

Pitt Is Again Ranked in Very Top Cluster Of America's Public Research Universities

The University of Pittsburgh has been ranked in the very top cluster of the nation's public research universities in the recently released 2009 edition of *The Top American Research Universities*. This is the third time in four years that Pitt has earned that high ranking. Only six other universities were placed in the very top group of public research universities this year—the University of California at Berkeley, the University of California at Los Angeles, the University of Illinois, the University of Michigan, the University of North Carolina, and the University of Wisconsin.

The report clusters universities based on their comparative strength in research, private support, faculty, doctorates, post-doctoral appointees, and undergraduate quality, as assessed across nine objective measures. Reflecting a core belief that “universities of the highest quality tend to do most things very well,” the institutions placed in the top cluster must rank among the top 25 public universities on all nine measures.

In commenting on the University of Pittsburgh's performance, Chancellor Mark A. Nordenberg stated, “When this particular study was first released in 2000, we immediately began using it in our own benchmarking, because we believed it was

the best independently produced assessment of institutional strength—in part, because it does rely on objective and well-targeted measures. To be performing at levels that place us in such a distinguished top cluster is a real achievement.”

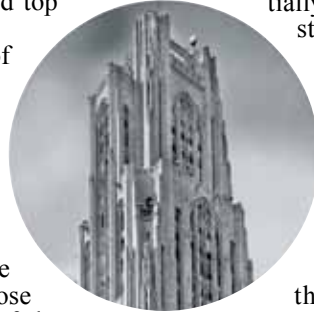
In 2000, the University of Pittsburgh was ranked in the study's fourth cluster of public research universities. That group included such other strong universities as Ohio State, Purdue, and the University of Virginia. To rise to the top cluster, Pitt had to improve its performance compared to those institutions and to another 12 of the country's finest public research universities.

In the initial *Top American Research Universities* report, its editors placed the significance of Pitt's rankings rise in perspective by first noting that “research universities live in a highly competitive marketplace, and none of those in the top categories is likely to cease improving.” To get relatively better, then, a university “must match and then exceed the growth of its competitors.” This was described as a “major challenge.” And this year's report notes the “remarkable stability in the rankings of research universities,” particularly

“at the top of the distribution.”

Consistent with the approach taken by this report—which clusters universities, rather than ranking them sequentially—Chancellor Nordenberg stated that “it always is possible to find bases to argue about distinctions between institutions that are drawn too finely.” However, he continued by noting that “our University's momentum in rising to claim and then retain a place in the top cluster for three of the last four years is an unmistakable measure of our progress and should be a source of pride for all of the many Pitt people who have contributed to building our ongoing record of success.”

The *Top American Research Universities* report is published by The Center for Measuring University Performance, which is located at Arizona State University. Its coeditors are John V. Lombardi, the president of the Louisiana State University System, and Elizabeth D. Capaldi, the executive vice president and university provost at Arizona State. The report is available at The Center's Web site, <http://mup.asu.edu>.



Engineering Alumnus Leonard Berenfield Pledges \$1.5 Million to Department Of Bioengineering



By Brittney Gillison

The University of Pittsburgh has received a \$1.5 million pledge from Leonard Berenfield (ENGR '64) to establish the Berenfield Family Engineering Legacy Fund for Bioengineering in the John A. Swanson School of Engineering.

Berenfield's gift will support the University's research efforts in the areas of pediatric cardiac surgery and cardiopulmonary regenerative medicine, fields in which the Department of Bioengineering has earned national recognition for research excellence. Berenfield, whose son and grandson were born with heart defects that required surgery, is an avid supporter of pediatric cardiovascular research and wishes to see continued advancements in technology and medicine in this field.

“As one of the oldest engineering schools in the nation, Pitt's Swanson School has a long tradition of producing advanced research and is one of the nation's leaders in bioengineering research,” said Gerald D. Holder, the U.S. Steel Dean of Engineering at Pitt. “Commitments like Len's are invaluable in lifting our academic reputation and positioning us even further as a leading national engineering school.”

“Under the leadership of Dr. Harvey Borovetz, chair and Distinguished Professor of Bioengineering at Pitt, a true partnership has developed over the past several years between the Swanson School and Children's Hospital of Pittsburgh,” notes Peter Wearden, Pitt assistant professor of cardiothoracic surgery and director of Mechanical Circulatory Support at Children's Hospital of Pittsburgh of UPMC. “Mr. Berenfield's gift will serve to grow this relationship even further. Because of the experiences of his family, Len, in the most personal of ways, shares our passion to find transformative solutions for children with congenital heart disease. We are very grateful that Mr. Berenfield has chosen to join our team. His generous gift will enhance our ability to make a significant difference in the lives of these children and their families.”

According to Borovetz, who also is the Robert L. Hardesty Professor in the

Eight Teaching Proposals Receive Funding From Provost's ACIE

The University of Pittsburgh Office of the Provost's Advisory Council on Instructional Excellence (ACIE) has selected eight teaching proposals to fund under the 2010 Innovation in Education Awards Program.

The awards, begun in 2000 by Pitt Provost and Senior Vice Chancellor James V. Maher, encourage instructional innovation and teaching excellence. The ACIE seeks to identify high-quality proposals that show promise for introducing innovative, creative approaches to teaching that can be adapted for use in other courses. Vice Provost for Faculty Affairs Andrew Blair, who chairs the advisory council, observed, “This is a mature competition (the 11th round of funding), and the council was pleased with both the overall high quality of the proposals recommended for funding and the continued vitality of the program, as evidenced by the innovative character of the pool of submissions.”

Funding for this year's awards totaled \$139,494.

Winners of the 2010 awards and summaries of their proposals follow.

Marilyn A. Davies, an assistant professor in the School of Nursing's Department of Health and Community Systems, “Developing a Video Resource to Enhance the Learning of Essential Nursing Competencies for Genetics and Genomics.”

Also participating in this project are Michele A. Reiss, an adjunct faculty member in the School of Nursing; and Pitt's Center for Instructional Development and Distance Education (CIDDE) video production personnel. This project, which will involve a collaboration between the

School of Nursing's Department of Health and Community Systems and CIDDE, is intended to help nurses integrate into their patient care the “core competencies” related to the genetic and genomic factors of health and illness. Nursing core competencies are skill sets in areas in which nurses must be proficient such as taking family histories and providing information about genetic testing.

As a result of the Human Genome Project, genetic and genomic information can now explain the biology of certain diseases, help form new treatments, and identify people with increased risk of developing those diseases. Educating patients about these new diagnostic and medical tools—and helping them come to terms with their ramifications, such as medical privacy concerns—is essential to quality patient care. This project will develop video reenactments of how nurses in the maternal health, pediatrics, and psychiatry specialties have integrated genetic and genomics core competencies into discussions with their patients.

Project director **Ketki D. Raina** and codirector **Joanne M. Baird**, both assistant professors in the School of Health and Rehabilitation Sciences' Department of Occupational Therapy, “Simulations for Teaching Students How to Transfer Medically Fragile Patients.”

This project will employ patient simulators to gauge the best method to teach occupational therapy students how to transfer medically fragile patients from one surface to another in an acute-care hospital environment. This skill is a critical one for occupational therapists, but evaluations of

students' fieldwork experiences indicate that current teaching methods, including lectures and classroom practice, do not fully address acute-care environments.

Students will complete traditional classroom instruction on transfer skills and then report to the Peter M. Winter Institute for Simulation, Education, and Research, which uses mechanical, life-size mannequins to teach medical students various procedures. Students will be randomly assigned to one of three teaching methods involving different amounts of active participation in performing transfers as well as observing other students. “This project will enable us to determine what ‘dose’ of active learning is needed to ensure the best educational outcome in the most cost-efficient way,” Raina and Baird wrote in their proposal.

Eunice E. Yang, an assistant professor in Pitt-Johnstown's Engineering Technology Program, “Enhanced Lectures via Worksheets and 3-D Computer Models.”

This computer-modeling initiative is aimed at improving the spatial visualization abilities of students enrolled in Pitt-Johnstown's Statics class, which teaches how to analyze forces on structures such as beams and bridges. About 100 students within the mechanical and civil engineering technology departments enroll in the course annually—and success is imperative because the course provides the foundation for understanding engineering concepts taught in the junior and senior years.

