

## Honoring a Legacy of Building Greatness, Transforming Lives, and Holding Fast to a Faith in Education

*This is the print version of Chancellor Mark A. Nordenberg's Winter 2012 Report to Pitt's Board of Trustees, delivered on Feb. 24.*

The sainted Mother Teresa said this, among many other memorable teachings: "What you spend years building, someone could destroy overnight. Build anyway." Those words have particular significance for Pitt today—as we prepare to celebrate a long and proud 225-year history of building better lives; as we press forward with our own determined efforts to build further on an already impressive institutional legacy; and as we continue to contend with serious threats, through deep and disproportionate budgetary reductions, to a relationship with our home state that has been critical to much of what we have been able to contribute to its people.

On Feb. 28, 1787, the people of Pittsburgh—led by our founder, Hugh Henry Brackenridge, and supported by state government—began building something very special here. Authorized by an act that began with the simple declaration that "the education of youth ought to be a primary object with every government," they built the wilderness academy that would become our world-class university. They did so when survival was defined in far more basic terms than balance-sheet entries. And they were driven by a clear commitment to future generations and by a belief in the power of education.

Those who succeeded our founders kept building as the Pittsburgh Academy became the Western University of Pennsylvania and, finally, the University of Pittsburgh. They kept building as our principal campus moved from downtown, to the North Side, and finally to Oakland and as the University expanded to include important regional campuses in Johnstown, Bradford, Greensburg, and Titusville.

They sustained their important work even when the country was at war. They



Chancellor Mark A. Nordenberg

coped with the ravages of economic disaster more serious than what we have just endured. In the face of damage by flood and fire, they rebuilt. And what they built and rebuilt, by any measure, was very good.

In assessing two centuries of commitment to "the education of youth," this is what our bicentennial historian concluded 25 years ago. The story of Pitt is "a happy chronicle of a sound and worthwhile accomplishment. For almost 200 years, there has been an output of a good product: an annual harvest of young people admirably trained to earn a living, to make a contribution to their community, their profession, and their country."

But from early times, this University became something even greater than that—a place that changed the shape of lives through the transforming power of ideas. Let me offer just a few telling examples that

take us across an extended time line.

- In the 1890s, Pitt astronomy professor, Allegheny Observatory director, and aviation pioneer Samuel Langley launched the first power-driven, heavier-than-air flying machines, paving the way for human flight. Today, the Langley name adorns many important Air Force and NASA facilities, just as it adorns our own Langley Hall.

- In the early 1900s, Pitt engineering professor Reginald Fessenden proved that radio waves could be used to transmit the human voice. On Christmas Eve of 1906, he broadcast carols and a violin solo, by radio, across the Atlantic Ocean.

- In the 1920s, Pitt graduate Vladimir Zworykin invented a TV transmitting and receiving system employing cathode-ray tubes, an advance that was critical to the

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## Chancellor Names Winners of Staff Awards For Excellence in Service

By Baidou Saidu

Chancellor Mark A. Nordenberg has announced the winners of the 2012 Chancellor's Awards for Staff for Excellence in Service to the Community and to the University. The honorees were recognized during the University's 36th Annual Honors Convocation on Feb. 24.

The Award for Staff for Excellence in Service to the Community recognizes staff members whose work in the community surpasses the expectations of the organizations they serve and whose commitment and effort have made a significant impact on the community. The two award recipients are **Peter L. DeNardis**, a senior information analyst in Pitt's Office of the Chief Financial Officer, and **Penny Semaia**, assistant athletic director for student life in Pitt's Department of Athletics.

The Chancellor's Award for Staff Excellence in Service to the University recognizes staff members who not only exceed job standards and expectations in performing their duties, but also make a significant impact on the University through their commitment and performance. The following four Pitt staff members were chosen to receive the award: **Natalie Arnold Blais**, recruitment and academic affairs administrator within the Graduate School of Public Health; **Shawn E. Brooks**, associate dean and director of residence life in the Division of Student Affairs; **Christina L. Graham**, director of student activities at Pitt-Bradford; and **J. Andrew Holmes**, machinist supervisor in the Swanson School of Engineering.

Each awardee will receive a \$2,500 cash prize and have his or her name added to a plaque displayed in the William Pitt Union that is inscribed with the names of all recipients of the Chancellor's Awards.

### Staff Excellence in Service to the Community

The chancellor praised **DeNardis'** commitment and service to the International Waldenstrom's Macroglobulinemia Foundation (IWFM), a support organization formed for a rare type of blood cancer that DeNardis himself is battling. In his Feb. 16 notification letter to DeNardis, the chancellor wrote that he was "struck by the fact that you not only are there to provide counsel and comfort to your fellow patients, but also work to improve the IWFM itself through your service on its Board of Trustees, and as a discussion list manager, webmaster, and patient database coordinator ..." The chancellor also said that DeNardis, in his role as a senior information analyst at Pitt, has "earned the respect and admiration" of his Pitt colleagues as well as those involved with IWFM. In a support letter for DeNardis' nomination, Judith May, IWFM president, praised his work, saying it has "enabled the foundation to significantly improve its outreach."

The award selection committee commended **Semaia** for his "above and beyond" service in the community, the chancellor said in his letter to Semaia. "On campus, our student athletes could not ask for a finer role model than to have a former standout

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## At the Feb. 24 winter meeting of the Pitt Board of Trustees, the following resolution was unanimously adopted:

### Resolution of the University of Pittsburgh Board of Trustees Relating to Commonwealth Support for the University

**RESOLVED**, that the members of the University of Pittsburgh Board of Trustees do hereby express their deep gratitude for past support from the Commonwealth and further express their pride in the quality and impact of the work done by the University of Pittsburgh as a public, state-related university; and be it further

**RESOLVED**, that the members of the Board of Trustees do hereby reaffirm their belief that further reductions to the University's state support, as recently proposed, should be eliminated and that the Commonwealth should re-affirm its intention to continue working with the University as an important partner in its status as a public, state-related university; and be it further

**RESOLVED**, that the members of the Board of Trustees of the University of Pittsburgh hereby commit themselves to advocating for these positions and look forward to joining forces with alumni, faculty, staff, students and other friends of the University in doing so; and be it further

**RESOLVED**, that this resolution be made a permanent part of the University's records, and that it be suitably inscribed and presented to the Honorable Tom Corbett, Governor of the Commonwealth of Pennsylvania; the Honorable Joseph B. Scarnati III, President Pro Tempore of the Pennsylvania Senate; the Honorable Dominic Pileggi, Senate Majority Leader; the Honorable Jay Costa, Senate Minority Leader; the Honorable Samuel H. Smith, Speaker of the Pennsylvania House of Representatives; the Honorable Mike Turzai, House Majority Leader; and the Honorable Frank Dermody, House Minority Leader.

