

Newspaper of the University of Pittsburgh

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### Pitt in Top Tier of Public Research Schools for Second Year

By John Harvith

For the second consecutive year, the University of Pittsburgh ranks in the uppermost tier of U.S. public research universities according to The Top American Research Universities, the recently issued 2007 annual report of The Center for Measuring University Performance.

The report again places Pitt in the company of only six other leading public research universities: the University of California at Berkeley, the University of California at Los Angeles, the University of Illinois at Urbana-Champaign, the University of Michigan at Ann Arbor, the University of North Carolina at Chapel Hill, and the University of Wisconsin at Madison.

For its annual report, the center clusters research universities by objectively assessing their performance on nine different measures: total research and development expenditures, federally sponsored research and development expenditures, endowment assets, annual giving, National Academies members, significant faculty awards, doctorates granted, postdoctoral appointees,

"This reaffirmation that Pitt is performing at the very highest levels across a broad range of important measures is a tribute to the talent and ambition that characterize the people of this community."

-Chancellor Mark A. Nordenberg

and median SAT scores. Tables in the annual report group research institutions according to the number of times they rank among the top 25 universities in these nine categories. The uppermost tier comprises those universities, including Pitt, that rank in the top 25 in all nine categories.

The center's coeditors-John V. Lombardi, president of the Louisiana State

University System, where he also is a professor of history, and Elizabeth C. Capaldi, executive vice president and university provost of Arizona State University-have described research universities as "highly competitive enterprises," saying that "those with the highest performance are successful in almost everything they do. As frequent readers of The Top American Research Universities know, we collect data on nine measures, and the best universities excel on all nine.'

In commenting on the University of Pittsburgh's performance, Chancellor Mark A. Nordenberg stated: "This reaffirmation that Pitt is performing at the very highest levels across a broad range of important measures is a tribute to the talent and ambition that characterize the people of this community. Pitt's inclusion in the very top cluster of America's top public research universities in last year's edition of this report was testimony to the seriousness of our commitment to quality in everything that we do. Our inclusion in that top cluster for a second consecutive year is especially gratifying because the competition is keen and other universities are constantly improving.'

In the center's inaugural 2000 study, Pitt was in the fourth cluster of public universities-along with the University of Arizona, Georgia Institute of Technology, Ohio State University, Purdue University, the University of California at Davis, the University of California at San Diego, and the University of Virginia, ranking among the top 25 public universities in six of nine categories.

As was explained in the introduction to that first study, though the center evaluates public and private universities in the same way, it also presents their performance separately "because the public and private research universities operate in significantly different contexts by virtue of their governance and funding structures. Private universities tend to have much larger endowments than public universities, while public institutions enjoy a much higher level of tax-based public support. Public universities tend to serve much more diverse constituencies in ways that affect their size and organization. Private universities often focus their efforts more closely and define

their missions more precisely." In January 2007, The Center for Measuring University Performance moved from the University of Florida, where it had been founded, to Arizona State University (ASU). The preparation and publication of The Top American Research Universities are now based at ASU.

### Faculty Members Dreyer-Lude, Oaks Win Bellet Awards

By Patricia Lomando White

Melanie Dreyer-Lude, an assistant professor in the University of Pittsburgh's Department of Theatre Arts, and Jeffrey Oaks, a lecturer in the Department of English, have been named winners of the 2008 Tina and David Bellet Arts and Sciences Teaching Excellence Award, Pitt's School of Arts and Sciences announced.

The Bellet Awards were established in 1998 with a \$200,000 donation from School of Arts and Sciences alumnus David Bellet (CAS '67) and his wife, Tina, to recognize outstanding and innovative undergraduate teaching in Arts and Sciences. A committee appointed by the Arts and Sciences associate dean for undergraduate studies evaluates teaching skills as evidenced by student-teaching and peer evaluations, student testimonials, and dossiers submitted by the nominees. Full-time faculty who have taught in Arts and Sciences over the past three years are eligible. Each award recipient receives a cash prize of \$5,000.

Dreyer-Lude and Oaks will be honored at an April 9 dinner in the ballroom of the William Pitt Union.

Dreyer-Lude is head of performance and director of the Master of Fine Arts (MFA) program in performance pedagogy in Pitt's theatre arts department. Prior to joining the University in 2000, Dreyer-Lude served from 1997 to 2000 as a teaching assistant in the Department of Theatre at Northwestern University. From 1993 to 1997, she was an artist-in-residence at Washington University and artistic director of ShatterMask Theatre, both in St. Louis, Mo.

Among Dreyer-Lude's numerous acting credits are roles in A Woman of No Importance, The House of Blue Leaves, On Golden Pond, Ten Little Indians, Camelot, and The Wizard of Oz. Her professional directing credits include plays in Capital Repertory Theater, Albany, N.Y.; Theater Rampe, Stuttgart, Germany; and Pittsburgh Irish and Classical Theater, barebones productions, and Pitt Repertory Theater, Pittsburgh. She also has directed many



Melanie Dreyer-Lude (left) and Jeffrey Oaks

academic productions.

Dreyer-Lude, who is fluent in German, has received various honors from Pitt, including a grant from the University's Department of Russian and Eastern European Studies for research and study at the Vakhatangov Institute, a Russian drama school in Moscow; a Research Abroad Program grant to investigate performance training techniques in Berlin, Munich, and Essen, Germany; and

established in 1998 with a

School of Arts and Sciences

Tina, to recognize outstand-

ing and innovative under-

graduate teaching in Arts

and Sciences.

\$200,000 donation from

alumnus David Bellet

(CAS '67) and his wife,

an Arts and Sciences Faculty Research Scholarship and Grant from the Central **Research Development** Fund for the German/ American bilingual international theater collaboration Outside Inn, produced at Pitt and Theater Rampe in Stuttgart.

Dreyer-Lude graduated cum laude with a Bachelor of Arts degree in theater and music from the University of Denver in 1983. She earned a master's

degree in drama from Washington University in 1992, and an MFA degree in directing

from Northwestern University in 2000. Oaks, who began his teaching career at University's Pittsburgh Contemporary Writers Series. He served as assistant director of Pitt's Writing Center from 1997 to 1999. Since 1991, Oaks has been a writer-in-residence for the Western Pennsylvania Writing Project. He also served as an instructor at the Western Penitentiary from 1993 to 1997 and a writer-in-residence at the Ellis School from 1994 to 1996.

The Moon of Books chapbook (Ultima Obscura Press, 2000) and The Unknown Country chapbook (State Street Press, 1992), which was chosen as winner of the State Street Press chapbook competition. (A chapbook is a small book or pamphlet containing poems, ballads, stories, or religious tracts.)