Research shows that students with the inability to mentally rotate, twist, or invert pictorially presented stimuli will perform poorly in Statics. This project seeks to help students with poor spatial visualization skills by providing 3-D computer models



Andrew Blair

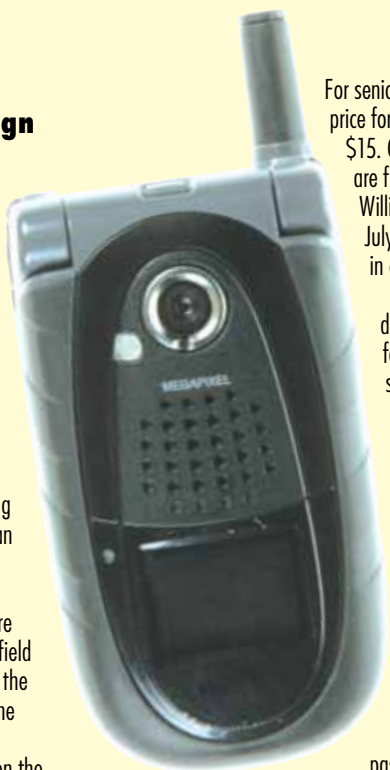
Briefly Noted

Pitt Cell Phone Recycling Campaign

The University of Pittsburgh will be collecting deactivated cell phones through June 6 for a recycling campaign sponsored by Pitt's Computing Services and Systems Development. Cell phones, PDAs, and accessories can be deposited in recycling drop boxes located across campus, including all campus computing labs, Craig Hall's lobby, Hillman Library, the Mascaro Center for Sustainable Innovation (153 Benedum Hall), Software Licensing Services (204 Bellefield Hall), Litchfield Towers lobby, the University Book Center, and the William Pitt Union.

Any personal data left on the cell phones will be securely destroyed prior to the recycling process, which will be done by eLoop LLC, a Pittsburgh recycling facility that has been approved by the Pennsylvania's Department of Environmental Protection.

—Amanda Leff Ritchie



For seniors 55 years and older, the price for the pass and catered meal is \$15. Children ages 2 and younger are free. Tickets are on sale in the William Pitt Student Union through July 30; payment must be made in cash.

SAC is also selling discounted tickets to Kennywood for use on other days this summer; each ticket costs \$22. There is an additional \$10 fee at the door if the tickets are used on weekends in July or August.

Discounted tickets to Sandcastle Waterpark in Homestead and Idlewild in Ligonier are available through Aug. 27, also in the William Pitt Student Union. Sandcastle Waterpark passes are \$20 each. Idlewild FunDay passes, \$21 each. Both parks' passes are valid any day of the 2010 season, with no surcharge.

Additional information is available through the SAC Office, 412-624-4236.



Pitt Plans 20th Annual Kennywood Day for July 31

University of Pittsburgh faculty, staff, and students and their families are invited to Pitt's 20th annual Kennywood Picnic Day on Saturday, July 31, from 11 a.m. until 10 p.m.

Pitt's Staff Association Council (SAC), which is coordinating the event, is selling discounted tickets for the Kennywood event—as well as for other Western Pennsylvania water and amusement parks.

The price of an all-day FunDay Pass and catered meal at Kennywood on July 31 is \$21.

G. Reynolds Clark to Receive Area's United Way Inaugural Outstanding Campaign Volunteer of Year Award

By Amanda Leff Ritchie

G. Reynolds ("Renny") Clark, the University of Pittsburgh's vice chancellor for community initiatives and chief of staff for Chancellor Mark A. Nordenberg, has been selected to be the inaugural recipient of the United Way of Allegheny County's Outstanding Campaign Volunteer of the Year Award, which recognizes a campaign leader who has made "a significant impact in the annual United Way campaign through his or her dedication, leadership, and outreach." Clark also is being recognized for his "passionate dedication to facilitating new and longstanding relationships with agencies of the United Way."

The award will be presented to Clark, retired chair of the Westinghouse Foundation, at the 2009 United Way Campaign Celebration, to be held at 11:30 a.m. May 25 in the Omni William Penn Hotel, Downtown.

Clark has been the cochair of the University's United Way campaign since he joined the University in 2000; during that time, the Pitt campaign has raised \$5.76 million for the Allegheny County United Way.

"Renny is the best volunteer in the world," says Robert Nelkin, president and chief professional officer of the United Way of Allegheny County. "He is tireless. He is passionate. He is reliable. And he is very effective."

A member of the United



G. Reynolds ("Renny") Clark

Way of Allegheny County Board of Directors, Clark also serves on the United Way's Tocqueville Society Committee, which strives "to deepen individual understanding of, commitment to, and support of United Way's work of advancing the common good by creating opportunities for a better life for all." The Tocqueville Society also recognizes local philanthropic leaders and volunteer champions around the world who have devoted time, talent, and funds to create long-lasting changes by tackling their communities' most serious issues. As a Tocqueville Society Committee member, Clark has reached out to community leaders, requesting major gifts of \$10,000 or greater.

Clark joined Pitt after a 34-year career with Westinghouse Electric Corporation, where, in addition to having chaired the Westinghouse Foundation, he served as executive director of the company's staff services functions, among other roles. In June 2009, Westinghouse SURE (Service Uniting Retired Employees) selected Clark to receive that organization's Lifetime Achievement Award for 2009. SURE's 900 supporting members volunteer some 60,000 hours a year, benefiting children, the elderly, and the infirm, and they help to raise funds for, and provide guidance to, other charities. In

Continued on page 3

Pitt's African American Alumni Council Names Cochairs For Diversity Initiative Fundraising Campaign



Louis Kelly



Margaret Larkins-Pettigrew

By Patricia Lomando White

The University of Pittsburgh African American Alumni Council (AAAC) has named Louis Kelly (EDUC '77, '78G) and Margaret Larkins-Pettigrew (NURS '76, MED '94) cochairs of the AAAC Scholarship Campaign Steering Committee. During Pitt's 2009 Homecoming, the AAAC publicly launched the \$3 million campaign to support diversity initiatives at

Pitt as well as for continued student scholarship assistance.

Appointed by AAAC President Linda Wharton-Boyd, Kelly and Larkins-Pettigrew will succeed Doug Browning (A&S '72), who led the AAAC scholarship effort during the initial phase of the campaign through its public launch in October. Kelly and Larkins-Pettigrew served as vice chairs of the AAAC campaign steering committee during Browning's tenure as chair.

The cochairs, along with the AAAC Scholarship Committee, are the primary alumni volunteers responsible for fundraising. In addition to fundraising, the campaign is focusing attention on

the strides made in recent years by the University to strengthen support of diversity efforts across all Pitt campuses.

Appointed by AAAC President Linda Wharton-Boyd, Kelly and Larkins-Pettigrew will succeed Doug Browning (A&S '72), who led the AAAC scholarship effort during the initial phase of the campaign through its public launch in October.

"Doug Browning's steady leadership gave a great start to this important project in its early stages," said Wharton-Boyd. "I am personally grateful for his commitment to this effort. He dedicated more of his time than he initially set out to give, and for that, we say, Thank you! As we move forward, we are excited about the next phase of the campaign, and

with Louis and Margaret leading the way, I

Continued on page 6

PittChronicle

PUBLISHER Robert Hill
ASSOCIATE PUBLISHER John Harvith
EXECUTIVE EDITOR Linda K. Schmitmeyer
EDITOR Jane-Ellen Robinet
ART DIRECTOR Gary Cravener
STAFF WRITERS Sharon S. Blake
 John Fedele
 Morgan Kelly
 Amanda Leff
 Anthony M. Moore
 Patricia Lomando White
CONTRIBUTING WRITER Brittney Gillison
HAPPENINGS EDITOR Anthony M. Moore

The Pitt Chronicle is published throughout the year by University News and Magazines, University of Pittsburgh, 400 Craig Hall, Pittsburgh, PA 15260, Phone: 412-624-1033, Fax: 412-624-4895, E-mail: chron@pitt.edu Web: www.chronicle.pitt.edu

The University of Pittsburgh is an affirmative action, equal opportunity institution that does not discriminate upon any basis prohibited by law.

78 Pitt Students Inducted Into Phi Beta Kappa

By Anthony M. Moore

The University of Pittsburgh chapter of Phi Beta Kappa inducted 78 Pitt students into its 2010 class during a May 1 initiation ceremony in the Teplitz Memorial Moot Courtroom of the Barco Law Building.

Founded in 1776 at The College of William & Mary, Phi Beta Kappa is America's oldest college honor society. Election to Phi Beta Kappa is considered by many to be the most prestigious honor of academic excellence that can be conferred upon students majoring in one of the liberal arts and sciences. Among the organization's lineage are 17 U.S. Presidents, 38 U.S. Supreme Court Justices, and 136 Nobel Laureates.

Local chapters work within the organization's national guidelines to establish their own criteria for admission. At Pitt, eligibility requirements

include, among others, proficiency in a foreign language as well as the completion of a demanding, broadly distributed program of course work spanning the humanities, social sciences, and natural sciences.

Completing a well-distributed program of course work is more important than a 4.0 grade point average. Grade point average requirements range from 3.5 to 3.9, with the lower criterion applying to students who have

earned at least 90 liberal arts credits at Pitt and the higher criterion applying to those who have earned 60 liberal arts credits at Pitt.