# “Dramatically Disproportionate” Proposed Budget Cuts Will Hurt Pitt’s Mission and Impact as Economic Engine, Chancellor Says



COURTESY OF PA HOUSE APPROPRIATIONS COMMITTEE

Pitt Chancellor Mark A. Nordenberg (right) and Penn State President Rodney Erickson listen intently during a Feb. 22 hearing on proposed budget cuts for higher education, held before the Pennsylvania House of Representatives Appropriations Committee in Harrisburg. Temple University and Lincoln University presidents Ann Weaver Hart and Robert Jennings, respectively, also testified during the hearing on the proposed funding cuts for Pitt, Penn State, and Temple. Gov. Tom Corbett has proposed no change in Lincoln’s state funding for 2012-13.

**For more than two centuries, Pitt has advanced the long-accepted values that access to higher education is a key to individual pursuit of the American dream and that a well-educated populace is essential for national and regional prominence and prosperity.**

(This is Pitt Chancellor Mark A. Nordenberg’s written testimony that was submitted to the state House of Representatives’ Appropriation Committee on Feb. 22, 2012. He will address the state Senate Appropriations Committee on Feb. 29, 2012.)

Because of the hard work done by so many, the University of Pittsburgh is moving through what should be another banner year, building on its enviable record of impact and accomplishment in education, research, and public service. Pitt also is moving through an historically important year, with next week bringing the 225th anniversary of our founding, as a log-cabin academy situated at the edge of the frontier. Unfortunately, what almost certainly will prove to be most memorable about 2012 is that an already brutal budget year has been made far worse by another proposal for deep and disproportionate cuts. To put that proposal in perspective:

- It would take our cumulative two-year cuts in state support to well in excess of \$100 million;
- It would reduce our state support, in absolute dollars, to levels that we have not seen since the mid-1980s, more than a quarter century ago and when the state’s own budget was about one-third its current size; and
- It would reduce our state support, if

adjusted for inflation, to the lowest level since Pitt became a state-related university.

In terms of proportionality, perhaps nothing is more telling than the proposed general fund budget’s bottom line. Overall state funding would be reduced by less than one-tenth of 1 percent, or \$22.456 million. The cuts proposed just for Pitt are more than double that amount.

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For more than two centuries, Pitt has advanced the long-accepted values that access to higher education is a key to individual pursuit of the American dream and that a well-educated populace is essential for national and regional prominence and prosperity. These twin beliefs drove the conversion of Pitt and Temple, two well-regarded private universities, to state-related status in the mid-1960s, a public status already claimed by Penn State. In effecting this change, there was a desire both to meet the growing demand from Pennsylvanians for reasonably priced, but high-quality, university experiences and to invest in anchor institutions that could help fuel both social vibrancy and economic growth in Pennsylvania’s two major urban areas, a role that has become increasingly important in the innovation-driven global economy of the 21st century.

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# Cynthia Miller, Director of University Of Pittsburgh Press, to Retire in 2013

Cynthia Miller, director of the University of Pittsburgh Press since 1995, will retire from the University, effective February 2013, Pitt Provost and Senior Vice Chancellor Patricia E. Beeson announced to the University community.

“Under Cynthia’s leadership, the University of Pittsburgh Press has grown and thrived,” said Beeson. “She has overseen the publication of more than 850 titles, the sustenance of eight long-standing series, and the founding of six more, including world-renowned series in English composition, Latin American studies, creative writing, and the philosophy of science.

“Cynthia also has served as steward to many important technological developments,” Beeson added, “including the establishment of an e-books program and the introduction of the Espresso Book Machine in the Pitt Book Center for print-on-demand titles, one of the first of its kind among university presses.”

In 2007, the Press launched the University of Pittsburgh Press Digital Editions in collaboration with Pitt’s University Library System. This database of electronic scholarship now includes more than 750 open-access and fully searchable titles, facilitating Pitt researchers and the broader academic community.

During the Press’ 75th anniversary celebration in 2011, Miller compiled and edited

and the Press published *The Pittsburgh Reader: Seventy-five Years of Books About Pittsburgh* to commemorate the occasion. The book, which contains selections from books published throughout the Press’ history, illustrates the progress of the Press through the years and serves as a landmark text illustrating the progress of a major

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Cynthia Miller

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## 225 Stories to Celebrate

### Pitt Leads the Way in Research on Aging



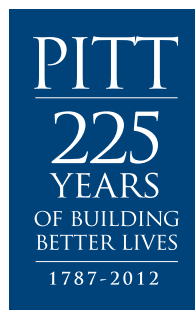
Extensive resources for geriatric research combined with Pittsburgh’s senior-heavy demographic make Pitt a national model for aging science and clinical programs. **Charles Reynolds**, director of the Pitt Aging Institute, calls Pitt’s opportunity to be a leader in the field “second to none.”

As part of his research, **Neil Resnick**, Pitt’s Thomas Detre Professor of Medicine and chief of UPMC’s Division of Geriatric Medicine and Gerontology, works to dispel myths surrounding one of the most common syndromes affecting older adults— incontinence. Resnick’s research has shown that incontinence is not part of normal aging or dementia and has uncovered more effective ways to treat it.

The gerontology program in Pitt’s University Center for Social and Urban Research (UCSUR) focuses on social effects of aging. In a recent study of 1,330 older married couples, UCSUR found that husbands whose wives reported high levels of suffering were nearly twice as likely to have cardiovascular disease and depression compared with those whose wives did not report suffering.

In Pitt’s School of Social Work, initiatives like the Hartford Partnership Program for Aging Education help to train social work professionals to serve older adults.

For more stories about Pitt’s legacy of achievement or to share your own stories about the University, visit [www.225.pitt.edu](http://www.225.pitt.edu).



# BlackHistoryMonth

## Alaine Allen Is Investing in the Future of Youth

By Audrey M. Marks

As a student, Alaine Allen excelled in math and science, all the way from elementary school through college. And in her first job as a physics teacher in the Woodland Hills School District, she was confident that she could engage her students in the sciences. Early on in her career, Allen realized that her true passion was more in connecting with and guiding students than in teaching science.

