environmental Health & Safety (EH&S), was nominated by EH&S Assistant Director Mark Banister for her commitment to campus diversity, professional development, supporting staff's work/life balance, and for creating a positive and supportive work environment.

"Prior to Madelyn's leadership, our department had considerable numbers of conflicts and problems. Staff turnover was significant and troublesome. These problems have long since been resolved under Madelyn. Satisfaction surveys of our staff show this," Banister wrote. "Also, satisfaction numbers of our clients in recent surveys have indicated our success in meeting the needs of our campus, through a better-functioning team."

"Madelyn is able to bring a diverse department together in a way that enables collaboration and mutual respect regardless of what our backgrounds or personal beliefs are," wrote EH&S Systems Analyst Ahren Hollis in a supporting letter. "It was with her support that I was able to transition genders while on the job in a seamless and supportive manner."

In a supporting letter, Lola Mason, director of Organizational Development, also praised Miller for her work in rebuilding relationships within her department by creating an inclusive environment. Mason said that as a manager, Miller's strengths-based approach allows her to match the right person to the right task, something that few managers accurately accomplish.

John Lanyon

Outstanding University Citizenship

Peer Tutor Coordinator John Lanyon was nominated by Linda Hooper, director of Academic Development, for setting new records in the walk-in tutoring program and for his work to initiate the Health Care Benefits Card as chair of Staff Council's Benefits Committee.

Janet Peters, adviser for undergraduate and professional master's degree students in electrical and computer engineering, wrote in a supporting letter that as chair of the Benefits Committee, "John has been a tireless advocate for the health and well-being of the staff community. His never-ending energy and enthusiasm helped make the meetings a pleasure to attend, while his organization and zeal helped the committee to keep on task and accomplish as much as possible."

In another supporting letter, Susan Ambrose, associate provost for education, wrote that Lanyon embodies the spirit of teamwork and dedication. In the past year, Lanyon has helped Peer Tutoring to increase its walk-in tutoring by 11 percent, overall standing tutoring appointments by 12 percent, and appointments by 15 percent. Under Lanyon, Peer Tutoring has supported 124 courses in 25 different academic departments.

"His workday often begins before 7 a.m. and goes until 11 p.m.," Ambrose added.

PHOTO BY TIM KAULEN

JOHN LANYON RECEIVES HIS AWARD FROM PRESIDENT JARED L. COHON AND PROVOST MARK S. KAMLET.

Amy Wells

Outstanding Dedication

Amy Wells, administrative coordinator for the Department of History, is the first Andy Award winner from the History Department since 1985. Joe W. Trotter, head of the History Department, nominated Wells and called her efforts outstanding, praising her for going above and beyond the call of duty.

"Amy is truly the unsung treasure of the History Department's undergraduate program," said Laurie Eisenberg, teaching professor of history, in a supporting letter. "Two copiers can be crashing, the third on fire, the printer smoking, three students waiting to see her with life-or-death requests, and faculty popping in with just a couple of quick questions to which they need immediate answers, and Amy glides calmly forward, multitasking to meet everyone's needs and exuding a steady patience…. There are three things the history department counts on each and every workday: the sun will rise and set, and Amy will be in her cubicle."

Scott A. Sandage, director of Undergraduate Studies and associate history professor, further supported Wells' dedication. According to Sandage, the full extent of his supervision of Wells is to tell her, "Go home!" and "That can wait," although usually in vain.

PHOTO BY KEN ANDREYO

"[Amy is] usually the first to arrive in the morning, almost always the last to go home at night — even though she is a loving and attentive mom with children and a husband at home," wrote Sandage in his supporting letter.

New HR Chief

Kenney Aims To Balance Customer Needs With Team Strengths

■ Bruce Gerson

Dianne Kenney has a penchant for taking good things and making them better.

The new associate vice president for Human Resources (HR) and chief HR officer says her success stems from seeing the big picture, building solid relationships and teamwork.

"It's kind of become my niche, to re-align and strengthen organizations," she said. "I've found success helping people learn to operate as a team in a way that's consistent with the organization's mission."