A list of Pitt's 2010 Phi Beta Kappa inductees follows.



2010 UNIVERSITY OF PITTSBURGH PHI BETA KAPPA INDUCTEES

Rachel E. Aliotta
Natalie Gene Allen
Christopher J. Bahur
Andrew Jay Berson
Catherine M. Bohner
Henry Jacob Borish
Katherine Elyse Campbell
Justin Edward Cardinale
Philip Carullo*
He Chang*
Chris Jonathan Cole
David Walter Combs
Rhiannon Nichole Cook
William H. Denq
Nicholas Regis DeStefino
Amanda Lee Dippold
Karolina Duskova

Bradley Matthew End
Jennifer Febbo
Richard P. Fiorella
Kevin A. Flaherty
Lorraine E. Fowler
Anjalika Gandhi
Brandon Lee Gillie
Alyssa Boden Green
Mary Elizabeth Harbist
Ashley L. Heisey
Jessica A. Herbe
Jessica E. Herman
Elizabeth Hocking*
Jennifer Howells
Alexander S. Jamison
Amelia L. Johnson
Millie S. Joneja

Rebecca A. Kerner*
Thomas T. Korpar
Andrea Kostura*
Gabrielle Langmann*
Grace W. Lindsay*
Yiyi Liu
Amy Danyl Lu
Jody L. Manners
Sarai Martinez-Suazo*
Ashley Rae Martz
Emma Catherine McAuley*
Molly McLaren*
Abhinav Mittal
Julia L. Morley
Rebecca Carole Morral
Kylie Lucinda Morris
Michael R. Muder

Courtlyn Elizabeth Mummert
Terri Ann Nicely
Michael Gerard Olah
Julia M. O'Rourke
Sumir R. Pandit*
Maria T. Panteva
Laura M. Pasek
Jacob William Phillips
Priya Rajendran
Natalie Reizine*
John Michael Roberts
Christine Anne Roden
Cory Rodgers*
Gabrielle Fayth Rozenberg
Marc Howard Schutzbank
Punit Singh

Savita Srinivasa
Olivia Ann Stapinski
Carrie A. Stem
Nathaniel D. Swift-Ersvle
Chelsea Ann Tessmer
Tameka Bridget Thompson
Carolyn Blair Wagner
Carrie Weintraub
Carly Werner
Elizabeth Wiehagen
Juliette Yedimenko*
(* Pitt juniors)

In-Store Slack: Pitt Researchers Find That Consumers Often Plan For Unplanned Purchases

By Amanda Leff Ritchie

Straying from the grocery list can yield some surprises in your shopping cart, but not necessarily in your wallet, according to University of Pittsburgh researchers and a coresearcher from Baylor University who have coauthored a new study.

The researchers found that shoppers often expect to buy a certain number of unplanned items, and most have a fairly accurate estimate as to how much they will spend on them. The study's coauthors used the term "in-store slack" to describe the room shoppers leave in their budget for unplanned purchases.

The study, "Planning to Make Unplanned Purchases? The Role of In-Store Slack in Budget Deviation," will be published in the August issue of the *Journal of Consumer Research*. It was written by Jeffrey Inman, associate dean for research and faculty, Albert Wesley Frey Professor of Marketing, and professor of business administration in Pitt's Joseph M. Katz Graduate School of Business; Karen M. Stille, postdoctoral fellow in the Katz School; and Kirk L. Wakefield, a professor and chair in the marketing department at Baylor University's Hankamer School of Business.

The researchers conducted a field study at several grocery stores in Texas. Shoppers were asked what they intended to purchase, how much they expected to spend on the planned items, and how much they intended

to spend total. After shopping, participants provided their receipts and answered questions about themselves and their purchases. More than 75 percent of the participants included room in their mental budgets for unplanned purchases.

"Shoppers in the study indicated that they employ this strategy both because they anticipate 'forgotten needs' as well as because they realize that they will encounter 'unplanned wants'—with some respondents even explicitly indicating that they expected to make impulse purchases," the authors wrote. The shoppers were remarkably accurate when predicting how much they would spend. The average budget deviation (actual spending minus planned spending) was only 47 cents.

The impact of in-store slack on household budget deviation depended on how many aisles the shopper visited and the shoppers' level of impulsiveness.

For retailers, this research suggests that consumers who shop only specific aisles are not spending all of the money that they are mentally prepared to

spend on the current trip, according to the authors. The fact that most consumers do not exceed their mental budgets despite making unplanned purchases suggests that different product categories function as substitutes (i.e., should I spend my in-store slack on ice cream or Parmesan cheese?). Therefore, the researchers believe future research should further examine whether in-store stimuli may simply serve to redirect what items consumers purchase rather than generate incremental spending.



The researchers found that shoppers often expect to buy a certain number of unplanned items, and most have a fairly accurate estimate as to how much they will spend on them.

Berenfield Pledges \$1.5 Million to Bioengineering

Continued from page 1

Pitt School of Medicine's Department of Surgery, the gift will help the Swanson School and its Department of Bioengineering support, retain, and recruit outstanding graduate student researchers, postdoctoral fellows, and prominent faculty members, all of whom will help further strengthen Pitt's position as a leading bioengineering research institution. The opportunity to collaborate across disciplines promotes translation of the research from the laboratory to the clinic, and, ultimately, to Wearden's very special patients.

Through his earlier investments in Pitt's Building Our Future Together Campaign, Berenfield, a Pittsburgh native, created the Leonard H. Berenfield Graduate Fellowship in Bioengineering. This commitment endowed a fellowship for bioengineering graduate students who focus their research in the area

of pediatric cardiac surgery and cardiopulmonary regenerative medicine.

Berenfield serves as president and chief executive officer of Berenfield Containers Inc. Headquartered in Mason, Ohio, with locations in Pennsylvania, North Carolina, and Arkansas, Berenfield Containers manufactures steel and fiber shipping containers that range in size from six to 77 gallons.

Prior to joining his family's business, Berenfield worked for Westinghouse at the Bettis Atomic Power Plant in West Mifflin as a mechanical engineer. He was responsible for designing the part of the container that stored the fuel rods.

The University of Pittsburgh's Building Our Future Together capital

campaign is the most successful fundraising campaign in the history of both Pitt and Southwestern Pennsylvania. To date, the campaign has raised more than \$1.46 billion.

Through his earlier investments in Pitt's Building Our Future Together Campaign, Berenfield, a Pittsburgh native, created the Leonard H. Berenfield Graduate Fellowship in Bioengineering.

G. Reynolds Clark to Receive United Way's Outstanding Volunteer Award

Continued from page 2

addition, Clark and his wife, Linda, lived for many years in Franklin Park, Pa., where Clark served for five years as mayor and 30 years as a volunteer firefighter, including 18 years as fire chief.

A 1965 graduate of Geneva College, Clark serves on his alma mater's board of trustees. In 1990, he received the Distinguished Service Award from that college's Alumni Association and cochaired the school's recent \$25 million capital campaign. In 2006, he received the Geneva College Life "G" award for lifetime achievement.

He also sits on the board of the Greater Pittsburgh Council-Boy Scouts of America, which awarded Clark the 2006 Silver Beaver

Award for distinguished service to scouting. Clark is an Eagle Scout, a distinction he earned in 1960.

Clark also serves on the advisory boards of the Salvation Army of Southwestern Pennsylvania and the Allegheny Regional Asset District and sits on the boards of a number of civic and cultural organizations, among them Family House, the Allegheny County Parks Foundation, the Pittsburgh Partnership for Neighborhood Development, the Pittsburgh CLO, the Pittsburgh Parks Conservancy, the Regional Industrial Development Corporation, and Pittsburgh Gateways. He also is chair of the Oakland Task Force.

Meeting Life's "Grand Challenges"

"Be informed ... get involved ... volunteer ... This is just the beginning of your education ... not the end."

(This is the print version of the May 2, 2010, University of Pittsburgh commencement address delivered by John A. Swanson, a Pitt alumnus, trustee, and John Fritz Medal winner. Swanson, whose founding of ANSYS, Inc., helped revolutionize computer-aided engineering, received the degree Doctor of Science Honoris Causa during the commencement ceremony.)

I did give serious thought about [giving this address after I was asked to do so] because I have never done anything like this before. But in thinking about it further, I said to myself, "That's probably the best possible reason for doing it." I'd like you to bear that in mind. To say yes [to something like this] opens up a new set of challenges. So if someone asks you to stretch yourself, to do a little bit more—please take advantage of the opportunity. Also, the best way to learn is to teach. I think many of you have probably found that out already. Nothing gives you a deeper understanding of subject matter than to stand up in front of peers and try to explain yourself and explain your subject to those who, like this audience, are exceptional in their intelligence and exceptional in their learning.