Pittsburgh Post-Gazette, Hanging Loose, Bloom, Seneca Review, 5 a.m., Ploughshares, Zone 3, Cumberland Poetry Review, Poetry Motel, Evergreen Chronicles, South-

> Pittsburgh Quarterly. Among Oaks

in creative writing (poetry) from Pitt in 1990. He also completed graduate study in poetry from 1986 to 1987 at the University of Montana

Pitt in 1990, also is managing director of the

He has written two poetry collections:

His poems have been published in the ern Poetry Review, and The Bellet Awards were

awards are three Pennsylvania Council on the Arts Fellowships—in 1992, 2000, and 2004 and an Individual Artist Grant from The Pittsburgh Foundation in 2000. He also was nominated for a Pushcart Prize in 1999.

Oaks earned a Bachelor of Arts degree in English literature from the State University of New York at Binghamton in 1986 and an MFA degree

# Women's History Month Patricia Beeson

### **A Guiding Force for Academic Excellence at Pitt**



Patricia Beeson

### By John Harvith

Later this year Patricia Beeson will celebrate the 25th anniversary of her arrival on the Pitt campus as a newly minted PhD in economics from the University of Oregon, ready to launch her academic career as an assistant professor of economics.

'My sister and I packed up the

role, I oversee 209

by faculty in 14 schools

graduate and professional

students. This represents

all graduate and profes-

sional programs Univer-

sitywide, including the

health sciences."

-Patricia Beeson

and more than 9,500

car and started off in Oregon, where I was born, grew up, went to high school, and got my bachelor's degree in economics [at Oregon State University] in addition to my graduate edu-cation," she recalls. "It took us a week to drive to Pittsburgh. Every morning we would listen to Simon and Garfunkel sing 'America' ['They've all come to look for America'] and made sure the part where they sing 'we boarded a Greyhound in Pittsburgh' was playing as we went through the Fort Pitt tunnel!"

Beeson says she was "a sheltered West Coast Oregonian" back

in the summer of 1983, one of a family of six kids, "right in the middle, the only academic in the bunch," and yet "came here to be in a big city."

Why did she come? "Because I'm an urban economist, and Pitt has had a long tradition in urban and regional economics as one of the strongest programs in the U.S. in that area. It was great to join that tradition.

"Like most people beginning an academic career, I thought I would be here a short while, hoped to get tenure, but didn't know whether it would work out. I didn't expect to be here that long, but 25 years later, here I am. I was hopeful, but you never know," she says.

It turned out to be a case of being in the right place at the right time for an academic "In my graduate studies researcher focused on studying the effects of radical shifts in a major urban region's graduate and professional economies. degree programs offered

"When I arrived here, in the early '80s, the region was in great decline with the mills closing," Beeson remembers. "My initial research interests were why certain regions grow and others decline, and what the impact of that growth and decline is on labor markets and other aspects of the local economies." As it happened, Beeson's interests squared with those of the Federal Reserve Bank in Cleveland, and during her

third year at Pitt, she began a long-term, ongoing relationship with the Fed. "The bank asked me to come there because there were a lot of synergies between my research interests and its interests: The Federal Reserve had special concern about the fourth district-which includes parts of Pennsylvania, West Virginia, Ohio, and Kentucky-and the industrial decline, which it knew I was studying."

Later on in her affiliation with the Fed and in her academic research, Beeson became interested in issues surrounding housing markets, "and so again we started working together," she says. "That project looked at discrimination in mortgage lending, and so I spent many years collaborating with researchers, working at the Cleveland bank as well as at the Federal Reserve Board of Governors in D.C. and at some of the other regional banks, and working with not just the researchers, but people who work on the other side of the Fed house—auditors, operations people-trying to better understand how that market was working and why we observed differences in lending patterns." That research influenced the design of new policy and the enforcement of existing policy related to fair lending. She and her fellow researchers, for instance, developed a statistical method to aid regulators in their charge

to monitor individual lenders' compliance. At Pitt, she was promoted to associate professor in 1990 and full professor in 2000.

Beeson says she's currently working on two academic research projects "in my spare time.'

The first, which she started "a long time ago," was spurred by her interest in regional growth and involves the analysis of a data set of every county in the United States from the earliest census, 1790, onward. She and her fellow researchers have looked at the natural advantages of certain regionssuch as mineral resources and lakes or coastlines-versus man-made advantages like the presence of universities, and how important these advantages are in determining regional growth.

And then she's pondering theories of growth. "Do economies diverge, so some get bigger and bigger while others disappear, leaving only really big cities like New York City or Boston?" she asks. "Or do we end up with some big cities, medium cities, smaller cities, but in stable patterns?'

But all of this now has taken a back seat to her all-consuming passion: overseeing the destiny of the University's academic programs as Pitt's vice provost for graduate and undergraduate studies. It's an awesome list of responsibilities by anyone's reckoning, but she seems to be unfazed by it all when reciting the litany, stating modestly that, after all, "the heavy lifting is done by the schools. I merely manage the process.'

Her experience in higher education administration began when she was asked to serve as associate dean for undergraduate studies in the School of Arts and Sciences in 2001. In that role, she was praised by Pitt Provost James V. Maher for her having "guided the implementation of an important new undergraduate curriculum that emphasizes a culture in which students are engaged with faculty in the scholarly activities of the University." She also was responsible for the provision of student services, including the Arts and Sciences Advising Center and Academic Support Center, and she played a lead role in developing quantitative models of student enrollment, to ensure that quality instruction was available throughout the school to meet students' educational objectives and ambitions.

In 2004, Maher named her vice provost for graduate studies; he added interim vice provost for undergraduate studies to her title in 2006 and then named her vice provost for graduate and undergraduate studies in May 2007.

"In my graduate studies role, I oversee 209 graduate and professional degree programs offered by faculty in 14 schools and more than 9,500 graduate and profes-sional students," Beeson explains. "This

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#### PittChronicle Newspaper of the University of Pittsburgh Robert Hill PUBLISHER John Harvith **ASSOCIATE PUBLISHER** Linda K. Schmitmeyer EXECUTIVE EDITOR Jane-Ellen Robinet EDITOR Gary Cravener ART DIRECTOR Sharon S. Blake **STAFF WRITERS** John Fedele Morgan Kelly Amanda Leff

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CONTRIBUTING WRITER

Anthony M. Moore

Michele D. Baum

Tearsa Brown

Patricia Lomando White

E-mail: chron@pitt.edu Web: www.chronicle.pitt.edu

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## Winter 2008 Report to the Trustees

This is the print version of Chancellor Mark A. Nordenberg's report to the Pitt Board of Trustees at its Feb. 29 meeting.