Kenney, who succeeded Barbara Smith as CMU's chief HR officer this past July 1, aims to build upon Smith's successful 22-year tenure by leveraging her team's core strengths — its dedication to customer service and expertise in specific HR disciplines.

"As a group, we are taking this time of leadership change as an opportunity to assess both strengths and need areas, and then develop a service model that draws more collectively on our customer service culture, systems knowledge and subject matter expertise. We're trying to understand what expertise our customers need most and then set up cross-functional work teams," Kenney said.

Kenney is not the only one new to her role in HR. She has four new members on her leadership team of eight, and says it's a great opportunity to learn, work and build together.

She said the first priority for her group was to define a departmental mission (see above) that will support the university mission and guide the work of each HR unit.

The HR units, which comprise about 40 staff members, include Benefits and Compensation, Learning and Development, Diversity and Equal Opportunity Services, HR Services, International HR, HR Compliance and Contracts, Recruiting and Staffing, and HR IT/Operations. Recruiting and Staffing, formerly part of HR Services, became its own unit this past July in response to heavy demand.

Kenney said Recruiting and Staffing helps academic and administrative departments with a full spectrum of hiring support services, including posting the jobs in places that garner a diverse talent pool. Currently the unit has a director and a recruiter, but she expects that area to grow.

As CMU expands globally, another area Kenney anticipates growing is International HR. Kenney said one member of her leadership team is devoted to learning the diverse international labor and employment laws around the world.

"We need to learn how we can compensate faculty and staff in ways that do not disrupt the local labor market, what kind of benefits we can offer and answers to many other employment-related questions," she said.

While Kenney is busy molding and growing her team, several important initiatives have begun, most notably work regarding a new HR information system. She says the system, which she hopes will be up and running by 2014, will eliminate manual processes, and provide flexible reporting and analysis capabilities.

Kenney said she also is in discussions with Staff Council leadership regarding opportunities to partner on university community service projects and orientation programs for new employees.

While "there's a lot to be done," Kenney is taking the time to meet individual customers from across the university.

"You want to preserve the good that's there, but also make sure that five years from now you're able to be cutting-edge, being able to serve and support your customers proactively and be a good partner," Kenney said.

The HR Mission

CMU HR promotes the university's mission of creating and disseminating knowledge through research, creative inquiry, teaching and learning by providing high-quality HR services and programs that:

1. **Help attract, develop and retain a diverse, world-class workforce;**
2. **Offer proactive and innovative support to faculty and staff; and**
3. **Ensure policies are developed, disseminated, and applied in a manner consistent with legal and regulatory requirements.**

The Kenney File

- Bachelor's degree, Virginia Commonwealth University
- MBA, Suffolk University
- Law degree, Vermont Law School
- Practiced municipal and education law in Vermont
- HR Director for City of Burlington, Vt.
- HR/legal consultant for numerous public and private employers
- Joined CMU as Assistant Vice President for Total Compensation in May 2010 from Dartmouth College, where she was Director of Benefits.

Dianne Kenney, former HR director for the City of Burlington, Vt., and director of benefits for Dartmouth College, joined Carnegie Mellon in May 2010 as Assistant VP for Total Compensation. This past July, she succeeded Barbara Smith as CMU's chief HR officer.

Open Enrollment for Benefits To Run Oct. 31-Nov. 14

Dental and Vision Plans Can Now Be Selected Annually

The Open Enrollment period for 2012 benefits will begin Monday, Oct. 31 and end on Monday, Nov. 14.

During this two-week period, employees can use HR Connection to review their benefit options and rates, and make their elections for 2012. If you don't actively make new elections, many of your 2011 benefits will carry over to 2012. However, active enrollment is required to participate in the Health Care and/or Dependent Care Spending Accounts for 2012.

The two main benefit plan changes for 2012 are:

- Dental and vision plans are moving to an annual enrollment instead of every two years.
- The maximum dependent age for eligibility in the dental and vision plans has increased to age 26 to match the maximum dependent age in place for the medical and prescription drug plans.