In order to put the talk together, I had to find the theme. After some consideration, I looked at something the National Academy of Engineering has produced. It's called "The Grand Challenges in Engineering." I thought, "Why should it just be engineers who have grand challenges? Because most of the challenges combine engineering and philosophy and religion and education and teaching and everything else." So let's for a few minutes explore some of these grand challenges.

And I'm going to start large.

Let's start with the world. When we were in college, we had a poster on the wall that said, "In five billion years, the sun will swallow the Earth." Doesn't that make your troubles seem insignificant? Actually, no. My troubles are my troubles. And to me, they are significant. But no grand challenge there. Five billion years—we're not going to worry about it.

We're just going to let it happen. By then, if we have managed to survive, we'll be long gone from this humble rock, and we'll have spread out throughout the universe.

So what is a grand challenge? Well, a grand challenge is not something that happens and turns out to be a big thing. A grand challenge is something that you plan for, that you say, "I have a problem. I need to do something." It's also something that's going to be major. It's going to affect the world—all of the people in the world. The solution may or may not be obvious. It may be that you know exactly what needs to be done, but you don't have the will to do it. That's a case that I call, "You have the way, but the will is weak." Or you may have the will, but haven't the foggiest idea what the way might be. Both of those are grand challenges.

Let's take a couple of examples just to put it into context. First, the invention here

at the University of Pittsburgh of the Salk polio vaccine. That was a grand challenge. We knew exactly what the problem was. We knew what the desired goal was. We knew what the schedule was—as soon as possible—because many people were dying of polio.

The moon program was also a grand challenge. It had a stated goal: In this decade we will put a man on the moon. And we did it, and now it's done. But that was a grand challenge. There are other things that are equally impactful but are not grand challenges.

Take, for example, the Internet. The Internet is transforming all of our lives. But we didn't plan on that. That's what happened. Not a grand challenge... but certainly a grand effect.

Or cell phones. Cell phones allow us to talk to anyone in the world at any time. If you were a science fiction buff many years ago, that would have been called "mental telepathy." It's exactly the same thing—the ability to communicate with anyone at any time. Whether that's good or bad, of course, remains to be seen.

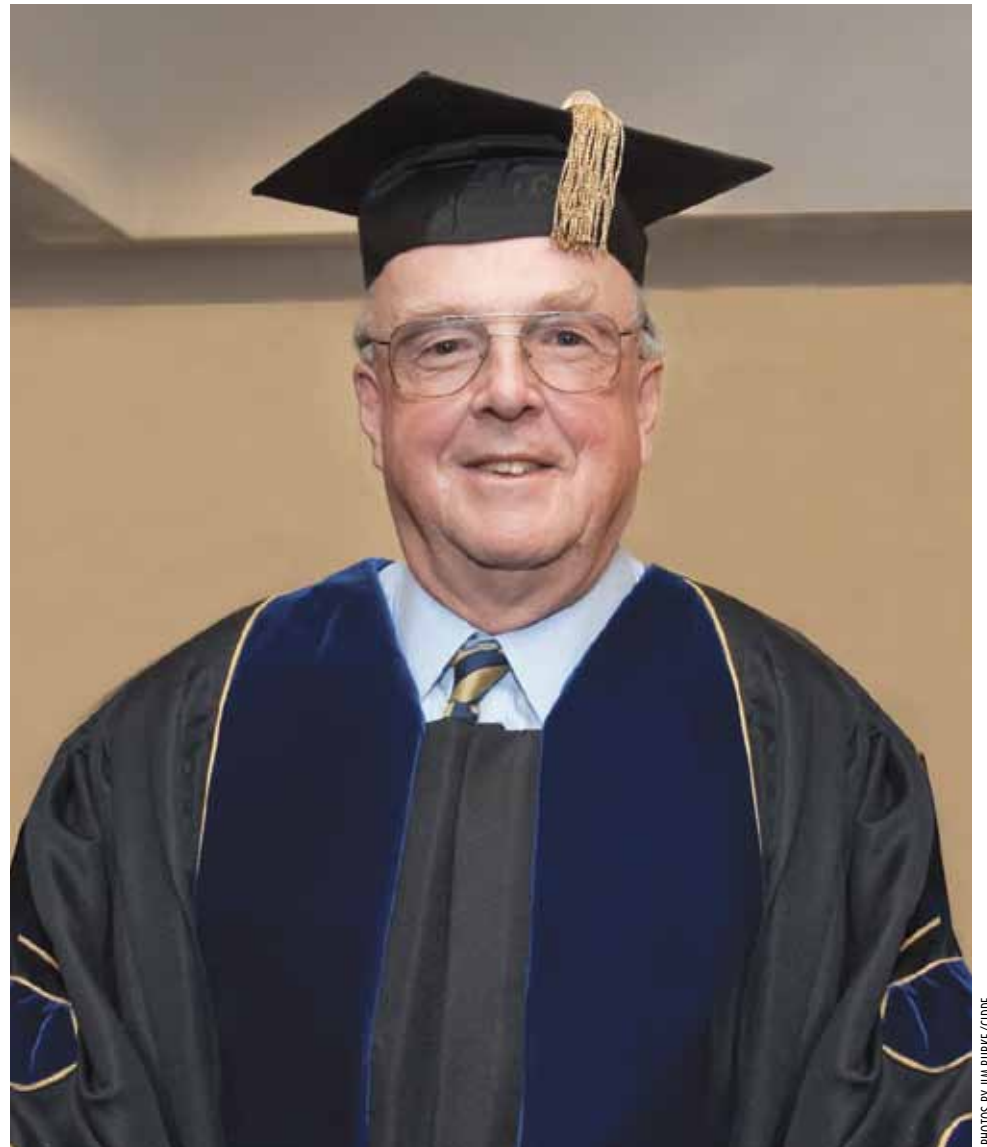
So anyway, the world is good. We've saved the world.

Let's move down a step. How about the survival of life? Well, not to worry. Life is very robust. Life is everywhere. If we look in the worst possible environments, life is there. If we look throughout the universe, I'm confident that everywhere we look there will be life. Now, you might ask, "How about intelligent life?" And there is some question as to whether there is even intelligent life here, but assuming there is,

I would argue that all life is intelligent. It has the intelligence it requires to meet its own needs. Our life is different as a species because we recognize not only our own needs, but the needs of the rest of our species. And that I think is unique.

If we focus on the survival of the species, where are the grand challenges? And I found just one, and it's a big one—the problem of nuclear war. Mass annihilation. This has every potential to wipe out our species. And I did not realize how adamant I felt about this until I started putting the words on paper. It is absolute stupidity to maintain vast archives of nuclear weapons. First of all, we're never going to use them. Secondly, who controls them? And if we look at the Gulf of Mexico, accidents will happen... and we do not want an accident to happen here. The way is clear, the will is weak.

But bear in mind that in that nuclear arsenal is energy—energy which can be made into electricity, energy which can [take a big chunk out of] the so-called energy



John A. Swanson

PHOTOS BY JIM BURKE/CORBIS

crisis. So one of our survival challenges is, of course, energy. And it is a big one because the other challenges such as water and food can be derived if there is sufficient energy. Energy is not a big problem. There is lots of energy falling on this Earth every day. The problem is timing, and the problem is location. No one wants to live in the desert, but the energy is there. So we have network problems. We can solve those. It's a grand challenge. The end is clear. We have the tools. Let's go and do it.

Also in the area of the survival of civilization, I would put the grand challenge of disease, things like the bird flu. And if we mention that, let us stop and consider that animals are part of our population. The health we have to look at is the health of the whole system, not just the health of the human species. We have to look at our animal friends and neighbors, because diseases can move back and forth between us. If we are healthy and the animals are not, we are not healthy. So we need to look at a total health system. That is a challenge. People understand it.

Other threats that we see include solar storms. We've seen dramatic pictures of the sun with massive flares. We also have the distinct possibility that sometime soon Earth's magnetic poles will reverse. If they do, the solar storms will strike the Earth in

full intensity during that period. We also have the concept of global climate change. Let me tell you for sure, that our climate will change. What we don't know for sure is which way it's going. The studies of cyclic weather say we're entering an ice age. Other studies say the Earth is heating up. The answer, I believe, is let's plan on change... not on which change. But let's not

build on floodplains. Let's get the houses away from the seacoast. Let's do the incremental things that can be done, so that when the earthquake comes or the hurricane comes, the Earth will not be annihilated, that we can pick ourselves up, dust ourselves off, and go on again.

It would be presumptuous to think, I believe, that we can control the climate. We don't understand it. But we do understand how to mitigate the effects—and that's what we must do.