One particular incident brought this realization to the fore: During a fifth-period physics class, a student burst into Allen's classroom in tears. The student, a teen mother, told Allen that her boyfriend had been shot and hospitalized the night before. Following school protocol, Allen walked with the student to the Student Assistance Program office.

"The woman in the office quickly returned the student to my room and offered to cover [my] class while I talked to the student," Allen recalled, adding, "I could teach physics well, and I could engage the students. But I realized that I was more excited and passionate about making a personal connection with the students."

So, in 1994, Allen left the classroom to work full-time for the University of Pittsburgh's INVESTING NOW, a program that encourages high school students from underrepresented populations to choose careers in the science, technology, engineering, and math (STEM) fields.

Today, she is the director of the Swanson School of Engineering's Pitt Engineering Career Access Program (PECAP), which helps open the STEM fields to students from underrepresented populations. PECAP comprises both INVESTING NOW and Pitt EXCEL, a program for Pitt students enrolled in the Swanson School of Engineering.

Allen, who earned bachelor's degrees in physics and secondary education in 1991 from Lincoln University, received her master's degree in education from Pitt's School of Education in 1993.

Since returning to Pitt, Allen has made her mark on campus. In 2011, she received the Chancellor's Affirmative Action Award, given annually to an outstanding University program area or individual that has made a significant contribution in affirmation action. In his letter to Allen informing her of the award, Nordenberg said the selection committee "lauded you as an ideal administrator

whose experience with the range of services provided by the Swanson School of Engineering and the University brings the continuity of commitment and vision necessary to maintain both the reach and the depth of PECAP's affirmative action mission." Nordenberg also noted that he was "particularly impressed" that Allen's nomination was supported by two former PECAP participants.

In 2010, Pitt's African American



Alaine Allen

Alumni Council presented Pitt EXCEL with the 2010 It Takes a Village Sankofa Award, recognizing the program's efforts to support the academic success of Pitt's African American students.

While Allen said the accolades are encouraging, one of her biggest career rewards is watching students succeed. She said she and Darryl Wiley, the INVESTING NOW assistant director, hope to expand the reach of the precollege program by increasing the number of students involved and discovering new opportunities

to engage high school students in math and science.

The INVESTING NOW program, established in 1988, accepts between 50 and 60 new eighth-grade students each year. Successful applicants must have an academic grade point average of 3.0 or higher, the recommendation of a teacher, healthy standardized test scores, and an interest in a STEM field.

Participating students take summer

noncredit math, science, and writing classes in the morning followed by an afternoon class involving them in a hands-on engineering project. With a total of 150 students in the program today, INVESTING NOW works with students as they progress through high school, offering academic enrichment as well as advising, tutoring, hands-on science and engineering seminars, and other opportunities designed to help them make informed college choices.

"Some students are the first in their families to attend college and don't know how to navigate the process," Allen said. "In other instances, parents may not know the [STEM] profession or the college admissions requirements to enter those majors. We are here to offer students support and to encourage parent involvement."

The INVESTING NOW program has impressive results: 94 percent of the most recent class, the Class of 2011, enrolled in college, with 64 percent pursuing STEM-related fields. Of those students, 13 percent enrolled at Pitt.

Allen said she understands the value of teacher encouragement for teens. When she was in middle school, a teacher encouraged her to explore her passion for math and science through a similar program. As an Allerdice High School student, she enrolled

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in the precollege program INROADS, where she attended summer classes at Duquesne University and even a class in Pitt's Benedum Hall. The math, science, and writing courses helped to strengthen Allen's academic skills and introduced her to STEM careers.

"I was attracted to the STEM field through the interaction with teachers and other adults who encouraged me to pursue a career in science," Allen said. "No one I was connected to personally at the time could help me navigate a career and future in math and science. I was attracted to these precollege programs because of the interaction and guidance."

In addition to reaching students years before they enter college, Allen also works with enrolled students at Pitt through the Pitt EXCEL program. The comprehensive initiative aims to bolster the recruitment, retention, and graduation rates of engineering students from underrepresented populations.

Allen describes the Pitt EXCEL Summer Engineering Academy as an academic boot camp for Pitt freshmen, with the students taking math, physics, chemistry, and engineering problem-solving classes. They also learn about campus resources and career development. The sessions include community building and "mandatory fun time," Allen said, which includes game night, a trip to Kennywood, and a Pirates game.

In addition to the Summer Engineering Academy, Pitt EXCEL offers participants academic counseling, tutoring, peer mentoring and professional development. "The rigor of the engineering program requires a support network," Allen said. "Students need to understand that they will have a better chance of being successful if they enter it knowing about these supports."

As a former science major, Allen said she remembers the stress of the academics: "At Lincoln, I had a program similar to Pitt EXCEL and teachers who helped me through the stress and pressure of being a STEM student," Allen said. "We know Pitt is a large university and students are adults, but it is important to help guide our students through this process."

# Honoring a Legacy of Building Greatness, Transforming Lives, and Holding Fast to a Faith in Education

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development of the television industry. It is said that Dr. Zworykin later identified his favorite part of a television set as “the switch, to turn the damn thing off.”

- In the 1930s, Pitt chemistry professor Charles King synthesized vitamin C, which prevents scurvy, one of humankind’s oldest diseases.

- In the 1950s, a Pitt team led by the late Jonas Salk and including current Pitt faculty member Julius Youngner developed the vaccine that won America’s long war against the dread disease of polio. This has been widely hailed as one of the greatest accomplishments of the 20th century.

- In the early 1960s, a Pitt team led by Panayotis Katsoyannis synthesized insulin. Until this time, insulin for human treatment was obtained from sheep and cows through a process that was messy, complicated, and expensive.

- Building on his Pitt graduate studies in the late 1950s and early 1960s and through work extending into the 1970s, alumnus Paul Lauterbur developed the science upon which magnetic resonance imaging was built. For this contribution, he was awarded the Nobel Prize in Medicine.

- Beginning in the 1960s and extending through the 1970s, Pitt professor (and double Pitt graduate) Bernie Fisher led studies concluding that breast cancer is a systemic and not a local disease, which resulted in dramatic and hugely beneficial changes in its treatment. There are those who believe that Dr. Fisher has done more to advance women’s health than any other person in history.

- In the 1970s, the recombinant DNA, gene-splicing work done by Pitt graduate and former Trustee Herb Boyer opened up what had been unimaginable possibilities for dealing with disease. That work was said by *Time* magazine to have “forever changed the course of civilization.” It also led to Herb’s founding of Genentech, marking the beginning of this country’s biotechnology industry.