For more details about 2012 benefits and to access HR Connection, visit www.cmu.edu/hr/benefits/hr_connection.html. The Benefits Office is available at 412-268-2047 or HRhelp@andrew.cmu.edu to answer specific questions.

Staff Council Open Benefits Forum is Oct. 25

Staff Council is hosting its annual Benefits Forum for staff from noon to 1 p.m., Tuesday, Oct. 25 in Rangos 1, University Center. Benefits Manager Mary Oler, Benefits Specialist Lori Bell and Benefits Administrator Beth Deming will preview changes for 2012 and answer your questions.

Benefits & Fitness Fair is Nov. 2

The annual Benefits & Fitness Fair will be held from 11 a.m. to 4 p.m., Wednesday, Nov. 2 in Rangos Ballroom, University Center. Representatives from HR, benefit carriers and health organizations will be there to answer questions. The fair also features wellness screenings, raffle drawings and giveaways, and flu shots.

Hills Publishes "Wi-Fi and the Bad Boys of Radio"

■ Maria Zayas

Alex Hills, a distinguished service professor of engineering and public policy and electrical and computer engineering at Carnegie Mellon, has published a book chronicling his fascination with radio waves, from his early adolescence until the time he and his small team of Carnegie Mellon innovators built Wireless Andrew, the forerunner to today's Wi-Fi.

The book begins by outlining Hills' days as a teenage ham radio operator and builder, his days as an undergraduate at Rensselaer Polytechnic Institute, and his work in Alaska, where he helped bring radio, television and telephone services to the Eskimos of remote northern Alaska. The book culminates with Hills' career at Carnegie Mellon, chronicling the research in the mid-1990s that bore Wireless Andrew and the subsequent development of Wi-Fi.

The eponymous "Bad Boys of Radio," aka radio waves, are as ubiquitous in Hills' chronicle of work as they are in our daily experience with technology. Even today's most advanced computers and cell phones rely on wireless — in other words, radio — connections, Hills writes.

For this reason, Hills, the former vice provost for computing services at CMU, ends his book with, "And the bad boys are still around."

For more on the book and to purchase a copy, go to www.dralexhills.com/

Alex Hills signs a copy of his book, "Wi-Fi and the Bad Boys of Radio," during a book-signing luncheon in Roberts Engineering Hall's Dilks Library. Behind Hills are (l-r) Mark Campasano, Lisa Picone, Chuck Bartel and Meena Lakhavani of Computing Services. Campasano, Picone and Bartel were members of the Wireless Andrew team.

Bigger Isn't Always Better

Smaller Batteries More Beneficial in Plug-in Vehicles

■ Chriss Swaney

Thinking about buying a new plug-in vehicle? You may want to check the size of its battery first.

Carnegie Mellon's Jeremy J. Michalek and co-authors report that plug-in vehicles with small battery packs and hybrid electric vehicles (HEVs) that don't plug in can reduce life cycle impacts from air emissions and enhance oil security at low or no additional cost over a lifetime. Conversely, plug-in vehicles with large battery packs are more costly and may have higher or lower emissions than HEVs depending on where and when they are plugged in.

In a study published in the Proceedings of the National Academy of Sciences, Michalek argues that electrified vehicles with smaller battery packs are more efficient in reducing societal costs for health care, environmental damages and oil consumption.

"Current government policy provides larger subsidies for vehicles with larger battery packs, assuming that larger is better," said Michalek, an associate professor of engineering and public policy and mechanical engineering at CMU.

"While larger battery packs allow plug-in vehicles to drive longer distances on electric power instead of gasoline, they are also expensive and heavy, they are underutilized when the battery capacity is larger than needed for a typical trip, they require more charging infrastructure and they produce more emissions during manufacturing," Michalek explained.

U.S. policy has been pushing the auto industry to investigate alternatives to fossil fuels. The American Recovery and Reinvestment Act of 2009 provides up to $7,500 in tax credits for up to 200,000 plug-in vehicles.