In a year in which the

**Consumer Price Index rose** 

posed overall growth in the

state budget is 4.2 percent,

the recommended increase

general appropriation is a

to Pitt's education and

mere 1.5 percent.

-Mark A. Nordenberg

4.1 percent and the pro-

Most typically, when I address you, I provide an overview of memorable events and important developments in the life of the University of Pittsburgh, either over the course of the preceding year or covering the period of time since our last meeting. Today, though, I want to focus on a single week, the first week of this month, and I intend to limit my remarks to two events and two principal topics.

On Feb. 1, we not only began a new month in the calendar year but also launched our observance of Black History Month. This year, we did so in partnership with our friend and colleague George Miles, at the world premiere screening of the WQED documentary, Fly Boys: Western Pennsylvania's Tuskegee Airmen, which the University had helped to sponsor. It was a fantastic evening-drawing an audience of more than 1,000 hardy souls, who braved the winter weather to travel to

Soldiers and Sailors Memorial Hall for an event that was both educational and inspirational.

More than 70 of the Tuskegee Airmen came from Southwestern Pennsylvania, an unusually high concentration, and 26 of them were Pitt graduates or became Pitt graduates or had other strong Pitt connections. Within the "strong connections" group, for example, was Wendell Freeland, a former member of this board. The documentary itself is a moving

account of loyal and courageous men whose distinguished record of wartime service changed the course of the struggle for civil rights in America. Watching the documen-tary in the company of some of the surviving Tuskegee Airmen from this region whose contributions were featured in the film made the experience even more memorable.

Our Black History Month programs have attracted a large and enthusiastic following in recent years, principally because we have found ways to press beyond what has become the norm-participating in the national celebration of Black History Month with a speaker or panel discussion. Instead, through a succession of unique and successful initiatives, we have found ways to breathe new life into important, and sometimes neglected, chapters of that history, by creatively presenting and preserving them.

Those efforts have included the worldpremiere screening of the documentary K. Leroy Irvis: The Lion of Pennsylvania, chronicling the life of the Pitt law school graduate and trustee who not only was the first African American speaker of the Pennsylvania House of Representatives but the first Black speaker of any state house since Reconstruction; the award-winning Heinz History Center exhibit and accompanying book celebrating the proud 125-year history of Three Rivers Youth, which had been founded as the Home for Colored Children; the world-premiere screening of the WQED documentary Torchbearers, preserving the legacy of Pittsburgh's civil rights pioneers; and the world-premiere screening of the documentary chronicling the pathbreaking contributions of the Hill District's Freedom House Ambulance Service, the country's first provider of modern emergency medical services. Freedom House was staffed principally by Black residents of the Hill District who had been dismissed by most as "unemployable,"

but who were effectively trained to make these pathbreaking contributions to emergency medical care by the late, great Pitt medical school professor Peter Safar, also revered as the "father of CPR.'

As you know, this "moving to the next stage" is not only reflected in our annual Black History Month celebration, but in our diversity efforts throughout the year. So, we are committed not only to attracting a diverse student body, but also to ensuring that everyone

within that student body has the chance to achieve the very highest levels of academic success. We saw that aspect of our efforts realized during the last year, when outstanding African American undergraduates earned both a Rhodes Scholarship and a Goldwater Scholarship. Similarly, we are committed not only to taking advantage of the full range of human talent within our general workforce but also to making certain that the full range of that talent is deployed, for the benefit of the University, in visible positions of leadership and impact.

Many people have contributed to our exceptional Black History Month series, but one University leader deserving special credit is Vice Chancellor for Public Affairs Robert Hill. This year, building on discussions initiated by Robert, we titled our ongoing program of annual Black History Month observances "The University of Pittsburgh K. Leroy Irvis Black History Month Program." This, we believed, was a fitting tribute

32.2%

Higher Education

Price Index

20.6%

Consume

Price Index

to a man who, both through his work and through his inspiring example, made many significant and lasting contributions to Pennsylvania, to Pittsburgh, and to Pitt.

For our University, Speaker Irvis' most directly relevant legislative contribution was his sponsorship of the bill, enacted in 1966, that made Pitt a state-related university. The state appropriations that resulted took Pitt from the brink of bankruptcy and helped position us to become one of the country's top public research universities. For our part, the University has provided tens of thousands of Pennsylvania residents with access to a very high-quality higher education at a comparatively reasonable cost, simultaneously meeting a collective state need and positioning each of those individual students to use the power of education to build the foundation for a more productive and satisfying life. In recent years, of course, the University also has become a key engine of economic development and has broadened its commitments to its home communities.

Four days after the screening of Fly Boys as the first Irvis Black History Month Program and 42 years after Speaker Irvis sponsored the bill creating Pennsylvania's new partnership with its state-related universities, the commonwealth's budget proposal for the next fiscal year was released. It began with a decidedly upbeat assessment of Pennsylvania's economic condition: "Today, at a time when the national economy seems to be spiraling into a recession and many other states are struggling to deal with the impact of the national downturn on their budgets, Pennsylvania is in much better shape.'

Unfortunately, the state's comparatively advantageous economic position was not translated into positive budgetary news for the commonwealth's state-related universities. Instead, the appropriations recommended for Pennsylvania's public research universities clearly reflect that a diminished priority has been assigned to these institutions, even while their expected contributions to the commonwealth are increasing.

In a year in which the Consumer Price Index rose by 4.1 percent and the proposed overall growth in the state budget is 4.2 percent, the recommended increase to Pitt's education and general appropriation is a mere 1.5 percent. To provide an even more complete picture, when the proposed treatment of other Pitt line items is considered—because

3.1%

University of

Pittsburgh

Appropriation



our line item support for teen suicide services, public health practice, disadvantaged students, and student life initiatives all were frozen and our line item support for rural education outreach was cut by 12 percent -the overall increase recommended for Pitt falls to 1.2 percent.

But the troubling nature of this recommendation becomes even more clear when it is considered in context. From fiscal year 2001 through fiscal year 2007, the Higher Education Price Index increased by 32.2 percent, and the Consumer Price Index increased by 20.6 percent. In that same period, Pitt's appropriation increased by only 3.1 percent. And even reaching that low level of percentage increase depends upon counting federal matching dollars as state funds. Since the commonwealth appropriation for the current year, as reported, includes \$9.9 million in federal Medicaid matching funds, Pitt's current appropriation actually includes approximately \$700,000 fewer state dollars than our fiscal year 2001 appropriation did.

