UNIVERSITY of PENNSYLVANIA Almanac

Tuesday, March 18, 2003 Volume 49 Number 25 www.upenn.edu/almanac

Penn's Participation in 'Cover the Uninsured Week'

Although experts have estimated that 41 million Americans are living without health care, a Robert Wood Johnson Foundation study released recently indicates the number of uninsured may be higher. The study found that about 75 million went without coverage at some point during 2001 and 2002.

As part of the RWJ Foundation's week-long, national public awareness program, Dr. Arthur H. Rubenstein, Executive Vice President of the University of Pennsylvania for the Health System and Dean of the School of Medicine, and Dr. Afaf I. Meleis, Dean of the School of Nursing, and Dr. Richard J. Gelles, Dean of the School of Social Work, met last Wednesday to sign a proclamation supporting the campaign to find a solution to this national health threat.

They co-signed the statement endorsing a national effort to find an acceptable method of providing health care for every American. The School of Medicine provided an opportunity for students, faculty and staff to sign the proclamation last week at an information table in the Silverstein Pavilion. The School of Nursing students are hosting a table on Locust Walk this week.



Dr. Richard J. Gelles, Dr. Afaf I. Meleis, and Dr. Arthur H. Rubenstein, (left to right) signing the 'Cover the Uninsured Week' proclamation which noted that "eight out of ten of the uninsured are in working families that cannot afford health insurance and are not eligible for public programs" and "uninsured Americans live sicker and die younger because they are forced to go without the health care they need" and "a slow economy, higher unemployment and rising health costs mean that more Americans are becoming uninsured in our community." The proclamation stated, "we recognize the urgency of seeking solutions to one of America's greatest problems." The signatures added to the national proclamation will be collected and filed in a national data bank as a demonstration of concern and support.

Creation of Position: Vice Provost for Strategic Initiatives

Provost Robert Barchi has announced the creation of a new Vice Provost for Strategic Initiatives position. The search for the position, which will report directly to the Provost, will begin immediately. The new position will assume responsibility for the development and implementation of Penn's strategy for technology transfer and entrepreneurial initiatives as well as the University's Corporate Relations strategy. It will integrate Penn's involvement in regional economic development initiatives; develop a cohesive approach to commercialization and long-term multi-dimensional corporate relations; oversee the Center for Technology Transfer and the new Office of Corporate and Industrial Relations; and take an active role in entrepreneurial activities related to education.

Photo by Sally Sapega

"Although these critical strategic areas have previously existed at Penn, this new position brings them together in an integrated and coordinated way," said Provost Barchi. "The Vice Provost for Strategic Initiatives will help us align our efforts with those of our faculty, making the best use of the intellectual property they inspire and help to spur economic development." He added that, "making sure that the University has a friendly, single open door to the commercial community" would be another benefit of the new position.

The position calls for a Ph.D. or M.D. or other advanced degree, preferably in a research or technology-related field. The ideal candidate will have leadership experience, preferably in a science-based industry such as life sciences or technology. Alternatively, the candidate will have industry experience in venture capital, investment banking, or intellectual property. The appropriate candidate will have the ability to develop and implement commercialization strategies as well as experience in crafting academic/industry partnerships. The ideal person will have experience negotiating, closing and implementing major deals.

GlaxoSmithKline's \$10 Million Grant: **Supporting Academic Research**

GlaxoSmithKline (GSK) and the School of Medicine announced on March 6 that GSK has provided Penn with an unrestricted grant of \$10 million to support academic research.

"We at GSK are fortunate that the Delaware Valley, home to so many of our Research and Development staff, is also home to such a leading academic research center as the University of Pennsylvania," said Dr. Tachi Yamada, chairman, Research and Development, GSK, "We are hopeful that this grant will further the important research being done at Penn and facilitate scientific interchange between its scientists and our own. GSK and Penn are working towards a shared goal-increasing our understanding of human disease and finding new treatments for the patients who need them."

We are delighted to receive this grant and look forward to exploring mutual scientific interests of Penn and GSK," said Dr. Arthur H. Rubenstein, EVP of the University of Pennsylvania for the Health System and Dean of the School of Medicine. "This generous grant will permit our researchers to continue to aggressively pursue the translational nature of our work—which seeks to transform knowledge gained at the benchside into safe and effective therapies and treatments that improve patient care.'

GSK is one of the world's leading researchbased pharmaceutical and healthcare companies. The 18,000 people working in their global R&D organization discover, develop, register, and support the commercialization of prescription medicines and vaccines for the treatment and prevention of human disease. In 2002 GSK invested \$4 billion in research and development at more than 20 sites worldwide. GSK has R&D facilities in Philadelphia, Upper Merion, and Upper Providence, which employ 3,500 staff. GSK is a major funder of academic research in the U.S., with 378 active collaborations between U.S. universities and GSK researchers.

Trustees Meetings: March 20

Members of the University community interested in attending any of the following open sessions are asked to call the Office of the Secretary at (215) 898-7005.

Facilities and Campus Planning Committee: Huntsman Hall, Colloquium Room, 9-9:30 a.m. Budget and Finance Committee: Huntsman Hall, Colloquium Hall, 11:10-11:40 a.m. Meeting of the Executive Committee: Huntsman Hall, Colloquium Hall, 1:30-2 p.m.

- Senate: SEC Agenda; Institute on Aging Pilot Study; Fulbright Scholars; Deaths: Mr. Hanna; Dr. Sunderman
- Honors & Other Things; Provost's Interdisciplinary Seminar Fund
- Government Affairs Update
- HR: Learning Opportunities; Changes to Performance and Staff Development Program
- Update; CrimeStats; Classifieds
- Research Roundup

The following agenda is published in accordance with the Faculty Senate Rules. Questions may be directed to Kristine Kelly either by telephone at (215) 898-6943 or by e-mail at kellyke@pobox.upenn.edu.

Senate Executive Committee Agenda Wednesday, March 19, 2003, 3 to 5:30 p.m. Room: TBD

- 1. Approval of Minutes
- 2. Chair's Report
- Past Chair's Report on Academic Planning and Budget and Capital Council
- 4. Gender Equity/Faculty Development Discussion
- 5. Patriot Act Resolution Discussion
- 6. Provost Robert Barchi—New Vice Provost for Strategic Initiatives position
- 7. Other New Business
- 8. Adjournment

Deaths

R.M. Hanna, Landscape Architecture



Robert Hanna

Robert Mitchell Hanna, landscape architect, and former chair of Design of the Environment, died on March 8 at the age of 67.

Mr. Hanna received a B.A. in architecture from the University of Washington in Seattle in 1959, and earned his MLA from Harvard in 1967. He worked as an architect for the Planning Design Group of

the Urban Design Department of the Boston Redevelopment Authority from 1967 to 1969. He joined Penn in 1969 as a lecturer and became an assistant professor of landscape architecture and regional planning in 1970. He was promoted to associate professor in 1976 and remained in that position until 1990. He became an adjunct professor in 1990 and served in this position until 2000. He had been teaching a course in the Urban Studies Program since the spring of 2000. Mr. Hanna was instrumental in forming the undergraduate Design of the Environment (DOE) program and served as its first chair. He participated in the formulation of the Landscape Architecture Master Plan for the University that resulted in the development of College Green and led to the current landscape setting of the Uni-

Mr. Hanna was a founding partner in the firm of Hanna/Olin Ltd., in 1976. The firm's projects included: the master plan for Battery Park City; the Fifth Avenue Terrace of the New York Public Library; Bryant Park; IBM World Headquarters; Ellis Island; the US Holocaust Museum; Canary Wharf in London; the 16th St. Transit Mall in Denver; and the public framework for the Los Angeles Downtown Strategic Plan. Since 1995 Mr. Hanna served as principal of RM Hanna Landscape Architects, and his projects include the University of Washington, Tacoma, Canberra Central National Area, Australia; the Hun School, Princeton; the Tianfu Square Master Plan, Chengdu, Sichuan, China; and a new town square for Pottstown, PA.