"Because vehicles with larger battery packs are more expensive, fewer of them can be subsidized, and that can result in lower total benefits," said Michalek, who recently received a $400,000 grant from the National Science Foundation to analyze how public policy could help determine the types of vehicles built in coming years and how consumers might respond to these vehicles.

"It's possible that in the future plug-in vehicles with large battery packs might offer the largest benefits at competitive costs if the right factors fall into place, including sufficiently low cost batteries, high gasoline prices, low emission electricity and long battery life," said study co-author Mikhail Chester, assistant professor of sustainable engineering at Arizona State University. "But such a future is not certain, and in the near term, HEVs and plug-in vehicles with small battery packs provide more emissions benefits and oil displacement benefits per dollar spent."

Michalek's research is aimed at understanding tradeoffs in the capabilities of new technologies and to predict what near- and long-term strategies should be.

"Given the major spending cuts under debate in Washington, it is important that we get the most benefits out of spending designed to improve the environment and energy security," Michalek said. "In the near term, HEVs and plug-in vehicles with small battery packs offer more cost-effective benefits. More research on batteries — especially lowering cost — and a transition to a cleaner electricity grid are needed to pursue a future where large battery packs may also be able to help address climate change, air pollution and oil dependency at competitive costs."

CMU's Jeremy Michalek says electric vehicles with smaller battery packs are more efficient than those with larger batteries.

Sweet RoboMail

Catherine Copetas, assistant dean and director of special events for the School of Computer Science, places an envelope and a sweet treat into the basket of CoBot-2, a robot created by a team led by Computer Science Professor Manuela Veloso. Occupants of the Gates and Hillman centers can now schedule CoBot to perform tasks, such as delivering Copetas' envelope — and a bag of M&Ms — to the main computer science office, escort visitors or tell jokes. The robot, supervised here by Ph.D. student and CoBot team member Brian Coltin, can navigate the building autonomously, though it occasionally must ask people for such assistance as pushing an elevator button. For more on the robot, and to schedule a task for CoBot, go to www.cs.cmu.edu/~coral/projects/cobot/.

18th Annual Food Drive Runs Oct. 31-Nov. 11

It's time to pitch in and help feed the hungry.

Sponsored by Staff Council for the 18th consecutive year, this fall's Food Drive will be held from Monday, Oct. 31 through Friday, Nov. 11.

All food and monetary donations benefit the Greater Pittsburgh Community Food Bank, a non-profit organization that collects, stores and distributes food and household products to nearly 350 charitable agencies in southwestern Pennsylvania.

Drop boxes and barrels for donations will be located throughout campus buildings. All non-perishable items are accepted, however peanut butter, cans of tuna fish, chicken in a can, canned soup, canned vegetables, food items in a pop-top can or in microwavable containers, pasta, tomato sauce, cereals, toilet paper, bath and laundry soap, shampoo and detergent are in high demand.

While food and funds are collected for two weeks, two special events highlight the drive, "One Day, One Can" and "Cans Across the Cut."

"One Day, One Can" is Wednesday, Nov. 2 during the Benefits & Fitness Fair from 11 a.m. to 4 p.m. in the University Center's Rangos Ballroom. Those donating at the Food Drive Table will be entered into a special raffle for great prizes.

"Cans Across the Cut" is Friday, Nov. 9. Individuals and teams are encouraged to participate by bringing their canned-good donations to the Cut, where they will be lined up across the lawn. To register a team or department, go to www.cmu.edu/staff-council/committees/food-drive/cans-cut.html

Carole Panno and Katie Lambrou, co-chairs of Staff Council's Food Drive Committee, report that last year's collection was the most successful with 9,026 pounds of food and $2,107.90 donated.

News Briefs

Gaynor To Head New Health Care Cost Institute

Professor Martin Gaynor has been named chairman of the governing board of the new Health Care Cost Institute (HCCI), an objective, independent nonprofit health research initiative that will offer new insights into health care costs, utilization and intensity.

Gaynor, the E.J. Barone Professor of Economics and Health Policy at Heinz College, will oversee HCCI, which will provide researchers with access to comprehensive data sets of commercial costs and utilization, and conduct its own research. HCCI plans to publish its own "Scorecards" and supporting analysis on aggregate trends of health care cost and utilization beginning in 2012.