- In the 1980s, Pitt professors Henry Bahnson and Thomas Starzl performed the world’s first double-organ transplant. During that same period, most of the surgical techniques and drug therapies that made human organ transplantation a widely available treatment option were developed here.

That essentially takes us up to the time of our 1987 bicentennial celebration. And

In the 1930s, Pitt chemistry professor Charles King synthesized vitamin C, which prevents scurvy, one of humankind’s oldest diseases.



in the last 25 years, as you all know, Pitt has just exploded—as an educational institution-of-choice for ambitious, hardworking students across almost every discipline; as one of the world’s most respected centers for pioneering research; and as one of the institutional anchors that helped Southwestern Pennsylvania move successfully through one of the most wrenching economic transformations ever experienced by any region.

In today’s Pitt, our principal responsibility can be seen as doing honor to the legacy of those who came before us by advancing their work through our own efforts to effectively build upon it. In that pursuit, we have continued to build momentum on all fronts. Let me rely on just a few examples which have arisen just since our fall meeting.

Cory Rodgers, the first university student in a four-generation family of bricklayers from Somerset was one of 32 students nationally to be named a 2012 Rhodes Scholar. Cory will graduate with a triple major—in Africana studies, the biological sciences, and the history and philosophy of science—and with a minor in chemistry. He also studied Swahili. In addition to pursuing his academic work, he tutored a Somali-Bantu refugee family; served as a hospice volunteer; and worked in UPMC’s patient transport division. He did an alterna-

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Jonas Salk (left) and Julius Youngner

tive spring break with Habitat for Humanity and spent summers studying in Mongolia and Tanzania.

Cory is the fourth Pitt undergraduate in the past seven years to be named a Rhodes Scholar, a record equaled by only one other public university, the University of North Carolina. He also represents the large number of Pitt students who compete successfully each year with the very best students from the country’s strongest universities for the highest national honors. Since we last met, Pitt also was again recognized as one of the country’s top producers of student Fulbright award-winners.

In terms of alumni achievement, let me again offer just a single example. And in this case, I look right into the heart of this group at Trustee Bill Strickland, who recently traveled to Japan to receive the Goi Peace Award. Past recipients have included Microsoft founder and philanthropist Bill Gates; former Costa Rican President and Nobel Peace Laureate Oscar Arias; social entrepreneur Bill Drayton; and Indian physician and author Deepak Chopra.

Bill was recognized for his visionary work in helping “the underserved transform their lives” and in “inspiring others to dream bigger.” The selection committee stated, “By offering innovative educational and cultural opportunities with emphasis on the arts, beauty, and respect, Mr. Strickland has empowered thousands of youth and adults to restore hope and dignity and become creative contributors to their communities.” Bill, we proudly claim you—as graduate, Trustee, and friend.

And today, Bill really stands as one among many inspiring examples of all the good that can be done with a Pitt education. As you all know, just since the dawn of this new century, our graduates have captured such high honors as the Nobel Peace Prize, the Nobel Prize in Medicine, the Pulitzer Prize for Fiction, the National Book Award for Poetry, the National Medal of Science, the Fritz Medal for Engineering, and the Shaw and Albany Prizes in Medicine. That record would be the envy of virtually any university.

Within the faculty, it is hard to know where to begin and end, because so many important forms of recognition have been earned just in the past few weeks. Let me, then, rely on a group example.

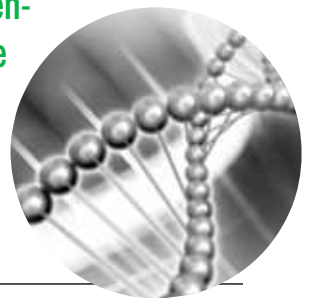
As you know, Pitt faculty members are expected to impart knowledge about their fields, as all teachers do. But they also are expected to be at the forefront of expanding

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Panayotis Katsoyannis

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the base of human knowledge by building their fields. Our faculty members continue to build an enviable record of doing just that, across wide-ranging disciplines.

Often, in fact, we dominate key fields. But I am not sure that I ever have seen such a stark example as the one I am about to share. At its annual meeting in Houston earlier this month, the Society of Critical Care Medicine selected 20 world-renowned intensivists to be the first to receive its highest honor—designation as a Master in Critical Care Medicine. Seven of the 20 members of that inaugural class of honorees came from Pitt, which is just extraordinary.

Three of the seven no longer are in active service with us—the late Peter Safar, the father of CPR, a great human being, and a person who belongs on any list of legendary Pitt faculty members; Professor Emeritus Ake Grenvik, also a giant in his field, a beloved member of this community and, along with John Swanson and John Petersen, surely among the most important Scandinavians in the Pitt family; and Mitchell Fink, the founding chair of our critical care medicine department, who left academia to start a company based on technology that he had developed.

Four of the 20, which still is one-fifth of the entire group, continue to work among us. They are Derek Angus, the current department chair; Pat Kochanek, the director of the Safar Center for Resuscitation Research; Ann Thompson, the associate dean for faculty affairs in the School of Medicine; and Michael Pinsky, who also serves as the president of the University Senate.

Much of our faculty research, particularly in the sciences and health sciences, is supported by outside funding. We continue to rank among the top American universities, both in funding from the National Institutes of Health and in overall federal science and engineering research and development support. Our research expenditures last year exceeded \$800 million—an amount that is a widely accepted measure of institutional strength, that advances pioneering work, and that supports, directly and indirectly, some 28,000 local jobs. This is one reason that the education and health

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Thomas Starzl

services supersector has been this area's most consistent source of job growth and now accounts for more than one in five jobs in this region.

It also is important to note that federal agencies are not the only organizations investing in Pitt's education and research enterprise as an effective means of supporting economic growth. Earlier this month, it was announced that the Richard King Mellon Foundation had awarded a \$22 million grant to Pitt's Center for Energy. Scott Izzo, the executive director of the foundation, said at the time, "The center has tremendous potential to make an impact in Pittsburgh, as energy will be the major driver of our regional economy for years to come."

