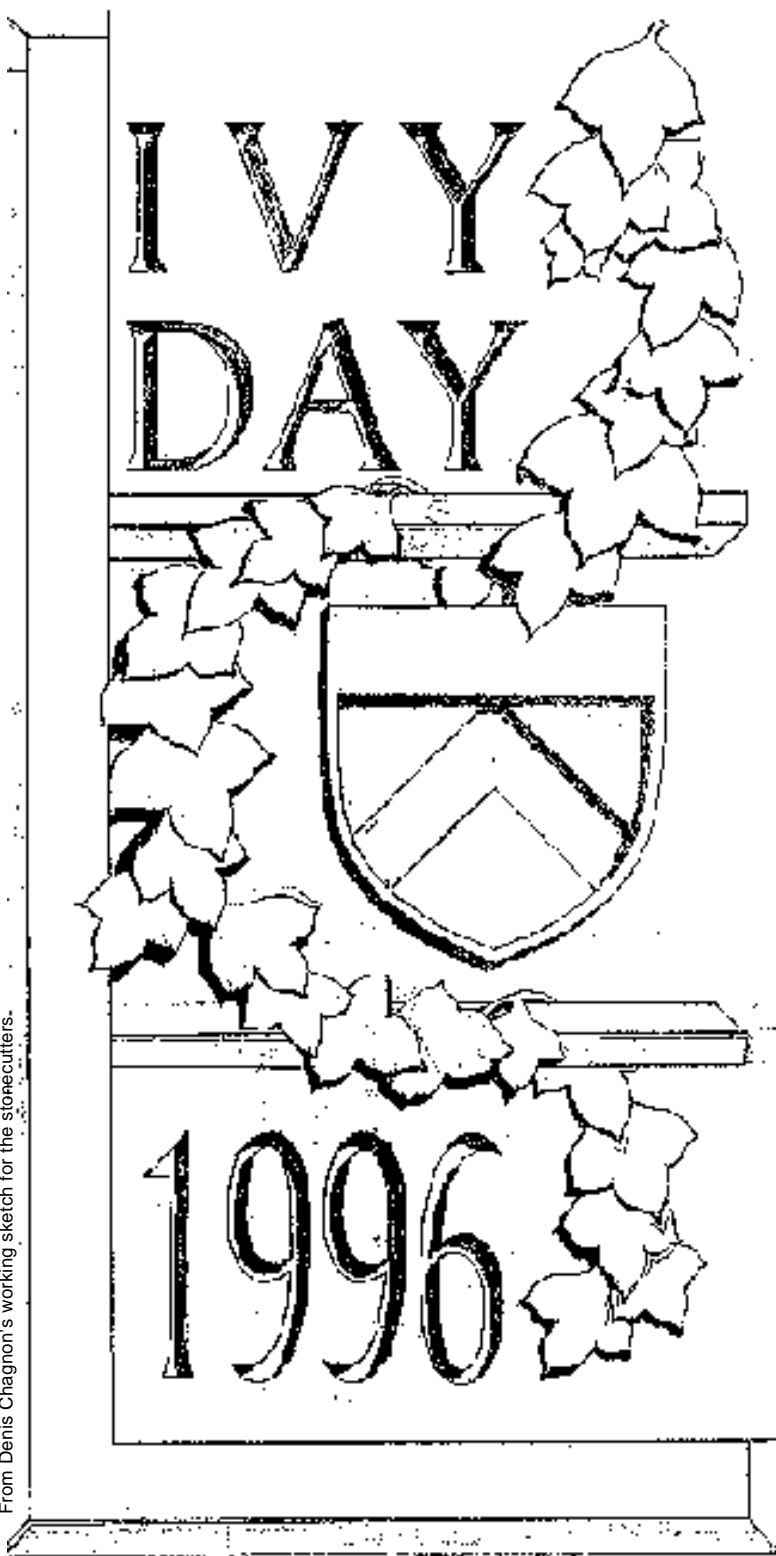


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IN THIS ISSUE

- 2 Communications Director: Ken Wildes of Northwestern;
JIO: Michele Goldfarb of the Law School;
Retirement Program: Review for Compliance by 1997;
- 3 PPSA: Officers, Notes from May 27 Presentations
on Reengineering, FinMIS, Construction, Human
Resources Studies, and Public Safety plans;
Research Facilities Fund Awards to Schools
New Federal Overhead Rates through 1999
- 4 Honors : Teaching Awards in GSE, Law and SEAS
Honorary Degrees to Dr. Hirschhorn, Dr. Sjoberg
Naming the Solomon Labs, and Other Honors
- 6-13 *Compass* Features
 - 6 Dr. Glandt at Penn
 - 7 Assistance to Staff in Restructuring:
Tracking the Position Discontinuation /
Transition Policy
 - 8 'Say Yes' to Photography
 - 9 The Hanrahan Farewell;
GSE Students in Victim Support Roles
 - 10 Human Resources: Time Off
 - 12 Unveiling Electric Inventions of Undergrads
 - 13 Homelessness: No Easy Answers
- 14 Penn's 240th Commencement: the School Ceremonies
- 15 OF RECORD: Guidelines on Cooperate Exchange of
Certain University Information
- 18 OPPORTUNITIES
- 22 OF RECORD: Reduced Hours and Compensation,
- 23 Update; CrimeStats
- 16 Benchmarks: Notes from a Forum on Federal
Funding of Research (Carl Maugeri)

PULLOUT

**For Comment: The Report of the
Research Administration Reengineering Team**

Setting the Ivy Stone

The 1996 Ivy Day Stone will be unveiled on Saturday, May 18 at approximately 5:30 p.m. after the presentation of awards and the Ivy Day speech by Comcast president Brian Roberts, W '81. The senior class has chosen Houston Hall as the site of the stone, in honor of the building's centennial (*Almanac* January 9/16, 1996). This stone—the 15th to be placed at Houston Hall—will be situated to the right of the main doors on the Plaza side of the building. The design is by Denis Chagnon, C '96, who began as an engineering student and will graduate as a major in the design of the environment. The Ivy Stone tradition began in 1873, soon after College Hall was built as the anchor of the "new" campus in West Philadelphia. Houston Hall got its first Ivy Stone in 1895 and its fourteenth in 1967.

For more information about the Ivy Day Stones see the Web, http://www.library.upenn.edu/~toccafondi/ivy_stones.html.

For more on graduation activities, see page 14.

Retirement Program: Review for Federal Compliance by FY97

Like many other universities, Penn must examine possible changes to its retirement program because of changes in federal tax law.

The University has been advised by both its actuaries and benefits consultants that the present retirement program will not comply with federal tax law beginning July 1, 1997. The laws are very complicated, and in order to comply with the new tax provisions, Penn needs to insure that it offers "comparable" benefits programs to various employee groups, including employees of both the University and the Health System.

Given the numerous organizational units and multiple employee groups of the University, Penn, like many other employers, has utilized both a defined benefit plan (a retirement program that provides a fixed retirement benefit based on a formula) and a defined contribution plan (a certain percentage of pay is contributed throughout the employment term of the faculty or staff member) to help support retirement needs of faculty and staff.

Compounding the issue is the government's requirement that the University and its Health System be treated as a single entity for plan comparability purposes. The University and the Health System have had significant independence in providing pension benefits to their respective employees under prior law. The new law allows each group to maintain its own retirement program but requires the plans to be developed and assessed in a coordinated fashion.

In order for the pension plans to be "qualified" by the government and eligible for tax-exempt status, they must meet specific provisions of the Internal Revenue Code. It is imperative that Penn's pension plans maintain their qualified status with the IRS—otherwise, plan benefits become immediately taxable to *plan participants*. For-profit organizations were required to modify their pension plans in 1994. Tax-exempt organizations, like Penn, have until 1997 to comply with the new laws.

While the review of the retirement plan is a result of changing government regulations, it is also an opportunity to revisit and assess the plan's objectives. The retirement plan is one of the most important expenditures in our overall benefit plan. The retirement program is one component of Penn's benefit package that a faculty and staff committee will review during the next year to insure compliance with the law. The committee, with input from many individuals and groups, will also review design effectiveness of the University's overall benefit plan.

Implementation of approved changes will begin in July 1997.

— *Clint Davidson, Vice President for Human Resources*

Communications Director: Ken Wildes of Northwestern

Kenneth J. Wildes, Jr., of Northwestern University will become Penn's Director of University Communications starting July 1, President Judith Rodin has announced.

Mr. Wildes will develop and manage a University communications strategy and serve as the primary spokesman for the University, Dr. Rodin said. He will oversee the University's internal and external communications and public relations operations, and enhance communication of the many contributions Penn's faculty, students and staff make to the advancement of education, research and society. In addition, he will advise the president and other senior officers of the University on communications issues.

"We are very excited that Ken Wildes will be joining us at Penn. He has had a superbly successful career overseeing communications at Northwestern University, and we were lucky indeed to recruit him here," said the President. "He will be a key member of our senior administrative team and a great advisor to the entire University. Ken is keenly aware of the important issues confronting higher education, cares deeply about the future of great universities like Penn, and will be instrumental in helping Penn lead the way to the 21st Century."

Mr. Wildes has been in charge of communications at Northwestern University for the last 14 years, initially as director of university relations and more recently as vice president for university relations.

Before joining Northwestern, where he is credited with increasing the national visibility of the university on radio, television and newspapers with national circulation, Mr. Wildes was director of newspaper promotion and public relations at Parade Publications, Inc., publisher of *Parade* magazine. Mr. Wildes took his bachelor's degree in English at Springfield College in Massachusetts, and began his career in media and public relations in 1969 as assistant director of sports information at Dartmouth College. Later he returned to Springfield College and served as director of public relations and publications for seven years.

Mr. Wildes is a frequent speaker on the management of institutional response to public issues, crisis public relations and ethical issues in public relations. He has also been the executive producer of several syndicated radio series, including "The Reviewing Stand," an award-winning radio news magazine syndicated for Northwestern University to 191 radio stations throughout the country.

Currently president of the executive committee of the University Magazine Network, he has chaired the Public Affairs Network of the Association of American Universities, the Public Issues Task Force of the Council for the Advancement and Support of Education, and the public affairs group of the Committee on Institutional Cooperation, an organization representing the institutions of the Big Ten Conference and the University of Chicago.

"Ken's extraordinary background and his wealth of experience in public relations have been widely recognized by his peers," Dr. Rodin added. "He will give us the guidance and wisdom to communicate to the world the great research in our laboratories, the scholarly expertise in our classrooms and the strength and vitality in our community."



Kenneth Wildes

JIO: Michele Goldfarb of the Law School

Michele Goldfarb, who has been Acting Judicial Inquiry Officer since August 1, has been named to the post after a search that began last fall, Provost Stanley Chodorow has announced.

"I was delighted that the search committee, which had on it students as well as faculty and staff, strongly recommended Michele Goldfarb as its favored candidate," the Provost said. "Michele has been Acting JIO for nearly a year now, and I, my staff, and the VPUL staff who have worked with her have been greatly impressed. The JIO has a very important and very difficult job, and Michele has done it superbly. I have relied on her judgment, common sense, and sound values and look forward to working with her under the new charter."

As JIO, Ms. Goldfarb will also be director of the Student Dispute Resolution Center. She is responsible for the investigation and resolution of alleged violations of the Code of Student Conduct and the Code of Academic Integrity, and for "ensuring that the disciplinary process is fair, timely and consistent," Dr. Chodorow said. The JIO is also responsible for educating the University community about behavioral standards and the disciplinary process set in place to handle violations of those standards.

Ms. Goldfarb, who earned her B.A. in history at Oberlin College in 1972, attended The American University's Washington College of Law, where she received the J.D. *summa cum laude* in 1975. After a clerkship with the Hon. Stanley S. Harris, then of the District of Columbia Court of Appeals, she served as an Assistant U.S. Attorney for three years before moving to Philadelphia to serve as an Assistant District Attorney. In 1988 she entered teaching, at Temple University as a visiting instructor in criminal procedure. The following year she became senior law clerk to the Hon. Phyllis W. Beck of the Superior Court of Pennsylvania, dealing primarily in criminal and family law issues, and in 1992 she was named to the clinical faculty of the Penn Law School.

As part of her work in the Civil Practice Clinic here she has also been the attorney of record for all cases handled by students representing the clients of the Penn Legal Assistance Office, where subject areas include domestic relations, social security, and general civil practice.

After becoming Acting JIO last year, Ms. Goldfarb also took intensive training in mediation in at the Friends Conflict Resolution Center in Philadelphia.



Michele Goldfarb

PPSA Notes from the May 7 Meeting

Officers for 1996-97

At the May 7 annual meeting, attended by some 225 voting members, James Bean of Mail Services was chosen as chair-elect and Thomas McCoy of Telecommunications as vice chair-elect. With three new members at large (below), the coming year's leadership of the Penn Professional Staff Assembly will consist of:

Officers

Chair, Marie Witt, director, support services, Business Services
Vice Chair, Janet Ansert, assistant University registrar for academic records
Chair-Elect, James Bean, manager, Mail Services
Vice Chair-Elect, Thomas McCoy, operations supervisor, Telecommunications
Past-Chair, Ira Winston, executive director, SAS and SEAS Computing
Past Vice Chair, James Beerman, business administrator, School of Medicine

Members at Large

Newly elected:

Sheila Armstrong, assistant to the director, Afro-American Studies Program
Thea Diamond, director of education, Annenberg Center
Mark West, manager, administration and finance, SEAS

Continuing:

Cathy Di Bonaventura, staff assistant, DCCS
John Keane, director, administration and finance, Library
Gerald Leddy, lieutenant, Police, Division of Public Safety

Update from Administrators

Some highlights of presentations by the five senior administrators who spoke at the meeting:

Reengineering: Executive Vice President John Fry indicated that present reengineering

projects are highly dependent on technology—procurement, computing, research administration and public safety—and reminded that all project reports are appearing in *Almanac* [see this week's insert on *Research Administration*].

He cited the Barnes & Noble bookstore venture as an example of perhaps “half a dozen” such outsourcing ventures, using the external market to improve the quality of service through a partnership that leverages capital. In each instance, Penn will seek a partner with a “world-class reputation...so they have something to lose if they don't perform” and “progressive human resources practices.”

Internally, he expressed disappointment that managers are not taking full advantage of vacancies to restructure workloads, noting that that there are 700 to 900 vacancies a year which present opportunities for restructuring through internal promotion. He reiterated a commitment to staff development and training as part of reengineering, citing his area's plan to conduct training via the Wharton School. In conclusion, he said that the monthly sessions that he has with the leadership of PPSA are “fruitful.”

Finance: Vice President Steve Golding said Penn is “out front” with its conversion to FinMIS. He advised that the July 1 conversion will be followed by a period of training and adjustment, and that anyone who has questions about the transition should call his office at any time. He said encumbrances will be closed out rather than rolled over into the new system.

Facilities: Vice President Art Gravina recapped major capital projects: IAST's Phase I, slated for fall occupancy; BRB II, which will take about two years to build and is the last of the major construction on the old PGH site; and continuing work on College Hall (toward a 1998 completion date). Logan Hall's exterior is finished—and has won state awards, to be announced—and the interior is expected to be

finished next year. The Perelman Quad will involve reconfiguring the interior of Irvine Auditorium to improve the acoustics, eliminating side wings but maintaining the main chamber's height. An upcoming project will be the replacement of all of Locust Walk's bluestone, which has deteriorated many years ahead of schedule. Hastings paver, the stone used on the 38th Street Bridge's surface, has been chosen as a “better stone” that is also less costly. Mr. Gravina commended the landscaping crew who did “an enormous job of clearing large amounts of snow from the campus in the winter.”

Benefits: Dave Smith, manager of employment, explained two major redesign projects: the Classification Study and a Benefits Study, being done concurrently. The Classifications project will use new methodology to classify jobs which have not had a systematic look since 1981. “No staff will have their salary reduced as a result of the project,” he said. The Benefits project is an attempt to make Penn “market competitive” in *total compensation*, he stressed. He also said Penn is looking into trends such as flexible hours and telecommuting, in the interests of “pursuing broad-based reengineering to move toward a family/friendly environment.”

Public Safety: Managing Director Tom Seamon called for input on the Public Safety Strategic Plan published in *Almanac* March 26. He said that one of Public Safety's goals is to strengthen investigative capability, especially where crimes against people are involved. He specifically asked for feedback about proposals to use closed-circuit television in public areas.

Expanding on issues in community interaction, he said Penn should be getting better service from the City government, and that the University is in an exploratory phase to determine whether or not the area is right for a “special services district” comparable to the Center City District, where economic development is a concomitant of safety planning. Such a district would include other institutions in the area such as Drexel, CHOP, the Post Office, Amtrak, and PCP.
—M.F.M./K.C.G.