The institute will provide access to de-identified data from plans operated by Aetna, Humana, Kaiser Permanente and United Healthcare, as well as some government data from Medicare Fee For Service and Medicare Advantage activity.

The data will include more than five billion medical claim records representing more than $1 trillion of health care activity from more than 5,000 hospitals and 1 million service providers from calendar year 2000 through the present.

"Researchers and experts are clamoring for better data and deeper analysis to better understand the factors driving costs and to inform effective policy decisions," Gaynor said. "HCCI will provide, for the first time, researchers access to data that covers all ages and health issues and is national in scope. Perhaps most importantly, for the first time there will be comprehensive data on the privately insured who make up the majority of health consumers in the United States."

To learn more about HCCI, visit www.healthcostinstitute.org/.

CMU Installs 10 Solar-Powered Waste and Recycling Containers

Carnegie Mellon and Waste Management, Inc. have installed 10 new waste and recycling containers on campus that use solar-powered batteries to compact trash and wirelessly transmit information to collectors notifying them when the containers need to be emptied. The containers, from BigBelly Solar Inc., will reduce operating costs and improve efficiency by eliminating the need for daily trash pick-ups.

"We are pleased to add these new compactors to our waste minimization efforts at the school," said CMU's Environmental Coordinator Barb Kviz. "Not only are we reducing our carbon footprint but we are making it easier for our students to recycle."

The containers supplement CMU's green practices. The university is ranked as a green power leader by the U.S. Environmental Protection Agency, with 100 percent of CMU's electricity coming from renewable power sources.

Music Celebrates Centennial Season

The School of Music celebrates its 100th anniversary this year with more than 250 events and some of the biggest names in the music world — as well as the big names of tomorrow.

The School of Music's major ensembles will showcase a wealth of musical talents. The year's opera productions include "or Angelica" (Puccini) and "Mahagonny Songspiel" (Weill/Brecht) and "L'Enfant et les Sortileges" by Maurice Ravel.