As the nation emerged from the fiscal challenges that visited us all earlier in this decade, most states began re-investing in higher education in an attempt to reverse losses that had been suffered during that severe downturn. Describing that trend, a recent article in *The Chronicle of Higher Education* bore the headline "State Appropriations for Higher Education See Biggest Jump in Decades" and reported that "statetax support for higher education climbed 7.5 percent in the 2007-08 budget year [and] was the highest annual increase since 1985

The situation in Pennsylvania stands in sharp contrast to that encouraging national trend. State support for higher education here rose only 1.8 percent last year-less than one-fourth of the national increase-placing Pennsylvania 47th among the 50 states. Unfortunately, we were just one spot higher, 46th, when increases over the last two years were compared.

The states that border Pennsylvania, and presumably are subject to some of the same economic constraints, project a very different picture. West Virginia's support for higher education was up 14.3 percent, Ohio was up 7.7 percent, New York was up 6.8 percent, Delaware was up 4.2 percent, and New Jersey was up 2.7 percent. Many of the states that



# Winter 2008 Report to the Trustees

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are home to universities with which Pitt directly competes also made substantial additional commitments to higher education. For example, Minnesota was up 12.6 percent, Texas was up 11.2 percent, North Carolina was up 10.5 percent, Wisconsin was up 8.2 percent, and California was up 5.7 percent. As noted earlier, the creation of the

relationship between the Commonwealth of Pennsylvania and the University of

Pittsburgh-a relationship that Speaker Irvis helped forge-resulted in additional state financial support for Pitt. It was expected that some of those funds would be applied to general overhead and to the support of particular programs. Also at the heart of this new relationship, though, was an understanding that the state would provide the funding that would, in turn, enable the University to maintain lower tuition rates for Pennsylvania residents.

Forty-two years later, the University of Pittsburgh is still maintaining that differential—whether measured against the tuition that we charge

our own out-of-state students or against the tuition charged by our private peers. While tuition rates vary from program to program and campus to campus, the undergraduate tuition rates for the Oakland campus, which affect the largest number of students, provide a telling example. In-state, undergraduate tuition at the Oakland campus for the current academic year is about \$12,100; out-of-state undergraduate tuition at the Oakland campus is about \$21,600—roughly 1.8 times the in-state charge. One natural benchmark for

**Increase in State Support** 

for Higher Education

how our tuition compares to private AAU research universities sits just up Forbes Avenue. At Carnegie Mellon, undergraduate tuition for the current academic year (before recently announced increases) is \$36,950, more than three times larger than Pitt's instate charge.

Many people naturally would assume that it is the state appropriation that permits a public university to offer in-state

By almost any measure, Pitt remains a relative bargain in today's world of higher education. This is reflected in the rising tide of applications that continue to come our way. It is clear when one compares the costs associated with competitor universities. And independent publications have labeled us a "good value" institution. -Mark A. Nordenberg propriation that perity to offer in-state tuition rates that are so comparatively low, and that may be the entire story in some states. It may even have been the entire story at some early time here at Pitt. However, our modern-era appropriations, though a welcome form of support, cover only part of that large cost gap.

Let me offer an oversimplified calculation, but one that accurately makes a basic point. If you take our entire education and general appropriation and assign that amount, for these purposes, exclusively to instate tuition reduc-

tion and also include our much smaller disadvantaged students and student life initiatives line items, that creates a total pool of about \$165 million—a large amount of money. If you divide that number by 26,456, the number of in-state students at Pitt (except for medical students, because the School of Medicine is funded separately), you are left with a per student subsidy of about \$6,200.

That amount, again, can fairly be viewed as a generous individual subsidy. However, the current gap between in-state and out-of-



From left: Ralph Cappy, chair of Pitt's Board of Trustees and retired chief justice of Pennsylvania; Emeritus Trustee Herbert P. Douglas Jr.; and Pitt Chancellor Mark A. Nordenberg at the Feb. 29 trustees' meeting.

state undergraduate tuition at Pitt is \$9,500 —roughly 1.5 times that amount. And the gap between in state undergraduate tuition at Pitt and undergraduate tuition at Carnegie Mellon is \$24,850—roughly four times that individualized level of state support.

By almost any measure, Pitt remains a relative bargain in today's world of higher education. That status is reflected in the rising tide of applications that continue to come our way. It is clear when one compares the costs associated with competitor universities. And independent publications have labeled us a "good value" institution.

Effectively managing costs has been a strength of Pitt and remains a very high priority. But we also are committed to maintaining high levels of quality. And to underscore one obvious link, when the state appropriation does not adequately grow, more of the cost of an in-state student's education must be borne by that student in the form of higher tuition charges.

Returning more specifically to Pitt's current position, if our fiscal year 2001 appropriation had been increased by an amount equal to the Consumer Price Index (CPI) (which is lower than the Higher Education Price Index) over the course of the intervening years, our appropriation would be some \$30 million larger than it is today. To be clear, we never have expected that this large gap could be quickly closed. Instead, we have only asked that steps be taken to move our levels of funding in that direction. But when the recommended increase for the next fiscal year is less than one-third of the CPI, we are in danger of falling further behind, with even larger cost burdens to be shifted to tuition-paying students and members of their families.

And, of course, it is not only those with such direct links who are disadvantaged by this trend toward diminished funding. Instead, everyone who has any interest in Pennsylvania's economy has a meaningful stake in the strength of the Commonwealth's public research universities. Becoming a bit more local, not only is the health and education sector the top employment sector in this region, it is the only sector of the regional economy that has added jobs in every year since 1995. And whether it is through our own employment, through the jobs supported by our research expenditures, through the companies created as we commercialize our discoveries, or in any of a number of other ways, Pitt sits at the very heart of that sector.

The fact that other states place a higher value on public higher education is reflected in the budget increase numbers that I cited just a few moments ago. That higher priority also is reflected in special initiatives that are being launched in other states.

Just last month, for example, a commission convened by the Governor of New York issued a report on steps that should be taken by that neighboring state to improve its universities and use them to fuel its economy. Among the recommendations: Establish a \$3 billion research fund to support economic development; create a low-cost student loan program; hire 2,000 additional full-time professors, including 250 "eminent scholars," in the next five years; and enter into multiyear agreements with public universities to guarantee a certain level of funding for a

2007-08 Budget Year

Increase in State Support for Higher Education 2007-08 Budget Year





### **Comparison of Tuition Gaps**



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## Winter 2008 Report to the Trustees

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#### period of years.

225,000

200,000

175,000

150,00

\$177,410

FY 2001

Appropriation

Dollars in Thousands

Obviously, none of us can know how many of these recommendations ultimately will be implemented. Presumably, New York State, like Pennsylvania, has budgetary challenges relating to Medicare and prisons and basic education and dozens of other things. But at least New York, like many other states, has determined and declared that public higher education—and, more particularly, public research universities—have got to be included among the state's high priorities —both in fairness to a new generation of students and as a matter of forward-looking economic self-interest.