Another challenge, of course, is that even if we do manage to get rid of the nuclear problem, we still have the problem of war

and conflict. And an underlying cause of that, unfortunately, seems to be religion. We almost all worship the same God, but somehow that does not seem to be enough. For those of you in philosophy, think about it. Find a way for all of our religions to coexist. The world is too small for us to be as fragmented as we are.

A grand challenge is something that you plan for, that you say, "I have a problem. I need to do something." It's also something that's going to be major. It's going to affect the world—all of the people in the world.

Let's move down another step, to the survival of our nation. I can talk about this because I am a U.S. citizen. I am proud of it, but I am not necessarily proud of our government. A grand challenge is to balance the federal and state budgets. We cannot continue spending more than we earn. I have to apologize for my generation, because what you are facing in the national debt, you and your children, is abominable. You have your hands tied behind your back and we are imposing upon you the sins of the adults. So please be a little forgiving, accept the challenge, and see if you can dig your way out of the mess that we've put you in.

If we had a government of statesmen, we would be in good shape. Unfortunately, we have a government of politicians. And until we can convert politicians into statesmen, the government will not be what we hope for... the government of the people, by the people, and for the people.

I have heard that the most terrifying statement in the English language is "I'm from the government, I'm here to help you." And the fact that that gives us a laugh gives us some indication of the depth of the problem.

There are some threats to our nation, and the biggest threat is cybersecurity. I'm sure that many of you are aware of that. The Internet has given us access to everything with only a little bit of hacking required to get to some items which are very threatening. We need to solve the cybersecurity problem.

Terrorism is a problem, but I would like to quote the distinguished philosopher Pogo: "We have met the enemy, and he is us." The impact of terror is much greater because of what we do than what any of our enemies do. And if you have traveled, you know what I am referring to.

If we move yet [further] up the pyramid of desire, we want to expand knowledge. And I think that the physics people in the audience will understand when I [speak about] the dark energy and dark matter that [are said to be] out there. But they [are said to make up] 75 percent or more of the universe, and they [the physicists] haven't a clue as to what they [dark energy and dark matter] are. So either there is a great big unknown out there, or somebody's got the sign wrong in an equation somewhere. And I don't know which one it is. But there is a challenge there.

It's an intellectual and an experimental challenge, and it is being approached.

Now, as Mark [University of Pittsburgh Chancellor Mark A. Nordenberg] pointed out, you in this room, are, first of all, by far the most intelligent group I have ever been able to face, and that makes this a joy. You are also highly qualified to meet these challenges. One of your major qualifications

Now, as Chancellor Mark A. Nordenberg pointed out, you in this room, are, first of all, by far the most intelligent group I have ever been able to face, and that makes this a joy. You are also highly qualified to meet these challenges. One of your major qualifications is, of course, that you are or soon will be graduates of the University of Pittsburgh. This is the university that developed the Salk polio vaccine, that is a leader in transplant technology, and that is among the top 10 recipients of federal science and engineering grants. Its graduates have won three Nobel Prizes, two within the last 10 years, and include two Pennsylvania governors, two U.S. senators, three representatives, and innumerable scientists, engineers, and business leaders. You are in great company and you are great company.

is, of course, that you are or soon will be graduates of the University of Pittsburgh. This is the university that developed the Salk polio vaccine, that is a leader in transplant technology, and that is among the top 10 recipients of federal science and engineering grants. Its graduates have won three Nobel Prizes, two within the last 10 years, and include two Pennsylvania governors, two U.S. senators, three representatives, and innumerable scientists, engineers, and business leaders. You are in great company and you are great company.

Another thing you have on your side is time. Time is very much to your advantage. There are a lot of things you can do. If somebody says it will take 10 years to do that, for you, 10 years is but a portion of your lifetime. Don't hesitate if someone says it will take a long time. Get started, because the 10 years or the 15 years will go by very quickly. If we start out, the world we see in 10 years will be much improved over the world we see now.

So, use time. Use it to invest in your future. Use it to invest in education—through yourselves. This is just the beginning of your education... not the end. Encourage education for your children. Make sure they get the [instruction] they [deserve]. And support your university. You have received; now is the time to start giving back. I got a scholarship; I would never have been able to get an education without it. My responsibility is to give back and make sure that others

have the same opportunity. You do the same.

But some of you... one or two perhaps... will say, "Well, I'm not going to be in a position to address these grand challenges... not in my lifetime." But I propose to you that your lives are the ultimate grand challenge. This is your challenge, and every single one of you has this challenge: Find a life partner, someone you can live with, and make it work. Be part of the solution, not part of the problem. Be informed. Learn how to get information instead of just raw data. Form opinions. Discuss those opinions. Be curious. Look at the other field—look at what they are doing versus what you are doing. There's a lot of cross-information, which is very, very beneficial. Live within

your means. You know, you don't have to outspend everyone else. Be happy. Be comfortable where you are.

When we moved to Florida, it was right after the "chad" election [the election of 2000]. And I said to myself, "I need to get involved." So I have worked there for many years at the polling places. Get involved in government, even if it's a small thing. Make sure that you are a part of it and you understand. Work with society. Being a loner is not a good thing. Have friends. Have neighbors. Talk to them. Work with them. Stay healthy. It's very tempting to just sit at your desk and work all day, [but] as you expand and expand, it's not your

mind that is expanding.

Volunteer. Work with other people. There are needs out there. There are needs that you can work [to meet]. I'm proud of Pitt; a lot of you students have gone out there on volunteer days. Thank you so much.

Now, when troubles come—and they will—a very useful thought is, "This too will pass." It may hurt, and it may hurt badly. But a week from now, a month from now, it will get better.

So, you have a Pitt education. You are well on your way. Try to make each day a better day. Make the world a little better each day. And I'd like to conclude with—Hail to Pitt!

John A. Swanson's Distinguished Career Includes Numerous Honors, Contributions

By Morgan Kelly

John A. Swanson, who helped revolutionize computer-aided engineering four years after graduating from Pitt, has earned substantial recognition over the past 40 years, including two of the highest honors a professional engineer can receive. Last year, he was named to the National Academy of Engineering, one of 65 new members and nine foreign associates elected in 2009 for contributions to and innovations in engineering. In May 2004, Swanson received the American Association of Engineering Societies' John Fritz Medal, widely considered the highest award in the engineering profession. Prior awardees of the Fritz Medal include Orville Wright, Alexander Graham Bell, Alfred Nobel, Thomas Edison, Guglielmo Marconi, and George Westinghouse.

Swanson was named a Pitt School of Engineering Distinguished Alumnus in 1998. He has served on Pitt's Board of Trustees since 2006.

In December 2007, Pitt renamed its engineering school the John A. Swanson School of Engineering in recognition of the greatest generosity by an individual donor in Pitt's history.

Swanson is recognized internationally as an authority and innovator in the application of finite-element methods to engineering. In 1970, Swanson founded ANSYS, Inc., which markets the ANSYS software code that Swanson created for use by the aerospace, automotive, biomedical, manufacturing, and electronics industries to simulate how product design will behave in real-work envi-

ronments.

Swanson served ANSYS as president, chief executive officer, and director; at his retirement from ANSYS in March 1999, he was the company's chief technologist. Headquartered in Canonsburg, Pa., with more than 40 sales locations worldwide, ANSYS and its subsidiaries today employ approximately 1,400 people and distribute products through a network of channel partners in more than 40 countries. Swanson still teaches ANSYS training classes and serves the company in an advisory capacity.

In 2002, Swanson was inducted into the Cathedral of Learning Society, which recognizes individuals who have donated \$1 million or more to the University. Through his earlier investments in Pitt's \$2 billion Building Our Future Together capital campaign, Swanson created the John A. Swanson Institute for Technical Excellence, which houses the John A. Swanson Center for Micro and Nano Systems; the John A. Swanson Center for Product

Innovation; and the RFID (Radio Frequency Identification) Center of Excellence. He also has established the John A. Swanson Embedded Computing Laboratory in Computer Engineering.

Before attending Pitt, Swanson received his master's and bachelor's degrees in mechanical engineering from Cornell University in 1963 and 1962, respectively. Now retired, Swanson lends his expertise to Pitt engineering students as an advisor on senior design projects.

In 1970, Swanson founded ANSYS, Inc., which markets the ANSYS software code that Swanson created for use by the aerospace, automotive, biomedical, manufacturing, and electronics industries to simulate how product design will behave in real-work environments. ... Now retired, Swanson lends his expertise to Pitt engineering students as an advisor on senior design projects.

Eight Teaching Proposals Receive Funding From Provost's ACIE

Continued from page 1

as well as lecture worksheets with predrawn images and schematics. The predrawn worksheets will allow more lecture and problem-solving time in class. Beverly W. Witham, a professor in Pitt-Johnstown's Engineering Technology Program, is also participating in this project.