Mr. Hanna was a Fellow for the American Academy in Rome and a Fellow of the American Society of Landscape Architects.

He is survived by his wife, Beverly Briggs (MLA'79); a son, Robert Jr.; and a sister, Hazel Bacon. A memorial service is scheduled for March 22 at 4 p.m. at the Trinity Center for Urban Life, 22 & Spruce Streets, Philadelphia.

To Report A Death: *Almanac* appreciates being informed of the deaths of current and former faculty and staff members, students, and other members of the Penn community.

Dr. Sunderman, Medicine

Dr. Frederick William Sunderman, professor emeritus of pathology and laboratory medicine, died on March 9, at the age of 104.

Dr. Sunderman received his B.A. from Gettysburg College in 1919, and graduated from Penn's School of Medicine in 1923. He earned a Ph.D. in physical chemistry at Penn in 1929.



Frederick Sunderman

Dr. Sunderman was the director of the William Pepper Laboratory at Penn in the 1930s where he developed methods for the measurement of blood cholesterol, glucose and chloride. During World War II, he was medical director of Explosive Research at Carnegie Institute of Technology and Los Alamos Laboratories also known as the Manhattan 8 Project. There he developed an antidote for nickel carbonyl poisoning. He was also responsible for the standardization of hemoglobin measurements throughout the world. He was the founder of the Association of Clinical Scientists. Dr. Sunderman assisted in the setup of the Brookhaven National Laboratories medical department and served as medical consultant at the Redstone Arsenal from 1947-1969. He was also the head of the clinical pathology department at the Communicable Disease Center in Atlanta. Other institutions he worked at include the Cleveland Clinic, the M.D. Anderson Hospital Cancer Center in Texas, and Emeroy University.

Dr. Sunderman co-wrote more than 300 scientific papers and 45 books. He was the editor of *The Annals of Clinical and Laboratory Science* from its first edition in 1971 and was working on the latest edition at the time of his death.

"His biggest contribution was to bring rigorous scientific standards to the medical laboratory," said Michael J. Warhol, chairman of pathology at Pennsylvania Hospital where Dr. Sunderman worked for many years.

Dr. Sunderman was also an accomplished musician who—on the occasion of his 100th birthday—played a violin duet with his son at Carnegie Hall. In 1999, Experience Works, Inc. named him the oldest worker in America. He also wrote an autobiography titled *A Time to Remember* (1998), which was nominated for a Pulitzer Prize.

He is survived by his son, F. William Sunderman Jr.; three grandchildren; and one great-granddaughter.

Memorial donations may be made to Lutheran Church of the Holy Communion, 2110 Chestnut St., Philadelphia, PA 19103.

Institute on Aging Pilot Study

The University of Pennsylvania Institute on Aging (IOA) will fund three multidisciplinary pilot projects on biomedical, epidemiological, behavioral or health services research in basic science or clinical areas in aging. Each pilot will be funded at a level of up to \$50,000/year (for personnel and supply costs, but not equipment).

These one-year, non-renewable grants support multidisciplinary pilot projects in aging-related research. The purpose is to assist faculty in obtaining preliminary data to serve as the basis of a grant application to the NIH or other public or private agencies concerned with aging. Application instructions may be found on the IOA web site: www.uphs.upenn.edu/aging/.

A committee representing the IOA Internal Advisory Board will review all proposals. Funding depends not only on scientific merit, but also on the likelihood that the pilots will lead to independent investigator initiated proposals. Principal Investigators must be on the faculty of Penn's School of Medicine, but collaboration with faculty from other departments is strongly encouraged. Priority will be given to:

- Faculty in the early stages of their career who seek to enter the aging research arena;
- Senior faculty who intend to shift their research emphasis towards aging.

Applications should utilize the basic NIH PHS 398 form with a limit of 5 pages (exclusive of face page, budget, biosketches, letters of collaboration and literature cited). The application submission deadline is *May 1*, 2003. Direct questions to Kathryn Jedrziewski, Deputy Director, Institute on Aging, (215) 898-2445 or e-mail: *jedrzmk@mail.med.upenn.edu*.

Fulbright Scholar Program

The Fulbright Scholar Program is offering lecturing/research awards in some 140 countries for the 2004-2005 academic year.

Opportunities are available not only for college and university faculty and administrators, but also for professionals from business and government, as well as journalists, lawyers, scientists, artists, independent scholars and many others.

Traditional Fulbright awards are available from two months to an academic year or longer. A new short-term grants program—the Fulbright Senior Specialists Program—offers two-to-sixweek grants in a variety of disciplines and fields.

While foreign language skills are needed in some countries, most Fulbright lecturing assignments are in English. Some 80 percent of the awards are for lecturing.

Application deadlines for 2004-2005 awards

- *May 1, 2003* for Fulbright Distinguished Chair awards in Europe, Canada and Russia
- August 1, 2003 for Fulbright traditional lecturing and research grants worldwide
- Rolling deadline for Fulbright Senior Specialists Program.

For information, contact the Council for International Exchange of Scholars (CIES) at 3007 Tilden Street, NW, Suite 5L,

Washington, DC 20008-3009. Telephone: (202) 686-7877

e-mail: apprequest@cies.iie.org
Information and an on-line application are

reau of Educational and Cultural Affairs.

also available on the web at www.cies.org.

The Fulbright Scholar Program is sponsored by the United States Department of State, Bu-

Honors and Other Things

Dr. Nathans: Koret Award

Dr. Benjamin Nathans, assistant professor of

history, has received the Koret Jewish Book Award in the History Category for his book Beyond the Pale: The Jewish Encounter with Late Imperial Russia (University of California Press). His book is a major reassessment of Jewish life in the capital of Imperial Russia, a community of mostly



Ben Nathans

Russian-speaking Jews who were drastically different from the bulk of Russian Jewry at the time.

Dr. Seligman: Book Award

Dr. Martin E. P. Seligman, professor of psychology, has received the Best Psychology Book of 2002 award from Books for a Better Life for

his book, Authentic Happiness. The award was presented by the National Multiple Sclerosis Society. Dr. Seligman is the founder of the positive psychology movement and author of 20 books. He serves as director of the Positive Psychology Network and was president of the American Psychological Association in 1998. Dr.



Martin Seligman

Association in 1998. Dr. Seligman had developed self-tests, exercises and a web site, www.authentic happiness.org to help people focus on their strengths rather than their weaknesses. He counsels that happiness can be cultivated using traits readers already possess and that by calling upon "signature strengths" readers can develop natural buffers against misfortune and negative emotion.