#### National Award-Winning Students 2000 to 2012

- 4 Rhodes Scholars
- 1 Gates Cambridge Scholar
- 4 Udall Scholars
- 5 Marshall Scholars
- 5 Truman Scholars
- 23 Goldwater Scholars



Those actively engaged in the energy sector agreed. Steve Tritch—who was not our Board Chair when he served as CEO of Westinghouse—reminded everyone that a key factor in that major employer's decision to build its new corporate headquarters in Southwestern Pennsylvania was the presence of Pitt, as a principal educator of its professional workforce and as a partner in energy research. Anthony Cugini, director of the National Energy Technology Laboratory, said that his lab "is charged with advancing energy options to fuel our economy, strengthen our security, and improve our environment" and "Pitt and the Center for Energy are among our most active collaborative partners in this effort." Dennis Yablonsky, CEO of the Allegheny Conference on Community Development, added that "Pittsburgh is the new center of innovation in American energy. . . . Pitt's Center for Energy has played a key role in these efforts, and we applaud the Richard King Mellon Foundation's investment in enhancing the University's capabilities."

With a such a strong record of impact—in education, in research, and in public service through economic development—and with testimonials like these, one might expect that the Commonwealth, too, would be stepping forward to say: "We really helped create something special when Pitt became a state-related university in 1966; there is no place that we are getting a higher rate of return on our appropriations; so, let us do the sensible thing and increase our investments in Pitt."

That approach would be particularly consistent with a belief in "a future that embraces innovation in emerging frontiers of energy, life sciences, and biotechnology," as described in the Governor's inaugural address. It also would be consistent with the "certainty" expressed in that same document "that the best way to embrace innovation—the best way to make us competitive—is to make us competitive in education."

It would be difficult to find many institutions with greater strengths in energy, life sciences, and biotechnology than the University of Pittsburgh. And in Pitt, Pennsylvania can claim, as one of its own public universities, an institution that already has established itself as a respected global competitor in both education and research.

Still, for the second successive year, Pitt, along with Pennsylvania's other public research universities and public higher education more generally, is being asked to bear far more than its fair share of the reductions required to balance the Commonwealth's budget for the next fiscal year. The largest of the proposed cuts has been rather widely publicized—a 30 percent cut to our education and general appropriation, on top of the 19 percent cut already imposed last year. In addition, the proposed budget would reduce our academic medical center lines by 10 percent, on top of the 50 percent cut already imposed last year.

This would reduce our appropriation, in absolute dollars, to levels that we have not seen since 1987, more than a quarter century ago. And today's overall state budget is three times larger

than it was then. Put another way, it would reduce our state support, if adjusted for inflation, to the lowest level since Pitt became a state-related university.

Even that is not the complete story, though. In late fall, our annual capital projects support was cut in half, from \$40 million to \$20 million. And in January, we were subjected to a midyear cut of 5 percent, or \$7 million.

Finally, though little public attention has been paid to it, this budget proposal would quietly, but completely, eliminate the Commonwealth Universal Research Enhancement program—which was established more than a decade ago, during the administration of Governor Ridge and with the strong support of both houses of the Legislature. The CURE program, as it is known, was created by the Tobacco Settlement Act of 2001, which committed a portion of the funds recovered from tobacco companies to health-related research with the goal of improving the lives of current and future citizens of Pennsylvania.

CURE funding has supported thousands of good-paying, knowledge-based Pennsylvania jobs focused on the goal of improving future health. Using CURE funds, as the budget proposal envisions, to plug a short-term hole in senior care instead of investing them in research infrastructure and scientific innovation will simply maintain the unsustainable status quo in health care.

To return to language already cited from last year's inaugural address, it seems almost impossible to reconcile such a budgetary action with a vision for our collective future that has been tied to "innovation in emerging frontiers of energy, life sciences, and biotechnology."

And it is every bit as hard to reconcile the more general budgetary approach being employed with what was the most inspiring passage from this year's budget address—the declaration that "[w]e cannot allow the debts of today to crowd out the dreams of tomorrow."

Building the best possible future, of course, depends directly upon two of our principal products—education and innovation. An approach to budget balancing built on record-setting cuts for public research universities, then, inevitably does sacrifice tomorrow's dreams.

In 1831, during his American travels, Alexis de Tocqueville wrote this to a friend in Europe: "The effort made in this country to spread instruction is truly prodigious. The universal and sincere faith that they profess here in the efficaciousness of educa-



tion seems to me one of the most remarkable features of America."

Faith in education has been one of the distinguishing features of this country, and it is one of the forces that has helped drive America's unparalleled record of sustained success. Certainly, the products of that faith have helped not only to shape our home region since the days of Hugh Henry Brackenridge but to positively reshape that region in the face of the challenges of the more recent past.

How tragically ironic it would be to see that long-term faith undermined by budget builders held prisoner to short-term fiscal pressures in the year that brings the 225th birthday of both the structuring of our national government and the chartering of our University. But what better way to celebrate those historic anniversaries than by acting on that faith and working together to restore appropriate levels of support for public higher education—not mainly for our own good, but for the good of all who will follow . . . in the spirit of 1787.

Happy Birthday, to Pitt and to all who care about Pitt . . . including, of course, all of you.

# “Dramatically Disproportionate” Proposed Budget Cuts Will Hurt Pitt’s Mission and Impact as Economic Engine, Chancellor Says

Continued from page 2

The most thoughtful in a succession of state master plans, issued shortly after the creation of the State System of Higher Education, labeled Pitt, Penn State, and Temple as the “Commonwealth Universities” and described their expected contributions in the following way: *The Commonwealth Universities . . . serve as the state’s major public research universities. Together, these institutions offer a broad range of educational programs and services and carry special responsibilities for research, advance graduate instruction, and for education in the professions, including law, medicine, engineering, business, and agriculture. . . . The scope and quality of their programs and their geographic distribution permit them to serve the needs of the state and nation in the fields of undergraduate, graduate, and first professional education, research, and public service. Along with the major independent universities in the state, the Commonwealth Universities are the principal centers for research and development in Pennsylvania.*

Pitt’s performance in this assigned role has been nothing short of remarkable. The strength of our educational programs at all levels has made us a magnet for ambitious, hard-working, high-potential students from across the country and around the world. However, consistent with our public mission, we have attracted particularly large numbers of Pennsylvania students, increasing the likelihood that, over the longer term, they will live, work, and contribute here. We also have become an internationally respected center for pioneering research, ranking among the top five American universities in support attracted from the National Institutes of Health and among the top 10 American universities in total federal science and engineering research and development support. During the last fiscal year, our research expenditures exceeded \$800 million—expenditures that are an accepted measure of institutional strength, fund important work, and support, directly and indirectly, more than 28,000 local jobs.

Though our service mission takes many forms, none has been more important than the role that we play as an engine for economic growth and as a generator of jobs. We sit at the heart of the education and health services “supersector”—by far, Southwestern Pennsylvania’s largest employment sector and a source of what has been substantial and dependable job growth, even as the nation has struggled to move through the “jobless recovery” from the Great Recession.