Overhead Recovery Rates, 1996 through 1999

The University has reached agreement with the department of Health and Human Services for indirect cost rates applicable to sponsored research programs through Fiscal Year 1999. The negotiated, predetermined indirect cost rates, by year, are as follows:

FY 1996	63.5%*
FY 1997	59.0%
FY 1998	59.0%
FY 1999	59.5%

Coupled with this negotiation is a change in the capitalization policy for equipment, which raises the threshold from \$500 to \$5,000 per item and the inclusion of the first \$25,000 of each subcontract in the research base. These changes are effective July 1, 1996.

—Alfred F. Beers, *Comptroller*
—Robert J. McCann, *Assistant Comptroller*

* This rate is consistent with the provisional rate charged during the year pending a final rate agreement.

Research Facilities Development Fund Awards

The Research Facilities Development Fund supports the improvement, renovation, and construction of research facilities at the University, as well as the acquisition of major items of equipment.

For fiscal years 1997-1998, Provost Stanley Chodorow and Acting Vice Provost for Research Ralph D. Amado announce the following awards:

School/Center		FY'97	FY'98
Arts and Sciences	Renovation of Facilities in the David Rittenhouse Laboratory for Elementary Particle Physics and Astrophysics	\$300,000	
	Renovation in 3401 Walnut for the Institute for Research in Cognitive Science	\$200,000	
Dental	Research Facilities Development in the Department of Periodontology	\$ 62,000	\$100,000
Education	Consortium for Policy Research in Education	\$ 45,000	
Engineering and Applied Science	Manufacturing Technologies Laboratory — Phase III	\$150,000	
IAST	IAST Phase 1	\$ 50,000	
LRSB	Variable Temperature Scanning Tunneling Microscope for Ultrahigh Vacuum Surface Science Studies	\$225,000	
Medicine	Good Manufacturing Procedures Laboratory	\$700,000	
Nursing	Renovation in the Nursing Education Building to Create Research Space	\$100,000	\$125,000
Veterinary	Laboratory Renovation for Animal Biology	\$165,000	\$165,000



Dr. Balamore

GSE: Dr. Usha Balamore

The Graduate School of Education's Excellence in Teaching Award for 1996 will be given at Commencement to Dr. Usha Balamore, a full-time kindergarten teacher at Episcopal Academy who is also a part-time Lecturer in GSE's Early Childhood Education program.

An alumna of Church Park Teachers' College in Madras, India, she took her M.A. in early childhood education and Ph.D. in developmental psychology from Bryn Mawr. Dr. Balamore is certified in teaching in India as well as in Pennsylvania, where she is also certified as a school psychologist.

The award is given annually to one whose teaching is intellectually and imaginatively challenging, clear and well-organized, and innovative in methodology or presentation. In nominating her for this award, former students of Dr. Balamore described her teaching as "...magnificent, charismatic, brilliant...innovative, creative, inspiring, imaginative, and enthusiastic." As a person they rated her "generous, warm, open hearted, enthusiastic, kind, available, appreciative, and a role model."

The award will be presented at Commencement by one of her students, Marci Andrews.



Dr. Bruno

SSW: Dr. Anthony Bruno

Anthony F. Bruno, G '84, will receive the School of Social Work's Excellence in Teaching Award at the SSW Commencement ceremony on May 21. On leave for the 1995-96 academic year from Community College of Philadelphia, where he is professor of social sciences, Dr. Bruno taught courses in American Racism and Social Work Practice, Human Functioning in the Social Environment, Adult Functioning and Research. In addition to teaching, he is coordinator of the Department of Human Services Research and Policy Advisory Board and convenor of the Citizens Crime Commission's Juvenile Justice Alliance.

He will also be on the Penn School of Social Work's faculty for the 1996-97 academic year.

A native of south Philadelphia and graduate of Bishop Neumann High School, Dr. Bruno earned his B.S. in political science from St. Joseph's College, his M.S.W. from Temple University, and his D.S.W. from Penn. At Community College, he won the Lindback Award for Distinguished Teaching in 1988. In his past 20 years there he has developed a variety of training and educational courses for practitioners in human services at the local, state and federal levels.



Dr. Dorny

SEAS's S. Reid Warren Award: Dr. Nelson Dorny, Dr. Susan Margulies

The School of Engineering and Applied Science's two most recent winners of the S. Reid Warren Award for Distinguished Teaching are Dr. C. Nelson Dorny for 1994-1995 and Dr. Susan Margulies for 1995-1996. The award, given by Engineering's undergraduate student body and the Engineering Alumni Society Board of Directors, was named during his lifetime for the late emeritus professor and undergraduate dean (1954-73) renowned for his dedication to teaching and mentoring students. The award recognizes "outstanding service in stimulating and guiding the intellectual development of undergraduate students" at SEAS.

Dr. Dorny is professor and undergraduate chair of systems engineering. He took his B.E.S. from Brigham Young in 1961, and his M.S.E.E. and Ph.D. from Stanford in 1962 and 1965, respectively. Dr. Dorny's expertise is in system theory and system methodology, specifically in probability and statistics, applied mathematics, optimization theory, linear system theory, control theory, computer simulation, and numerical solution of partial differential equations. His current research is in system integration, integrated manufacturing, robotics and automation. Dr. Dorny is also a former White House Fellow as special assistant to the Secretary of Agriculture.

Dr. Margulies is assistant professor of bioengineering. She graduated *summa cum laude* from Princeton in 1982 with a B.S.E. in mechanical and aerospace engineering, and came to Penn for her M.S.E. and Ph.D. in bioengineering, awarded in 1983 and 1987, respectively. Dr. Margulies's research interests are in biomechanics with an emphasis on injury mechanisms and tolerances, pulmonary regional ventilation and barotrauma, spinal cord injury, and pediatric and adult brain injury.



Dr. Margulies

Prizes for Scholarly Publication

Dr. Noam Lior, professor of mechanical engineering and applied science in SEAS, has won one of the two Best Treatise Awards of the International Desalination Association—a new prize given for papers of 20,000 words or more. Dr. Lior's treatise is on "Foaming: General Review, and Discovery as a Novel Method for Significant Improvement of Flash Evaporation."

Dr. Ian Lustick, professor of political science in SAS, has been awarded the American Political Science Association's J. David Greenstone Award for his 1993 book, *Unsettled States, Disputed Lands*, which discusses conflicts between Britain and Ireland, France and Algeria, and Israel and the West Bank-Gaza.

Dr. Siegfried Wenzel, professor of English, has received the Charles Homer Haskins Award, the highest honor of the Medieval Academy, for his book on *Macaronic Sermons: Bilingualism and Preaching in the Late Medieval Period*.

Naming the Solomon Laboratories

On April 19 the Trustees Executive Committee passed the following resolution on naming the psychology laboratories (*see photos, opposite page*).

The faculty of the Department of Psychology has proposed that the Psychology Laboratory Building at 3720 Walnut Street be renamed the Richard L. Solomon Laboratories of Experimental Psychology in honor of their late colleague, who died on October 12, 1995, at age 77. This proposal has the enthusiastic support of the Dean of the School of Arts and Sciences, the Provost, and the President.

Dr. Solomon received his A.B. degree in 1940 and master's degree in 1942 from Brown University. After wartime service with the Office of Scientific Research and Development, he earned his Ph.D. from Brown in 1947. He taught for a year there before joining Harvard's Department of Social Relations, where he became full professor in 1953. He joined Penn's Department of Psychology and Institute for Neurological Sciences in 1960 as the first James M. Skinner University Professor of Science. At Penn, he took a leading role in work in perception, avoidance learning in dogs and people, the effects of punishment on subsequent behavior, the interaction of Pavlovian conditioned reflexes with instrumental behavior, the conditions for establishing learned helplessness, and drug addiction.

A brilliant scientist, Dr. Solomon was also an extraordinary teacher and mentor. Upon retiring in 1984, he had published some 65 papers and supervised 35 doctoral dissertations. He also served as the first Faculty Master of Van Pelt College House—Penn's first college house—and the first head of the University Scholars Program. Among his many honors were election to the National Academy of Sciences and the American Academy of Arts and Sciences; a Guggenheim Fellowship; and awards including the Society of Experimental Psychologists' Warren Medal for research, the Monie A. Ferst Award of Sigma Xi, and a Distinguished Achievement Citation from Brown University.

Resolved, that the psychology Laboratory Building be renamed the Richard L. Solomon Laboratories of Experimental Psychology, in honor of one of the University's most distinguished and beloved citizens.

... Honorary Degrees This Month for Two SAS Members



Dr. Hirschmann



Dr. Rodin



Dr. Sjöberg

Honorary Degrees to Three Penn Members Next Week

Dr. Ralph Hirschmann, the Makineni Professor of Bioorganic Chemistry, will receive the honorary degree Doctor of Science on May 17 from the University of Wisconsin in Madison. Dr. Hirschmann took his Ph.D. at Wisconsin in 1950 before launching his illustrious career in chemical research, which has produced a new class of anti-inflammatory steroids, a new approach to the treatment of insulin-requiring diabetics, and other major breakthroughs in the biomedical sciences.

Dr. Judith Rodin, President of the University, will receive the honorary degree of Doctor of Laws from Lafayette College on May 19. Dr. Rodin is being honored for her innovative work in the biological processes in health and behavior, as well as for her leadership of Penn.

Dr. Ake Sjöberg is slated to receive an honorary Doctorate of Theology from Uppsala University in Sweden on May 27. The Clark Research Professor Emeritus of Assyriology in Asian and Middle Eastern Studies, who has also been curator of tablet collections in the University Museum, is an Uppsala alumnus and editor of the world-renowned Pennsylvania Sumerian Dictionary project, which began in 1984 and projects another twenty years' work to complete.

Photo by Frank Ross, Courtesy of University Archives



The structure now named for the late Dr. Richard L. Solomon, left, is the psychology laboratory building where he did much of his work during his years at Penn. It is the westernmost building in the social services quadrangle in 3700 block between Locust Walk and Walnut Street. This view faces Stiteler Hall, with the School of Social Work to the left and Graduate School of Education to the right.

Home Page for Teaching

The new Graduate Student Teaching Resource Network, established with the advice of GAPSA and the cooperation of the Provost's Office to help graduate students sharpen their teaching skills, has a homepage on the Penn Web at http://www.upenn.edu/grad_teach/.

The site was created by the GSTRN's founding director, Stephen D. Winick, a graduate student in Folklore and Folklife. Steve is actively soliciting input in developing the site further—there are “buttons” to click to “send your tips for better teaching” and to help identify other important on-line teaching resources for additional links to the GSTRN home page.

— Karen Lawrence,
Office of the Vice Provost
for Graduate Education

Class of '39 Grad Fellows

The Class of 1939 created a fund last year to provide two fellowships each year to doctoral students who have earned a Penn undergraduate degree within the three academic years prior to the start of their doctoral studies. This year's recipients, chosen in a University-wide competition, are *Julie Tereshchenko* of Economics and *Jonathan Kantor* of History.

The Class of 1939 Fellowship covers tuition for the first year of study and is matched by University, School and Departmental fellowship funds to cover tuition and provide a stipend for the first four years of study, if the student maintains exemplary academic performance.

For information about future awards, please contact the Office of the Vice Provost for Graduate Education, 210 College Hall/6381, or by phone at 898-2061.

Penn VIPS: Salute to 13

Penn Volunteers in Public Service, an organization of faculty/staff performing community service, will present \$500 scholarships to thirteen high school seniors at the fourth annual Penn VIPS reception Wednesday, May 15, 4:30-6:30 p.m. in the Faculty Club. The thirteen students, who are being honored for combining community service with academic achievement and a desire to further their education, will come from West Philadelphia, University City, Overbrook, Bartram and Parkway Gamma High Schools. (Open to interested faculty and staff. For more information see *Special Event* in this week's *Update*, p. 23).

Town Watch Training

As part of the Philadelphia Police's Community Education Program (CEP), a Town Watch training workshop will be offered on Monday, June 10, at 7 p.m. at the 18th Police District headquarters, 55th and Pine Streets. Those interested may call the CEP office, 564-6949, or the 18th District's Community Relations Officer Ed Ryals at 686-3180.

Argentine Academic Makes a Home at Penn



By Sandy Smith

For those of you disinclined to believe that chance can play a significant role in scientific research, consider the case of Eduardo Glandt, professor of chemical engineering in the School of Engineering and Applied Science.

Glandt came to Penn in 1973 from his native Argentina. He intended to obtain an advanced degree in chemical engineering, then return to his home country to pursue applied research projects. Instead, he stayed, and has gone on to receive numerous honors for his research in the fundamental properties of liquids and particulate solids.

Had it not been for artificial blood, everything might have turned out differently. "When I was a graduate student 20 years ago, my advisor was approached

by people from the medical school who were interested in developing a blood substitute," Glandt said. "The challenge was to 'design' a liquid with high solubility for oxygen that could be kept on the shelf for long periods and administered without rejection problems.

"I had come to graduate school at Penn looking for a very applied research topic," he continued, "but the artificial-blood project got me interested in pursuing a much more fundamental line of work."

Glandt graduated from the University of Buenos Aires in the late 1960s and worked for five years in Argentina's National Institute of Industrial Technology, which provides technical support to small businesses of all kinds. Glandt, his brother Carlos, and two friends (who called themselves "the gang of four") then decided that they should pursue advanced degrees.

"We came to the U.S. in order to get the best education," Glandt said. "The

plan was to join the faculty at Buenos Aires." By the time they were ready to graduate, though, "terrible things were happening in Argentina. The offer from Penn looked doubly attractive." In fact, all four friends ended up staying in the United States.

Glandt received his master's degree in chemical engineering in 1975, and his doctorate in 1977. He has been on the Penn faculty ever since.

His research work focuses on the properties of all sorts of "disordered" materials, such as particulate solids and suspensions. "The theme of my work is to relate things that occur at a microscopic scale to things that occur at much-larger scales," he said. "I carry out research in physical chemistry, which is concerned with molecules, and then try

to see what it means for engineers, who think in terms of inches and feet."

In spite of the fundamental nature of his research, some of it has had immediate practical results. One example is his investigation on the storage of natural gas. "Because gas is such a promising fuel for transportation, the gas industry is eager" to find ways to exploit its potential, he said.

One of the problems of making natural gas as convenient to use as gasoline, however, is that it must be compressed in order to fit enough of it into a typical vehicle's fuel tank. A possible storage method is based on adsorption—what happens when molecules attach themselves to the surfaces of a solid, which then can be used to carry the gas safely.

The Gas Research Institute funded work by Glandt and his colleague Alan Myers to study whether using a porous solid, such as carbon granules, as a storage medium would eliminate the need for compression. "We found out, with the

certainty of a theorem, that you would never be able to do it," he said. "And since many people were claiming that they had 'secret' adsorbents that would work, our results were very valuable for the Gas Research Institute."

Research such as this has earned Glandt honors both here and abroad. This spring, he was elected to membership in the National Academy of Engineering, one of the highest professional distinctions in the field. Election into the academy recognizes important contributions to engineering theory and practice, and unusual accomplishment in the pioneering of new and developing fields of technology.

Glandt's research achievements did not go unnoticed in his native land. Last year, the Argentine government, in hopes of luring its best minds back home, offered Glandt and seven others fellowships-in-residence at Argentine universities.

"The government had optimistically thought that things had finally improved for good" in Argentina, Glandt said of the offer, which he accepted. "I had the opportunity to sample the life of an academic in Argentina, and I realized that the country still had to advance even more before it could be intellectually appealing to those doing well abroad."

We came to the U.S. in order to get the best education.

—Eduardo Glandt

Besides, a good fraction of Glandt's family now resides in the United States, including his brother Carlos, a chemical engineer who is a researcher for Shell Oil Co. in Houston. Although Carlos pursued his graduate studies in chemical engineering at Princeton, even he has ties to Penn now. "His eldest daughter recently graduated from Penn," Glandt said, "and we're working on getting his youngest to come here too."



Photograph by Addison Geary

Dr. Eduardo Glandt

Program Assists Staff With Restructuring

By Phyllis Holtzman

When the University launched its administrative restructuring project, it appeared certain that re-engineering Penn's business processes would result in the elimination of many positions. Therefore, University officials wanted to ensure that employees whose jobs were eliminated would be treated fairly and consistently.

To that end, with input from across the University, the Division of Human Resources developed the Position Discontinuance and Staff Transition (PDST) policy, which went into effect last August. The policy describes the circumstances under which a position may be eliminated, how the affected staff will be notified, and what benefits and resources are available to help ease the employee's transition.