Dr. Burbank: NFL Special Master

Dr. Stephen B. Burbank, the David Berger Professor of Law, has been appointed special



Stephen Burbank

master to resolve designated disputes between the National Football League Management Council and the NFL Players Association. Dr. Burbank will have exclusive jurisdiction to enforce various provisions of the collective-bargaining agreement. Among the issues Dr. Burbank may be called upon to decide are appeals from the NFL commissioner's

disapproval of player contracts, alleged violations of provisions concerning guaranteed leaguewide salary, salary cap and minimum team salary and claims of prohibited collusion.

Dr. Berman: Hower Award

Dr. Peter H. Berman, professor of neurology and pediatrics, has been awarded the 29th Annual Hower Award in pediatric neurology. Dr. Berman held the position of director of the Division of Neurology at CHOP for 25 years.

The Hower Award is named for the late John B. Hower, and is presented to a physician who has made a significant contribution to pediatric neurology. The Child Neurology Society, an organization of the nation's top pediatric neurologists, selects the recipient.

Dr. Bashaw: Sloan Fellowship

Dr. Greg J. Bashaw, assistant professor of neuroscience, has received a Sloan Foundation Fellowship. Dr. Bashaw is one of 117 scientists and scholars to receive awards in the 2003 Sloan Foundation Awards cycle. The Alfred P. Sloan Foundation awards are given annually to recognize and support young scientists and scholars. The awardees receive grants of \$40,000.

Dr. Rozmyslowicz: amfAR Award

Dr. Tomasz Rozmyslowicz, research associate in pathology and laboratory medicine, received a targeted basic research fellowship from the American Foundation for AIDS Research (amfAR). He received \$99,000 to test the role of microparticles in HIV-1 infection.

Dr. Percec: Fellow Polymeric Materials

Dr. Virgil Percec, the P. Roy Vagelos professor in Biochemistry and Molecular Biology, has been elected a Fellow of Polymeric Materials: Science and Engineering, a division of the American Chemical Society, the world's largest scientific society. Fellowship is granted to members who have made significant contributions to the science and engineering of polymeric materials. He is one of six fellows to be inducted during ACS's meeting in New Orleans on March 24.

Dr. Kumanyika: Russell Award

Dr. Shiriki Kumanyika, professor of epidemiology, senior scholar in the Center for Clinical Epidemiology and Biostatistics and associate dean for health promotion and disease prevention, director of graduate program in public health studies and senior fellow of the Institute on Aging, will be awarded the Louis B. Russell, Jr., Memorial Award of the American Heart Association on April 28. Dr. Kumanyika will receive this award in recognition of her outstanding service to minority and under-served communities and enhancing their relationship with the Association. In particular, it was noted that she has been effective in advocating for and articulating minority health research and policy issues.

Dr. McGovern: Education Award

Dr. Patrick E. McGovern, adjunct associate professor of anthropology and research investigator, senior scientist at the Museum's Applied Science Center for Archaeology (MASCA), has received an Education Award from the American-Turkish Council. Dr. McGovern received his award for the chemical research on the ancient organic residues inside Tumulus MM ('Midas Mound') at Gordion.

Dr. Sutton-Smith: Senior Fulbright

Dr. Brian Sutton-Smith, professor emeritus of education, has received a Fulbright Senior Specialists grant to lecture and consult for two weeks at the Australian Centre of the University of Melbourne and at the Museum Victoria. Dr. Sutton-Smith is a child-development expert and directed a child culture group during his tenure at Penn. He had a secondary appointment in the folklore department at SAS and taught here for 20 years before his retirement.

Dr. Chinburg: Robinson Prize

Dr. Ted C. Chinburg, professor of mathematics, has received the 2002 G. de B. Robinson Prize from the Canadian Mathematical Society. The prize, which recognizes outstanding publication in the Canadian Journal of Mathematics or the Canadian Mathematical Bulletin, was awarded to Dr. Chinburg, along with Victor Snaith of the University of Southampton, and Manfred Kolster of McMaster University for their paper, Comparison of K-theory Galois Module Structure Invariants.

Provost's Interdisciplinary Seminar Fund

The Provost announces the FY 2004 seminar fund to stimulate the creation of interdisciplinary discussions and connections that could grow into lasting cooperative intellectual efforts and perhaps programs. This fund will provide financial support for up to three years for seminars and is designed to support initiation of new seminar series that emphasize interdisciplinary research and scholarship. To be eligible for funding, seminars must draw on faculty scholars from at least two schools. Seminars that include Penn graduate or undergraduate students will be particularly welcome as will seminars with participation from the nonacademic community outside the University. The fund will provide each seminar with approximately \$10,000 (depending on documented need) a year for up to three years. Funding in the second and third years is subject to success in the previous years. Success is defined as growing attendance, publications, general visibility and other evidence of intellectual progress. Each proposal must contain criteria by which its success can be judged.

Applications to the Provost's Interdisciplinary Seminar Fund should contain:

i. A seminar title.

ii. A brief (no more than five pages) description of the intellectual area of the seminar and of how the suggested new connections will advance the subject.

iii. The names and affiliations of the principal faculty (no more than 4) proposing the seminar with a two page CV on each.

iv. The names and affiliations of others who will be major participants in the seminar.

v. A suggested set of criteria or goals by which success of the seminar program can be evaluated.

vi. A detailed proposed budget for the first year of the seminar. The budget may be dedicated to honoraria, travel, and other directly associated expenses, but entertainment should be kept to a minimum. Also, cofunding from Departments, Schools, or other sources should be documented and will increase the credibility of the application.

The application should be sent electronically as one MS Word document without images to *corbett@pobox.upenn.edu*, by Friday, *April 25*, 2003. A committee will review the applications and funded proposals will be announced in May.

—Neal Nathanson, Vice Provost for Research

Commonwealth Relations

On March 4, Governor Edward G. Rendell, as required by law, released the first part of an intended two-part proposed FY 2003-04 budget for the Commonwealth. Pennsylvania is facing a projected \$2.4 billion deficit. This "first part" balances the budget by cutting programs and personnel, offers improved government efficiencies, but included no tax increases. Governor Rendell characterized this first budget as a "painful, barebones plan that met his constitutional requirement of offering a balanced budget, but would accomplish little else.'

Governor Rendell also announced his intent to deliver to the legislature a "second budget" on March 25. Governor Rendell indicated that his "Investment Plan for a New Pennsylvania" will propose new sources of revenue that would provide additional support for existing programs, and would help fund new programs he wants to support in areas such as basic education, economic development, and property tax reform. He asked the legislature not to take action immediately and wait to consider both budgets together.

Shortly thereafter, on March 7, the Republican-controlled House pushed the Governor's "first" budget (HB 648-General Fund Bill) through without debate or public hearings by a vote of 113-84 along party lines. On Wednesday, March 12, the Republican-controlled Senate passed the Governor's proposed first budget as well. The Governor is now faced with three options: veto of his own initial budget; line-item veto of some parts of the budget; or sign the passed budget and hope that the legislature will still consider his investment plan. Lawmakers have expressed willingness to consider additional spending proposals that the Governor will bring later this month. The Governor has until March 23 to decide how to proceed on HB 648.

Below is a summary of those parts of the Governor's first budget that affect the University of Pennsylvania:

The Governor's first budget proposed for the University, in its nonpreferred appropriation, a total of \$42,946,000, a decrease of \$2,260,000, or five percent below the amount authorized for the current fiscal year. All of Penn's line items were reduced by 5 percent below the FY '03 authorization level. These cuts are consistent with the 5 percent cuts included for the state-related institutions (Penn State, Pitt, Temple and Lincoln) and most of the other state-aided institutions (several of the state-aided institutions had larger cuts). As shown in the chart below, Penn's funding is broken down as follows—\$36,523,000 for the Veterinary School; \$3,832,000 for the Medical School; \$1,520,000 for Cardiovascular Studies; \$846,000 for the Dental Clinics; and \$225,000 for the University Museum.