Given this impressive record of success, the Commonwealth’s current retreat

from support for its public research universities must be viewed as very problematic by anyone concerned about the next generation of Pennsylvanians or about Pennsylvania’s next-generation economy. Extending last year’s pattern of reductions, these institutions—despite a long record of unique and exceptional contributions to the progress of the Commonwealth—once again are being targeted for dramatically disproportionate budget cuts.

**To be fair, the budget pressures faced by state government are daunting. Dealing with them can involve painful funding decisions, with success depending upon a spirit of shared sacrifice. And to be clear, Pitt never has resisted doing its fair share. What we must resist—not only for ourselves, but for the many who depend upon us—are disproportionately deep cuts that threaten Pitt’s ability to continue making critical contributions, either to deserving individuals or to a vibrant, more productive region.**

**After a past decade that brought cuts to our appropriation almost every year and a past year that brought the steepest cuts in our history, this year’s budget proposal contains reductions that would be even more devastating.**

As another reminder, this 22 percent reduction to our state support came during a year in which overall state spending decreased by only 4 percent. Late in the fall, we also were notified that our annual capital projects support would be cut in half, from \$40 million to \$20 million. Then, in January, we were directed to put another 5 percent—or \$7 million—into “budgetary reserve.” To return to the issue of proportionality once again, the state-related universities, whose appropriations account for less than 2 percent of the state’s budget, were

directed to shoulder nearly 16 percent, or about eight times that amount, of this mid-year reduction.

To this point, our accumulated cuts for this fiscal year total \$67 million. To be more contextually descriptive, let me give that very large number more practical significance. If we had tried to deal with a \$67 million cut solely through workforce reductions, that would have required us to eliminate more than 1,000 Pitt staff jobs carrying average levels of compensation and benefits. Or if we had tried to deal with a \$67 million cut solely through tuition increases, that would have required an average tuition increase of about \$2,600 for each of our in-state students. For an in-state undergraduate student enrolled

## Successive Waves of Deep Cuts.

To be fair, the budget pressures faced by state government are daunting. Dealing with them can involve painful funding decisions, with success depending upon a spirit of shared sacrifice. And to be clear, Pitt never has resisted doing its fair share. What we must resist—not only for ourselves, but for the many who depend upon us—are disproportionately deep cuts that threaten Pitt’s ability to continue making critical contributions, either to deserving individuals or to a vibrant, more productive region.

This fiscal year began with a 22 percent—or \$40 million—combined reduction to our education and general appropriation and our academic medical center support lines.



Chancellor Mark A. Nordenberg speaks on Feb. 20 to a group of interested students about proposed cuts to Pitt’s state funding that were announced Feb. 6. The University’s Student Government Board is taking an active stance in providing information to students and assisting in advocacy efforts to reverse the proposed reductions.

**In his budget address, the Governor declared, “We cannot allow the debts of today to crowd out the dreams of tomorrow.” Unfortunately, it is hard to look at the cuts proposed for Pitt and Pennsylvania’s other public research universities without feeling that this is just what has happened—that dreams are being sacrificed in an effort to deal with current debt.**

in the arts and sciences on the Pittsburgh campus, that would have been an 18.5 percent increase and would have taken tuition to \$16,676 per year. For an in-state undergraduate student enrolled in the arts and sciences on a regional campus, that would have been a 23 percent increase and would have taken annual tuition to \$13,886.

We did not adopt either of those approaches. Instead, we worked to maintain employment levels—consistent with the still-rising demand for our services—while dealing with part of our deficit by delaying salary increases for most employees. We imposed more tempered increases in tuition of 8.5 percent, to \$15,272, for in-state undergraduates in the arts and sciences in Pittsburgh and by 4.0 percent, to \$11,736, for in-state undergraduates in the arts and

sciences on our regional campuses. And, in the spirit of shared sacrifice, we made up for much of this massive loss of state support through budget reductions that either were managed centrally or were distributed by senior leaders to the units reporting to them. Over the past four years, by imposing aggressive cost-cutting efforts, we have removed nearly \$200 million in ongoing operating costs.

After a past decade that brought cuts to our appropriation almost every year and a past year that brought the steepest cuts in our history, this year’s budget proposal contains reductions that would be even more devastating. The Governor has proposed an additional cut of 30 percent to our education

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# Proposed FY 2013 Budget Cuts

Continued from page 6



Pitt Chancellor Mark A. Nordenberg (left) shakes hands with Pitt Student Government Board (SGB) President James Landreneau during a Feb. 20 meeting in Alumni Hall's Connolly Ballroom. The SGB had arranged the meeting for students to inform them about the proposed cuts in Pitt's state funding for 2012-13.

and general appropriation for the next fiscal year (on top of the 19 percent reduction suffered this year) and a 10 percent reduction to our academic medical center line items (on top of the 50 percent reduction suffered this year). This would be a blended reduction of about 29 percent (on top of a blended reduction of 22 percent suffered last year), totaling nearly \$42 million. This budget proposal also would totally eliminate a long-standing and well-targeted program that has invested tobacco settlement revenues into health-related research. The dollar amounts flowing to Pitt have varied from year to year but have averaged more than \$9.2 million annually over the course of the last 11 years and have been vital in building the research facilities that helped Pitt researchers attract record levels of external funding.

Diminished levels of state support stand as the primary contributor to rising public university tuition and its impact on access and affordability. Virtually everyone who has seriously examined these issues has fairly called for colleges and universities to do even more to control their costs in these challenging times but also has recognized that the key culprit is reduced state funding.

In his budget address, the Governor declared, "We cannot allow the debts of today to crowd out the dreams of tomorrow." Unfortunately, it is hard to look at the cuts proposed for Pitt and Pennsylvania's other public research universities without feeling that this is just what has happened—that dreams are being sacrificed in an effort

to deal with current debt.

It might be said, in fact, that our basic activity is the business of building dreams. Pitt does that through the power of higher education as we help position tens of thousands of students, each and every day, to more effectively pursue the dreams that they have for their own lives. And we do it, often more dramatically, through our programs of research. Sixty years ago, all of America was desperately dreaming about a cure for polio, and that dream became a reality through work done at the University of Pittsburgh. Thirty years ago, both physicians and patients were dreaming about a time when human organ transplantation might become a widely available treatment for a range of deadly diseases. That dream, too, became a reality through work done, to a large extent, at Pitt. Today, when people think of a world without Alzheimer's disease or cancer or diabetes or Parkinson's disease, they often look to the work of Pitt researchers. The same also can be said about dreams of a world made

better by more accessible and less expensive energy or by the miracles of nanotechnology or quantum computing or by any of a number of other advances.