A Day in the Park

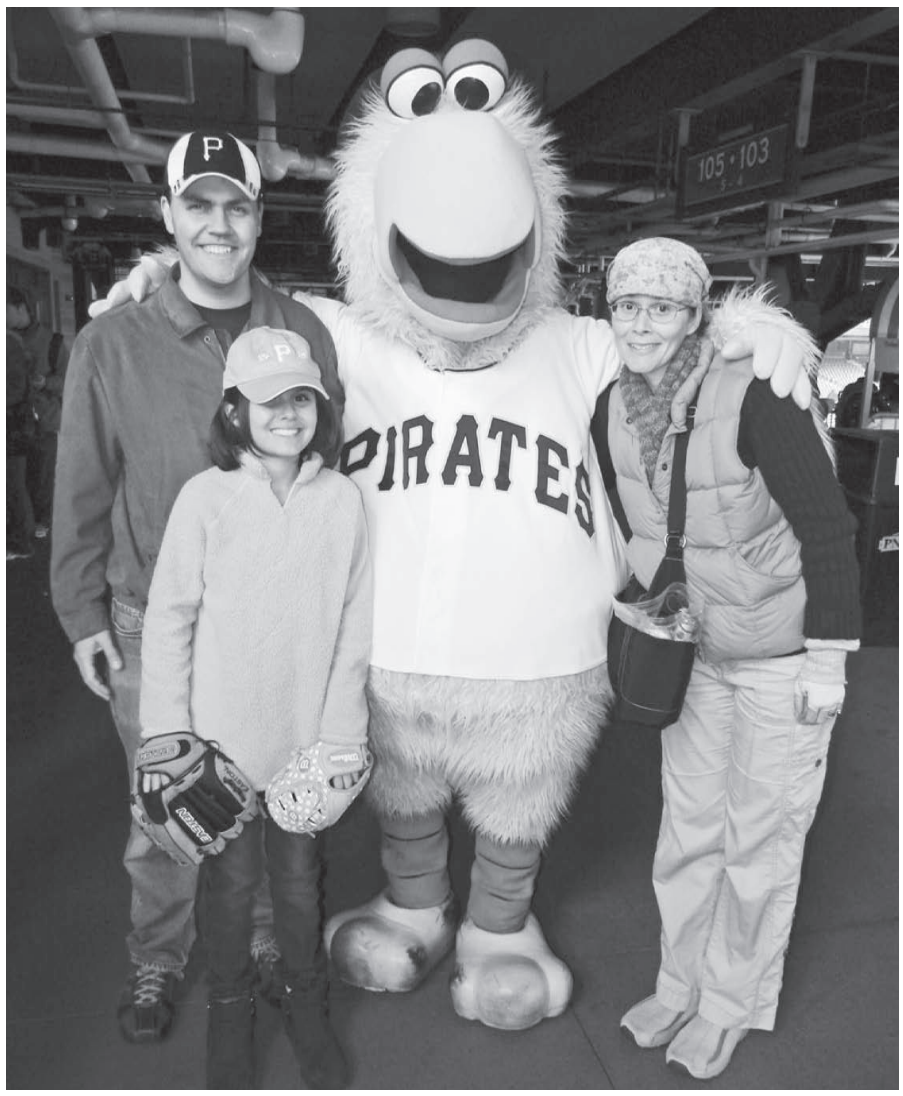


PHOTO BY DIAZ-KOMMONEN LILY

Entertainment Technology Center (ETC) Executive Producer Don Marinelli (above) treated ETC students, faculty, staff and their families to an Appreciation Picnic at PNC Park on Saturday, Oct. 1. In addition to a picnic lunch, attendees took part in a baseball skills competition that included hitting, fielding and running the bases and they met the Pirate Parrot. Posing with the Parrot (left) is faculty member Jesse Schell with his wife, Nyra, and daughter, Emma.

Brumley Earns Presidential Award Continued from page one

Ed Schlesinger, head of the Department of Electrical and Computer Engineering, said Brumley is an emerging leader in the field of cybersecurity who has already made significant contributions.

"My goal is to make computer software and systems safe," said Brumley, whose work focuses on the techniques, principles and algorithms for finding flaws in software that hackers use to break into systems. "Attackers only need to find a single flaw to break into a system. Our work tries to find these flaws before attackers do, so that they can be fixed," he said.

Brumley, who also is working on techniques to fight against next-generation malware, is a faculty adviser for CMU's award-winning "Capture the Flag" team. Capture the Flag is a computer security game in which each participating team or individual competes to find a key source of information by solving a litany of challenging problems. The team has won three international competitions this year.

He received his undergraduate degree in mathematics in 1998 from the University of Northern Colorado, a master's degree in computer science in 2003 from Stanford University and a Ph.D. in computer science in 2008 from Carnegie Mellon.

David Brumley is working to find computer system flaws before hackers do.

On Valentine's Day, Feb. 14, the Music School welcomes National Public Radio's "From the Top with Host Christopher Riley" for a live taping at 8 p.m. in Carnegie Music Hall in Oakland. Some of the outstanding young artists from CMU's preparatory school and from around Pittsburgh will perform in the show, which will be broadcast across the country and locally on WQED 89.3 FM.

The School of Music will bring back some of its most prestigious alumni and guests for the Carnegie Mellon School of Music Centennial Celebration Concert & Gala, Saturday, March 31 at the Benedum Center in Pittsburgh, and Monday, April 2 at the Carnegie Hall Stern Auditorium in New York City.

Download the 2011-12 schedule at http://bit.ly/qbJHXh.

CMU Team Wins First Yahoo! Hack All-Stars Competition

A team of undergraduates created a prototype file-sharing tool in just 24 hours at the Yahoo! Open Hack All-Stars event Sept. 13-14 in New York City, winning the inaugural Hack All-Stars competition and $10,000.

Pictured (from left) are Chong Xie, Amos Yuen, Ethan Gladding and Arjuna Hayes.