The General Assembly has not yet taken any action on the approval of non-preferred appropriations, including Penn's. At this point, it is unclear when the legislature will begin consideration of these bills, which require a two-thirds vote.

- In addition to the University's non-preferred appropriation, the General Fund budget includes \$899,000 for regional cancer institutes, a reduction from the current year's funding level of \$2 million. Penn's Cancer Institute is receiving \$600,000 under the current year funding.
- In other higher education funding programs, the Governor maintained PHEAA student grants at current levels. The budget eliminates the Higher Education Equipment Grant program. In the current fiscal year, Penn is receiving \$95,000 through this program, which had been reduced by 2/3 through budgetary freezes. The budget eliminates the Engineering Equipment Grant program, through which Penn is receiving \$85,000 in the current year. The budget includes no funding for the Higher Education Technology Grant program (funded in FY '03 at \$4.5 million), formerly called Link to Learn. The Governor recommended that the SciTech and Technology Scholarships program be cut from \$6.2 million to \$3.1 million. Finally, the budget cuts in half (from \$6 million to \$3 million) the amount available to provide low interest loans to colleges and universities to install dormitory sprinklers.
- In the area of health care, the budget proposes major cuts to various programs providing reimbursements to UPHS. The following programs are scheduled to be eliminated in the Department of Public Welfare Medical Assistance budget—Community Access Fund, Outpatient Disproportionate Share (DSH) and Medical Education. In the current fiscal year, our three urban hospitals (Hospital of the University of Pennsylvania, Presbyterian Medical Center and Pennsylvania Hospital) receive \$13.9 million through these programs (Community Access Fund—\$4.8 million; Outpatient DSH—\$2.6 million; and Medical Education—\$6.4 million).
- The budget makes no cuts in the existing tobacco settlement allocations, but does take \$330 million from the Tobacco Settlement endowment to help balance the budget.

University of Pennsylvania Commonwealth of Pennsylvania **History of Non-preferred Appropriation**

(in thousands of dollars)

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003 Final HB 2495	FY 2003 % Inc.	FY 2004 Request	FY 2004 Request % Inc.	FY 2004 Gov. Rec.	FY2004 Gov.Rec. % Inc.
Instruction	\$ 0	\$ 0	\$ —	\$ —	\$ —	_	\$ —	_	\$ —	_
Medical Instruction	4,034	4,034	4,034	4,034	4,034	0.0	5,632	39.6	3,832	-5.0
Dental Clinics	938	938	938	938	891	-5.0	1,126	26.4	846	-5.0
Cardiovascular Studies	132 ²	632 ¹	882	1,632	1,600	-2.0	1,664	4.0	1,520	-5.0
Veterinary Activities	31,489	32,276	34,783	36,626	38,445	5.0	40,367	5.0	36,523	-5.0
Universitý Museum	199²	219 ²	241 ³	248 ³	236 ³	-4.8	265 ³	12.3	225	-4.7
Total University	\$36,762	\$38,099	\$40,878	\$43,4784	\$45,206 ⁵	4.0	\$49,054	8.5	\$42,946	-5.0

⁵ Note: Amount authorized by HB 2495. Does not reflect 2% freeze announced 2/13/03. (As of 3/04/03)

City and Community Relations

City Elections

The City of Philadelphia will hold municipal elections this November following a May 20 primary election for the following seats: Mayor, City Council, City Commissioners, Clerk of Quarter Sessions, Register of Wills, Sheriff, and trial judges for the Common Pleas, Municipal and Traffic Courts. The filing deadline for the May 20 primary election closed on March 11, 2003.

Challenging Mayor Street in the Democratic primary are protest candidate Quenna Bass and religious family activist Bill Devlin. Sam Katz is unopposed in the Republican Mayoral primary. Therefore, the

general election for the Mayor's seat will likely pose the incumbent John F. Street against the same Republican opponent he faced in 1999, local businessman Sam Katz. Mayor Street won that election by a narrow 2% margin offset by approximately the same number of votes that went to a third-party candidate.

Candidates will also vie for all ten district seats and seven at-large seats on the City Council. All incumbents have filed to run in their respective primaries, with the exception of Republican at-large Councilman W. Thacher Longstreth. Because two of the 7 at-large seats are reserved for Republicans, and Councilman Longstreth is no longer running, this will be

www.upenn.edu/almanac ALMANAC March 18, 2003

 ¹ Includes \$132,000 appropriated through separate non-preferred appropriation.
 ² Appropriated through separate non-preferred appropriation.
 ³ Appropriated through PA Historic and Museum Commission (not part of submission to PDE).

⁴ Note: Amount authorized by HB 1201. Does not reflect 3% freeze announced 1/18/02.

Affairs Update

a hotly contested seat. In addition to incumbent Republican Frank Rizzo, four other Republicans have filed for at-large seats. On the Democratic side for the at-large seats, incumbents David Cohen, Wilson Goode Jr., Jim Kenney, Angel Ortiz, and Blondell Reynolds Brown have filed for reelection, along with eight new democrats hoping to unseat one or more of the incumbents. Democratic district council members facing challenges include Frank DiCicco, Rick Mariano, Donna Reed Miller, and Marian Tasco. Councilwoman Jannie Blackwell, the council member for the Third District in which Penn is located, is running unopposed.

Mayor's Budget

On January 28, 2003, the Mayor presented his budget address to City Council. He proposed a \$3.3 billion operating budget for fiscal 2004 and outlined that the City's five-year plan forecasts an estimated \$834 million deficit by 2008 due to the lagging national economy. His five-year budget continues minor cuts in the wage and business taxes by \$319 million. His cost saving measures include: 5% budget reductions across all departments; 1.5% cuts in personnel costs; 16% reduction in outside legal fees; continuation of the hiring freeze; elimination of 500 positions through the DROP program; and reduction of the workforce by approximately 2500 positions over the course of the 5-year plan. His workforce reduction plan includes the elimination of 50 Administration positions within the Mayor's Office, Finance, and Managing Director's Office, several of these cuts have already been made. Mayor Street noted that Philadelphia supports a public infrastructure designed for a City population of 2.5 million. Because this represents a system designed for one million more residents than Philadelphia currently has, he warned of closure of city facilities specifically citing pools and recreation centers. The PHLASH shuttle bus for tourist sites is also slated to lose its city subsidy, saving \$9.4 million through fiscal 2008.

The Mayor promised support for resolution of the Convention Center union issues and continued funding for Operation Safe Streets. He recommended changes to the Neighborhood Transformation Initiative spending that will result in more apparent physical changes, such as an acceleration of the demolition schedule and introduction of new housing development plans. Hearings in City Council on the Mayor's operating and capital budget are taking place throughout March, and it is anticipated that Council will vote on the budget in April.