In a very real sense, the Governor perfectly defined our challenge—to not let the debts of today crowd out the dreams of tomorrow. However, the deep and disproportionate cuts proposed will not let us travel to where we hope to be. In the weeks ahead, then, we hope to work with members of the Legislature, as well as with the Administration, to find better ways to continue building the foundation for a strong Pennsylvania, which should be our shared goal.

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Eartha Kitt leaping through poster to launch a Citizen's Committee on Hill District Renewal program; photo by Teenie Harris

## Pitt to Sponsor Feb. 28 Black History Month Program Launching New Book, *Teenie Harris, Photographer*

By Sharon S. Blake

The University of Pittsburgh Press and Pitt's Office of Public Affairs will celebrate the launch of a new book, *Teenie Harris, Photographer: Image, Memory, History* (University of Pittsburgh Press, 2011), at a special Black History Month program at 5:30 p.m. Feb. 28 at the Twentieth Century Club, 4201 Bigelow Blvd., Oakland. The event is free and open to the public. Members of the public wishing to attend must RSVP to Pitt's Office of Public Affairs at 412-624-4147 or [frontdesk@umc.pitt.edu](mailto:frontdesk@umc.pitt.edu).

The book—coauthored by Pitt history professor Laurence Glasco, who will speak at the event—reveals the essence of African American life in Pittsburgh from the closing years of the Great Depression through the era of the civil rights movement. As a photographer for *The Pittsburgh Courier*, Harris captured on film historic events and celebrities coming through town, as well as everyday scenes at Hill District locations. Joe Trotter, who will also speak at the event, and Cheryl Finley are coauthors.

*Teenie Harris, Photographer: Image, Memory, History* was recognized at the Black Caucus of the American Library Association's 2012 Literary Awards in January, winning the Outstanding Contribution to Publishing Citation.

The evening will begin with remarks by Pitt Vice Chancellor for Public Affairs Robert Hill, followed by remarks by University of Pittsburgh Press Director Cynthia Miller. Trotter, Giant Eagle Professor of History and Social Justice at Carnegie Mellon University, will make a presentation and take questions, followed by a presentation and brief Q&A session by Glasco. The evening closes with a reception, book sale, and book signing.

Glasco, a professor of history in Pitt's Kenneth P. Dietrich School of Arts and Sciences since 1969, has for many years documented the contributions of African Americans to Western Pennsylvania. He was historical director of the Pitt-produced exhibition *Free at Last? Slavery in Pittsburgh in the 18th and 19th Centuries*, which was on display from October 2008 through April 2009 at the Senator John Heinz History Center, Strip District. Over the years,

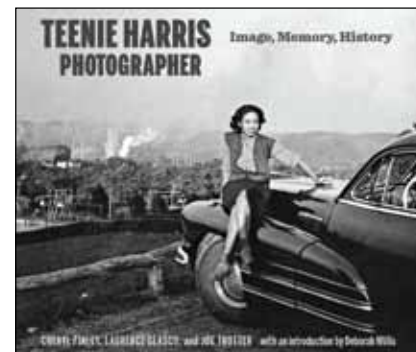
**Teenie Harris' body of work reveals the essence of African American life in Pittsburgh from the closing years of the Great Depression through the era of the civil rights movement. As a photographer for *The Pittsburgh Courier*, Harris captured on film historic events and celebrities coming through town, as well as everyday scenes at Hill District locations.**

Glasco's comments and insights have been part of a number of documentaries screened as part of Pitt's K. Leroy Irvis Black History Month Program.

Glasco's publications include *August Wilson: Pittsburgh Places in His Life and Plays* (Pittsburgh History & Landmarks Foundation, 2011), *The WPA History of the Negro in Pittsburgh* (University of Pittsburgh Press, 2004), and *A Legacy in Bricks and Mortar: African-American Landmarks in Allegheny County* (Pittsburgh History & Landmarks Foundation, 1995).

Trotter has served as Carnegie Mellon's Giant Eagle Professor of History and Social Justice since 2008 and was the head of the University's Department of History from 2001 to 2011. He is the founding director of Carnegie Mellon's Center for African American Urban Studies and the Economy (CAUSE), an interdisciplinary research institute that focuses on aspects of history, race, and policy.

Trotter is the author of *Race and Renaissance: African Americans in Pittsburgh Since World War II* (University of Pittsburgh Press, 2010), *The African American Urban Experience: Perspectives from the Colonial Period to the Present* (Palgrave Macmillan, 2004), and *The African American Experience, Volumes I and II* (Houghton Mifflin, 2011).



# Chancellor Names Winners of Staff Awards for Excellence in Service

Each awardee will receive a \$2,500 cash prize and have his or her name added to a plaque displayed in the William Pitt Union that is inscribed with the names of all recipients of the Chancellor's Awards.

Continued from page 1

Panther assisting them with career planning, facilitating the Panther Game Plan Life Skills program, promoting personal development, and encouraging them to participate in community service," Nordenberg wrote. Recently named one of Pittsburgh's *50 Finest* by the Cystic Fibrosis Foundation, Semaia also is involved in a number of community service programs, including The Polite Way, which assists single mothers, Big Brothers and Sisters, and Get Involved, for which he serves as president. Writing in support of Semaia's nomination, Tom Baker, founder of Get Involved, noted that he found Semaia's leadership skills and positive message to be "second to none in Western PA."

## Staff Excellence in Service to the University

Nordenberg, in his notification letter to Blais, wrote, "the committee was particularly impressed by the many ways in which you contribute to the success of others, including mentoring colleagues who do not report to you; helping GSPH students even after they graduate; helping new faculty; attending doctoral committee meetings; and volunteering for numerous activities." Blais was also commended for her significant contributions to the Staff Association Council (SAC), particularly her service as chair of the SAC Benefits Committee. The awards committee also noted Blais' initiative, commitment, and ultimate success in establishing a lactation room in the Graduate School of Public Health—a facility now used by faculty and staff across campus. Her efforts led the Allegheny County Health Department to present the Graduate School with its Breastfeeding Friendly Place Award in August 2011.