Members of the D1W team, which won the 2009 HackU at Carnegie Mellon, are Amos Yuen and Chong Xie, both computer science majors; Arjuna Hayes, an electrical and computer engineering major, and Ethan Gladding, an art major. All are juniors.

D1W's file-sharing prototype, Ruum, enables users to collaborate in an interactive space, where they can share content, chat with others and leave comments.

"Hack Days are the perfect venue to create cool and innovative apps," Yuen said. "The opportunity to focus on a singular problem and bring a solution to life is what hacking is all about."

Biologists Track Neuronal Stem Cells Using MRI

CMU biologists have developed an MRI-based technique that allows researchers to non-invasively follow neural stem cells in vivo.

The recently patented technology could be used to further the study of neural stem cells and inform the development of new treatments for brain injury caused by trauma, stroke, Parkinson's disease and other neurological disorders. The findings, authored by Associate Professor of Biological Sciences Eric Ahrens and Biological Sciences postdoctoral student Bistra Iordanova, are published online in the journal NeuroImage.

Legend had it that once a brain cell dies, it's lost forever. Neuroscientists now know that this is purely myth, having proved that the brain is constantly producing new neurons. These neural stem cells are born deep in an area of the brain called the subventricular zone. As time goes on, the cells, also called neuroblasts, make their way to other areas of the brain where they mature into functioning neurons.

"If we could better understand the molecular migratory signals that guide neuroblasts, we could try to redirect these cells to areas of the brain harmed by stroke or traumatic brain injury. With this information, scientists might be able to one day repair the brain," said Ahrens, who also is a member of the Pittsburgh NMR Center for Biomedical Research.

Read more: http://bit.ly/n0nYIe

Lecture Spotlight: Alumni To Chronicle Their Distinguished Careers

■ Bruce Gerson

Two upcoming lectures featuring alumni who have achieved greatness in their fields serve as testimony to Carnegie Mellon's impact in the arts and sciences.

Presented by the Alumni Association as part of Ceilidh Weekend and the annual Alumni Association Awards, the talks will be given by Dr. Hillard M. Lazarus (E'70) and musician M. Dale Clevenger (A'63), this year's recipients of Alumni Distinguished Achievement awards. Lazarus and Clevenger will receive their honors Friday, Oct. 28 in Rangos Hall, where 16 alumni and students will be recognized for their professional accomplishments and service to the university.

Lazarus, a tenured professor of medicine at Case Western Reserve University, was recently named director of Novel Cell Therapies for University Hospital's Case Medical Center and Seidman Cancer Center. In his new position he will work to develop new cell therapy approaches across the disciplines of cancer, hematology, neurology, genitourinary diseases, orthopedics and cardiology.

Lazarus will trace his experiences from CMU to his award-winning medical career in a talk titled "My Path from Carnegie Mellon University to Academic Medicine." His talk is scheduled for 6 p.m., Thursday, Oct. 27 in the Hillman Center's Rashid Auditorium.

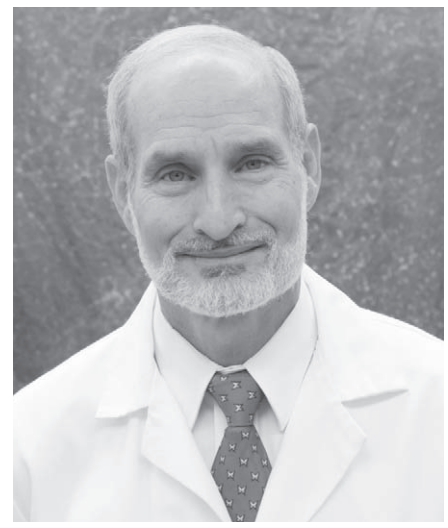
Internationally renowned for his work as a hematologist, oncologist and medical pioneer, Lazarus has been director of the Case Medical Center's Blood and Marrow Transplant program for more than 25 years. His efforts in stem cell — he performed the first adult stem cell transplant — blood and marrow transplantation included the development of many new anti-cancer therapies and supportive care technologies.