Commonwealth Appropriation

\$186,946

FY 2008

Appropriation

It is unlikely, of course, that Speaker Irvis, in 1966, could have envisioned the place that this University, his university, would occupy—in this city, in this commonwealth, and beyond—in 2008. It is clear, however, that he believed in the power of higher education, both in elevating individual lives and in enhancing our collective future. That is why he sponsored the bill that made Pitt a state-related university.

But this belief in the power of education and the government's responsibility to support it has been a part of the compact between the people of Pennsylvania and their government for more than 221 years. Yesterday,

\$216,000+

FY 2001 to FY 2008

Appropriation

With Increase

Equal to CPI

as you all know, was Pitt's 221st birthday, and the preface to the Act of February 28, 1787, chartering the academy that became our University directly declares that "the education of youth ought to be a primary object with every government."

Even earlier than that, Ben Franklin, perhaps the greatest Pennsylvanian of all and Rep. Irvis' predecessor as speaker of the Pennsylvania House of Representatives, stated, simply

but memorably, that "an investment in knowledge always pays the best inter-est." Unfortunately, though honored in concept, the statement of values seems to have had very little impact, particularly with respect to Pennsylvania's public research universities, as state budget priorities have been set in more recent years

Perhaps this year's stark budget message—buried in a big budget book, but clear in its mean-

ing—will provide the platform from which all of us can work to get things back on track, not only for the good of Pitt but for all of the people who depend on us for so many different things. A commitment to making that happen is a part of the basic bond between us, as institutional stewards. That bond can be traced back to Hugh Henry Brackenridge, our founder and the sponsor of our 1787 chartering legislation. And it is a bond that flows through K. Leroy Irvis, the Lion of Pennsylvania, who was the sponsor of the bill that made Pitt a state-related university.

It seems especially fitting to focus on



that bond today, as our University begins its 222nd year. We move into this new year from a highly respected position, with momentum that continues to build, and with truly exciting prospects. But we also move forward with a set of daunting challenges including, in particular, the challenges just described that relate to state funding. Hopefully, this is one area in which we can effectively reach back, even as we move forward, to restore a more appropriate level of funding to an institution that has proven itself to be a very worthy recipient of investments for more than two centuries.

JIM BURKE/CIDDE

## **University's Honors Convocation**



# Women's History Month Patricia Beeson

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represents all graduate and professional programs Universitywide, including the health sciences.

"I am responsible for policies and procedures Universitywide relating to graduate programs. I work with deans as they develop new graduate and professional programs. I chair the University Council on Graduate Studies, which makes recommendations to the provost. I establish allocations policies, distribute graduate financial aid, and address student concerns and complaints that arise.'

Pitt is unlike other universities in that there is no graduate school here, Beeson is careful to point out. "Each school is responsible for its own graduate programs, and not just academic programs, but student services, complaints, financial aid allocations,' she says. "We have to make sure that dissertations are complete, that they conform to policies and procedures."

Beeson, by the way, has served on dozens of dissertation committees during her years at Pitt; students whose committees she has chaired are now pursuing academic careers at colleges and universities throughout this country and abroad.

In her role as vice provost for undergraduate studies, she has responsibilities related to undergraduate studies at all campuses. "I work with deans and campus presidents to improve programs, on efforts to retain and graduate students. I chair the Provost's Advisory Committee on Undergraduate Programs. I also manage the academic integrity process and address student concerns rising to the provost's level."

She also is responsible for enrollment management, working with Director of Admissions and Financial Aid Betsy Porter on enrollment

issues. She cochairs the Enrollment Management Committee and coordinates Universitywide efforts to recruit, retain, and graduate undergraduates

She coordinates Universitywide assessment efforts, including the new effort on learning outcomes assessment. She works with the Office of Institutional Research in developing data to assess academic programs. She also is the liaison responsible for University-level accreditation through the Middle States Association.

She works with the Office of the Registrar to develop and interpret policies as they relate to that

In the diversity arena, she chairs the Provost's Advisory Committee on Women's Concerns (PACWC), is responsible for the Provost's Office's affirmative action review of all faculty appointments, and is an administrative liaison to the Pitt Board of Trustees Affirmative Action Committee and the Senate Antidiscrimination Policy Committee.

"I see my role as working with fac-

that Pitt has undergraduate and graduate programs befitting a major research university, that we recruit those students best able to take advantage of those programs, and that we provide the support those students need to be successful,' Beeson says.

ulty and staff to ensure

Over the past few years, Beeson has been focusing on the assessment of student learning outcomes as a way to "make sure that we continue to build on the strong academic pro-grams offered at Pitt," Beeson says. "We are asking our faculty to reflect on the academic programs they offer, consider what it is they expect graduates to achieve, and determine whether or not our programs are delivering on those goals the faculty have set. As we con-

sider these questions, I expect

that our faculty will identify areas in which the programs can be improved to better help students achieve the goals we have for them, and in this way we will continue to build on the strong academic programs offered at Pitt.'

Beeson emphasizes that Pitt has always assessed its students and evaluated its programs. What is new, she says, is that "we are asking faculty to use the assessment of student learning as part of their overall program evaluation. Until recently, program evaluation has

In her role as vice provost for focused on what I would call the undergraduate studies, she 'inputs'-faculty quality, curricuhas responsibilities related lum, qualifications of students, to undergraduate studies at and facilities all campuses. "I work with such as labs and classrooms. We deans and campus presidents are now saying, 'Let's also look to improve programs, on at the "outputs": Are our programs graduating students who have the skills, attributes, and knowledge we expect they would?' This is a different way of looking at things, and as is often the case with things that are new, it is not easy. It takes careful, considered reflection

> by our faculty, and it takes time. But I do believe that once we have the system set up, and assessment becomes a routine part of what we do, it will take less effort, and we will see the benefits in terms of program improvement. In fact, I think we already are seeing some of the benefits.

> To have an undergraduate experience that nurtures the development of thoughtful, reflective individuals, Beeson also sees the need to have student services and cocurricular programs that are aligned with and sup-



Patricia Beeson presented graduate and professional academic honorees at this year's Honors Convocation.

port academic programs. "In recent years, the University has invested in student services such as advising because of their importance in helping students get the most out of their years at Pitt," she says. "We also are very fortunate to have Kathy Humphrey as the vice provost and dean of students, and I am happy to be working with her on this aspect of the undergraduate experience. She places a high value on aligning student affairs with the academic mission of the University, and she has the ability to make that vision a reality.