Mayor's Report to the Greater Philadelphia Chamber of Commerce

On February 7, the Mayor delivered his annual report to the Greater Philadelphia Chamber of Commerce. The focus of this speech is to deliver to the region's business community an update on the City's financial and economic progress, and strategic investments and future plans. The Mayor echoed themes used in his City Council budget speech in expressing the difficult economic times facing Philadelphia and the nation. He outlined several of the challenges he inherited in his first years as Mayor, which he has helped turn around including: a financially stable Philadelphia Gas Works; retaining the Eagles and Phillies teams with new ballparks; improved on-line City government operations and information; new large-scale developments announced under the Mayor's Neighborhood Transformation Initiative; and new leadership and partnership with the Commonwealth for the School District.

The Mayor spoke of retaining Philadelphia's status as a world class city with a great future by investing in areas critically important to future growth. One of these areas focused on the knowledge industry fueled by the region's colleges and universities. He stated," In fact, our 'knowledge industry' of colleges and universities is to Philadelphia what the auto industry is to Detroit or the entertainment industry is to Los Angeles." He highlighted many initiatives in which Penn is involved.

• Mayor Street intends to rigorously support the expansion of Philadelphia's colleges and universities to further leverage the economic impact of higher education and research institutions in Philadelphia and the region. The Mayor highlighted the development of 1.2 million square feet of research and clinical facilities by the University of Pennsylvania and Children's Hospital on the old Civic Center site. He spoke of working with area university and college Presidents to develop a clear strategy to increase our share of federal research awards and maximize funding for technological innovation related to homeland security.

- Retention of college graduates was named as a major economic development priority for Mayor Street's administration. He outlined his intention to work with universities and the Commonwealth to make land, low cost financing and other needed support available to help universities develop campus student housing and grow their student enrollment. The Mayor announced his support of the "Knowledge Industry Partnership" chaired by Dr. Rodin. This effort is designed to bring more college students to study in Philadelphia, encourage existing students to explore the City and region during their stay here, and achieve successful careers in Philadelphia after completion of their studies.
- The City intends to take better advantage of the "creative class" cluster that exists in Philadelphia due to the convergence of culture, arts, technology and media, and competitive strengths in biotechnology, pharmaceuticals and life sciences industries. Mayor Street noted the concentration of local institutions such as the Moore College of Art and Design, the University of the Arts, the Pennsylvania Academy of Fine Arts, and the Art Institute of Philadelphia. He mentioned Temple University's commitment to move the Tyler School of Design from the suburbs to its main campus in North Philadelphia, which will further add to the City's creative resources. The Mayor credited the revitalization of neighborhoods such as Northern Liberties and Old City to many of the graduates of these institutions. He expressed that public and private support for these creative services can breathe new life into the Avenue of the Arts and the effort to bring the Barnes Foundation to the Benjamin Franklin Parkway.
- Mayor Street also announced that the City is providing financial support to the Schuylkill River Development Corporation to create exciting new development plans for institutional, recreational, commercial and market rate residential projects. The Mayor indicated that development along the Schuylkill River could present the next frontier for growth in Philadelphia. The University of Pennsylvania is working with the City, the Center City District, the University City District, and other institutional partners along the river on these plans.

Tax Reform Commission

Councilman Michael Nutter (D-Fourth District) received overwhelming public approval for his proposed Tax Reform Commission, which was presented to the electorate as a ballot question in the 2002 General Election. The Commission is charged with evaluating the City's current tax structure and developing recommendations to improve Philadelphia's ability to compete with other regional jurisdictions in retaining and attracting new residents, businesses and jobs. The fifteen-member appointed commission is supported by a 23-member Advisory Committee, on which Dean Patrick Harker of the Wharton School sits. We will watch the proceedings of the tax commission closely to determine whether there are any recommendations affecting the University and Penn Medicine.

Neighborhood Transformation Initiative (NTI)

On February 3, Mayor Street announced the first large-scale development sites of his NTI program. The projects will result in 2100 new homes and apartments and the proposed development of commercial space on approximately 350 acres throughout the city. The new housing will provide low and moderate-income homes to upscale townhouses. The total development value to the City will be \$150 million. One of the sites includes the redevelopment of the recently imploded Philadelphia Housing Authority Mill Creek Apartments in West Philadelphia. The project will create a new community of 788 homes, which will include 247 homes for sale, 341 apartments for senior citizens, and 200 rental units for families. The City has allotted approximately \$68.1 million of bond proceeds for FY2003 and \$60.2 million for FY 2004 NTI activities.

Free Library

Penn continues to work with its neighbors to advocate for the restoration of the 40th Street Walnut West Library. It is scheduled to reopen January 2004 and remains on schedule. The City's recommended capital program for FY 2004 continues to provide funding to complete the construction project

-Carol R. Scheman, Vice President for Government, Community and Public Affairs



In *Three Worlds Intertwined*, The Vagabond Acting Troupe takes visitors on an interactive theater journey through time in Theater in the Galleries at the UPM. Above, an Etruscan Priestess (Kate Griesermer), a Roman Senator (Leonard Kelly), the goddess Athena (Rose Evans) and a slave from all three worlds (Jason Stockdale).

Ever wonder what it was like to be an Etruscan slave, a Greek pilgrim visiting the temple of a goddess, or a senator plotting revenge on the newest Roman emperor? Visitors can find out this spring as they journey through Three Worlds Intertwined, a live interactive theater production created by the award-winning Vagabond Acting Troupe specifically for the opening of Worlds Intertwined: Etruscans, Greeks, and Romans. The UPM galleries are a fitting stage, as characters from the ancient Mediterranean world come vividly to life, sharing the challenges and perspectives of their time. All theatrical programs are free with regular admission, Saturdays and Sundays now through April 13. (multiple performances, beginning Saturdays at 11:30 a.m., Sundays at 1:15 p.m.)

April Learning Opportunities – Human Resources

Take advantage of the programs offered by Human Resources to help further your professional and personal development. The Learning and Education (L&E) and Quality of Work Life (QOWL) departments are promoting several programs in the month of April, as listed below. Visit the HR website at www.hr.upenn.edu for descriptions of the programs and to pre-register online. Registration is required for all programs.

Learning and Education programs

Learn valuable skills through American Management Association (AMA) programs, Brown Bag Matinees, Satellite Broadcasts, and other programs. For questions on L&E programs, call (215) 898-3400 or visit www.hr.upenn.edu/learning.

Thurs., April 3 and Fri., April 4, 9 a.m.–5p.m. *The Grammar Course* (AMA Program) 2-day program

Wed., April 16, noon-1p.m. FISH! (Brown Bag Matinee)

Wed., April 23, 1–3 p.m.
Future Skills, What You Need to Succeed in 2003

and Beyond, Featuring Bob Nelson (Live Satellite Broadcast at Penn)

Special Event for Administrative Professional Day Fri., April 25, noon–1p.m.

Closing the Gap (Brown Bag Matinee)

Quality of Work Life programs

Human Resources continues to promote effective communication and health promotion with workshops presented by experts from Penn Behavioral Health (our Employee Assistance Program (EAP) and Work/Life Benefit provider), and Independence Blue Cross (IBC).

For personalized assistance with dependent care issues and personal well-being, contact PENN Behavioral Health at 1-888-321-4433 or go on-line to www.hr.upenn.edu/quality/wellness/eap.asp. For questions on QOWL programs, contact Orna Rosenthal at orna@hr.upenn.edu or (215) 898-5116.

Thurs., April 3, 11:30 a.m. -1p.m.