"Losing a job is traumatic," said Clint Davidson, vice president for human resources. "Any individual who goes through this is going to have doubts and concerns, and those who remain in the organization will experience painful emotions as well. But what helps individuals and organizations succeed is having in place strong programs, policies and professional resources."

Thus far, approximately 100 positions have been eliminated under the PDST program. Of that number, approximately half were positions that were already vacant.

"There is no question that we need to resize and restructure work processes and our work force, in order to become more efficient and effective, and to reduce costs," said Executive Vice President John Fry. "All higher-education institutions are faced with the same imperative. We must contain the soaring costs of higher education for our students and their families."

Penn's position-discontinuation policy provides for both inplacement and outplacement services, pay continuation, and continuation of some benefits. A recent Philadelphia Inquirer article comparing similar programs indicates that Penn's program is among the most competitive of its kind.

"The focus of our policy is on helping our people find new jobs, whether inside or outside Penn," Davidson said.

Inplacement assistance is offered to eligible staff starting from the date they are notified of position discontinuance until the official separation date, for a

total of 30 days.

The service is coordinated by Janet Mass, senior training specialist in human resources, who has extensive experience in career coaching.

Mass offers individual sessions in which she helps employees identify open positions on campus; facilitates networking and job interviews with potential hiring managers; clarifies training needs and locates on-campus training opportunities; builds networking techniques and interviewing skills; and accesses on-campus career-development and job-search information.

Mass meets with all interested employees as quickly as

possible. "I want to get a good idea right away of where this person can best contribute," she said.

"If they already have a good résumé, I'll begin making calls for them right away,

and fax their résumés to hiring managers. Sometimes people need to learn new skills, and I tell them about training opportunities on campus."

Penn Temps, the University's sole-source provider for temporary workers, has been a "wonderful" resource, according to Mass.

"Temping lets you meet all sorts of people across campus," she explained. "It occasionally leads to a permanent job." Mass said the agency, which has an office in the Funderburg Information Center at 3401 Walnut St., also offers skills evaluations.

Mass works aggressively to match employees with vacancies in other University units. One employee, whose position had been eliminated in January, was hired elsewhere in the University by March. She wrote to Mass, thanking her for her "support and diligence," and praising her for "diligently working on my behalf; making phone calls, faxing résumés, updating me each time you did so, and listening to and encouraging me."

People who go through position discontinuance are a valued resource, Davidson said. "It is in the University's interest to consider these people first for vacancies," he noted.

Outplacement services are offered through two agencies: Career Concepts, a Conshohocken, Pa.-based career consulting firm, and Right Associates, an international career-management and human-resources consulting firm headquartered in Philadelphia. Both agencies offer Penn employees programs that include career assessment, résumé development, individual consulting sessions, weekly strategy meetings, interviewing techniques, and access to computers, fax and other administrative support services.

Kathy Haeber, who had been a secretary with the School of Veterinary Medicine for seven years until her position was eliminat-

ed in October due to restructuring, now works for the Computer Fixer, a computer-support services company in Center City. She was assisted in her job search by Career Concepts.

"Career Concepts

was a very valuable service to me during a difficult time," Haeber said. "They gave me a lot of practical advice, and helped me stay focused. They kept with me throughout the entire process."

According to a nationwide study conducted by Right Associates, the majority of employees who take advantage of outplacement services are successful in finding new careers.

When separation is handled professionally and honestly, carries a fair severance package and outplacement services, "careers are often created and enhanced, not destroyed," the study concluded.

Penn's PDST policy also provides pay continuation based on length of service and continuation of medical benefits throughout the pay-continuation period.

"The programs we have developed at Penn are among the best," Davidson said. "The ideal is that they will ultimately help our people grow and prosper. We have the wherewithal to make that happen, and that is what we are striving for."

*The focus of our policy
is on helping our people
find new jobs.*

—Clint Davidson

Questions? Comments? Something newsworthy to report? Contact The Compass at (215) 898-1427 or jandag@pobox.upenn.edu.

Through the “Say Yes to Education” Program, Students Develop an Interest in Photography



By Carl Maugeri

Although the subjects varied from hamsters to building signs, an exhibit of photographs taken by junior-high students in the “Say Yes to Education” program had a common focus: everyday objects, seen in a new way.

Jeanette Flamm, a former assistant to the dean of Penn’s Graduate School of Fine Arts and now a volunteer photography instructor in the program, said that teaching the students to transform the ordinary into the extraordinary, the mundane into the beautiful, requires a practiced eye and a willingness to experiment.

“Photography is all about opening one’s eyes and seeing things a little bit differently,” she explained.

The photography class and exhibit, part of a series of enrichment activities, were meant to help expand the intellectual horizons of the program’s students, who

I didn’t realize photography was going to be this interesting.

—Melanie Fernandez

are now in eighth grade at the Turner Middle School. The exhibit was held at the Nixon branch of the Free Library of Philadelphia, 59th and Baltimore Avenues, on April 25.

“Say Yes to Education” is one of Penn’s most-visible outreach programs to the public schools in West Philadelphia. It

began in 1987 when Penn trustee George Weiss and his former wife, Diane, announced that they would pay for college or vocational training for all 112 students

graphed their neighborhood in West Philadelphia, choosing themes that interested them, she said. The stu-

dents then wrote essays to accompany the photos, which included topics such as barber shops; retail stores; graffiti and how it affects morale; the homeless; and trash on streets or at the park. Many of the photo captions captured students’ feelings about their subjects, according to Flamm.

This semester, each student chose a photographic theme for an individual project that was of special personal interest. These themes included pets, families or friends, and after-school basketball practice.

Misha Powell, 13, enjoyed photographing her pet hamster, Spike.



Jane Toll (above, third from left) admires the photographs taken by the students, while Norman Newberg (right) praises the projects on display.

in a Belmont Elementary School class.

A second class was added in 1991 under the sponsorship of Bob and Jane Toll of Bucks County. The Toll group, in third grade at the time of the announcement, has been progressing well, according to Norman Newberg, senior fellow at Penn’s Graduate School of Education and executive director of “Say Yes to Education.”

Jane Toll, who accompanied the students to the exhibit, has been actively involved in all aspects of their education. She visits the students at least once a week, often serving as tutor or advisor to the children she and her husband sponsor.

Newberg was also on hand at the exhibit. He congratulated the students, praising them for “making the pictures come alive.”

Flamm began working with the Toll group last summer. The students photo-



Photographs by Tommy Leonardi

“I really wanted to capture his face,” she said.

Powell said that she learned a great deal about how to focus a camera, read a light meter and frame a shot. “This has made me a better learner,” she said.

Melanie Fernandez, 14, was impressed with the camera’s ability to catch a wide range of themes. “It [the camera] can capture positive and negative things,” she said. “I didn’t realize photography was going to be this interesting.”

At the Faculty Club, a Sad Good-bye for Hanrahan

By Jerry Janda

Although dark clouds blackened the sky and heavy rains soaked the streets, the miserable weather didn't dampen the festivities at Pat Hanrahan's retirement party. More than 150 friends from across the University came to the Faculty Club to wish her farewell.

A Penn employee for nearly four decades, Hanrahan retired on April 30, the same day the party was held. Co-workers were sorry to see her go. "It's a dreary day because Pat is leaving," said Treasurer Scott Lederman, the party's emcee.

Hanrahan started at Penn on June 9th, 1958. She worked in the treasurer's office for 14 years, then spent six years with the assistant to the president for federal relations. Before retiring, she was the business administrator in the Office of International Programs, a position she held for almost 20 years.

Hanrahan noted that the Office of International Programs has grown greatly over the last two decades, so managing its finances has been quite a challenge. "Their study-abroad programs went from under 10, when I first came in here, to over 150," she remembered. "The budget-

ary problems with study abroad have been rather interesting."

Despite the heavier workloads, Hanrahan never complained. "She assumed these responsibilities gracefully," Manny Doxer (pictured holding Hanrahan's hand), executive director of administrative affairs in the provost's office, told the crowd.

Towards the end of the evening, members of the 25-Year Club presented Hanrahan with a beautiful crystal clock—a fitting gesture, since Hanrahan has spent so much time with the club, serving as its secretary and, more recently, its chair.

Speaking of chairs, Hanrahan's co-workers from the Office of International Programs also bought her a gift: a University of Pennsylvania rocking chair. Not that Hanrahan plans on spending her retirement sitting around. She is going to work with her brother.

"He will go to public and parochial schools and do hands-on science projects with children, from the nursery-school level through the eighth grade," she explained. "I've gone out with him on a



Photograph by Jenny Friesenhahn

number of occasions, and he said to me, 'Look, you're wonderful, you're personable. I'd like you to help me market this, and I'd like you to help me with some administration.'

"After 38 years, you need to do something a little bit different," she added. "That's what I'm going to do."

Helping Victims to Cope With Court Proceedings

By Phyllis Holtzman

For most crime victims, navigating through the court system can be a daunting experience. The unfamiliar terminology and proceedings that characterize the criminal justice system may intensify their feelings of distress and vulnerability.

A new collaboration between Victim Support and Special Services and the Graduate School of Education (GSE) will help alleviate the anxiety for some members of the Penn community who have been victims of certain types of crime. The Volunteer Court Advocacy Program pairs graduate students in GSE's Psychology in Education Division with crime victims for court appearances.

"For many victims, this may be their first experience with the criminal justice system, and they are scared about what will happen," said Rose Hooks, assistant director of Victim Support and Special Services, Division of Public Safety. "Hav-

ing an advocate with them who can answer questions and offer general support is enormously important."

Victim Support and Special Services already offers court accompaniment to all crime victims, said Officer Tammie Watson of the Penn police, but was looking for ways to ease the workload.

"We thought if we used student volunteers, they would learn about the court system and community intervention, and Penn police would connect with graduate students," Watson said. "It's a way of fostering a stronger sense of community."

Jeanne L. Stanley, coordinator of the graduate program in Psychological Services at GSE, designed the program as part of "Contemporary Issues in Community Psychology," her course this semester.

"I wanted a 'hands on' component to the course," she said. "There was great interest in doing this. All 19 of my students volunteered to participate."

Hooks said that the student volunteers served as advocates for victims of specific types of crimes, primarily robberies, thefts and burglaries. Staff of Victim Support and Special Services continued to handle more-serious crimes, such as sexual assault.

The students attended an intensive one-day training seminar, which included sessions with members of advocacy groups, other court advocates and attorneys. The students received on-site training and resource manuals from Hooks and Watson.

"At first, I thought it would be too much, but then I started looking forward to it," said volunteer Yvonne Lamar. "When I was assigned a student to accompany, it became more personal. Because of the

(continued on page 12)

Questions? Comments? Something newsworthy to report? Contact The Compass at (215) 898-1427 or jandag@pobox.upenn.edu.



Human Resources at Your Service:

Time Off

In order to keep Penn community members informed of University-wide policies and procedures, a regular column from the Division of Human Resources/Staff Relations appears on these pages once a month. The column uses a question-and-answer format to explain both new and existing policies and procedures, and to answer specific questions from faculty and staff.

FLOATING DAY

Q *What is a floating day?*

A Each fiscal year (July 1-June 30), a floating day is provided to all regular full-time staff members. The day must be scheduled in advance, with approval of the staff member's supervisor.

Q *Can a staff member in the introductory period use the floating day?*

A No. A new staff member must successfully complete his/her introductory period before using the floating day.

Q *Are regular part-time staff members eligible for the floating day?*

A Yes. Regular part-time staff members are eligible for a floating day on a pro rata basis. For example, a part-time staff member who works four hours per day, five days a week, would receive a floating day equivalent to four hours.

Q *What happens if I do not use my floating day this year?*

A Floating days cannot be carried from one fiscal year to the next.

Q *Do I get paid for my floating day if I leave the University?*

A No. Floating days are not paid out if you leave the University.

PERSONAL DAYS

Q *What are personal days? Do all staff members receive them?*

A Three personal days are given to all weekly paid full-time, part-time and limited-service staff members at the beginning of each calendar year. Part-time weekly paid staff members receive personal days on a pro rata basis. Monthly paid staff members do not receive personal days.

Q *I am a newly hired, weekly paid employee. When can I take a personal day?*

A It depends on what time of the year you were hired. Staff members hired between January and April receive three personal days. Those hired between May and August receive two personal days. Staff hired between September and December do not receive a personal day for that year because personal days cannot be taken during the introductory period, which is the first four months of employment. Remember that supervisory approval is needed to take these days off.

Q *For future reference, how do I accrue my personal days?*

A Personal days are available at the beginning of each calendar year. They can only be used during that calendar year.

FUNERAL-LEAVE BENEFITS

Q *How much time off am I allowed for a death in my family?*

A A maximum of five days off with pay for a spouse, registered domestic partner, child, brother or sister, parent/guardian, son- or daughter-in-law, mother- or father-in-law, father or mother of registered domestic partner, brother- or sister-in-law. This also includes direct steprelations. Three days for a staff member's grandparent, grandchild, aunt or uncle. One day for a staff member's first cousin, nephew or niece.

VACATION BENEFITS

Q *I just started my new job at the University as a weekly paid employee. How much vacation time am I eligible for this coming summer?*

A The amount of vacation you are eligible for depends on the month and day you started work at Penn. The month in which you are hired is counted if you started work on or before the 15th of that month. The vacation year for weekly paid staff members is

May 1-April 30.

Month Started	Vacation Entitlement on May 1
January	4
February	3
March	0
April	0
May	10
June	10
July	10
August	9
September	8
October	7
November	6
December	5

For example: A weekly paid staff member hired on Jan. 14 would be eligible for four vacation days on May 1.

Q At what rate do weekly paid staff members with more than one year of service accrue vacation?

A Weekly paid staff members who have more than one year of service but less than two years receive 10 days of vacation plus: one additional day for 15 months of service; two additional days for 17 months of service; three additional days for 20 months of service; four additional days for 22 months of service.

Weekly paid staff members with more than two years of service but less than three years receive 15 days of vacation plus: one additional day for 27 months of service; two additional days for 29 months of service; three additional days for 32 months of service; four additional days for 34 months of service.

A weekly paid staff member with more than three years of service is eligible for 20 days of vacation.

Q What if I am a monthly paid staff member?

A Monthly paid staff members are eligible for 22 vacation days upon the completion of one year of full-time service.

Q If I am a monthly paid staff member and I just started work, how much vacation am I eligible for?

A Monthly paid staff members accrue vacation at the rate of 1.83 days for each completed month of service. The month in which the staff member is hired is counted in the calculation if the staff member was hired before the 15th of that month. Staff members accrue vacation for the upcoming vacation year. The vacation year is July 1-June 30.

For example: A monthly paid staff member hired on Jan. 14 would be eligible for 10.98 (6 months x 1.83) vacation days on July 1.

Q If I leave the University, will I be paid for the vacation leave I did not use?

A Yes. You will receive payment for any vacation time not used. You will also be paid for the vacation time you have accrued over the present vacation year but has not been posted. You will not be paid for any unused sick, personal or floating-day leave.

SICK LEAVE AND SHORT TERM DISABILITY BENEFITS

Q How do I accrue my sick leave?

A You accumulate your sick leave at the rate of one day per month of completed service.

Q When can I use my Short Term Disability (STD) benefit?

A STD will provide pay continuation once the staff member has been out of the workplace for 10 consecutive workdays due to a nonwork related illness or injury. All sick, vacation and personal days and the floating day must be used prior to the commencement of STD.

Q How do I earn STD days?

A STD is accumulated each year by calculating 50 percent of the sick leave you did not use in the prior year. If you earned 12 sick days and took two days because of an illness, 50 percent of the balance $([12 - 2] \times 50\% = 10 \times 50\% = 5)$ is added to your STD account. You do not lose any of the sick leave used in the calculation. You can accumulate a maximum of 42 STD days.

If you need to use your STD benefit, you must apply—the benefit is not applied automatically. You can receive the Short Term Disability/Family and Medical Leave Request Form from your supervisor or human resources.

For more information, please call the Division of Human Resources at 898-6093 or e-mail us at askhr@pobox.upenn.edu.

For help with child care call
Child Care Choices
985-2929

Day-care Centers
Nursery Schools or Preschools
In-home Care
Family Day-care Homes
Summer Camp Options

Undergrads Unveil Their Electric Inventions



By Esaúl Sánchez

"This project," said Sunila Varghese, pointing to the poster and hardware behind her, "has made my last four years at Penn worth it. I designed and constructed something that may someday make some-

Ketterer, who coordinated the course, did a great job in pacing and forcing the students to reach new heights in their designs and engineering. As a result, most of the projects were more than good ideas; most of them worked perfectly!"



Photograph by Addison Geary

Michael Mirmak (left) and Materson Zeno examine their Micromouse. This "rodent" can find its way through a maze and back again.

body's life a little bit better. It made me feel very proud about being an electrical engineer."