For Beeson, working on recruitment at the undergraduate level means "letting people like Betsy Porter and her staff do what they do best-getting the word out about what Pitt and Pittsburgh have to offer, identifying those potential students who could best take advantage of what we offer, and getting them to campus to meet some of our faculty, to meet University Honors College Dean Alec Stewart, to see our campus and our city. Once they visit campus, there is a very high probability that they will enroll. It also means finding the resources to provide scholarships and other financial assistance to attract undergraduates to our campus."

Graduate and professional recruitment is much more diffuse at Pitt, says Beeson, because individual programs recruit and admit students: "Last year we had an admissions workshop, but mostly we have been trying to help program directors think about how better to use existing resources to recruit and support students while we also work to improve the financial support available for graduate students.'

Beeson has adopted as an additional focus of her work "making people at Pitt and outside of Pitt more aware of the strengths of our academic programs." She noted that over the past few years there was more emphasis on relating stories about undergraduate research at Pitt, a genuine strength of Pitt's undergraduate programs and "something we have been trying to let people know about." This year, Beeson adds, "we have been focusing on raising the visibility of our graduate and professional programs.

Pitt has traditionally been known for its strong graduate and professional programs. In recent years we have not heard as much about these programs because of the focus on undergraduate education. Right now we are trying to remind everyone that Pitt continues to have great graduate and professional programs that produce leading scholars and professionals in medicine, law, business, government, and the nonprofit sector.'

The issue of diversity, Beeson feels, is related to all of this. "I think it's important that Pitt be an institution at which individuals with diverse backgrounds, ideas, and points of view come together to learn from and with each other," she says.

"Now in my own role with PACWC, I am involved particularly with women's issues, and I am pleased to say that over the past decade there has been a lot of success achieving goals set by this committee in the mid-90s. We are currently updating that agenda with input from the University community so that we can continue to make progress.

After such a full plate set at her worktable, does Beeson have time left for anything else as her long days stretch into evenings? "As a mom with a 10-year-old son, I spend a lot of time going to SpongeBob SquarePants movies, spring recitals (he plays piano), and Little League baseball games. I also enjoy going to Pitt basketball, both the men's and the women's teams.

And then there's that weekly night that's been going on for 25 years.

When my sister and I drove into Pittsburgh back in 1983, econ department colleagues Shirley and Jim Cassing had invited us to stay with them while I looked for an apartment (little did they imagine that we would end up staying for a month!)," Beeson recalls. "When we arrived at their house, they had a group of friends over to welcome us to Pittsburgh. Those same people are my friends today. In fact, for years Shirley, some of those friends, and I have gone out for beer every Tuesday evening after teaching night classes. We still do; only instead of teaching a night class, I just work late. In fact, it was through them that I met my husband, Werner Troesken, who also is on the faculty at Pitt, and who joined us for beers his first year at Pitt!'

efforts to retain and graduate students. I chair the Provost's Advisory Committee on Undergraduate Programs. I also manage the academic integrity process and address student concerns rising to the provost's level."

-Patricia Beeson

office, and she chairs the Academic Calendar Committee.

# Happenings



and Tennyson avenues) Seventh Floor Auditorium 412-624-7298 www.kuntu.org

### Kuntu Repertory Theater, March 20-April 5

### Concerts

**Jill Scott-The Real Thing Tour,** 8 p.m. **March 19,** Benedum Center, 719 Liberty Ave., Downtown, 412-456-6666, www.pgharts.org.

Spring College/Community Choir Concert, features Mozart's Vesperae de Dominica and Haydn's Missa in Angustiis, 7:30 p.m. March 26, Bromeley Family Theater, Pitt-Bradford, 814-362-0248, www.upb.pitt.edu.

University of Pittsburgh Symphony Orchestra, featuring new music by Benjamin Harris, 8 p.m. March 26, Bellefield Hall Auditorium, Pitt Department of Music, 412-624-4125, www.music.pitt.edu.

### Exhibitions

Kimbo Gallery, Century Project, through March 21, William Pitt Union, Pitt Women's Studies Program, www. pitt.edu/~wstudies.

**709 Penn Gallery,** Solo Ceramic Exhibition: H U M, **through March 22,** 709 Penn Ave., Downtown, 412-325-7017, www.pgharts.org.

Carnegie Museum of Art, Forum 61: Lowry Burgess, through March 23; Great British Art: 200 Years of Watercolors, Drawings, and Prints From the Bank of New York Mellon Collection, through May 18; Ecology.Design.Synergy, through June 1, 4400 Forbes Ave., Oakland, 412-622-3131, www.cmoa.org.

Hillman Library, Audubon Print, *Black-burnian Warbler*, through March 24, 412-648-7715.

Andy Warhol Museum, Ron Mueck at the Andy Warhol Museum, through March 30; Canis Major: Andy Warhol's Cats and Dogs (and Other Party Animals), through May 4; Neke Carson: Eyeball Portraits and Beyond + Neke Paints Andy '72, through June 1, 117 Sandusky St., North Side, 412-237-8300, www.warhol.org.

Manchester Craftsmen's Guild, One Potter's Touch Affects a Generation of Artists and Their Communities, Kerr Gallery, **through April 4**, 1815 Metropolitan St., North Side, 412-322-1773, www.manchesterguild.org.

**707 Penn Gallery,** Suggestion/Submission, **through April 5**, 707 Penn Ave., Downtown, 412-325-7017, www.pgharts. org.

**Wood Street Gallery**, Urban Living, **through April 5**, 601 Wood St., Downtown, 412-471-5605, www.woodstreetgalleries.org.

KOA Art Gallery, Affairs of the Art 2008, through April 11, Blaisdell Hall, Pitt-Bradford, 814-362-0248, www.upb. pitt.edu.

Silver Eye Center for Photography, In Search of America, photographs by David Graham, through April 12, 1015 E. Carson St., South Side, 412-431-1810, www.silvereye.org.

Mattress Factory, Gestures: Illustrations of Catastrophe and Remote Times, through May 11, 500 Sampsonia Way, North Side, 412-231-3169, www.mattress.org.



Neke Carson: Eyeball Portraits and Beyond, through June 1

#### Manchester Craftsmen's Guild, through April 4

**Carnegie Science Center,** *Bodies: The Exhibition*, **through May 31**, 1 Allegheny Ave., North Shore, 412-237-3400,

www.carnegiesciencecenter.org.

Seminars/Readings

**Scott Simon,** author and host of *NPR's Weekend Edition Saturday*, 7:30 p.m. **today**, Carnegie Music Hall, 4400 Forbes Ave., Oakland, Drue Heinz Lectures,

412-622-8866, www.pittsburghlectures.