Talking to Your Teenager (Employee Assistance and Work/Life Benefit workshop)

Tues., April 8, noon–1p.m. *Insomnia* (IBC video presentation)

Thurs., April 17, 11:30 a.m.– 1 p.m. He Said, She Said: Communicating Across the Gender Gap (Employee Assistance and Work/ Life Benefit workshop)

Look for monthly updates on HR programs in future *Almanac* editions.

—Division of Human Resources

Changes: 2003 Performance & Staff Development Program

The Division of Human Resources continuously strives to enhance our Performance and Staff Development Program (the annual performance appraisal program) to support the University's strategic goals, meet the needs of our community, and promote best practices. In doing this, we seek constant feedback from supervisors and staff on our program in addition to benchmarking and researching best practices in the field. Based on our recent research and feedback, we have made minor changes to the annual performance appraisal process for the 2003 cycle. The 2003 appraisal process will now include a 5-tier overall rating system and a revised competency list consisting of 11 basic competencies for all staff and an additional 3 supervisory competencies.

All of the materials for the 2003 Performance and Staff Development Program can be found on the HR website at *www.hr.upenn.edu*. If you have questions about the performance appraisal process or need training for staff and/or supervisors, contact the Division of Human Resources, Staff and Labor Relations at (215) 898-6093.

—Division of Human Resources

Get On Board Express Almanac

Sign up to receive e-mail notification when we post breaking news between is-



sues. Send an email message with "subscribe" as the Subject to almanac@pobox. upenn.edu and include your name,

e-mail address and mailing address. — Ed.



Making Music: Women's History Month

The Cassatt String Quartet will celebrate Women's History Month in a free concert on Wednesday, March 19. The quartet will perform works by women composers, including Anna Weesner's Sudden, Unbidden; she is an assistant professor of composition at Penn. Hailed as one of America's outstanding young ensembles, the quartet consists of Muneko Otani, violin; Jennifer Leshnower, violin; Tawnya Popoff, viola; and Caroline Stinson, cello. They have performed throughout North America, Europe, and the Far East. The concert will take place at 8 p.m., Wednesday, March 19 at the Amado Recital Hall in Irvine Auditorium. Doors open at 7:30 p.m., and all seats are on a first come, first served basis.

CLASSIFIEDS—PERSONAL

FOR RENT

Treetop Apartment in Owner Occupied Building: Trinity Place 3rd floor, 1bdrm apartment fully furnished with European kitchen, Dishwasher, G/D, Victorian bath, all linens, Cable TV. \$900 per month long-term. \$1000 short-term. Excellent transportation: 13 trolley & Penn bus. Please phone: (215) 729-2827

Great Beach! Weekly rentals—Ocean City (Gardens) beachblock, reasonable, sleeps six, all conveniences, parking, call Steve (610) 565-1312.

Furnished **Penthouse efficiency**, Society Hill, River view. No Pets/smoking. \$1,150 utilities included. (215) 413-3601.

Penn offers three luxury apartments at the Left Bank for extended stay use by University-affiliated guests. Annual lease commitment not required for eligible visiting scholars, researchers, consultants and new appointees. Paid utilities and other amenities provided by Penn include: cable, parking, washer/dryer and much more. For details contact: Conference Services, 222 SPE/6106, (215) 898-9319 or confsvcs@pobox.upenn.edu.

FOR SALE

Beautiful 5-bedroom, 2.5-bath house in prime W. Mt. Airy neighborhood. Large living/dining area, fireplace, enclosed sunporch, built-in shelving, security system, garage. Quiet street, close to R8 train stations. \$320,000. Contact judgerk@hotmail.com; (215) 844-2686.

Almanac is not responsible for contents of classified ad material.

To place a classified ad, call (215) 898-5274.

MARCH AT PENN

CORRECTIONS

The Neal Nathanson Lecture, Immunological Memory: Remembering Our Pathogens, originally scheduled to be held on March 19 at 4 p.m. at the BRB II/III Auditorium has been rescheduled. It will instead take place on March 19 at noon in Reunion Hall, John Morgan Building.

The reception for the Steve McCurry exhibit on March 19 will be at 5 p.m. at the Arthur Ross Gallery, not 4:30 p.m. at the Annenberg School.

The talk Enzymology and "Top Down"

The talk Enzymology and "Top Down" Proteomics Spearheaded by Ultra-high Performance FTMass Spectrometry, originally scheduled for March 21, has been rescheduled for March 25 at 4 p.m.

EXHIBITS

Recent Paintings and Photographic Works by Suchitra Mattai and Hilary Takiff; Graduate Student Center. Through March 30.

Charles Cooper and John H. Stone: Painting and Sculpture; Cooper's paintings reflect his love of Indian miniature painting, gothic painting and American figurative works of the 1950s; Esther Klein Gallery. Through May 2.

FILM

20 *The Discreet Charm of the Bourgeoisie*; 8 p.m.; Hill College House (Hill Film Society).

FITNESS/LEARNING

18 PennKids Day Camp Information Sessions; 6 p.m.; Conference Room, Pottruck Center. Also March 19, 5:30 p.m.

19 Career Opportunities in Biomedical Industry; 9 a.m.-noon; Austrian Auditorium, CRB (Biomedical Postdoctoral Programs).

ON STAGE

22 Three Worlds Intertwined; interactive performance by the Vagabond Acting Troupe; UPM (UPM). Also March 23, 29 & 30.

RELIGION

20 Devotional Worship and Organ Concert; Soo Yeon Lee, Westminster Choir College; noon; Philadelphia Cathedral.

TALKS

18 Healing Word Waters: Africa Diasporic Women Recovering from the Traumas of Violence, Racism, and Historical Oppression; Thema Bryant, Princeton; noon; Golkin Room, Houston Hall (AARC; Makuu, Penn Women's Center; CA).

20 Biological Aspects of Domestic Violence Prevention; John Umhau, NIH; 9:30 a.m.; rm. G65, Jon M. Huntsman Hall (Trauma Center; Firearm Injury Center).

Metastasis Suppressor Genes Alter Signal Transduction; Patricia Steeg, National Cancer Institute; noon; Conference Rm., John Morgan Bldg. (Radiation Oncology).

The Children of ART (Assisted Reproductive Technology): Canthe Law Protect Them From Harm?; Jennifer Rosato, Brooklyn Law School; noon; suite 320, 3401 Market St. (Center for Bioethics).

Cooperative Control of Multi-Vehicle Systems; Richard Murray, California Institute of Technology; 2 p.m.; rm. 337, Towne Bldg. (MEAM).

Pharmaceuticals in Urban Ecologies: The Register of the Local; Veena Das, Johns Hopkins; 4:30 p.m.; rm. 209, College Hall (Ethnohistory).

Intentional Communities; Cheryl Shipman, Research and Fellowships; 5:15 p.m.; CA House (Christian Association).

25 The War Against Militant Islam; Daniel Pipes, Middle East Forum and Campus Watch; 5:30 p.m.; Irvine Auditorium (Penn, Drexel Objectivist Clubs).

Sons of Mississippi: A Story of Race and Its Legacy; Paul Hendrickson, English; 6 p.m.; 3619 Locust Walk (Penn Humanities Forum).

26 Dialogue on Race, Racism and Health; David Williams, University of Michigan; 10 a.m.; rm. 216, School of Nursing (Nursing).

Deadline: The deadline for the May AT PENN calendar is *April 15*. For info, see *www.upenn.edu/almanac/calendar/caldead-real.html*.