The project is the Wrist Alert, a bracelet that vibrates when the phone or doorbell rings, or if the smoke detector goes off. Varghese created the Wrist Alert for the hearing impaired. It's less expensive than the systems that get a person's attention by flashing the lights throughout a house, and it gives users more freedom.

Varghese's project was just one of the 22 inventions and concepts that graduating electrical engineers demonstrated on Friday, April 26. They built their projects as a requirement for the senior project design class, EE 442.

"This year's projects were some of the best we've ever had," Jorge Santiago-Aviles, associate professor of electrical engineering, said enthusiastically. "Fred

Some of these working projects included devices designed for those who suffer from diabetes. One invention dispenses medication to patients. Another invention uses shoe sensors to let advanced diabetic patients who have lost feeling in their legs know when one foot has touched the ground, so they know it's safe to take another step.

Not all of the projects served medical purposes. A small electronic device that measures the flow of gases was on display. A completely wireless elec-

tric guitar sat ready for strumming. And Jeremy Agulnek unveiled an invention that would make any serious golfer's wish list.

"Every time I approach my putt shots, I first crouch behind the ball to check out the slope of the green and to estimate the

"My invention will enable me to perform the same pre-shot rituals, but it will tell me the distance the ball would have traveled if I had hit it with the same club speed. I can then adjust the speed of my swing and—boom—putt the ball right in the hole. And there go nine strokes off my golf game."

Fred Ketterer, associate professor of electrical engineering, is pleased with the results of EE 442. And he has high hopes for the class and its students. "We want to be an incubator for products and ideas that students, professors and people from different departments bring to us," he said. "Hopefully some of them will become the basis for new products and companies."

It wouldn't be the first time. Nathaniel Weiss (SEAS'89) developed his senior project into Lyrrus Inc., a company that now employs 13 people and has \$10 million in sales.

Helping Victims

(continued from page 9)

extensive training, I had lots of technical information and was able to explain things to her that she didn't understand."

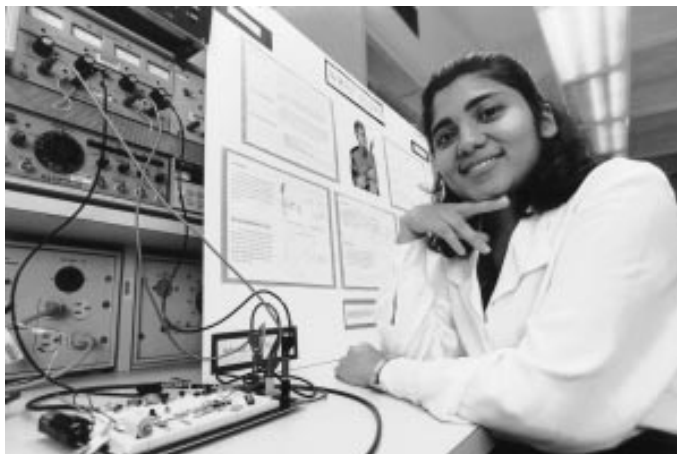
Hooks said that court accompaniment has become essential to an effective safety program: "Many people experience a great deal of anxiety about court proceedings, and don't want to follow through. If it weren't for court accompaniment, the majority of victims either wouldn't go to court, or would only go the first time."

Watson said that Victim Support and Special Services has gotten very good feedback from both crime victims and student volunteers.

"We were surprised how involved everyone got," Watson noted. "Most went above and beyond the call of duty to make sure they stayed connected with their person."

In fact, more than half of the class has volunteered to continue the work during the summer, even after graduation. The program is expected to continue in the fall.

"One of the nicest aspects of the program is seeing the development of the Penn community from the interaction of Penn police personnel and GSE students," Stanley said.



Photograph by Addison Geary

Sunila Varghese, inventor of the Wrist Alert

distance to the pin," Agulnek explained. "Then I approach the ball and take a few practice swings, not knowing how hard I am 'hitting' the ball. Then when I actually putt the golf ball, I doink it five feet short of the hole.

Homelessness: No Easy Answers

By Jon Caroulis

Dennis Culhane is disturbed by his statistics on homelessness. That's because he is able to see past his figures, to see the numbers for what they actually are: representations of real, living people.

Culhane, a Penn researcher, claims that the social injustices of homelessness drew his involve-

ment. While a graduate student, he went to work in "the field," meeting and befriending people who had to live in shelters or on the streets. "I was an ethnographer, and spent considerable time observing and learning from people's experiences," he said. "I developed strong friendships over time."

Now an associate professor in the School of Social Work and a research associate professor of psychology in psychiatry with the Center for Mental Health Policy and Services Research, Culhane no longer has the "face-to-face" contact with the homeless he had as a graduate student. But he still remembers many of the people he met on the streets and in the shelters. He said that those memories have kept him passionate about his work.

During the past few years, Culhane's research has focused on analyzing and interpreting data on homelessness. It's not easy. "This is a complicated, difficult issue," he explained. "It's not as simple as people think."

Culhane conducted his latest study with Susan Wachter, co-director of the Wharton Real Estate Center. Culhane requested her help in compiling geographic and real-estate data. Wachter, a Wharton professor of real estate and finance, wasn't surprised.

"One of the great things about Penn is

that interdisciplinary ventures are encouraged," she said. "The Wharton Real Estate Center held a seminar on urban problems, and we hoped to get more faculty involved with our work. Later, Dennis came to me and asked for help on the study."

Using data collected from shelters in New York and Philadelphia, the researchers found that the areas with the highest rates of homelessness are distinguished by overcrowded housing, abandonment and high vacancy rates. Furthermore, the housing that is available in those areas remains unaffordable to the mostly African-

American families and female heads of households who populate them.

Wachter and Culhane said that the forces which drive people into shelters and onto the streets are related to those that cause neighborhood blight and empty housing, and hurt the remaining population.

"Many of the neighborhoods are in a state of decay, and sometimes entire blocks of homes are vacant and abandoned," Culhane noted. "This suggests that problems such as disinvestment and concentrated poverty are chipping away at neighborhoods, and driving men, women and children into homelessness."

The study found that nearly two-thirds of all people who are homeless belong to families, and that one-third of all homeless people are 18 years of age or younger. The average age of mothers using shelters was 27, "and the age is dropping," Culhane said.

Homeless families, the study reported, often come from the most racially and economically segregated areas. For example, the majority of the homeless in Phila-

delphia come from three specific neighborhoods.

According to the study, from 1990 to 1994, approximately 67 percent of the prior addresses of Philadelphia's homeless were in three dense clusters: west of Broad Street and north of Spring Garden Street; west of Broad Street and south of South Street; and the Mantua/Parkside sections of West Philadelphia.

This is the second major study on homelessness that Culhane has conducted. Three years ago he reported that the number of people who experienced homelessness in New York and Philadelphia in a five-year period (305,000 people) was greater than the number of homeless the census bureau enumerated during one night in 200 of the largest U.S. cities (239,000 people).

Culhane said that little is being done to reduce the number of homeless, which may swell in the wake of proposed cuts in housing, welfare and Medicaid benefits. Culhane urges a prevention-oriented approach, instead of the current emphasis on moving people through shelters.

"People in shelters are, in a sense, a captive population," he said. "They must depend on the charity of others for basic necessities, such as nutrition, safety and housing. Although there are certainly model shelter programs, this dependency leaves many people vulnerable to coercion and abuse."

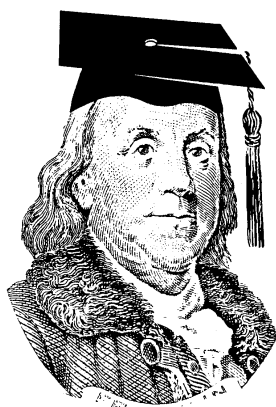
Culhane is now leading a national effort for the U.S. Department of Housing and Urban Development to standardize and computerize local systems for monitoring the use of emergency services for the homeless. He said that if he ever had an opportunity to offer his advice on homelessness to government leaders, he would tell them: "Do not permit states or the Congress to whittle away at the safety net—welfare, job training and housing subsidies. Only 25 percent of those eligible for housing subsidies receive them. To prevent homelessness, we need to expand social protections, not do away with them."

Questions? Comments? Something newsworthy to report? Contact The Compass at (215) 898-1427 or jandag@pobox.upenn.edu.



Photograph by John Woodin/Penn Medicine

Culhane believes that decaying neighborhoods are driving people into homelessness.



Baccalaureate Service

Monday, May 20, 3 p.m.,
Irvine Auditorium
(Concert begins at 2:30 p.m.)

Guest Speaker:

Rt. Rev. Barbara C. Harris,
Suffragan Bishop of Massachusetts

University Commencement

Tuesday, May 21, Franklin Field,
33rd and South Streets

Rain or shine—and no later than 8:45 a.m.—faculty report to the Annenberg Center lobby and students report to Superblock, 39th and Locust Walk, for the Academic Procession.

Gates to Franklin Field open at 9 a.m. (for guest seating) The procession will enter the field at 9:30 a.m. The ceremony will begin at 10:15 a.m. and conclude by 12 noon

Guest Speaker: Tom Brokaw, Anchor and Managing Editor, "NBC Nightly News"

Honorary Degree Recipients

- Tom Brokaw, Anchor and Managing Editor, "NBC Nightly News"
- Rita Dove, Commonwealth Professor of English, University of Virginia and Poet Laureate of the United States, 1993-95
- Helen Frankenthaler, artist
- Moshe Greenberg, Isaac Becker Professor of Bible, Hebrew University
- Jon M. Huntsman, Chairman and Chief Executive Officer, The Huntsman Group
- Arnold J. Levine, Harry C. Weiss Professor in Life Sciences and Chair of Molecular Biology, Princeton University
- Nabeel Shaath, Palestinian Minister of Planning and International Cooperation
- Maurice V. Wilkes, Professor Emeritus of Computer Technology, Cambridge University

School Ceremonies

Unless otherwise noted, receptions begin immediately following the School Commencements, and in an adjacent or nearby location.

Annenberg School for Communication

Ceremony: Tuesday, May 21, 2 p.m.
Annenberg School Auditorium
Speaker: Daryll Trent, President, Trent Communications

College of Arts and Sciences

Ceremony: Monday, May 20, 7 - 9 p.m.,
Convention Hall, Civic Center
Speaker: Leonard Goldberg, President, Mandy Films, Inc.

Graduate Division, School of Arts and Sciences

Ceremony: Tuesday, May 21, 1 p.m.
Superblock, 39th Street and Locust Walk;
Speaker: Peter Conn, Graduate Group Chair, English

College of General Studies

Ceremony: Tuesday, May 21
immediately following Commencement,
Class of 1952 Plaza (across 36th Street from Logan Hall)

School of Dental Medicine

Ceremony: Tuesday, May 21, 1 p.m.
Irvine Auditorium
Reception: School of Dental Medicine
Speaker: Rowland A. Hutchinson, Dean, University of Louisville School of Dentistry

Graduate School of Education

Ceremony: Tuesday, May 21, 2:30 p.m.
Zellerbach Theater, Annenberg Center
Speaker: David Hornbeck, Superintendent, School District of Philadelphia

School of Engineering and Applied Science

Ceremony: Tuesday, May 21,
immediately following Commencement
The Palestra
Reception: West Lawn, Towne Building

Graduate School of Fine Arts

Reception: Tuesday, May 21, 12:30 p.m.
Meyerson Hall Galleries
Ceremony: 1:30 p.m., Meyerson Hall Plaza
(rain location: Room B1, Meyerson Hall)

Law School

Ceremony: Monday, May 20, 2 p.m.
Academy of Music,
Broad and Locust Streets
Reception: Law School
Speaker: U.S. Senator Arlen Specter

School of Medicine

Ceremony: Tuesday, May 21, 4 p.m.
Irvine Auditorium
Reception: University Museum
Speakers: Nobel Laureate Michael Brown, M.D., Paul J. Thomas Professor of Medicine and Genetics, University of Texas Southwestern Medical Center; and Louis Sokoloff, M.D., Chief, Laboratory of Cerebral Metabolism, National Institutes of Mental Health

School of Nursing

Undergraduate Ceremony:
Monday, May 20, 1 p.m.
Harrison Auditorium, University Museum
Speaker: Christine Grant, Ph.D., R.N. Associate Provost, Royal Melbourne Institute of Technology and Director, Australian Center for Excellence in Psychiatric Nursing
Doctoral Ceremony:
Monday, May 20, 3 p.m.
Auditorium, Nursing Education Building
Reception (all students): Tuesday, May 21, 12:30 p.m. Street-level reception area, Nursing Education Building

School of Social Work

Ceremony: Tuesday, May 21, 2 p.m.
Harrison Auditorium, University Museum
Reception: Chinese Rotunda
Speaker: Carol Rasco, Assistant to President Clinton for Domestic Policy

School of Veterinary Medicine

Ceremony: Monday, May 20, 2:30 p.m.
Zellerbach Theater, Annenberg Center
Speaker: Martin Fettman, Ph.D., D.V.M., Mark L. Morris Chair in Clinical Nutrition and Professor of Pathology, Colorado State University College of Veterinary Medicine and Biomedical Sciences

Wharton School

Undergraduate Division and Wharton Evening School
Reception: Tuesday, May 21, 1-3 p.m.
Atrium, Steinberg Hall-Dietrich Hall
Ceremony: 5-7 p.m., Convention Hall, Philadelphia Civic Center
Wharton Graduate Division
Ceremony: Tuesday, May 21, 1-4 p.m.
Convention Hall, Civic Center
Reception: Lehman Brothers Quadrangle and Vance Hall
Wharton Doctoral Division
Ceremony and Reception: Sunday, May 19, 5:30 - 9:30 p.m.

To the University Community

In September 1989, the University of Pennsylvania received from the United States Department of Justice a request for information in connection with an inquiry into potential agreements among colleges and universities relating to financial aid, tuition, and faculty and administrative salaries. Cooperating fully with the investigation, the University provided many thousands of documents to the Justice Department.

The Justice Department's inquiry culminated in the entry on September 20, 1991, of a final judgment in the United States District Court for the Eastern District of Pennsylvania. Under the terms of that judgment, the University of Pennsylvania and seven other Ivy League schools agreed not to exchange certain types of information, such as financial aid data and "plans and projections, including budget assumptions, regarding future student fees or general faculty salary levels...."

In 1992, Congress modified the requirements of the final judgment by enacting legislation that allowed colleges and universities to agree to award institutional financial aid on the basis of need; the law did not authorize them to discuss financial aid awards to specific common applicants. That law, which expired on September 30, 1994, has been replaced by new legislation that permits colleges and universities that practice "need-blind" admissions to: (a) agree to award aid only on the basis of financial need; (b) use common principles of analysis for determining need; (c) use a common aid application form; and (d) exchange certain limited financial aid data with respect to commonly admitted applicants prior to making an aid award.

"Need-blind" admissions is defined as making admissions decisions "without regard to the financial circumstances" of the student. Like the prior law, the new legislation does not authorize colleges and universities to discuss specific awards to common applicants. Under the final judgment, the University is still required to maintain an enforcement program that disseminates the rules set out in the judgment and monitors compliance with the antitrust laws.

In accordance with the requirements of the final judgment, I have been designated Antitrust Compliance Officer with responsibility for implementing the antitrust compliance program. While complying with the final judgment is a priority, it should not impede appropriate communication among schools. Accordingly, we are republishing the final judgment in *United States v. Brown University, et al.* and the University's guidelines on cooperative exchanges of certain University information. Attorneys for the University are available to confer with you regarding compliance with the final judgment and the antitrust laws. Please direct your questions to the Office of the General Counsel, 221 College Hall; telephone: 898-7660.

— Shelley Z. Green, General Counsel

Guidelines on Cooperative Exchanges of Certain University Information

1. These Guidelines apply to University information pertaining to tuition (including fees for room and board), financial aid and salary levels for faculty and administrative personnel.

2. University officials may disclose policies and information to the public and may communicate to others policies and information once they have been made public. However, no University official shall communicate to an official of another school any plans or projections, including budget assumptions, regarding tuition and fees or general faculty salary levels prior to their final approval by the administration or the Trustees, as appropriate.

3. University officials must not participate in one-on-one or roundtable discussions with representatives of other institutions about projected or anticipated levels of tuition, fees, and salaries, or budget assumptions, and if such discussions occur, University officials must excuse themselves.

4. Decisions by the University relating to the setting of tuition, fees and salaries or the awarding of financial aid must not be based upon or refer to projections of tuition, fees, and salaries or financial aid by other educational institutions. University officials cannot solicit information concerning projected levels of tuition, fees and salaries or the methodology for awarding financial aid at other educational institutions.