"Citizenship in the 21st Century: An International Colloquium," keynote speaker Etienne Balibar, professor

emeritus of political philosophy at the Université de Paris X-Nanterre, 8:30

a.m.-6 p.m. **today** and 9:30 a.m.-4 p.m. **March 18**, 2500 Posvar Hall, Pitt

Cultural Studies Program, 412-624-7232,

"Propensities and Conditional Prob-

**abilities,**" Isabelle Drouet, philosophy professor at the University of Paris, 12:05 p.m. March 18, 817R Cathedral

of Learning, Pitt Center for Philosophy of Science, 412-624-1052, www.pitt.

"Affecting the Political: Assessing the Emotional Turn in the Study of Social Movements," Deborah Gould, Pitt professor of sociology, noon March 19, 2431 Posvar Hall, Pitt Department of

Sociology, www.sociology.pitt.edu.

"From Deference to Democracy:

Catholics Transform Their Faith in the Mid-20th Century," Timothy Kelly, professor of history at St. Vincent

College, noon March 19, 2628 Cathedral

of Learning, Pitt Religious Studies Pro-

gram, www.religiousstudies.pitt.edu.

"Tanaka Atsuko and the Circles of Subjectivity," Namiko Kunimoto,

doctoral candidate at the University of

California-Berkeley, noon March 19, 203 Frick Fine Arts Building, History of

Art and Architecture Colloquium, 412-

Against Black and Latino Job Seekers," Devah Pager, professor of sociol-

ogy at Princeton University, 1:30 p.m. March 19, 2017 Cathedral of Learning,

Pitt Center on Race and Social Problems,

"Transport and Fate of DDT on the Palos Verdes (Calif.) Shelf: A Sourceto-Sink Story ," Patricia Wiberg, professor of environmental sciences at

the University of Virginia, 4:30-6 p.m.

March 19, 203 Thaw Hall, Pitt Depart-

ment of Geology and Planetary Science Spring 2007 Colloquium Series, www.

"Brain Drain: A Search for Equitable Global Solutions," Thuy Bui, UPMC medical director, 4 p.m. March 19, 4130 Posvar Hall, Pitt Global Issues Lecture

Series, 412-624-2918, www.ucis.pitt.edu.

Institutional Origins," Yujie Li, Heinz Fellow in Pitt Global Studies Center,

noon March 20, 4130 Posvar Hall, Pitt

"The Relevance of Homeland Secu-

rity Issues in the EU-U.S. Relation-

ship," Durante Rapacciulo, European

Union Fellow in Pitt's European Union Center of Excellence and European

Studies Center, noon March 20, 4217

Asia Over Lunch Lecture Series, 412-648-7763, www.ucis.pitt.edu.

"China's Petition Issues and Its

geology.pitt.edu.

648-2400, www.haa.pitt.edu.

"Race at Work: Discrimination

412-624-7382, www.crsp.pitt.edu

www.pitt.edu/~cultural.

edu/~pittcntr.

Lectures/

org.

From left to right: Wesley Mills—Untitled vessel; Frank Ross—*Footed Jar With Lid;* Bill Strickland—*Jar With Lid* 

of Excellence, 412-648-8517, www.ucis. pitt.edu.

"Claims, Counter-Claims and Choreography," Linda Morrison, author of Talking Back to Psychiatry: The Psychiatric Consumer/Survivor/Ex-Patient Movement, noon March 20, 2431 Posvar Hall, Pitt Department of Sociology, www. sociology.pitt.edu.

**"A Holistic Approach to Treating Anxiety and Depression,"** James Donnelly, psychotherapist at the Center for Integrative Medicine, 5:30 p.m. March **20**, Center for Integrative Medicine, Suite 310, 580 S. Aiken Ave., Shadyside, 412-623-3023, http://integrativemedicine. upmc.com/

**"Public Health at Pitt: Local to Global Perspectives,"** Donald Burke, dean of Pitt's Graduate School of Public Health, noon-1 p.m. **March 21**, Lecture Room 3, Fourth Floor Scaife Hall, Pitt Medical Education Grand Rounds, 412-648-9000, www.medschool.pitt.edu.

"Classical Random Fields as Models for Quantum Experiments," Peter Morgan, research affiliate at Yale University, 12:05 p.m. March 21, Room 817 Cathedral of Learning, Center for Philosophy of Science Lunchtime Talk, www.pitt.edu/~pittentr.

"Animae Dimidium Meae: Vergil and Horace," Jana Adamitis, professor of modern and classical languages and literatures at Christopher Newport University, 4 p.m. March 21, 244A Cathedral of Learning, Pitt Department of Classics, www.classics.pitt.edu.

"Shakespeare's Comedy of Errors," Francois Rigolot, Frank Sulzberger Distinguished Professor of English and Divinity at the University of Chicago, 4 p.m. March 21, 501 Cathedral of Learning, Pitt Consortium for Medieval and Renaissance Studies and Pitt Department of English, 412-624-5220, aaloe@pitt.edu.

**Cathy Day,** Pitt professor of English, literary reading from her book *Comeback Season: How I Learned to Play the Game of Love*, 7 p.m. **March 21**, Joseph Beth Booksellers, 2705 East Carson St., South Side, 412-624-6508.

**Ed Ochester,** Pitt Poetry Series editor, informal talk at 3:30 p.m., poetry reading at 7 p.m. **March 24**, campus coffeehouse, Pitt-Greensburg, 2008 Pitt-Greensburg Writers Festival, 724-836-7481, www. upg.pitt.edu.

**"She Said: Women's Words,"** poetry reading featuring special guest and poet Naomi Shihab Nye, Pitt English Professor Dawn Lundy Martin, and others, 7:30 p.m. **March 24,** Cabaret at Theater Square, 655 Penn Ave., Downtown, Women's History Month, Pittsburgh Cultural Trust, 412-456-6666, www.pgharts.org.

"Careers in Biotech," Kenneth Giuliano, principal scientist at Cellumen Inc., noon-1:30 p.m. March 25, S100 Biomedical Science Tower 2, Pitt Survival Skills and Ethics Program, 412-578-3716, www. survival.pitt.edu.

"Deconstructing Place: Objectivity and the Theory of Lived-Space From Husserl to Casey," Edward Slowik, professor of philosophy at Winona State University, 12:05 p.m. March 25, 817R Cathedral of Learning, Pitt Center for Philosophy of Science, www.pitt. edu/~pittcntr.

Joshua Cohen, literary reading of his book *A Heaven of Others*, 7:30 p.m. March 25, Kiva Han Café, 420 S. Craig St., Oakland, Pitt Cultural Studies Program, 412-624-7232.

### Miscellaneous

Hop Hop Hop Into Spring Seasonal Beers, 6:15 p.m. March 18, Cabaret at Theater Square, 655 Penn Ave., Downtown, Craft Beer School Series, 412-456-6666, www.pgharts.org.