The University of Pennsylvania Police Department Community Crime Report

About the Crime Report: Below are all Crimes Against Persons and Crimes Against Society from the campus report for **March 3-9, 2003**. Also reported were 8 Crimes Against Property (**including 5 thefts, 2 burglaries and 1 retail theft**). Full reports are on the Web (*www.upenn.edu/almanac/v49/n25/crimes.html*). Prior weeks' reports are also online. —*Ed.*

This summary is prepared by the Division of Public Safety and includes all criminal incidents reported and made known to the University Police Department between the dates of **March 3-9, 2003**. The University Police actively patrol from Market Street to Baltimore Avenue and from the Schuylkill River to 43rd Street in conjunction with the Philadelphia Police. In this effort to provide you with a thorough and accurate report on public safety concerns, we hope that your increased awareness will lessen the opportunity for crime. For any concerns or suggestions regarding this report, please call the Division of Public Safety at (215) 898-4482.

03/05/03	2:11 AM	4200 block Sansom	Male wanted on warrant/Arrest
03/05/03	10:18 PM	3800 Spruce St	Male urinating on highway/Cited
03/07/03	12:25 AM	3000 Walnut St	Male driving intoxicated/Arrest
03/07/03	1:24 AM	51 N 39 St	Female assaulted by male
03/07/03	10:21 AM	200 St Marks	Female robbed at gunpoint
03/08/03	1:40 AM	38 & Chestnut	Female assaulted by boyfriend/Arrest
03/08/03	2:41 AM	3300 Walnut St	Male driving intoxicated/Arrest
03/08/03	7:30 PM	300 S 33 St	Male wanted on warrant/Arrest
03/08/03	11:14 PM	3400 block Sansom	Male grabbed complainants purse
03/09/03	1:10 PM	3100 Walnut St	Male exposed himself to female
03/09/03	8:48 PM	3700 Spruce St	Male on private property/Arrest

18th District Report

9 incidents and 1 arrest (including 8 robberies and 1 rape) were reported between **March 3-9, 2003** by the 18th District covering the Schuylkill River to 49th St. & Market St. to Woodland Ave.

03/03/03	3:45 PM	315 45 St	Robbery
03/04/03	1:55 AM	4800 Pine	Robbery
03/05/03	1:00 PM	4800 Walnut	Rape
03/07/03	10:45 AM	200 St Marks	Robbery
03/07/03	8:15 PM	5000 Hazel	Robbery
03/08/03	4:06 AM	3701 Chestnut	Robbery
03/08/03	1:11 PM	4818 Florence	Robbery/Arrest
03/08/03	8:00 PM	5038 Larchwood	Robbery
03/08/03	11:07 PM	3600 Sansom	Robbery

CLASSIFIEDS—UNIVERSITY

RESEARCH

Want To Lose Weight For the Summer? The UPENN Weight and Eating Disorders Program is offering a 2-year weight loss treatment program beginning this March. Women aged 21-50 who are approximately 50 pounds overweight (BMI 30-40) may be eligible. Please call (215) 898-3184 to see if you qualify.

Are you **overweight** and at least 18 years of age? You may qualify for a research study that is being conducted on an investigational medication that may improve high cholesterol. Qualified participants will receive at no cost: study related exams and lab tests, dietary counseling, study related medication and compensation for time and effort. For more information please call (215) 662-9045.

Are you taking estrogen replacement? Volunteers are needed for an osteoporosis research study. If you are between the ages of 45 and 55 and are taking or would like to take estrogen replacement for menopause, you may be eligible to participate. Participants are compensated. For more information, call (215) 898-5664.

Do You Have High Cholesterol? Do you want to lower your cholesterol naturally, without taking medicine? Doctors at the University of Pennsylvania are launching a new study looking at the effects of adding the food, flaxseed, to a low-fat diet on lowering cholesterol levels and improving other risk factors for heart disease. The entire study lasts approximately 4 months and includes 7 short outpatient visits at the Hospital of the University of Pennsylvania in Philadelphia. There is NO medication involved with this study and participants will be compensated for their time and effort. If you are generally healthy, between the ages of 45 and 75, have high cholesterol, and think you might be interested in this study, please contact Shilpa Balikai (215) 662-9040 or e-mail her at balikai@sas.upenn.edu.

Postmenopausal Women Needed Post-menopausal volunteers needed for a research study examining estrogen, memory, and the ability to smell. \$50 will be given for approximately 3 hours of participation. Women 55 or older. For more information please call (215) 662-6580.

Almanac is not responsible for contents of classified ad material.

To place a classified ad, call (215) 898-5274.



Suite 211 Nichols House 3600 Cheshut Street, Philadelphia, PA 19104-6106 Phone: (215) 898-5274 or 5275 FAX: (215) 898-9137 E-Mail: almanac@pobox.upenn.edu URL: www.upenn.edu/almanac/

The University of Pennsylvania's journal of record, opinion and news is published Tuesdays during the academic year, and as needed during summer and holiday breaks. Its electronic editions on the Internet (accessible through the PennWeb) include HTML and Acrobat versions of the print edition, and interim information may be posted in electronic-only form. Guidelines for readers and contributors are available on request and online.

EDITOR ASSOCIATE EDITOR ASSISTANT EDITOR STUDENT ASSISTANTS

WPHS INTERN

Marguerite F. Miller Margaret Ann Morris Natalie L. Stevens Tamara Bobakova, David Fecteau, Adelia Hwang, Angie Liou Jamar Benyard

ALMANAC ADVISORY BOARD: For the Faculty Senate, Martin Pring (Chair), Helen Davies, Mitchell Marcus, Phoebe Leboy, Lance Donaldson-Evans, Joseph Turow. For the Administration, Lori N. Doyle. For the Staff Assemblies, Michele Taylor, PPSA; Karen Pinckney, WPSA; David N. Nelson, Librarians Assembly.

The University of Pennsylvania values diversity and seeks talented students, faculty and staff from diverse backgrounds. The University of Pennsylvania does not discriminate on the basis of race, sex, sexual orientation, religion, color, national or ethnic origin, age, disability, or status as a Vietnam Era Veteran or disabled veteran in the administration of educational policies, programs or activities; admissions policies; scholarship and loan awards; athletic, or other University administered programs or employment. Questions or complaints regarding this policy should be directed to Office of Affirmative Action,3600 Chestnut Street, 2ndfloor, Philadelphia, PA 19104-6106 or (215) 898-6993 (Voice) or (215) 898-7803 (TDD).

----- Research Roundup --

Designing Accessible Passenger Trains

As the deadline for compliance with the Americans with Disabilities Act draws closer, the commuter and passenger trains used in large swaths of the United States remain inaccessible to passengers in wheelchairs. Meanwhile, the elevated platforms many regional rail systems have erected to address this problem have created another, forcing bulky freight shipments off the rails and onto some of the busiest roadways in the nation.

Dr. Edward K. Morlok, professor of transportation and systems engineering, has designed a new train car that's fully accessible to disabled passengers, compatible with freight trains and spacious enough to carry nearly 40 percent more passengers. Penn has filed for patent protection.

Problems arise when two different levels of platforms are found alongside the same set of tracks, a situation common in the northeastern U.S. Older low-level platforms deny access to disabled passengers, who cannot mount stairs to enter cars. Newer high-level platforms block the passage of freight trains, funneling truck traffic onto congested highways.