5. No University official may request from, communicate to or exchange with any college or University confidential financial aid information. For purposes of this policy, confidential

financial aid information includes but is not limited to the application of a Needs Analysis Formula to, or how family or parental contribution will be calculated for, a specific applicant; the University's plans or projections regarding summer savings requirements or self-help; the aid awarded or proposed to be awarded any applicant except as required by federal law.

6. In general, current and historical data relating to tuition, fees and salaries may be discussed and exchanged with representatives of other institutions, unless such disclosure is proscribed (for reasons other than the antitrust laws) by University or legal regulations. (For example, the University generally will not disclose the salary of any identified individual without his or her consent.) Thus, University officials may release to representatives of other institutions and to the press information relating to current or past levels of tuition, fees and aggregate salaries, and may participate in discussions with representatives of other institutions about such current or past information. However, University officials cannot disclose budget assumptions about future tuition, fees and salaries, or suggest that the University will maintain current levels of tuition, fees and salaries or will modify them in any particular way (e.g., to agree that tuition and fees will rise by a specified percentage).

7. Any University official who learns of a violation of these Guidelines or of Section IV of the Final Judgment, must report it to the Antitrust Compliance Officer.

Questions about these Guidelines should be directed to the Office of the General Counsel.

Final Judgment of the U.S. District Court for the Eastern District of Pennsylvania begins next page

**UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

UNITED STATES OF AMERICA,

Plaintiff,

v.

BROWN UNIVERSITY IN PROVIDENCE
IN THE STATE OF RHODE ISLAND
AND PROVIDENCE PLANTATIONS;

THE TRUSTEES OF COLUMBIA
UNIVERSITY IN THE CITY
OF NEW YORK;

CORNELL UNIVERSITY;

THE TRUSTEES OF DARTMOUTH
COLLEGE;

PRESIDENT AND FELLOWS OF
HARVARD COLLEGE, MASSACHUSETTS;

MASSACHUSETTS INSTITUTE OF
TECHNOLOGY;

THE TRUSTEES OF PRINCETON
UNIVERSITY;

THE TRUSTEES OF THE UNIVERSITY
OF PENNSYLVANIA; and

YALE UNIVERSITY,

Defendants.

Civil Action No. 91-3274

FINAL JUDGMENT

Filed:

September 19, 1991

Entered:

September 20, 1991

the student's income from term time employment offered by, or through, the college or university).

(E) "Merit Aid" means Financial Aid that is not based on economic need.

(F) "Needs Analysis Formula" means any formula for calculating or ascertaining a student's need or Family or Parental Contributions.

(G) "Summer Savings Requirement" means the amount the college or university requires the student to earn during the summer to contribute to his or her Student Fees for the following year.

III. APPLICABILITY

This Final Judgment shall apply to each defendant and to each of their officers, trustees, and other members of their governing boards, employees, agents, successors, and assigns, and to all other persons in active concert or participation with any of them who shall have received actual notice of this Final Judgment by personal service or otherwise.

IV. PROHIBITED CONDUCT

Each defendant is enjoined and restrained from:

(A) agreeing directly or indirectly with any other college or university on all or any part of Financial Aid, including the Grant or Self-help, awarded to any student, or on any student's Family or Parental Contribution;

(B) agreeing directly or indirectly with any other college or university on how Family or Parental Contribution will be calculated;

(C) agreeing directly or indirectly with any other college or university to apply a similar or common Needs Analysis Formula;

(D) requesting from, communicating to, or exchanging with any college or university the application of a Needs Analysis Formula to, or how family or parental contribution will be calculated for, a specific Financial Aid applicant;

(E) agreeing directly or indirectly with any other college or university whether or not to offer Merit Aid as either a matter of general application or to any particular student;

(F) requesting from, communicating to, or exchanging with any other college or university its plans or projections regarding Summer Savings Requirements or Self-help for students receiving Financial Aid;

(G) requesting from, communicating to, or exchanging with any other college or university, the Financial Aid awarded or proposed to be awarded any Financial Aid applicant except as required by federal law;

(H) requesting from, communicating to, or exchanging with any other college or university any information concerning its plans or projections, including budget assumptions, regarding future Student Fees or general Faculty Salary levels; and

(I) entering into, directly or indirectly, any contract, agreement, understanding, arrangement, plan, program, combination, or conspiracy with any other college or university or its officers, directors, agents, employees, trustees, or governing board members to fix, establish, raise, stabilize, or maintain Student Fees or Faculty Salaries.

V. COMPLIANCE PROGRAM

Each defendant is ordered to maintain an antitrust compliance program which shall include designating, within 30 days of the entry of this Final Judgment, an Antitrust Compliance Officer with responsibility for accomplishing the antitrust compliance program and with the purpose of achieving compliance with this Final Judgment. The Antitrust Compliance Officer shall, on a continuing basis, supervise the review of the current and proposed activities of his or her defendant institution to ensure that it complies with this Final Judgment. The Antitrust Compliance Officer shall be responsible for accomplishing the following activities:

(A) distributing, within 60 days from the entry of this Final Judgment, a copy of this Final Judgment (1) to all trustees and governing board members, and (2) to all officers and non-clerical employees who have any

Final Judgment

Plaintiff, United States of America, filed its Complaint on May 22, 1991. Plaintiff and consenting defendants, by their respective attorneys, have consented to the entry of this Final Judgment without trial or adjudication of any issue of fact or law. This Final Judgment shall not be evidence or admission by any party with respect to any issue of fact or law. Therefore, before any testimony is taken, and without trial or adjudication of any issue of fact or law, and upon consent of the parties, it is hereby

ORDERED, ADJUDGED AND DECREED:

I. JURISDICTION

This Court has jurisdiction of the subject matter of this action and of each of the parties consenting to this Final Judgment. The Complaint states a claim upon which relief may be granted against each defendant under Section 1 of the Sherman Act, 15 U.S.C. § 1.

II. DEFINITIONS

As used in this Final Judgment:

(A) "Student Fees" means the tuition, room, board, and mandatory fees, or any of these individually, a college, or university charges.

(B) "Family Contribution" means the amount the student and the student's family pay from their income and assets towards the Student Fees.

(C) "Parental Contribution" means the portion of the Family Contribution the student's parent or parents contribute from their income and assets.

(D) "Financial Aid" means a reduction of the total Student Fees for a particular student. It consists of grants (gift aid) and self-help (loans and

responsibility for recommending or setting of fees, salaries, or financial aid in the offices of the President, Vice Presidents, Provost, Deans, Financial Aid, Admissions, Budget, Controller, Treasurer, and other similar offices;

(B) distributing in a timely manner a copy of this Final Judgment to any officer, employee, or trustee who succeeds to a position described in Section V(A);

(C) briefing annually those persons designated in Section V(A) on the meaning and requirements of this Final Judgment and the antitrust laws and advising them that each defendant's legal advisers are available to confer with them regarding compliance with the Final Judgment and the antitrust laws;

(D) obtaining from each officer, employee, or trustee designated in Section V(A) an annual written certification that he or she: (1) has read, understands, and agrees to abide by the terms of this Final Judgment; (2) has been advised and understands that non-compliance with this Final Judgment may result in his or her conviction for criminal contempt of court; and (3) is not aware of any past or future violation of this decree that he or she has not reported to the Antitrust Compliance Officer; and

(E) maintaining a record of recipients to whom the final Judgment has been distributed and from whom the certification in V(D) has been obtained.

VI. CERTIFICATION

(A) Within 75 days after the entry of this Final Judgment, each defendant shall certify to the plaintiff whether it has designated an Antitrust Compliance Officer and has distributed the Final Judgment in accordance with Section V above.

(B) For 10 years after the entry of this Final Judgment, on or before its anniversary date, the Antitrust Compliance Officer at each defendant school shall certify annually to the Court and the plaintiff whether that defendant has complied with the provisions of Section V.

(C) At any time, if a defendant's Antitrust Compliance Officer learns of any past or future violation of Section IV of this Final Judgment, that defendant shall, within 45 days after such knowledge is obtained, take appropriate action to terminate or modify the activity so as to comply with this Final Judgment.

(D) If any person designated in Section V(A) learns of any past or future violation of this decree, he or she shall report it to the Antitrust Compliance Officer promptly.

VII. SANCTIONS

(A) If, after the entry of this Final Judgment, any defendant violates or continues to violate Section IV, the Court may, after notice and hearing, but without any showing of willfulness or intent, impose a civil fine upon that defendant in an amount reasonable in light of all surrounding circumstances. A fine may be levied upon a defendant for each separate violation of Section IV.

(B) Nothing in this Final Judgment shall bar the United States from seeking, or the Court from imposing, against any defendant or person any other relief available under any other applicable provision of law for violation of this Final Judgment, in addition to or in lieu of civil penalties provided for in Section VII(A) above.

VIII. PLAINTIFF ACCESS

(A) To determine or secure compliance with this Final Judgment and for no other purpose, duly authorized representatives of the plaintiff shall, upon written request of the Assistant Attorney General in charge of the Antitrust Division, and on reasonable notice of the relevant defendant, be permitted:

(1) access during that defendant's office hours to inspect and copy all records and documents in its possession or control relating to any matters contained in this Final Judgment; and

(2) to interview that defendant's officers, employees, trustees, or agents, who may have counsel present, regarding such matters. The interviews shall be subject to the defendants's reasonable convenience and without restraint or interference from any defendant.

(B) Upon the written request of the Assistant Attorney General in charge of the Antitrust Division, a defendant shall submit such written reports, under oath in requested, relating to any of the matters contained in this Final Judgment as may be reasonably requested.

(C) No information or documents obtained by the means provided in this Section VIII shall be divulged by the plaintiff to any person other than a duly authorized representative of the executive branch of the United

States, except in the course of legal proceeding to which the United States is a party, or for the purpose of securing compliance with this Final Judgment, or as otherwise required by law.

IX. LIMITING CONDITIONS

(A) Nothing in this Final Judgment shall prevent defendants that are members of a common athletic league from: (1) agreeing to grant financial aid to recruited athletes or students who participate in athletics on the sole basis of economic need with no differentiation in amount or in kind based on athletic ability or participation, provided that each school shall apply its own standard of economic need; (2) agreeing to permit independent auditors access to Financial Aid information to monitor adherence to this agreement so long as the monitoring process does not disclose financial aid information, needs analysis or methodology to other league members; or (3) interpreting this agreement and enforcing it so long as such interpretation and enforcement do not disclose financial aid information, needs analysis or methodology to other league members.

(B) Nothing in this Final Judgment shall prohibit any defendant from advocating or discussing, in accordance with the doctrine established in *Eastern Railroad Presidents Conference v. Noerr Motor Freight, Inc.*, 365 U.S. 127 (1961), and its progeny, legislation, regulatory actions, or governmental policies or actions.

(C) Nothing in this Final Judgment shall prevent any defendant from: (1) disclosing policies or information to the public; or (2) communicating to others policies or information once they have been made public. However, no individual designated in Section V(A) shall communicate to any individual similarly situated at another defendant institution any plans or projections, including budget assumptions, regarding Student Fees or general Faculty Salary levels prior to their approval by that defendant's Governing Board.

(D) Nothing in this Final Judgment shall prohibit any defendant from unilaterally adopting or implementing a Financial Aid program based, in whole or in part, on the economic need of applicants.

(E) Nothing in this Final Judgment shall prohibit or regulate conduct that federal legislation enacted subsequent to the entry of the Final Judgment authorizes or exempts from the antitrust laws.

(F) Nothing in this Final Judgment shall prevent the defendants from each unilaterally utilizing or appointing an independent agency, whether or not utilized by other defendants, to collect and forward information from Financial Aid applicants concerning their financial resources. The agency may only forward the financial aid information requested by that particular defendant.

(G) Nothing in this Final Judgment shall prohibit defendants or their representatives from continuing their consultations with the College Scholarship Service concerning the processing and presentation of its data in the same manner and degree as currently exists.

(H) Nothing in this Final Judgment shall prohibit an individual designated in Section V(A) from serving as and performing the normal functions of a trustee or governing board member of another college or university that is not a defendant to this action. However, the individual may not disclose any non-public information including student fees, faculty salaries, or financial aid to any other college or university.

(I) Nothing in this Final Judgment shall prohibit any defendant from disclosing information as part of the accreditation process. However, any individual participating in the accreditation process may not disclose any non-public information including student fees, faculty salaries, or financial aid to any college or university.

(J) Nothing in this Final Judgment shall prohibit any defendant from providing financial aid for an individual student in situations where such defendant is jointly providing education or financial aid for that student with another college or university.

X. FURTHER ELEMENTS OF DECREE

(A) This Final Judgment shall expire 10 years from the date of entry.

(B) Jurisdiction is retained by this Court for the purpose of enabling any of the parties to this Final Judgment to apply to this Court at any time for further orders and directions as may be necessary or appropriate to carry out or construe this Final Judgment, to modify or terminate any of its provisions, to enforce compliance, and to punish violations of its provisions.

(C) Entry of this Final Judgment is in the public interest.

Dated: September 19, 1991

—Louis C. Bechtle, Ch.J.

OPPORTUNITIES at PENN

Listed below are job opportunities at the University of Pennsylvania. To apply please visit:

University of Pennsylvania Job Application Center
Funderburg Information Center, 3401 Walnut Street, Ground Floor
Phone: 215-898-7285

Application Hours: Monday through Friday, 9 a.m.-1 p.m.

Positions are posted on a daily basis, Monday through Friday, at the following locations:

Application Center—Funderburg Center, 3401 Walnut St. (Ground level) 9 a.m.-1 p.m.

Blockley Hall—418 Guardian Drive (1st Floor and 2nd Floor)

Dental School—40th & Spruce St. (Basement-across from B-30)

Houston Hall—34th & Spruce St. (Basement-near the elevators)

Wharton—Steinberg Hall-Dietrich Hall (next to Room 303)

Job Opportunities and daily postings can also be accessed through the Human Resources Home Page (<http://www.upenn.edu/hr/>). A position must be posted for seven (7) calendar days before an offer can be made. The Job Opportunities Hotline is a 24-hour interactive telephone system. By dialing 898-J-O-B-S and following the instructions, you can hear descriptions for positions posted during the last three weeks. You must, however, have a push-button phone to use this line.

The University of Pennsylvania is an equal opportunity employer and does not discriminate on the basis of race, color, sex, sexual or affectional preference, age, religion, national or ethnic origin, disability or veteran status.

WHERE THE QUALIFICATIONS FOR A POSITION ARE DESCRIBED IN TERMS OF FORMAL EDUCATION OR TRAINING, PRIOR EXPERIENCE IN THE SAME FIELD MAY BE SUBSTITUTED. POSITIONS WITH FULL DESCRIPTIONS ARE THOSE MOST RECENTLY POSTED.