Hoda Kaldas, principal investigator for this program and an assistant professor in the Pitt School of Medicine's Renal-Electrolyte Division, "Virtual Patients to Teach Electrolyte Disorders: An Innovative Approach to Integrate Physiology and Pathophysiology During the Clinical Rotations."

Kaldas is the principal investigator for this project, which seeks to develop an innovative method to teach medical students how to better manage fluid and electrolyte abnormalities by improving students' patient assessments and analysis of laboratory results. While students learn about electrolyte disorders through lectures or bedside discussions, they need experience in handling many cases to develop competency.

The project will use virtual patient simulation (vpSim), an online virtual patient player, to develop an interactive case-based module that will augment the teaching of fluid, acid, and electrolyte disorders. The medical students will play the role of a health care provider by interacting with an on-screen "patient." Objectives for the course, which include important areas of electrolyte disorders, were developed in consultation with expert nephrologists and internists.

Additional team members for this project include Kristine Schonder, assistant professor in the School of Pharmacy; Mark Unruh, assistant professor of medicine in the Renal-Electrolyte Division; James R. "Jamie" Johnston, professor of medicine and the clinical director of the Renal-Electrolyte Division; James B. McGee, director of the Laboratory for Educational Technology (LET) and assistant dean for medical education technology; Teppituk Krinchai, a system engineer/software developer for LET; and Peter Kant, production director for LET.

Adam K. Leibovich, a physics professor and the director of graduate studies for the Department of Physics and Astronomy in the School of Arts and Sciences, "Teaching Computer Modeling in Introductory Physics."

Leibovich will team with Russell J. Clark, a lecturer in the Department of Physics and Astronomy, to develop a computer lab curriculum for freshman engineering students taking the Integrated Curriculum versions of Physics 0174 and 0175. The curriculum will include computational problem-solving methods—a skill which is normally taught in advanced courses at the junior and senior levels. Leibovich and Clark conducted a limited feasibility study that showed that, with the proper tools and instruction, freshman students are more than capable of learning such techniques. Because computer modeling is essential to all engineering students throughout their careers, the students should begin to develop the programming skills necessary for their calculations as early as possible, they said in their proposal.

The computer lab curriculum developed in the project will eventually be available for all sections of Physics 0174 and 0175.

Steven P. Levitan, the John A. Jurenko Professor of Computer Engineering, Department of Electrical and Computer Engineering, Swanson School of Engineering, "Simulating the World."

The goal of this project is to develop a course that will provide undergraduate engineering and science students with skills in using modeling and simulation methods to design and analyze systems within the domains of physics, chemistry, biology, and several types of engineering. Students will learn to characterize physical systems and

create mathematical models that can be used in computer simulations to design systems and predict their performance.

The course is motivated by the need for both scientists and engineers to develop these skills—a need that has been identified at a national level by the National Science Foundation's Blue Ribbon Panel on Simulation-Based Engineering Science. Levitan taught a pilot version of such a course in the Fall Term of 2009 to a group of electrical and computer engineering students. This project will allow the course to be broadened into a more structured course that will be applicable to a wide range of science and engineering students across the University.

Brian S. Butler, a professor of information systems in the Joseph M. Katz Graduate School of Business and a professor of clinical and translational science in Pitt's Clinical and Translational Science Institute, "The Virtual Firm: An Interactive Environment for Teaching Information Technology (IT) Opportunity Recognition."

This project will create a real-world interactive virtual firm aimed at helping students to learn how to identify and evaluate information technology innovation opportunities. The project's premise is that although billions of dollars are invested each year in IT systems, much of this investment is wasted because of misaligned priorities and unrealized potential. Key to both individuals' and organizations' abilities to benefit from IT investment is the ability of professionals—regardless of their specialty—to recognize opportunities to use IT to increase efficiency, support growth, and enable innovation. But efforts to teach students how to do so are limited.

There is support from six Katz faculty members for using the virtual firm concept in five different courses. In addition, faculty from other Pitt programs have expressed interest in using the materials, which will comprise a collection of data about the firm, a Blackboard computer-based repository with teaching notes for faculty, and an interactive virtual world implementation of a corporate facility.

Additional team members for the virtual firm project are Russell Robbins, a visiting assistant professor of business administration in the Katz School; and Jacqueline Pike, a visiting instructor and doctoral student in the Katz School.

Gary Tabas, a professor of medicine in the Pitt School of Medicine's Division of General Medicine, "A Novel Approach to Teaching Clinical Decision-Making Using Virtual Patient Technology."

The teaching of clinical decision-making is one of the most crucial aspects of medical education. The goal of this project is to develop a Web-based program that uses vpSim—software developed by LET to teach effective clinical decision-making. The project's first phase will be to develop a program to help medical students learn about diabetic ketoacidosis, a potentially fatal condition that develops when a person has dangerously low insulin levels. The virtual patient simulation method will be administered to about 200 students in Pitt's School of Medicine and School of Pharmacy. Tabas, the project leader, will work closely with the LET and University faculty to assess the students' decision-making abilities concerning diabetic ketoacidosis.

Other project team members include Neal J. Benedict, an assistant professor of pharmacy and therapeutics in the School of Pharmacy; James B. McGee, a professor in the Department of Medicine, assistant dean for medical education technology, and director of Pitt's LET; Peter Kant, production director for LET; Teppituk Krinchai, system engineer for LET; and Harsha Rao, a professor of medicine and chief of endocrinology at the VA Medical Center Pittsburgh.

Pitt's Kuntu Repertory Theatre Wraps Up Season With August Wilson's *Radio Golf*

By Sharon S. Blake

The University of Pittsburgh's Kuntu Repertory Theatre closes its 2009-10 season with *Radio Golf* by August Wilson—the final play in Wilson's unprecedented 10-play cycle chronicling Black life in 20th-century America. The play runs May 27 through June 12 in the Seventh-Floor Auditorium of Alumni Hall.

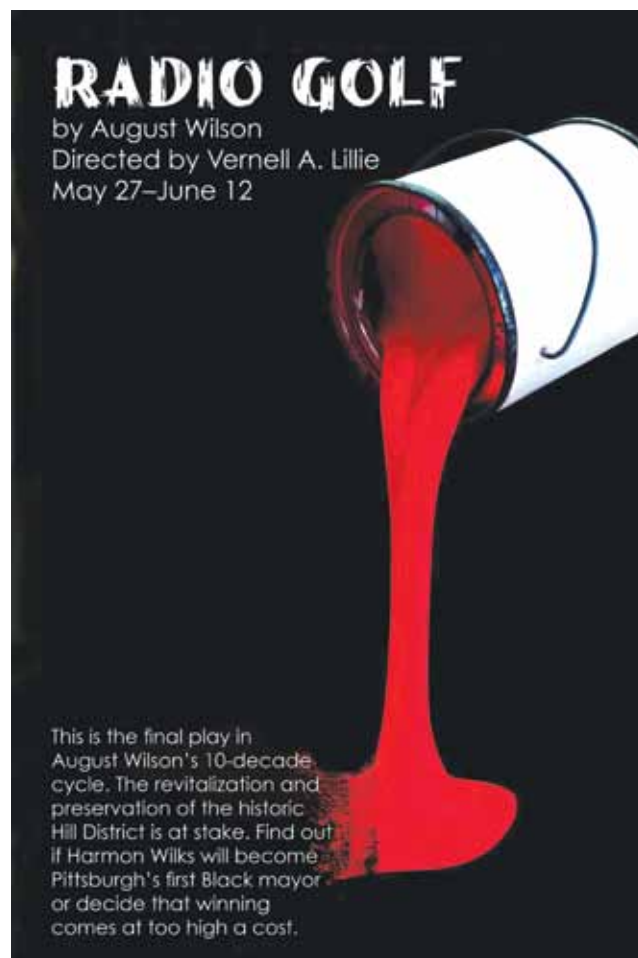
Set in Pittsburgh in the late 1990s, *Radio Golf* is a fast-paced dynamic work about successful entrepreneur Harmond Wilks, who aspires to become the city's first Black mayor. But when Wilks' past begins to catch up with him, some secrets are revealed that could be his undoing.

Three of the play's lead characters will be played by actors from three of Pittsburgh's major universities: Carnegie Mellon University senior Eric Berryman plays Wilks; Point Park University senior Lichelle Byrd assumes the role of Mame Wilks; and Ruffin Prentiss, who graduated from Pitt earlier this month with a BA in theater, performs the role of Roosevelt Hicks. Rounding out the ensemble are Anton Floyd, a New York City actor previously featured in Kuntu's production of *The Electronic Negro*, playing the role of Sterling Johnson, and Montez Freeland, making his debut with Kuntu as Elder Joseph Barlow. *Radio Golf* will be directed by Vernell A. Lillie, founder and artistic director of Pitt's Kuntu Repertory Theatre and a professor emeritus of Africana Studies at Pitt.