Dr. Morlok's answer to this dilemma is a split-level car divided into three sections, with the two ends at the level of a high platform (four feet above the rails) and the longer middle portion accessible from lower platforms (eight inches above the rails). Doors are situated at both levels, opening only at the appropriate stations, and a small lift within the car permits disabled passengers to move between levels.

Because the central portion of the car is lower, a second level can be added above it. To fit within railroad height restrictions in the Northeast, the double-deck levels are nested together to yield full headroom over aisles. The tri-level configuration carries some 130 passengers, compared to about 94 in current-generation cars with similarly wide seats.

Dr. Morlok estimates that by more rapidly loading and unloading passengers, his design could shave six percent off the time it takes a commuter train to run its route and boost ridership two to four percent. Because fewer staffers would be required to assist passengers as they board and alight, the new design could slash train staffing costs by up to a third.

Dr. Morlok has also developed a second car design whose vestibule features a stairwell that can rotate for access to either high or low platforms. Such a design would save considerable time for trains stopping at both types of platform; currently most such trains have to be reconfigured manually by conductors.

Giant Self-assembled Liquid Crystal Lattice

A new liquid crystal lattice created by scientists at Penn and the University of Sheffield may be invisible to the naked eye, but it's a giant in its own way.

Uniting hundreds of thousands of atoms, this supramolecular structure is one of the most complex ever made via self-assembly, where molecules organize themselves into larger structures. It's the first organic compound to assume an intricate structure previously seen only in metals such as uranium and various metal alloys. The work is described in a paper published on the web site of the journal *Science*.

Among self-assembled structures, bigger is better. Dr. Virgil Percec, professor of chemistry, says if this lattice can attain dimensions equaling the wavelength of light the material could represent a new class of photonic crystals and a new approach to telecommunications. Such work could also yield molecular-scale electronics.

To create these large nanostructures, Dr. Percec and his colleagues started with a supersized building block: a carefully designed, well-defined and highly branched molecule referred to as a dendron. When thousands of these tree-like molecules come together, they organize themselves, unaided, into discrete microscopic spheres.

In the liquid crystal phase, each sphere consists of 12 tapered dendrons linked at their narrow end. Dr. Percec and his colleagues observed 30 of these globular structures arrange themselves into a tetragonal lattice whose repeat unit is a rectangular prism containing 255,240 atoms and measuring 169 by 169 by 88 angstroms. This repeat unit size is comparable to the crystal form of some spherical virus particles isolated from plants.

Using increasingly sophisticated techniques, scientists engineer self-assembling molecules to arrange themselves into much larger, functioning objects. The field draws inspiration from nature, where proteins and cells are genetically encoded to arrange themselves into functional entities.

Self-assembly may prove useful in a wide range of fields, many involving encapsulation of materials: drug delivery, adhesives, pesticides, composites, coatings and paints, photographic and imaging media, catalysis, microfabrication and microelectronics. Dr. Percec's group is now tweaking the structure of their dendron molecules so they might assemble into hollow spheres.

Dr. Percec is joined in the *Science* paper by co-authors Wook-Dong Cho at Penn and Goran Unger, Yongsong Liu and Xiangbing Zeng at the University of Sheffield. The research was funded by the UK Engineering and Physical Sciences Research Council and the NSF.

Insect Antibiotics: A Model for Therapeutic Agents

For antibiotics, the best way to beat bacterial defenses may be to avoid them altogether. Researchers at the School of Medicine have discovered that Cecropin A, a member of a family of antibiotic proteins produced by insects, may kill bacteria and avoid resistance by entering bacterial cells and taking control of their genetic machinery.

While most antibiotics kill bacteria by attacking critical enzyme systems, Cecropin A somehow slips inside the bacteria and turns specific genes on and off. The findings challenge conventional thinking on how these antibiotics function, and may aid in turning antimicrobial peptides like Cecropin A into therapeutic agents.

"For decades, researchers have studied Cecropin A and focused on its obvious effects against bacterial cell walls and membranes. These antibiotics certainly do disrupt outer structures of the bacterial cell, but there's much more to the story," said Dr. Paul H. Axelsen, associate professor of pharmacology and infectious diseases. "Before the bacterial cell dies, Cecropin A enters the cell and alters the way its genes are regulated. It's like sneaking over the castle wall and opening the gates from the inside. We need to understand this mechanism of action because it may explain why bacteria are unable to develop resistance to this family of antibiotics."

Dr. Axelsen's findings were described in the January issue of the *Antimicrobial Agents and Chemotherapy*, a publication of the American Society for Microbiology. In their study, Dr. Axelsen and his colleagues treated E. coli with small doses of Cecropin A—not enough to kill the bacteria, but enough to see what genes are affected when bacteria are exposed to the antibiotic. They found that transcript levels for 26 genes are affected, 11 of which code for proteins whose functions are unknown. Even more surprising for the researchers, the genes are not the same as the ones affected when bacteria experience nutritional, thermal, osmotic, or oxidative stress.

Despite years of research, there remains much to know about the antibiotics produced by insects. Cecropin A was discovered in the Cecropia moth, also known as the silkworm moth, the largest moth in North America. Since insects do not have an immune system as humans do, they rely on polypeptide antibiotics like Cecropin A to fight off infections. These proteins are highly selective—they readily kill bacteria, but are susceptible initially stay susceptible—researchers have not seen bacteria develop resistance to their action. For this reason, these antibiotics offer a potentially invaluable model for new therapeutic agents.

This research was supported by grants from NIH, American Heart Association, and from Affymetrix's donation of E. coli GeneChip Microarrays.

Women in Region: Facing Significant Inequality

The women's movement has shattered some glass ceilings, but fulltime working women in Philadelphia still earn 25 percent less than men, with the wage disparity for women in "pink collar jobs" even greater.

Researchers from Penn and Solutions for Progress joined leaders from Women's Way in releasing the Women's Way report, A Change of Pace: Accelerating Women's Progress.

According to the report, women working full-time in 2001 in the Philadelphia region of Bucks, Chester, Delaware, Montgomery and Philadelphia counties earned a median income of \$31,375 while men working full-time earned a median income of \$42,050, or \$10,675 more than women.

Further, women were overrepresented in "pink collar jobs" such as personal care, health-care support and administrative support. These occupations represent the lowest paying jobs in the workforce with median hourly wages ranging from \$7.40 to \$10.18.

Dr. Dana L. Barron, associate director of the Alice Paul Center for Research on Women and Gender, in collaboration with Laryssa Mykyta, senior policy analyst with Solutions for Progress, collected and analyzed data from federal agencies including the Census Bureau and the U.S. Department of Labor, and from published reports.

Their report covers income and occupations, poverty and economic security, housing, responsibility for care giving, work/family balance, assets and wealth, influence, aging and retirement and reproductive rights. It offers policy recommendations designed to accelerate the pace of women's progress in achieving fair and equitable compensation for their work.

Between September 2001 and August 2002, researchers conducted a telephone survey of residents in the Philadelphia metropolitan area to determine public attitudes and priorities. The research team also interviewed leaders of women's non-profit groups, directors of community organizations and academic experts on gender and wage issues.

Dr. Barron said that the report definitively demonstrates that area residents are aware of gender inequalities and adamant that their public officials take action to remedy them. Copies of the report are available at www.sas.upenn.edu/wstudies/alicepaul.

www.upenn.edu/almanac ALMANAC March 18, 2003