ARTS AND SCIENCES

Specialist: Nancy Salvatore

RESEARCH SPECIALIST, JR. (05418NS) Perform anatomical tracings on computerized MRI images of the brain; maintain databases; administer neuropsychological tests to normal individuals. **Qualifications:** BA/BS or higher in psychology or related field (biology or neuroscience); knowledge of basic neuroanatomy & computers; prior experience with neuropsychological testing. **Grade:** P1; **Range:** \$19,700-25,700 5-8-96 Psychology

RESEARCH SPECIALIST I (05417NS) This position requires skills appropriate for research in the areas of neurophysiology, muscle physiology, animal care & testing; perform sterile surgery, electrophysiological recordings with electrodes; assist with experimental design & computer aided data analysis & histological work; assist in maintenance of research subjects (animals) & the operation of the laboratory. **Qualifications:** BA/BS; advance training in biological sciences; Master's preferred; clear evidence of research experience in relevant areas required; demonstrated ability to carry out delicate surgical procedures & knowledge of histology & electrophysiology; previous experience in animal research & familiarity with computers & electronics laboratory equipment required. **Grade:** P2; **Range:** \$21,700-28,200 5-9-96 Psychology

ADMINISTRATIVE ASSISTANT III (05413NS) Handle mail, e-mail & phone inquiries; chairman's secretary; coordinate course scheduling on-line SRS; maintain course register & audit inventory files on SRS; supervise work flow of department office; prepare reports & documents; facilitate all aspects of faculty searches; assist business administrator with accounting reports, business reports forms & supervise the office in the absence of the administrator; trouble shoot & solve registration problems with students. **Qualifications:** High school graduate & related post high school training or equivalent; at least two yrs. experience at the AAI level or comparable; thorough knowledge of office procedures; on-line SRS skills; ability to use Word Perfect Windows, Lotus 1-2-3; ability to communicate effectively; knowledge of academic activities preferred. **Grade:** G11; **Range:** \$19,900-25,300 5-7-96 Political Science

BUSINESS ADMINISTRATOR/VMANAGER ADMINISTRATOR & FINANCE (04358NS) P6/P7; \$31,900-40,600/35,000-43,700 4-23-96 Biology

RESEARCH SPECIALIST I (04313NS) P2; \$21,700-28,200 4-9-96 Biology

RESEARCH SPECIALIST IV (04388NS) P6; \$31,900-40,600 4-30-96 Physics & Astronomy

OFFICE ADMIN. ASSISTANT I (37.5 HRS) (04343NS) G9; \$18,321-22,929 4-23-96 Chemistry

SECRETARY IV (37.5 HRS) (04344NS) G9; \$18,321-22,929 4-23-96 Office of the Dean

DENTAL SCHOOL

Specialist: Clyde Peterson

DIRECTOR II (05414CP) Responsible for coordinating & directing patient/treatment flow between clinical departments; compile clinical operational data on patient flow, evaluate results, develop intervention strategies & make recommendations; direct supervision of clinical staff. **Qualifications:** BA/BS in health care admin. or equiv. req.; three-five yrs. of progressive supervisory & management exp. in dental group practice or equiv. req.; licensed dental hygienist; familiarity with University setting a plus. **Grade:** P5; **Range:** \$28,800-37,600 5-10-96 Clinic Management

RESEARCH SPECIALIST I (04393CP) Execute experiments to study matrix mineralization & molecular changes associated with chondrocyte maturation; maintain tissue culture facility & prepare primary cell culture; assist in writing manuscripts. **Qualifications:** BA/BS; one-three yrs. research experience; knowledge of cell culture & molecular biology techniques desirable. (End date: 6/98) **Grade:** P2; **Range:** \$21,700-28,200 5-7-96 Biochemistry

RESEARCH SPECIALIST II (04394CP) Design & execute experiments to study transcriptional control of osteogenesis; supervise & teach technicians & student in lab procedures involving molecular biology & tissue culture; assist in preparation of manuscripts. **Qualifications:** BA/BS; PhD & gene cloning exp. desirable; three yrs. research exp. including molecular biology & tissue culture. (End date: 6/98) **Grade:** P3; **Range:** \$23,900-31,000 5-7-96 Biochemistry

ADMINISTRATIVE ASSISTANT II (04366CP) G10; \$18,700-23,300 4-25-96 Restorative Dentistry

DENTAL ASSISTANT II (40 HRS) (04351CP) G8; \$17,943-22,400 4-22-96 Implant Center

ENGINEERING/APPLIED SCIENCE

Specialist: Clyde Peterson

RESEARCH SPECIALIST JR./I (04397RS) Under general supervision, participate in research project investigating the role of gap junctions in cultured vascular tissues; perform procedures for gene cloning, amplification & purification, PCR, Northern/Southern blotting, screening of cDNA sequencing; experience in immunohistochemical staining, fluorescence microscopy & in situ hybridization desirable but not required (will train). **Qualifications:** RES. SPEC. JR.: BA/BS in scientific or related field; exposure to lab work. RES. SPEC. I: BA/BS in biology, molecular biology, biochemistry or a related discipline; one-three yrs. laboratory research experience. **Grade:** P1/

P2; **Range:** \$19,700-25,700/\$21,700-28,200 5-6-96

Institute for Medicine & Engineering
RESEARCH LAB TECHNICIAN III (40HRS) (04398RS) Follow established protocols to perform routine to complex lab procedures under limited supervision; perform cell cultures, including isolation & maintenance of primary & established cell lines, preparation of media & preparation/maintenance of frozen stock; perform procedures in immunohistochemistry, Western blotting & immunoprecipitation; operate & maintain laboratory equipment; keep inventory & order supplies. **Qualifications:** BA/BS in biology or biochemistry; experience in tissue culture & biochemistry; good organizational skills required. **Grade:** G10; **Range:** \$21,371-26,629 5-6-96 Institute for Medicine & Engineering

STAFF ASSISTANT III/II (04387JZ) P2/P3; \$21,700-28,200/\$23,900-31,000 5-2-96 Institute for Medicine & Engineering (For full description, please look under Medical School section)

EXECUTIVE VICE PRESIDENT

Specialist: Nancy Salvatore/Susan Curran

ADMINISTRATIVE ASSISTANT III (37.5 HRS) (04355SC) Provide administrative support to the Director of Staff & Labor Relations & Staff & Labor Relations Team; may also provide support to the Vice President of Human Resources; act as liaison with senior management & with numerous & diverse customers; type & proofread highly complex &/or confidential materials; respond to inquiries that may require interpretation of policies, procedures & contracts; research, compile & summarize data; prepare reports; organize & maintain confidential office records & files; manage contract administration process; manage phases of publishing policies & contracts; develop presentation-quality spreadsheet, charts & graphs; manage phases of the grievance process; schedule meetings, events & appointments; maintain records on & monitor expenditures; compose correspondence, develop forms & brochures; collect, open, sort & distribute mail; handle customer service for department. **Qualifications:** High school graduate or equivalent; BA/BS preferred; at least two yrs. at the AAI level or comparable background; skilled in project planning & management; expert in word processing, spreadsheet & computer graphics for correspondence, reports & presentation; knowledge of WordPerfect; Microsoft Windows, Lotus 1-2-3 preferred; skilled at dealing with diverse customers & demanding situations continuously, professionally & appropriately; skilled at prioritizing & managing multiple, competing priorities in a positive organized manner; must be collaborative & flexible in appreciation; superior customer service skills; ability to communicate effectively both orally & in writing. **Grade:** G11; **Range:** \$21,321-27,107 5-1-96 HR/Labor Relations

CLERK ACCOUNTING III (0152NS) Responsible for the efficient & timely printing of payroll checks and advices & Accounts Payable checks & credit statements; coordinate the operation of the record's retention function of the Comptroller's Office; download checks & advice information from administrative system to PC formats & print checks & advices from Accounts Payable & Payroll systems. **Qualifications:** High school graduate with some additional technical training or personal computer exp.; at least five yrs. of increasingly responsible & relevant work exp.; exp. working with personal computers (Windows applications), laser printers & other check handling machinery; good organizational skills & attention to detail & exp. working with confidential material; ability to handle some physically demanding tasks required for records preparations & blank check stock. **Grade:** G9; **Range:** \$17,100-21,400 5-9-96 Comptroller's Office

SERVICE REP. I (37.5 HRS) (05415NS) Provide technical information about computers & related equipment & software to non-technical staff & customers; greet customers; answer telephones; give demonstrations on equipment; light filing & data entry; operate computerized cash register. **Qualifications:** High school graduate with some college level course work preferred, preferably in computer related field; experience in retail &/or computer support center preferred; working knowledge of Apple & DOS computers, computer peripherals & software required; strong

OPPORTUNITIES at PENN

interpersonal, customer service skills required; high volume/fast paced department. **Grade:** G10; **Range:** \$20,036-24,964 5-8-96 Computer Connection

SUPERVISOR II (40 HRS)(05403NS) Operate & maintain ice making & related equipment; maintain log of operations; work with Physical Plant & outside contractors; take inventory & order supplies; coordinate technical requirements for special events; train student supervisors; supervise staff; assist manager with rink operations, policies & procedures. **Qualifications:** High school graduate or equivalent with one-three yrs. supervisory experience; one-three yrs. recreational facility operation; excellent interpersonal & organizational skills; ability to work under pressure, lift up to 50 lbs. & work on feet for extended periods; familiarity with recreational facility operations highly desired. **Grade:** G11; **Range:** \$22,743-28,914 5-6-96 Class of 1923 Ice Rink

TEACHER, CHILDREN'S CENTER (05404NS) (05405NS) (05406NS) Teach, guide & supervise children ages 12 weeks to five yrs.; develop, plan & carry out daily activities & lesson plans; arrange & maintain educational materials & equipment; log daily activities; communicate with parents; attend staff meetings, parent-teacher meetings & special events; participate in continuing education programs. **Qualifications:** Bachelor's degree in Early Childhood Education or equiv.; one-two yrs. exp. in a day care or teaching facility; working knowledge of developmental milestones; ability to discipline children & manage classroom. (End date: One yr. appointment) **Grade:** G11; **Range:** \$19,900-25,300 5-6-96 Penn Children's Ctr.

ACCOUNTANT, JR. (04365NS) G11; \$19,900-25,300 4-25-96 Comptroller's Office

ACCOUNTANT I (04336NS) P2; \$21,700-28,200 4-18-96 Comptroller

INVESTIGATOR, SR. (40HRS) (04345NS) (04346NS) (Position will require extensive travel throughout the city & on occasion will require unusual hours &/or overtime; position is contingent upon the successful completion of a background investigation & a psychological & physical examination.) Union 4-22-96 Division of Public Safety

INVESTIGATOR, SR. (40HRS) (04391NS) (04392NS)(Position will require extensive travel throughout the city & on occasion will require unusual hours &/or overtime; position is contingent upon the successful completion of a background investigation & a psychological & physical examination.) Union 5-1-96 Division of Public Safety

PROCUREMENT SPECIALIST (04352NS) (04353NS) P7; \$35,000-43,700 4-23-96 Purchasing

PROPERTY ADMINISTRATOR (04339NS) P3; \$23,900-31,000 4-23-96 Risk Management

ADMIN. ASSISTANT III (37.5 HRS)(04354SC) G11; \$21,321-27,107 5-1-96 HR/Staff Relations

CLERK, ACCOUNTING III (04401NS) G9; \$17,100-21,400 5-3-96 Central Gifts

GRAD SCHOOL OF EDUCATION

Specialist: Clyde Peterson

ASSOCIATE DIRECTOR V (05402CP) Exercise financial & administrative responsibility for a revenue generating & research area; oversee budget & ensure the integrity of financial transactions processed within the budgetary unit; assume primary responsibilities for capital program planning including resource planning & distribution of allocated costs; advise school management of the financial impact of major renovations, new building & human resources staffing decisions; develop school short & long term fiscal plans with input from division; provide financial analyses to school management; prepare & oversee preparation of financial section of grant proposals; monitor the school's compliance with grant & contract processes. **Qualifications:** BA/BS degree in accounting, business, finance or equiv.; five-seven yrs. of financial management exp.; excellent analytical skills; thorough knowledge of University financial procedures, accounting & policies pref.; demonstrated experience

with computerized accounting, financial analysis & managerial administrative software packages; excellent organizational & communication skill. **Grade:** P7; **Range:** \$35,000-43,700 5-6-96 Business Office

GRAD SCHOOL OF FINE ARTS

Specialist: Clyde Peterson

COORDINATOR II (04342CP) P2; \$21,700-28,200 4-22-96 Architecture

LAW SCHOOL

Specialist: Clyde Peterson

ADMINISTRATIVE ASSISTANT III (04373CP) (Application deadline date: 5/10/96) G11; \$19,900-25,300 4-26-96 Biddle Law Library

MEDICAL SCHOOL

Specialist: Ronald Story/Janet Zinser

ASSOCIATE DIRECTOR, IHGT (05411JZ) Function as the Acting Director of the Institute for Human Gene Therapy when the IHGT Director is absent; represent the Institute within the University or to the extramural community; help to establish & implement a national & international policy on gene therapy; monitor the opinions & view points of national & international leaders as they relate to gene therapy; chair the Regulatory Affairs Office (RAO); develop & oversee a quality assurance/quality control (QA/QC) program from vector manufacturing, toxicology, clinical pathology & human clinical trials; work with the Director to oversee & coordinate the filing of all applications for IHGT sponsored human clinical trials, to include Investigational New Drug (IND) submission to the FDA, Institutional Review Board (IRB) submission; monitor the human clinical trials to ensure that all reporting requirements are met; represent the National Gene Vector Laboratory (NGVL) at the University of Pennsylvania to the extramural community in lieu of the Director of IHGT; in conjunction with the Institute Director, sits on the NGVL Steering Committee at the National Institutes of Health. **Qualifications:** MD & PhD required; extensive experience in regulatory administration required, with a solid track record in developing, implementing & ensuring compliance to policies & procedures; academic experience preferred; experience in basic investigation as an independent investigator required; working knowledge of Federal regulation of gene therapy, as well as a strong commitment to the further development of the field of gene therapy required; proven administrative, scientific & management skills required; excellent organizational, written & oral communication skills; must be a leader capable of working with a diverse constituency. (End date: 4/30/98) **Grade:** P12; **Range:** \$63,700-77,700 5-8-96 IHGT

COORDINATOR I (04319RS) Responsible for overall laboratory operations; ensure smooth & efficient functioning of laboratories & compliance with personnel & environmental safety procedures (biohazard & radiation safety); maintenance of laboratory equipment, glass washing & autoclaving operations; tissue culture rooms, cryo-preservation of tissue; liquid nitrogen, inventory & supplies; direct supervision of 1-2 laboratory technicians; develop plan for preventive maintenance & emergencies; make recommendations for improved operations, cost-savings & reporting. **Qualifications:** BA/BS preferred; at least three-five yrs. of experience in a laboratory setting, strong technical skills & knowledge of laboratory equipment function & repair, facilities management & operations required; strong knowledge of computers preferred; must have a hands-on style, the ability to deal with multiple constituencies (faculty, technicians, vendors & other University departments); must be available for emergencies. (End date: 4/30/98) **Grade:** P1; **Range:** \$19,700-25,700 5-8-96 IHGT

DIRECTOR V (04377JZ) Manage faculty employ-

ment process for full-time & part-time faculty in the School of Medicine, including appointments, promotions & tenure issues; maintain high level of familiarity with all the basic policies & procedures concerning employment of faculty members; provide extensive writing, interpretation, counseling & advice regarding same to Dean, Department Chairs & other staff; provide advice & counsel regarding faculty complaints & due process procedures; assist in efforts to establish endowed chairs; direct annual Faculty Extramural Activity Reports process; supervise three staff members; oversee School of Medicine Art Collection. **Qualifications:** BA/BS; advanced degree preferred; six-eight yrs. related experience; experience/understanding of higher education administration, especially faculty personnel & academic issues; outstanding writing & interpersonal skills essential; attention to detail; proficient in word processing; strong counseling & negotiation skills; demonstrated ability to handle confidential & sensitive materials; knowledge of the University of Pennsylvania & the Medical School preferred; interest/experience in the oversight of art collection a bonus. **Grade:** P8; **Range:** \$38,500-48,100 4-25-96 Office of Faculty Affairs

MEDICAL PHYSICIST/RADIATION ONCOLOGY (05416RS) Develop & implement general medical physics policies & procedures; establish, supervise & document a program of quality assurance for accelerators, ancillary equipment & procedures used in stereotactic irradiations; review & approve all treatment plans & dose calculations as required; maintain treatment planning systems. Supervise linear accelerator calibration; develop quality assurance policies & institute procedures; oversee radioelement handling & serve as the Department's liaison to the applicable state & federal nuclear regulatory agencies; supervise the commissioning of new major equipment (linear accelerators & simulators); assist in the design & development of the proposed radiation oncology suites; determine radiation shielding requirements; collaborate with radiation oncologist to design patient specific treatment applications; actively participate in medical physics research projects; participate in training of radiation oncology residents; monitor & report on radiation exposure; serve as departmental representative to affiliate radiation safety. **Qualifications:** Master's degree in medical physics or related field & certification in therapeutic radiological physics by the American Board of Radiology or equivalent; no less than four yrs. experience in medical physics; ability to work independently with minimal supervision & to supervise technical personnel; direct medical physics services at HUP & affiliates. **Grade/Range:** Blank 5-8-96 Radiation Oncology

RESEARCH SPECIALIST, JR. (05419RS) Perform experiments in molecular & cell biology, including nucleic acid purification, DNA sequencing, various blotting techniques & hybridization, tissue culture of mammalian cells & dissection of rodents for harvest of tissues; research is focused on understanding how hormones affect breast cancer risk; assist in planning experiments, implementing new protocols, writing lab reports, analyzing data & performing computer searches; order & maintain supplies & media stocks & maintain equipment; assist in training other lab personnel including students. **Qualifications:** BA/BS in scientific field required; knowledge of molecular & cell biology; previous lab experience in working with recombinant DNA techniques & tissue culture required; good organizational skills; ability to work semi-independently; knowledge of computers. **Grade:** P1; **Range:** \$19,700-25,700 5-9-96 IHGT

RESEARCH SPECIALIST, JR. (05420RS) Conduct experiments on biology of virus-nerve cell interactions; perform tissue culture, rat brain dissection, biochemical & ELISA assays, recombinant DNA techniques & general lab work; utilize & adapt protocols & compile data; perform library searches; assist writing methods sections of paper; attend group meetings; maintain equipment & order supplies; may assign task to student worker. **Qualifications:** BA/BS in scientific or related field or equivalent; experience in tissue culture preferred, but not required; exposure to lab work. **Grade:** P1; **Range:** \$19,700-25,700 5-9-96 Neurology