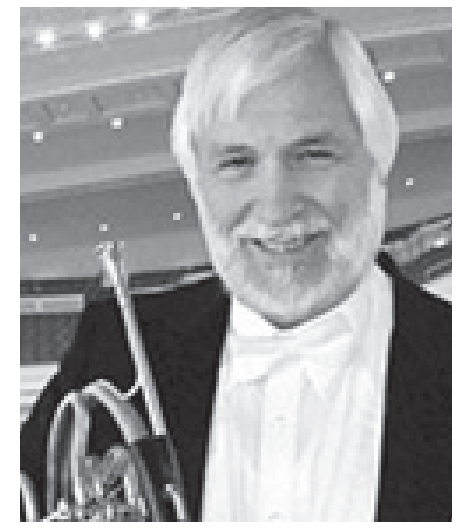
He was inducted into the American Cancer Society's Cancer Care Hall of Fame and is a recipient of the American Cancer Society Lifetime Achievement Research Award.

Clevenger is world-renowned as the reigning virtuoso of the French horn and is highly sought after as a teacher, soloist and conductor. His talk will be at 2 p.m., Friday, Oct. 28 in the College of Fine Arts' Kresge Theatre.

The Principal French Horn with the Chicago Symphony Orchestra for more than four decades, Clevenger has performed to acclaim as a soloist and conductor in symphonic, chamber music and jazz performances, and has recorded extensively. In addition to the Chicago Symphony, the three-time Grammy Award winner has played with and led many orchestras in North and Central America, Europe, Asia and Australia.

A former faculty member at the Northwestern University Music School, Clevenger is a faculty member at Roosevelt University in Chicago and at Indiana University's Jacobs School of Music. He received the Lifetime Achievement Award from the International Horn Society in 2010.





Dr. Hillard Lazarus and Dale Clevenger will receive Alumni Association Distinguished Achievement Awards.

What: My Path from Carnegie Mellon University to Academic Medicine

Who: Dr. Hillard M. Lazarus (E'70)

When: 6-7:30 p.m., Thursday, Oct. 27

Where: Rashid Auditorium, Hillman Center

What: 2011 Alumni Distinguished Achievement Honoree Lecture

Who: M. Dale Clevenger (A'63)

When: 2-3 p.m., Friday, Oct. 28

Where: Kresge Theatre, College of Fine Arts Building

Cèilidh Weekend Unites Tartan Traditions

■ Abby Simmons

Student Affairs and University Advancement have joined forces to introduce Cèilidh (pronounced kay-lee) Weekend, Oct. 27–30. The new event combines Homecoming, Family Weekend and the International Festival.

"The common goal is to bring the entire community — students, families, alumni, faculty and staff — together in celebration," said Dan Barnett, director of on-campus programs for Alumni Relations. "We selected the Scottish Gaelic word Cèilidh because it represents a traditional social gathering and pays tribute to our founder's heritage."

A full schedule of events and registration details are available at www.cmu.edu/ceilidh.

Cèilidh Highlights

Thursday, Oct. 27:

Alumni Faculty and Staff Reception, 12:30 – 2 p.m., Alumni Lounge, University Center (UC)
The 900-plus employees who also are CMU alumni are invited. Registration is required.

Friday, Oct. 28:

International Festival Keynote Lecture, 12:30–2 p.m., Rangos Hall, UC
Author Chris Abani will speak about spending his teenage years as a prisoner of the Nigerian government. The event is free and includes lunch. Registration is required.

Alumni Awards Ceremony, 5:30 p.m., Rangos Hall, UC
Alumni Relations will honor 16 individuals for their professional achievements and contributions to the university. Registration is required.

Student Showcase, 9–10:30 p.m, Rangos Hall, UC
Students from around the world will present reflections on their cultures through music, dance and poetry performances.

Saturday, Oct. 29:

Carnegie Clan Chili Cook-Off, Cèilidh Tailgate Party and KidZone Activity Fair, 11:30 a.m.–2 p.m., Wiegand Gym, UC

Football game, Carnegie Mellon Tartans vs. Washington University in St. Louis Bears, noon, Gesling Stadium
Admission is $5 and includes a game program. CMU student admission is free.