Brooks was commended by Nordenberg and the awards committee for his commitment to Pitt students and for consistently going "above and beyond his job requirements because of the amount of time, degree of enthusiasm, magnitude of involvement, and depth of personal connection he brings to his position." The chancellor, in his Feb. 16 notification letter, noted Brooks' willingness to work late in the evenings, overnight, and on weekends. Nordenberg also cited Brooks for his work on projects that go well beyond his duties, such as revamping the Univer-

sity's *Out of the Classroom Curriculum*. The chancellor wrote that he was impressed with Brooks' devotion of his spare time to the University through his service as an unpaid adjunct professor in the School of Education and as a pro bono advisor to graduate students.

Helping students clean their rooms after displacement owing to a flood is just one example of Graham's sense of responsibility toward Pitt-Bradford's students, according to the awards selection committee and Chancellor Nordenberg in his notification letter. One former student, who is now the coordinator of special events at the University of South Carolina, wrote in support of Graham's award application that Graham "worked 12 hours a day and most weekends; she lived to help her students succeed in life, and that is exactly what she did for me." Nordenberg also cited Graham's handling of a flooding incident that required Pitt-Bradford to find alternative housing for 370 students. The chancellor wrote that Graham "not only relocated the students, but also stayed with them overnight and assisted them in cleaning their rooms the next day. I should add that not only was the committee impressed with your dedication, but so too, was this Chancellor."

Holmes was selected for the award because he routinely goes the extra mile for the Swanson School and its engineering students, Nordenberg told Holmes in his notification letter. The chancellor recounted Holmes' nomination from U.S. Steel Dean of Engineering Gerald D. Holder, who stated that Holmes' "contributions have enhanced efficiency in the workplace, have been innovative and impacted productivity, and have resulted in cost-savings. He has demonstrated excellent customer service to a wide constituency, has extremely positive interpersonal skills, has reached out to the local community in significant ways, [and] has supported a team-oriented environment in the workplace ..." Nordenberg also said a number of students wrote in support of Holmes' nomination, one of whom said that Holmes knows "how to make a part from the designing phase all the way to testing it, dozens of prototyping methods, [and] the machining speed and feed for every metal I have ever dealt with ..."



Peter L. DeNardis



Penny Semaia



Natalie Arnold Blais



Shawn E. Brooks



Christina L. Graham



J. Andrew Holmes

# Quantum Computing Has Applications in Magnetic Imaging, Dutt-Led Research Shows

By B. Rose Huber

Quantum computing—considered the powerhouse of computational tasks—may have applications in areas outside of pure electronics, according to a University of Pittsburgh researcher and his collaborators.

Working at the interface of quantum measurement and nanotechnology, Gurudev Dutt, assistant professor in Pitt's Department of Physics and Astronomy in the Kenneth P. Dietrich School of Arts and Sciences, and his colleagues report their findings in a paper published online in the Dec. 18 *Nature Nanotechnology*. The paper documents important progress toward realizing a nanoscale magnetic imager comprising single electrons encased in a diamond crystal.

"Think of this like a typical medical procedure—a Magnetic Resonance Imaging (MRI)—but on single molecules or groups of molecules inside cells instead of the entire body. Traditional MRI techniques don't work well with such small volumes, so an instrument must be built to accommodate such high-precision work," says Dutt.

However, a significant challenge arose for researchers working on the problem of building such an instrument: How does one measure a magnetic field accurately using the resonance of the single electrons within the diamond crystal? Resonance is defined as an object's tendency to oscillate with higher energy at a particular frequency and occurs naturally all around us: for example, with musical instruments, children on swings, and pendulum clocks. Dutt says that resonances are particularly powerful because they allow physicists to make sensitive measurements of quantities like force, mass, and electric and magnetic fields. "But they also restrict the maximum field that one can measure accurately."

In magnetic imaging, this means that physicists can only detect a narrow range

of fields from molecules near the sensor's resonant frequency, making the imaging process more difficult.

"It can be done," says Dutt, "but it requires very sophisticated image processing and other techniques to understand what one is imaging. Essentially, one must use software to fix the limitations of hardware, and the scans take longer and are harder to interpret."

Dutt—working with postdoctoral researcher Ummal Momeen and PhD student Nausar (A&S'08 G), both in Pitt's Department of Physics and Astronomy—has used quantum computing methods to circumvent the hardware limitation to view the entire magnetic field. By extending the field, the Pitt researchers have improved the ratio between maximum detectable field strength and field precision by a factor of 10 compared to the standard technique used

previously. This puts them one step closer toward a future nanoscale MRI instrument that could study properties of molecules, materials, and cells in a noninvasive way, displaying where atoms are located without destroying them; current methods employed for this kind of study inevitably destroy the samples.

"This would have an immediate impact on our understanding of these molecules, materials, or living cells and potentially allow us to create better technologies," says Dutt.

These are only the initial results, says Dutt, and he expects further improvements to be made with additional research: "Our work shows that quantum computing methods reach beyond pure electronic technologies and can solve problems that, earlier, seemed to be fundamental roadblocks to making progress with high-precision measurements."



Gurudev Dutt

# Cynthia Miller, Director of University Of Pittsburgh Press, to Retire in 2013

Continued from page 2

American university press.

During Miller's tenure, University of Pittsburgh Press books have received 88 awards from 15 academic societies as well as from library and publishing associations and 11 major design awards. Two Pitt Poetry Series poets, Billy Collins and Ted Kooser, have been selected as U.S. Poets Laureate during Miller's tenure, and a third, Pitt professor of English Toi Derricotte, has been elected a Chancellor of the Academy of American Poets.

Before joining the University of Pittsburgh Press, Miller served as editor-in-chief of the University Press of Kansas. She also has held leadership positions in publishing at the Brookings Institution, the Catholic University of America Press, and Wesleyan University Press.

Among Miller's many honors is the prestigious Women's National Book Association Book Women Award on the occasion of the association's 70th anniversary recognizing top women in publishing, library science, literacy, and bookselling "who have made a difference" and being selected as one of only 10 university press representatives to be part of a 100-member United States Information Agency delegation to Moscow's International Book Fair in 1987.

Miller received her Bachelor of Arts degree in history from Virginia Polytechnic Institute and State University in 1973 and her Master of Arts degree in U.S. history from Duke University in 1975; she received a Managing Marketing Certificate from Catholic University's Graduate School of Business in 1986.

**"Under Cynthia's leadership, the University of Pittsburgh Press has grown and thrived. She has overseen the publication of more than 850 titles, the sustenance of eight long-standing series, and the founding of six more, including world-renowned series in English composition, Latin American studies, creative writing, and the philosophy of science."**

—Patricia E. Beeson