RESEARCH SPECIALIST I (06106RS) Perform basic molecular biology techniques including transfections, multigenesis & PCR plus flow cytometry & cell

OPPORTUNITIES at PENN

culture; maintain equipment & supplies; supervise lower level technicians; write reports/plot graphs; primary source for experimental design; test new procedures; perform complex analysis. **Qualifications:** BA/BS required; one-three yrs. experience in similar project. **Grade:** P2; **Range:** \$21,700-28,200 5-7-96 Hematology/Oncology

RESEARCH SPECIALIST I (05421RS) Prepare & culture primary cells & brain slices; perform routine molecular biology, in situ hybridization, sectioning & immunohistochemistry; assist with animal breeding, ordering, preparation of solution & record keeping; prepare & assist with report publications & letters. **Qualifications:** BA/BS degree in science field; one-three yrs. experience; familiarity with tissue culture, molecular biology & PC's required. **Grade:** P2; **Range:** \$21,700-28,200 5-9-96 Neuroscience

RESEARCH SPECIALIST II (04395RS) Conduct research on the structure of lipids, peptides, proteins utilizing GC/MS, HPLC/MS & HPLC/MS/MS techniques; develop & utilize techniques for micro-sequencing of proteins using in-line enzyme hydrolysis & HPLC/MS/MS; support quantitative methods for measuring eicosanoid using negative ion chemical ionization GC/MS; maintain, troubleshoot, repair GC/MS instruments. **Qualifications:** Master's degree in analytical chemistry; three-five yrs. experience; experience in micro-sequencing of proteins using quadrupole LC/MS/MS techniques. *(On-going contingent on grant funding)* **Grade:** P3; **Range:** \$23,900-31,000 5-6-96 Medicine/Experimental Therapeutics

RESEARCH SPECIALIST II (04396RS) Assist in designing, performing & analyzing various experiments using virological, immunological & molecular biological techniques, including the use of radioactivity; assist in the design, performance & analysis of various animal models. **Qualifications:** BA/BS; MS preferred, with three-five yrs. of exp. in immunological, virological or molecular biological techniques; must be willing & able to work with small animals (rats & mice). *(On-going contingent on grant funding)* **Grade:** P3; **Range:** \$23,900-31,000 5-3-96 Surgery

SENIOR RESEARCH INVESTIGATOR (02136RS) Provide analytical chemistry support for all research activities of department; direct collaborative research; organize & operate the Analytic Laboratories for Program Grant Applications; direct the core laboratory facility; work with gas chromatography, mass spectrometry; peptide & protein separation, enzyme assays, radioisotopes & spectrophotometry & fluorometry; primary responsibilities include purchase, operation & maintenance of routine analytic equipment; supervise & train staff; conduct independent research analytic techniques in conjunction with individual investigations; oversee general laboratory services, safety & operation; write reports, methods, research grant & scientific collaborations; present & defend proposals. **Qualifications:** PhD in Analytic Chemistry; five yrs. exp. in biological research techniques; recognized by publications, lectures &/or reputations, experts in aspects of analytic chemistry; demonstrated knowledge in analytic chemistry; expertise in gas, high pressure, capillary, reversed phase liquid & solid phase chromatography, mass spectrometry, peptide & protein separation, enzyme assays, radioisotopes & spectrophotometry & fluorometry; exp. in cell culture techniques; demonstrated oral & written communication skills; exp. with computers; supervisory exp. **Grade/Range:** Blank 5-6-96 Anesthesia

STAFF ASSISTANT II/III (04387JZ) Provide high-level administrative coordination & management support to the Director of the new Institute for Medicine & Engineering; develop relationships & act as liaison with faculty & administrators from various schools, departments, University staff & outside agencies; develop office policies & procedures; create & maintain database; assist in establishing visibility of Institute; schedule meetings, calendar, travel & recruitment visits; assist in grant proposal preparation; work on independent projects, managing data & preparing reports; provide up-dates on status of projects & initiatives to Director; write correspondence & min-

utes; perform wordprocessing & transcription; manage phone & office reception. **Qualifications:** BA/BS or equivalent; knowledge of policies & procedures at the University level preferred; knowledge of School of Medicine &/or School of Engineering & Applied Science desirable; demonstrated initiative, project orientation, ability to meet deadlines & teamwork approach; high level of computer literacy, Macintosh expertise, Microsoft Word, FileMaker Pro, Excel & Now-up-to-Date. **STAFF ASST. II:** one-two yrs. of professional & responsible administrative management. **STAFF ASST. III:** three-five yrs. of professional & responsible administrative management. **Grade:** P2/P3; **Range:** \$21,700-28,200/\$23,900-31,000 5-2-96 Institute for Medicine & Engineering

ADMINISTRATIVE ASSISTANT III (40 HRS) (05412JZ) Provide administrative support to & manage the Office of the Vice Dean for Administration of the University of Pennsylvania School of Medicine; manage the calendar of the Vice Dean; serve as his/her primary liaison to external, University, Health System, Medical Center, School & Department offices; review confidential correspondence & documents & prepare responses for signature & approval; monitor office expenses; manage office equipment operation; collect & compile data & process documents. **Qualifications:** High school graduate; BA/BS pref.; professional training in field helpful; two yrs. exp. as an AAI, preferably in a senior management level/CEO office; excellent organizational abilities, oral & written communications skills; previous exp. editing documents; ability to deal effectively with diverse constituencies; ability to work effectively under changing deadlines & priorities; exp. on word processor & excellent typing skills, required knowledge of Macintosh, including Microsoft Word (6.0.1 or higher), spreadsheet & calendaring software required; familiarity with LAN's & E-mail; familiarity with an academic medical environment preferred. **Grade:** G11; **Range:** \$22,743-28,914 5-8-96 Vice Dean for Administration

ASSISTANT TO CHAIR II (04368JZ) P2; \$21,700-28,200 4-26-96 Neuroscience

ASSOCIATE DIRECTOR VI (04378JZ) P8; \$38,500-48,100 4-26-96 Architecture & Facilities Mgt

FINANCIAL ADMINISTRATOR II (04385JZ) P4; \$26,200-34,100 4-25-96 Center for Clinical Epidemiology

FINANCIAL ADMINISTRATOR III (04367JZ) P5; \$28,800-37,600 4-25-96 Dermatology

REIMBURSEMENT ANALYST (05104JZ) P6; \$31,900-40,600 4-24-96 Medicine/Billing

RESEARCH COORDINATOR, SR. (04399RS) *(On-going contingent on grant funding)* P4; \$26,200-34,100 5-3-96 Psychiatry

RESEARCH SPECIALIST JR./I (04397RS) P1/P2; \$19,700-25,700/\$21,700-28,200 5-6-96 Institute for Medicine & Engineering *(For full description, please look under Engineering & Applied Science section)*

RESEARCH SPECIALIST I (04349RS) *(End date: 4/30/98)* P2; \$21,700-28,200 4-22-96 IHGT

RESEARCH SPECIALIST I (04369RS) *(End date: 4/30/98)* P2; \$21,700-28,200 5-2-96 IHGT

RESEARCH SPECIALIST II (04347RS) *(End date: 4/30/98)* P3; \$23,900-31,000 4-22-96 IHGT

STAFF ASSISTANT I (04340JZ) *(End date: 4/30/98)* P1; \$19,700-25,700 4-23-96 IHGT

ADMINISTRATIVE ASSISTANT I (40 HRS) (04384JZ) G9; \$19,543-24,457 4-26-96 Medicine/Endo

BUILDING SERVICES ASSISTANT (40 HRS) (04379JZ)(04380JZ)(04381JZ) G8; \$17,943-22,400 4-26-96 Architecture & Facilities Management

PSYCH TECH I (40 HRS) (04362RS) (04363RS) *(May involve evenings/weekends)* *(Contingent on grant funding)* G10; \$21,371-26,629 4-25-96 Psychiatry

RESEARCH LAB TECHNICIAN II (40 HRS) (04364RS) *(May involve some evenings/weekends)* G8; \$17,943-22,400 4-25-96 Psychiatry

RESEARCH LAB TECHNICIAN III (04370 RS) G10; \$18,700-23,300 4-26-96 Pathology & Lab Medicine

RESEARCH LAB TECHNICIAN III (04372RS) *(End date: 6/30/97)* G10; \$18,700-23,300 4-26-96 Pathol-

ogy & Lab Medicine

RESEARCH LAB TECHNICIAN III (04371RS) *(On-going contingent on grant funding)* G10; \$18,700-23,300 5-3-96 Pathology & Lab Medicine

RESEARCH LAB TECHNICIAN III (40HRS) (04398RS) G10; \$21,371-26,629 5-6-96 Institute for Medicine & Engineering *(For full description, please look under Engineering & Applied Science section)*

SECRETARY V (40 HRS) (04400JZ) *(End date: 4/30/98)* G10; \$21,371-26,629 5-3-96 IHGT

SECURITY OFFICER/SCHOOL OF MEDICINE (04382JZ) G8; \$17,943-22,400 4-26-96 Architecture & Facilities Management

NURSING

Specialist: Ronald Story

ADMINISTRATIVE ASSISTANT I (37.2 HRS) (03243RS) G9; \$17,100-21,400 3-18-96 Nursing

PRESIDENT

Specialist: Susan Curran/Janet Zinser

ANNUAL GIVING OFFICER II (04376JZ) Plan, organize & administer direct mail & phone campaign programs for undergraduate annual giving; recruit & work with regional volunteers, identify sites, produce & mail invitations, coordinate logistics & operations & oversee Philadelphia phonathons; assist with student telethons; handle negotiations of telemarketing contracts, production & mailing of newsletter, statistical reports & oversight of annual honor roll; plan & implement corporate matching gifts program. **Qualifications:** BA/BS; three-five yrs. related work exp. req.; demonstrated ability to organize & coordinate programs directed toward fundraising; ability to develop & maintain tight schedules; excellent oral & written communication skills; knowledge of accepted professional fundraising principles, concept & techniques; willingness to travel; valid driver's license. **Grade:** P5; **Range:** \$28,800-37,600 4-29-96 Development & Alumni Relations

EXECUTIVE ASSISTANT I (05434SC) Plan & organize the activities & programs associated with trustee matters; arrange & staff trustee meetings, including logistics & mailings; write minutes; compose correspondence; work with VP/Secretary in writing & editing trustee newsletter; publish trustee/administrator directory; maintain data on trustees: lists, statistics, index decisions; work with VP/Secretary in organizing new trustee orientation; oversee & indirectly supervise the work of executive secretary; provide information about the University & its governance to educational & government bodies, the University community & to the public; assist with other activities in the office as needed. **Qualifications:** BA/BS; five yrs. staff assistant exp. or equivalent pref.; exp. in higher education pref. & knowledge about the University highly desirable; excellent written & verbal communication skills; excellent interpersonal skills; excellent organizational skills; experience & knowledge with Macintosh & data bases. **Grade:** P6; **Range:** \$31,900-40,600 5-13-96 Office of the Secretary

MANAGER VI (05410SC) Office & Events Manager: supervise office support staff & ensure efficient use & supervision of work-study students; structure, schedule & supervise routine work & special projects in the President's Office; establish organizational procedures & standards for work quality & individual performance; responsible for providing technical expertise for the office including support of computers, all office equipment, telephones & the efficient use of filing & mail processes & distribution; oversee financial functions for the Office in cooperation with Business Administrator; responsible for strategically & professionally planning, scheduling, coordinating & overseeing events held in the President's house & elsewhere at the University; ensure that the themes & purposes of events are carefully conceived & effectively communicated; oversee calendar of events & ensure the expert handling of the design, production & distribution of invitations; maintain invitation & acceptance lists; supervise caterers & staff at events; oversee budgets & expenditures. **Qualifications:** BA/BS or equivalent required; minimum three-five yrs. supervisory experience in a demanding work environment; demonstrated experience in planning & manag-

OPPORTUNITIES at PENN

ing events; knowledge of higher education & Penn preferred; wide range of computing support experience required; some human resource management training desirable; strong interpersonal skills & ability to interact effectively with faculty, student & alumni & all levels of University staff & administration; strong verbal & written communication skills required; dependability mandatory; ability to function well in fast-paced office under simultaneous deadlines for various projects. **Grade:** P7; **Range:** \$35,000-43,700 5-3-96 Office of the President

STAFF ASSISTANT, PRESIDENTS OFFICE (05409SC) Responsible for oversight & coordination of a variety of special project & current issues for the Office of the President; represent the President's office on joint projects with other University offices & serve on a variety of committees; serve as a liaison; coordinate logistics for special events on or off campus; ensure the accurate, appropriate & timely flow of information to & from the President's office on projects & critical current issues; consult with members of President's staff & overall University community to gather information needed to appropriately respond to correspondence & write remarks for specific occasions; may supervise work-study students. **Qualifications:** BA/BS req.; three-five yrs. exp. as assistant to high level administration, preferably in higher education or equiv.; excellent interpersonal & skills & ability to interact effectively with students, staff, alumni & all levels of administration; evidence of ability to write clear, well organized, occasion-specific prose under deadline pressure; general knowledge & specific interest in higher education with an understanding of relationship with various constituencies pref. (Two writing samples must accompany applications) **Grade:** P6; **Range:** \$31,900-40,600 5-3-96 Office of President

ANNUAL GIVING OFFICER II (04375JZ) P5; \$28,800-37,600 4-26-96 Development & Alumni Relations

STAFF WRITER II (04062JZ) (Two Writing Samples Must Accompany Application) P3; \$23,900-31,000 4-24-95 Development and Alumni Relations

PROVOST

Specialist: Clyde Peterson

COORDINATOR II (05427CP) Assist in the management of animal procurement operations; responsible for coordination of transportation of animals; maintain billing & reconciliation of invoices, monitor the transportation part of departments budget & journal entries; support day-to-day operations of animal procurement; assist in the management of protocol & animal procurement records; monitor & delegate workflow to one clerical support staff person. **Qualifications:** BA/BS or equivalent experience in business administration &/or accounting; billing experience preferred; strong verbal, oral & interpersonal communication skills; customer service oriented; must be able to coordinate multiple tasks & project simultaneously; experience using PC's including, DOS, Windows, WordPerfect, dBase & Lotus 123. **Grade:** P2; **Range:** \$21,700-28,200 5-10-96 ULAR

COORDINATOR III (05425CP) Coordinate football administration including game responsibilities; act as general liaison with alumni & development office; maintain recruiting responsibilities including organize recruitment data, coordinate on campus visits, maintain records during contact periods, act as liaison to various athletic & University administration; coordinate potential summer employers with athletes; act as liaison to high school coaches. **Qualifications:** BA/BS or equivalent required; football playing &/or coaching background; proficient in Microsoft Windows, Word Excel; strong administrative, organizational & interpersonal skills; ability to deal with a wide variety of constituents. **Grade:** P3; **Range:** \$23,900-31,000 5-10-96 DRIA

EDITOR-EXPEDITION (04389CP) Solicit & evaluate manuscripts for Expedition magazine; edit & re-

write submitted manuscripts; supervise full-time associate editor; oversee hiring & supervision of freelancers; identify & contact potential customers; create flyers for distribution; maintain Web site; write or compile editorial content such as introduction to special issues; edit MASCA research publications; in cooperation with Editor of MASCA Reports. **Qualifications:** BA/BS in archaeology or anthropology; advanced degree desired; at least three yrs. experience in editing & producing academic or popular publications, with a broad background in archaeology or anthropology; demonstrated professional competence in the writing & editing of archaeological & anthropological texts; computer proficiency. **Grade:** P3; **Range:** \$23,900-31,000 5-8-96 Museum

ADMINISTRATIVE ASSISTANT III (05426CP) Provide administrative support in recruiting, fund raising, travel planning & budget management primarily for the men's basketball program; assist in arranging special events such as receptions, team banquet(s) & golf outings; report directly to the Head Coach of Men's Basketball & work closely with other areas in the department. **Qualifications:** High school diploma req.; min. two yrs. at the AAIL level or equiv.; ability to type with speed & accuracy; ability to operate a variety of office equipment; particularly Word for Windows 6; must possess good clerical aptitude, excellent communication & organizational skills. **Grade:** G11; **Range:** \$19,900-25,300 5-10-96 DRIA

CLINICAL VETERINARIAN (04374CP) (Willing to work irregular hours, weekends & holidays & assume emergency "on call" responsibilities) Blank 4-26-96 ULAR

DIRECTOR, ADMINISTRATIVE AFFAIRS (04338CP) P11; \$54,500-68,200 4-26-96 Provost's Office