Performances are

Thursdays through Saturdays at 8 p.m. and Sundays at 4 p.m. Matinees are scheduled for 1 p.m. Saturday, June 5, and 11 a.m. Thursday, June 10. Students will be admitted for \$5; admission is \$20 for adults, \$14 for Pitt faculty and staff, and \$13 for senior citizens. Groups of 10 or more will receive a discount.

Tickets are available at the box office of the William Pitt Union; through ProArts at 412-394-3353 or www.proartstickets.org; or at Dorsey's Record Shop, 7614 Frankstown Ave., Homewood. For more information, call 412-624-7298 or visit www.kuntu.org.



Pitt's African American Alumni Council Names Cochairs For Diversity Initiative Fundraising Campaign

Continued from page 2

am confident we will not only achieve our goal for this second phase, but also surpass it."

Browning is a senior vice president and general counsel at Sandler & Travis Trade Advisory Services Inc., where he helps governments and multinational businesses modernize their customs and security procedures. Named a Pitt Legacy Laureate in 2007, Browning also serves as a director at large for the Pitt Alumni Association.

Kelly has worked for the District of Columbia Superior Court for more than 22 years and currently serves as an educational specialist for education and training at the D.C. Court Systems Center. Licensed and ordained as a minister in 1998, he is currently on the ministerial staff of the Campbell AME Church in Washington, D.C.

Larkins-Pettigrew is a visiting assistant professor at Case Western Reserve University. Throughout her career, she has

held numerous medical positions, including program director for global health and reproductive science in Pitt's School of Medicine; assistant director of student

health at Tuskegee University; and critical care instructor at Brotman Medical Center. She is the recipient of many awards and honors and a volunteer with several nonprofit organizations worldwide.

The AAAC Campaign is part of the University's Building Our Future Together capital campaign, the most successful fundraising campaign in the history of both Pitt and Southwestern Pennsylvania. To date, the Building Our Future Together campaign has raised more than \$1.46 billion.

For more information about supporting the AAAC or to make a gift online, visit www.giveto.pitt.edu or call 1-800-817-8943.

The AAAC Campaign is part of the University's Building Our Future Together capital campaign, the most successful fundraising campaign in the history of both Pitt and Southwestern Pennsylvania.

Happenings



Pittsburgh Glass Center, *From the Earth to the Fire and Back*, through June 13

Concerts

Giada Valenti, Italian singer and songwriter, 7:30 p.m. **May 17**, Cabaret at Theater Square, 655 Penn Ave., Downtown, 412-325-6769, www.pgharts.org.

Jasper Lewis, guitarist, singer, and songwriter, 5 p.m. **May 19**, Backstage Bar at Theater Square, 655 Penn Ave., Downtown, 412-325-6769, www.pgharts.org.

Boilermaker Jazz Band, musical performance, 5 p.m. **May 27**, Backstage Bar at Theater Square, Jazz Live Series, 655 Penn Ave., Downtown, 412-325-6769, www.pgharts.org.

Charles Wallace, Pittsburgh-based trio, 5 p.m. **May 29**, Backstage Bar at Theater Square, 655 Penn Ave., Downtown, 412-471-6070, www.pgharts.org.

Ode to Joy, Beethoven's Ninth Symphony, Manfred Honeck, conductor, **June 4-6**, Heinz Hall, 600 Penn Ave., Downtown, Pittsburgh Symphony Orchestra, 412-392-4900, www.pittsburghsymphony.org, Pitt Arts Cheap Seats, 412-624-4498, www.pittarts.pitt.edu.

It's De-lightful! It's De-licious! It's Cole Porter, musical performance, 10:30 p.m. **June 5**, Late Night Cabaret, Cabaret at Theater Square, 655 Penn Ave., Downtown, Pittsburgh Cultural Trust, 412-471-6070, www.pgharts.org.

Exhibitions

SPACE, Artist Image Resource, and **Fe Arts Gallery, *Rock, Paper, Scissors***, through **May 23**, one exhibition at three locations, comprising work ranging from video to installation art; featuring pieces by three Pitt Studio Arts faculty: SPACE, 812 Liberty Ave., Downtown; Artists Image Resource, 518 Foreland St., North Side; Fe Arts Gallery, 4102 Butler St., Lawrenceville, 412-624-4364.

Carnegie Museum of Art, *Forum 64: Cecil Balmond*, through **May 30**; ***Gods, Love, and War: Tapestries at Carnegie Museum of Art***, through **June 13**; ***Imagining Home: Selections From the Heinz Architectural Center***, through **May 30**; ***Past Meets Present: Decorative Arts and Design***, ongoing; ***Caricature, Satire, and Comedy of Manners: Works on Paper From the 18th Through 20th Centuries***, ongoing; 4400 Forbes Ave., Oakland, 412-622-3131, www.cmoa.org.

Pittsburgh Glass Center, *From the Earth to the Fire and Back*, through **June 13**, Pittsburgh Glass Center, 5472 Penn Ave., Garfield, 412-365-2145, www.pittsburghglasscenter.org.

Andy Warhol Museum, *Bunny Yeager: The Legendary Queen of the Pin-Up*, through **June 19**; ***Playboy Redux: Contemporary Artists Interpret the Iconic Playboy Bunny***, through **June 20**; ***Rufino: Blots & Figments***, through **July 18**; 117 Sandusky St., North Side, 412-237-8300, www.warhol.org.

709 Penn Gallery, *Alice's Adventures in Wonderland: Photographs by Abelardo Morell*, through **June 25**, 709 Penn Ave., Downtown, 412-471-6070, www.pgharts.org.

Senator John Heinz History Center, *Discover the Real George Washington: New Views From Mount Vernon*, through **July 18**; ***Ben Franklin: In Search of a Better World***, ongoing; 1212 Smallman St., Strip District, 412-454-6000, www.heinzhistorycenter.org.

Frick Art and Historical Center, *Small But Sublime: Intimate 19th-Century American Landscapes*, through **Sept. 5**, 7227 Reynolds St., Point Breeze, 412-371-0606, www.frickart.org.

Lectures/Seminars/Readings

"Chemical Approaches to Understanding Redox Biology in the Brain," Christopher J. Chang, chemistry professor at the University of California, Berkeley, 14th Annual Paul Dowd Lectures, 5 p.m. **May 20**; also **"Metals on the Brain: Probing Their Chemistry With Molecular Imaging,"** 2:30 p.m. **May 21**, both lectures held in 157 Benedum Hall, Pitt Department of Chemistry, www.chem.pitt.edu.

Miscellaneous

Vanessa German, *Root*, spoken-word performance, 8 p.m. **May 20**, August Wilson Center for African American Culture, 980 Liberty Ave., Downtown, First Voice: A Pittsburgh International Black Arts Festival, 412-258-2700, www.pgharts.org.

Pittsburgh Improv Jam, 10 p.m. **May 20, 27, and June 3**, Cabaret at Theater Square, 655 Penn Ave., Downtown, 412-325-6769, www.pgharts.org.

Shadyside Art Festival on Walnut Street, featuring works by an eclectic mix of established artists and emerging talents, **May 22-23**, 954-472-3755, info@artfestival.com.

Opera/Theater/Dance

Regional Dance America's Northeast Festival 2010, three performances featuring 11 dance companies, 7 p.m. **May 20-22**, Byham Theater, 101 Sixth St., Downtown, Pittsburgh Cultural Trust, 412-456-1350, www.pgharts.org.

The Blonde, the Brunette, and the Vengeful Redhead, by Robert Hewett, through **May 30**, City Theatre, 1300 Bingham St., South Side, 412-431-2489, www.citytheatrecompany.org.

Nonsense, musical theater, through **June 6**, CLO Cabaret Theater, 655 Penn Ave., Downtown, 412-456-6666, www.pittsburghclo.org, Pitt Arts Cheap Seats program, 412-624-4498, www.pittarts.pitt.edu.

West Side Story, musical based on book by Arthur Laurents, score by Bernstein and Sondheim, **May 17-22**, Benedum Center, 803 Liberty Ave., Downtown, Pittsburgh Cultural Trust, PNC Broadway Across America Series, 412-471-6070, www.pgharts.org.

Othello, by Shakespeare, **May 20-June 12**, Henry Heymann Theatre inside Stephen Foster Memorial, Forbes Avenue off Bigelow Boulevard, Oakland, Pittsburgh Irish & Classical Theatre, www.pict-theater.org, 412-561-6000, Pitt Arts Cheap Seats, 412-624-4498, www.pittarts.pitt.edu.