**Barbie Nation: An Unauthorized Tour,** film screening, 7 p.m. **March 20**, Carnegie Library-Main, 4400 Forbes Ave., Oakland, 412-622-3105, www.carnegielibrary.org.

**Cama Adentro,** film screening, 8:30 p.m. March 20, Frick Fine Arts Building Auditorium, Amigos del Cine Latinoamericano Film Series—New Millenium, amigoscinelatinoamericano08@ gmail.com.

University of Pittsburgh Wellness Fair, 10 a.m.-1:30 p.m. March 25, William Pitt Union, Pitt Wellness Program, 412-648-8251.

### Opera/Theater/ Dance

**Hairspray, March 18-22,** Heinz Hall, 600 Penn Ave., Downtown, PNC Broadway Across America Series, 412-394-4900, www.pgharts.org.

Lavendar Lizards and Lilac Landmines: Layla's Dream, directed by Linwood Sloan, March 20-April 5, Kuntu Repertory Theatre, Seventh-Floor Auditorium, Alumni Hall, 412-624-7298, www.kuntu. org.

Lord of the Dance, March 21-22, Benedum Center, 719 Liberty Ave., Downtown, 412-456-6666, www.pgharts.org.

**A Number**, through April 6, O'Reilly Theater, 621 Penn Ave., Downtown, Pittsburgh Public Theater, 412-316-1600, www.ppt.org.

**The Big Bang, through April 27,** Theater Square Cabaret, 655 Penn Ave., Downtown, CLO Cabaret Theater, 412-281-2822, www.clocabaret.com.

### Pitt PhD Dissertation Defenses

**Katherine Wick,** Department of Economics, "Experimental Studies on Public Good Allocation With Agents," 9 a.m. **March 19,** 4716 Posvar Hall.

**Donald Freytes,** Department of Bioengineering, "Development and Characterization of a Biohybrid Scaffold for Regenerative Medicine Applications," 12:30 p.m. **March 19,** Conference Room A, Bridgeside Point Building, 100 Technology Drive, Hazelwood.

Marie Agatha Ozah, Department of Music, "Egwe Amala: Women in Traditional Performing Arts in Ogbaruland," 2:30 p.m. March 21, Room 114, 110 Music Building.

Daniel Handley, Department of Human Genetics in the Graduate School of Public Health, "Systems Approach to Analyzing the TGFbeta/SMAD3 Gene Regulatory Pathway in A549 Cells," 4 p.m. March 24, PACCM Conference Room, NW 628 Montefiore Hospital, 200 Lothrop St., Oakland.

### Workshops

"Preparing for Critical Changes in Scholarly Publishing: How Will Open Access Impact You?" 3-5 p.m. March 18, Lecture Room 6, Scaife Hall, Pitt Office of Academic Career Development, register at www.oacd.health.pitt.edu.

**"Management Skills,"** Survival Skills and Ethics Workshop, 9:30 a.m.-2:30 p.m. **March 22**, Fourth-Floor Lecture Room, 2 Scaife Hall, Pitt Survival Skills and Ethics Program, 412-578-3716, www.survival.pitt.edu.



University of Pittsburgh

PittChronicle

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### Pitt Study Could Advance Fight Against Diabetes, Obesity

Researchers crack enzyme code that plays role in glycerol metabolism

### By Michele D. Baum

Researchers at the University of Pittsburgh School of Medicine have become the first to decipher the three-dimensional structure of a membrane-bound enzyme that plays a crucial role in glycerol metabolism —a discovery that could lead to important advances against obesity, diabetes, and a potential host of other diseases.

Their findings were reported in the March 4 issue of the *Proceedings of the National Academy of Sciences*.

The sugar-alcohol glycerol is an essential source of energy that is required to help drive cellular respiration. In addition to powering some of the most central reactions of the body, glycerol also provides key precursors needed to regulate fatty acid and sugar metabolism. Figuring out the complex ways that cells break down or produce glycerol and use this vital chemical could be critical to combating obesity, diabetes, and other chronic disorders. Recent findings also have linked glycerol metabolism to cellular processes related to aging, infectivity in certain organisms such as *Mycobacterium tuberculosis*, and other energy-related illnesses.

"Everybody wants a golden bullet for obesity, and certainly we need better ways of controlling diabetes," said Joanne I. Yeh, the study's senior author and a professor

study's senior author and a profess of structural biology at Pitt. "I think that glycerol metabolism will be on the forefront of developing treatments for these diseases and so many others, since it is a pivotal yet underappreciated link among some very important metabolic pathways."

The protein structure that Yeh's team solved is a large enzyme called Sn-glycerol-3-phosphate dehydrogenase—known simply as GlpD—found in abundance in the cell membranes of almost all organisms, including humans. GlpD is a an monotopic membrane protein, which means in



that although it is embedded partially in the cell membrane, the protein does not span the entire membrane to the

interior of the cell. As a result, it is technically challenging to produce enough highly purified and active protein to obtain clear, relevant information about the enzyme's atomic structure. This study marks the highest resolution structure of a monotopic membrane protein that scientists have solved to date, one of only a handful of structures of

. Yeh this important class of membrane proteins that have been determined.

"These findings and data help to fill an important scientific and technical gap in the structural field. They also present new information and ideas about how the enzyme works and the importance of the cell membrane in stabilizing the enzyme and in processes related to energy production," said Yeh, who published the paper with postdoctoral research associate Unmesh N. Chinte and research assistant professor Shoucheng Du, both in Pitt's Department of Structural Biology.

Studying the proteins and enzymes involved in oxidative and glycerol metabolism as well as characterizing their structures, functions, and regulatory relationships has been a major research focus of Yeh's lab. It took Yeh and her colleagues only three months—an unusually short time—to decipher the set of 3-D structures of GlpD isolated from *E. coli* bacteria, thanks to other methodologies they developed in earlier studies.

With the GlpD structure in hand, Yeh's team is already examining how mutating, or changing, certain amino acids in the enzyme affects its function and fold. These studies target the roles that these specific amino acids play in enzymatic function and regulation of activity. These questions are important because glycerol metabolism is a key link between sugar and fatty acid metabolism. The Pitt group also has determined the atomic resolution structures of other enzymes involved in mediating glycerol and oxidative metabolism. In all, these structural results provide some of the first three-dimensional views of these highly important proteins and enzymes.

The study was funded by the National Institutes of Health. A link to the online paper is available at www.

pnas.org/cgi/reprint/0712331105v1.

**PUBLICATION NOTICE** The next edition of *Pitt Chronicle* will be published March 24. **Items for publication in the newspaper's** *Happenings* calendar (see page 7) should be received six working days prior to the desired publication 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.