Ode to Joy, Beethoven's Ninth Symphony, Heinz Hall, June 4-6

Rennie Harris Puremovement, Philadelphia-based dance company known as international hip-hop ambassadors, 8 p.m. **May 21**, August Wilson Center for African American Culture, 980 Liberty Ave., Downtown, part of First Voice: A Pittsburgh International Black Arts Festival, 412-456-6666, www.pgharts.org, Pitt Arts Cheap Seats program, 412-624-4498, www.pittarts.pitt.edu.

Seussical, musical by Ahrens and Flaherty based on works of Dr. Seuss, **May 22-23**, Pittsburgh Playhouse, 222 Craft Ave., Oakland, 412-621-4445, www.pittsburghplayhouse.com.

The Dark Side of Zylo's Moon, play written and directed by Yoli, **May 22-23**, Pittsburgh Playhouse, 222 Craft Ave., Oakland, 412-621-4445, www.pittsburghplayhouse.com.

August Wilson Center Dance Ensemble/Greer Reed-Jones *The Journey Begins ...* inaugural performance of ensemble led by founding artistic director Reed-Jones, 6 p.m. **May 23**, August Wilson Center for African American Culture, 980 Liberty Ave., Downtown, part of First Voice: A Pittsburgh International Black Arts Festival, 412-456-6666, www.pgharts.org.

Art, by Yasmina Reza, **May 27-June 27**, O'Reilly Theater, 621 Penn Ave., Downtown, Pittsburgh Public Theater, 412-316-1600, www.ppt.org.

Pittsburgh Ballet Theatre School 2010 Spring Performance, 7 p.m. **May 28**, Byham Theater, 101 6th St., Downtown, Pittsburgh Cultural Trust, 412-456-6666, www.pgharts.org.

A Confluence of Dreaming, play written by Tammy Ryan, **May 28-June 13**, Pittsburgh Playhouse, 222 Craft Ave., Oakland, 412-621-4445, www.pittsburghplayhouse.com.

Oliver, music, lyrics, and book by Lionel Bart, **June 1-6**, Benedum Center, 803 Liberty Ave., Downtown, Pittsburgh CLO, 412-456-6666, www.pittsburghclo.org, Pitt Arts Cheap Seats program, 412-624-4498, www.pittarts.pitt.edu.

Pitt/PhD Dissertation Defenses

Haya Al-Khatlan, School of Health and Rehabilitation Sciences, 10 a.m. **May 17**, "Evaluation of Young Adults' Preferences, Needs, and the Understandability of the Personal Health Record Data Contents," 6053 Forbes Tower.

Judith Carroll, School of Arts and Sciences' Department of Psychology, 2 p.m. **May 17**, "The Association of Affective, Behavioral, and Cognitive Components of Hostility With Telomere Length, a Marker of Biological Aging," 4127 Sennott Square.

Zhongyu Yang, School of Arts and Sciences' Department of Chemistry, 1 p.m. **May 18**, "Copper Ion-Based Electron Spin Resonance Spectroscopic Rulers," 715 Chevron Science Center.

Meghan Solomon, School of Education's Department of Administrative and Policy Studies, 11 a.m. **May 19**, "The Influence of Faculty Gender on Student-Centered Pedagogical Approaches to Instructional Technology," 5702 Posvar Hall.

Reena Bajpai, School of Arts and Sciences' Department of Chemistry, 10 a.m. **May 21**, "Mixture Synthesis and Spectroscopic Analysis of a Stereoisomer Library of the Phytophthora Mating Hormone Alpha1 and the Corresponding bis-MTPA Esters," 307 Eberly Hall.

Eva Martinez, School of Arts and Sciences' Department of Anthropology, 3 p.m. **May 24**, "Prehispanic Social Organization in the Jamastran Valley, Southeastern Honduras," 3107 Posvar Hall.

Michael Thompson, School of Medicine's Cellular and Molecular Pathology Graduate Program, 2 p.m. **May 25**, "b-Catenin: A Friend or Foe in Liver Pathobiology?" S123 Starzl Biomedical Science Tower.



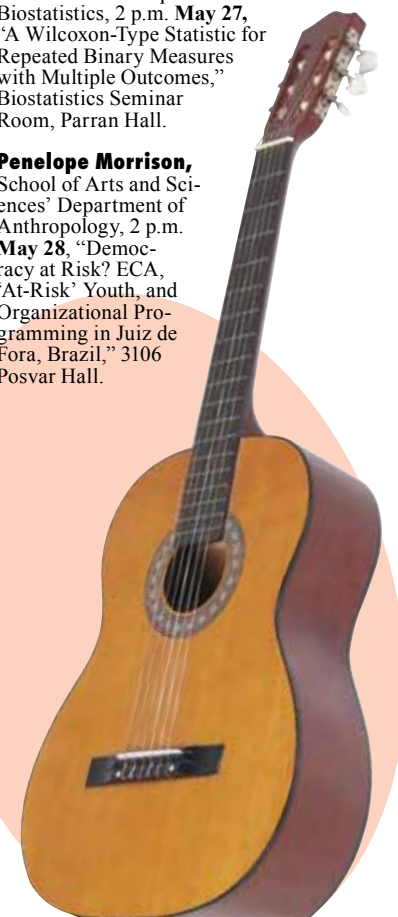
Pittsburgh Ballet Theatre School 2010 Spring Performance, Byham Theater, May 28

Aaron Secrest, Graduate School of Public Health's Department of Epidemiology, 3 p.m. **May 25**, "Mortality Trends in a Population-Based Type 1 Diabetes Cohort," 2nd-Floor Conference Room, Diabetes and Lipids Research Building.

Bradley Impink, School of Health and Rehabilitation Sciences, noon **May 27**, "The Relationship Between Ultrasonographic Median Nerve Characteristics, Symptoms of Carpal Tunnel Syndrome, and Wheelchair Propulsion Techniques Amongst Manual Wheelchair Users," 5047 Forbes Tower.

Okan Umit Elci, Graduate School of Public Health's Department of Biostatistics, 2 p.m. **May 27**, "A Wilcoxon-Type Statistic for Repeated Binary Measures with Multiple Outcomes," Biostatistics Seminar Room, Parran Hall.

Penelope Morrison, School of Arts and Sciences' Department of Anthropology, 2 p.m. **May 28**, "Democracy at Risk? ECA, 'At-Risk' Youth, and Organizational Programming in Juiz de Fora, Brazil," 3106 Posvar Hall.



Jasper Lewis, Backstage Bar at Theater Square, May 19



Commencement 2010



PHOTOS BY JIM BURKE/CODICE, EXCEPT AS NOTED

1



2



3

MIKE DRAZDZINSKI/CODICE



5



4

The University of Pittsburgh has conferred about 7,000 undergraduate, graduate, and professional degrees at its five campuses this spring. In Oakland, students, alumni, donors, and Pitt administrators gathered at 2 p.m. May 2 in the Petersen Events Center for commencement. **1.** From left, Pitt Board of Trustees Chair Stephen R. Tritch (ENGR '71, KGSB '77), who also is chair of the Westinghouse Electric Company; John A. Swanson (ENGR '66G), commencement speaker, Pitt trustee since 2006, and the founder and retired president, CEO, and director of ANSYS, Inc., who received the Doctor of Science *Honoris Causa* degree during the ceremony; and Gerald Holder, professor and U. S. Steel Dean, Swanson School of Engineering. **2.** Pitt Chancellor Mark A. Nordenberg (right) surprised Provost and Senior Vice Chancellor James V. Maher by conferring upon him the Pitt honorary Doctor of Science degree. **3.** Sharon Epperson (third from left), a CNBCTV correspondent, was the keynote speaker for the May 2 School of Social Work Afternoon of Recognition at Soldiers & Sailors Memorial Hall and Museum. She stands with (from left) her father, David E. Epperson (A&S '61, '70, '75G, SOC WK '64), who was dean of the School of Social Work from 1972 to 2001; her mother, Cecilia Trower Epperson (EDU '57, '61G); and Larry E. Davis, Pitt's Donald M. Henderson Professor, current dean of the School of Social Work, and director of the Center on Race and Social Problems. **4.** Graduating students and their family and friends attended the 6th Annual Interfaith Baccalaureate Service, sponsored by the African American Alumni Council and Black Action Society, on May 1 in the William Pitt Union. **5.** Celebrating graduates!

PUBLICATION NOTICE The next edition of *Pitt Chronicle* will be published June 7. Items for publication in the newspaper's *Happenings* calendar (see page 7) should be received at least two weeks before the event date. *Happenings* items should include the following information: title of the event, name and title of speaker(s), date, time, location, sponsor(s), and a phone number and Web site for additional information. Items may be e-mailed to chron@pitt.edu, faxed to 412-624-4895, or sent by campus mail to 422 Craig Hall. For more information, call 412-624-1033 or e-mail robinet@pitt.edu.