DIRECTOR, RECREATION (04328CP) (Must be willing to work evenings/weekends as required) P8; \$38,500-48,100 4-25-96 DRIA

LIBRARIAN I/III (04357CP) (Applications deadline: 5/31/96) P5/P6; \$28,800-37,600/\$31,900-40,600 4-24-96 Biomedical Library

SYSTEMS ANALYST II (04359CP) P7; \$35,000-43,700 4-24-96 OEHS

VICE PROVOST FOR INFORMATION SYSTEMS (04337CP) Ungraded 4-26-96 Provost's Office

HEALTH PHYSICS TECH TRAINEE/HEALTH PHYSICS TECH. (04390CP) TRAINEE: G12/G13; \$22,200-28,600/\$24,400-31,400 4-30-96 Radiation Safety

OFFICE ADMINISTRATIVE ASSISTANT III (04360CP) G11; \$19,900-25,300 LRSM

VETERINARY SCHOOL

Specialist: Nancy Salvatore

MGR II (05423NS) Provide catering service for events at New Bolton Center & oversee reservations for Allam House guest & meeting rooms; manage guest activities in the Allam House Complex; monitor & direct housekeeping services at AHC; coordinate AHC events schedule with catered events schedule; organize & assist with some social events; work closely with outside caterers; provide catering services as needed; supervises housekeepers in Dormitory; monitor dorm for room arrangements, key assignments & maintenance. **Qualifications:** High school graduate; BA/BS pref.; three-five yrs. catered dining exp. req.; strong interpersonal & communicative skills. (Position located in Kennett Square, PA - There is no public transportation available.) **Grade:** P3; **Range:** \$23,900-31,000 5-10-96 New Bolton Center

TECH, CLINICAL LAB (40 HRS) (05407NS) Under minimal supervision, perform a variety of clinical tests utilizing precision instruments; prepare fluid, blood specimens & other samples for analysis; perform chemical, biological & microscopic tests; record results & perform preliminary analysis; maintain lab records & equipment; provide lab coverage on middle & late night shifts. **Qualifications:** High school graduate with two yrs. of post-secondary school training in

clinical lab procedures & techniques or equivalent experience; ASCP certification as an MLT preferred; accuracy, dependability & ability to work under pressure is important. (Position located in Kennett Square, PA - There is no public transportation available)(varied evening/night shift) **Grade:** G10; **Range:** \$21,371-26,629 5-6-96 Large Animal Hospital

VICE PROVOST/UNIVERSITY LIFE

Specialist: Clyde Peterson

COORDINATOR, TUTORING SERVICES (09363CP) P3; \$23,900-31,000 4-5-96 Academic Support Programs

WHARTON SCHOOL

Specialist: Janet Zinser

PROGRAMMER ANALYST I/II (05428JZ) Support administrative users & their IS requirements for data storage, manipulation, reporting & analysis; perform detailed program design, coding, testing, debugging, documentation & implementation of administrative information systems on PC's, Networks, client/server or Web environments; analyze, customize, implement & support vendor-supplied information systems; provide front-line support to users on PC applications, Novell or NT networks & data access; enable user access to their data through appropriate use of query/analysis tools & training. **Qualifications:** BA/BS in computer science or management info systems or comparable exp.; strong customer service skills; users support exp. highly pref.; demonstrated willingness & ability to learn new systems & new technologies; thorough knowledge of UNIX & Windows for Novell or NT knowledge a plus; thorough working knowledge of relational database technologies, including SQL capabilities; knowledge of Oracle, Ingres, Informix or Sybase engines pref.; strong expertise in C, Perl or Pascal req.; additional major languages/tools, Web development & Visual Basic or Visual C++ pref.; demonstrated oral & written communication skills. **PROG. ANA. I:** one-two yrs. of progressively responsible programming & system exp. **PROG. ANA. II:** two-three yrs. of progressively responsible programming & system exp. **Grade:** P4/P6; **Range:** \$26,200-34,100/\$31,900-40,600 5-10-96 WCIT

SYSTEMS PROGRAMMER I/II (04341JZ) P6/P7; \$31,900-40,600/\$35,000-43,700 4-22-96 WCIT

Classifieds

FOR SALE

51st & Hazel, University City (above Baltimore Ave.) 3 story townhouse 7 bedrooms, 3 baths, fully intact Victorian features in bare wood (never painted), leaded glass French doors, built-ins, wainscoting, excellent condition. \$60,000. 349-8911, 748-7335 after 6 pm.

FOR RENT

Powellton Village—Fabulous 3-story Victorian twin, 3400 block Hamilton Street Large LR,DR, sunny, eat-in kitchen, 4BR, 2 1/2 bath, study, den, laid out for separate in-law apartment on 3rd floor, 1/2 basement. WD, walnut detailing throughout, sky-light, perennial garden front and back. Must see. Avail 7/1/96. \$1500+util. (215) 386-2877.

SUMMER SUBLET

Rittenhouse Square, 18th & Spruce. 1 bedroom, furnished, \$525/month—negotiable. (215) 772-0865

SUBLET

20th and Green. Beautiful, spacious 1 bedroom apartment; backyard, garden, cats. Available 6/24 - 8/20. \$500/mo. OBO Prefer professional/academic. (215) 232-7821.

VACATION

Pocono Chalet. 3BDR/1B, deck. Swimming, fishing, tennis. \$350/week, (215) 573-9048

FREELANCE RESEARCH

M.S. Ed. available for research projects. Reliable, thorough. (GSE '90; CAS '83). 222-8019.

1996 Reduced Hours and Compensation Practices

Effective July 1 - August 30, 1996

Departments, depending on their operational needs and constraints, may elect to implement reduced hour schedules in July 1996 or during any consecutive two-month period during fiscal year 1997 (e.g., January and February). Any unit deciding to maintain the regular work week schedule throughout July and August, observe reduced hours during two other consecutive months, or not have a reduced hours policy, should notify their staff in writing by June 7, 1996. A copy of this written notice should be shared with Human Resources/Staff Relations.

A. Effective Period

Beginning Monday, July 1, 1996 and ending Friday, August 30, 1996, University departments may alter their regular schedule of weekly hours worked. The reduced schedule of hours worked may be 1/2 hour per day totaling 2 1/2 hours per week (e.g., 9 a.m. to 4:30 p.m., Monday through Friday with a one-hour lunch period, resulting in a work week of 32.5 hours).

Reduced Hour Schedules:

- 35.0 hour work week is reduced to 32.5 hours;
- 37.5 hour work week is reduced to 35.0 hours;
- 40.0 hour work week is reduced to 37.5 hours.

The following should serve as a set of guidelines in the implementation of reduced hours for this year.

B. Guidelines for Implementation

In recognition of the varying operating requirements throughout the University, a particular department or school may need to adopt a flexible schedule to meet its particular needs. However, the reduced schedule of hours worked cannot exceed the reduced rate of weekly hours indicated above without additional compensation. Supervisors should advise staff members as soon as possible, but no later than June 7, 1996, what the reduced schedule of hours worked will be in their department or school. These same guidelines will apply if a department or school chooses to observe reduced hours in two other months.

Departments are given flexibility in the scheduling of the reduced work week. *Some examples follow:*

Scheduled Work Week (Using a 35 hour work week reduced to 32.5 hours)

- I. Monday through Friday, 9 a.m. to 4:30 p.m.
- II. Staggered hours to extend daily coverage:
 - Staff Member 1: Monday through Friday, 8:30 a.m. to 4 p.m.
 - Staff Member 2: Monday through Friday, 9 a.m. to 4:30 p.m.
 - Staff Member 3: Monday through Thursday, 9 a.m. to 5 p.m. and Friday, 9 a.m. to 2:30 p.m.*

* Staff members choosing to take the 2 1/2 hours off in any one day must work the regularly scheduled hours on the remaining four days to accrue the 2 1/2 hours. Paid time off, i.e., sick, vacation, personal days, etc. do not count as days worked.

C. Compensation Practices

1. All staff members working the reduced schedule of hours are to be paid their regular weekly salary.
2. If a weekly-paid staff member works more than the reduced schedule of hours, that staff member is to receive, in addition to the regular weekly salary, extra compensation at straight time for hours worked up to forty hours a week. With prior notification and approval of the supervisor, compensatory time may be taken equal to the additional straight-time hours worked.
3. If the staff member is given approval to take compensatory time, it must be taken between **September 3, 1996 and February 28, 1997**.
4. If a weekly-paid staff member works more than forty hours in a week, s/he is to receive compensation at time and one-half (1.5) for all hours worked in excess of forty (40) hours.

D. Exclusions

Regular part-time staff, temporary staff, University staff working in Public Safety, clinical areas at HUP, the Dental School, the Nursing School and the Veterinary School whose units choose not to observe the reduced hours schedule, and staff covered by collective bargaining agreements are excluded from this reduced hours procedure. Other areas may elect to be excluded from the procedure. These units should notify their staff in writing of this decision by June 7, 1996 and send a copy of the written notice to Human Resources/Staff Relations.

E. Questions

Any questions concerning reduced hours should be directed to Human Resources/Staff Relations at 898-6093.

— Division of Human Resources

Limited Access to Archives

The University of Pennsylvania Archives in the North Arcade of Franklin Field will be undergoing a construction and renovation project starting next week.

For the period from May 13 to September 3, 1996, limited access to our collections will be available. Use of the Archives' collections will be by appointment only, with two weeks' advance notice required. Selected collections will be completely closed during the renovations.

We expect to resume full reference services in September 1996.

— University Archives

'Stand for Children' Bus to D.C.

On Saturday, June 1, 1996, thousands of people concerned for the nation's children will join together in Washington, DC to "Stand for Children." The event is sponsored by the Children's Defense Fund, and endorsed by hundreds of organizations across the country.

The University has reserved one bus to enable Penn faculty, staff, and students to attend the event. It is scheduled to leave campus at 8 a.m. on June 1 and return by 8 p.m. Thanks to support from the Office of the President, there will be no charge for the bus trip. There will be Metro subway charges into Washington, which we expect to be approximately \$4 round trip.

If you are interested in attending, please e-mail me at grossman@pobox, or call 898-4831. For more information about the Stand for Children, check the World Wide Web, <http://www.tmn.com/cdf/stand.html>.

— David Grossman,
Director, Penn Program for
Student-Community Involvement

Managing Mortality: A Dance Symposium About Living

In conjunction with campus performances of the Bill T. Jones/Arnie Zane Dance Company's opus *Still/Here*, Dance Celebration will present a free public symposium in which members of the arts, health and spiritual communities discuss the challenges and rewards faced in the struggle to understand mortality.

At the symposium, to be held May 18 at 3 p.m. in Zellerbach Theater, panel members include choreographer Bill T. Jones; Elizabeth Blair, WHYY arts reporter; Joan Applegate, coordinator of the Childhood Cancer Program of the American Cancer Society in Philadelphia; Helana Agi and Kimberly Dolan, patients and Survival Workshop participants; Ted Menten, author and court jester of the hospital ward; and Edward Leitz, founding member and first president of the Philadelphia Buddhist Association.

Still/Here uses words, images and movement that choreographer Bill Jones, who is HIV positive, gleaned from "Survival Workshops" he conducted in 1993 and 1994, encouraging people of all ages living with terminal illnesses—such as cancer, AIDS, and multiple sclerosis—to share their lives and experiences.

Still/Here performances will be held May 16, 7 p.m.; May 17 and 18, 8 p.m.; and May 19, 3 p.m. in the Zellerbach Theatre.

For information about the symposium or to order dance tickets (\$26, \$12/students), call the Annenberg Center Box Office, 898-6791.

Update

MAY AT PENN

CONFERENCE

17 *Appropriate Standards of Care in Working with Client Memory*; topics include: *Experimental Research on Memory, Suggestibility and Repression, Clinical Research on Memory, Standards of Care and Sound Clinical Practices When Working with Memories; Clinical Practice in Helping Families Reconcile*; speakers include Terence Campbell, Pamela Freyd, Allen Feld; 8 a.m.-5:15 p.m.; B-21 Stiteler Hall; fee info/registration: 387-8663, or register at the door (FMS Foundation).

SPECIAL EVENT

15 *Penn Volunteers in Public Service 4th Annual Scholarship Benefit*; awards to 13 local high school seniors for commitment to higher education and community service; keynote by Bruce Crawley, Crawley, Haskin, & Rogers; 4:30-6:30 p.m.; Alumni Hall, Faculty Club; RSVP: 898-2020 (Penn Volunteers in Public Service).

TALK

15 *Graphical User Interfaces: Past, Present, and Future*; Andries van Dam, Brown; Saul Gorn Memorial Lecture; 11 a.m.-12:30 p.m.; Alumni Hall, Towne Bldg. (CIS; Institute for Research in Cognitive Science).

Move-Out Drive

The Penn VIPS, Office of Community Relations, and UCA Realty Group are sponsoring their fifth annual Move-Out Drive from May 13 to June 15. They ask for furniture, clothes, food and accessories. The items need to be in good condition and the food must not be opened. All items donated will be given to various shelters for the homeless and to anyone in need from the community.

Donations can be made at:

- 4100 Walnut Street
Garage Door Entrance next to Urban and Bye
Monday-Friday, 9 a.m.-5 p.m.
Saturday, 10 a.m.-1 p.m.
- Franklin Building Lobby
3451 Walnut Street
Monday-Friday, 9 a.m.-5 p.m.

Start a great summer by doing a good deed that will benefit someone in need. For more information or questions, please call Bonnie Ragsdale at 898-2020.

—Penn VIPS

Need Copies of Back Issues?

Almanac is moving this summer. Those who anticipate a need for copies of back issues or supplements are asked to notify us as soon as possible, but before mid-June when files will be reduced—K.C.G.

A-3 Career Conference May 14 and 16

The Third Annual Career Conference of the A-3 Assembly will take place on May 14, and repeated May 16, from 2 to 5 p.m. at Bodek Lounge, Houston Hall.

In the program on "Resources for Your Future," speakers will include Dan Dougherty of the Computing Resource Center; Dr. Carol Bennett-Speight and Alan Bell of the Faculty/Staff Assistance Program; Gene Haldeman of Admissions Data Control; and Burton Brodo of Wharton School and CGS.

Attendees will be eligible to enter a drawing to win door prizes of resume kits valued at \$50.

FBI Alert on Terrorism

The FBI has informed law enforcement agencies that a group making demands on Israel has threatened to harm American Jewish executives and physicians if Israel does not withdraw its forces from Lebanon and pay Lebanon 12 million dollars.

A deadline for this terrorism has passed with no injuries to U.S. citizens. However, this is a reminder to members of the Penn community to be attentive to any unusual occurrences or packages in the workplace. Also, be cautious if telephone callers ask unusual or invasive questions about any Penn employees.

As always, if you have any safety and security concerns, do not hesitate to call the Division of Public Safety at 573-3333.

—Maureen Rush

Director of Operations, Penn Police

The University of Pennsylvania Police Department Community Crime Report

About the Crime Report: Below are all Crimes Against Persons and Crimes Against Society listed in the campus report for **April 29 through May 5, 1996**. Also reported were **Crimes Against Property**, including 30 thefts (including 4 thefts of auto, 4 thefts from autos, 3 of bicycles and parts); 1 incident of forgery and fraud; and 2 incidents of criminal mischief and vandalism. Full crime reports are in this issue of *Almanac* on the Web (<http://www.upenn.edu/almanac/v42/n32/crimes.html>).—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 **April 29 and May 5, 1996**. 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 898-4482.

Crimes Against Persons

34th to 38th/Market to Civic Center: Sexual assaults—1, Robberies (& attempts)—1, Threats & harassment—4

04/29/96	10:25 AM	Thomas Penn Dorm	Harassing phone calls received
05/01/96	4:26 PM	Stouffer Dining	Complainant reports verbal harassment
05/02/96	10:41 AM	University Hospital	Earrings taken from complainant's ears
05/02/96	12:44 PM	Psychology Labs	Unwanted calls received
05/02/96	10:12 PM	Stouffer Triangle	Unwanted phone calls received
05/05/96	11:00 PM	Houston Hall	Complainant reports being assaulted by 2 unknown males

38th to 41st/Market to Baltimore: Robberies (& attempts)—2, Threats & harassment—2

04/29/96	12:57 PM	Unit Blk. 41st	2 complainants robbed by unknown suspect with gun
04/30/96	5:31 PM	3900 Blk. Ludlow	Complainant robbed of wallet by unknown suspect
05/02/96	5:44 PM	High Rise North	Unwanted phone calls received
05/03/96	4:19 PM	300 Blk. 40th	Complainant received threat/did not wish to press charges

41st to 43rd/Market to Baltimore: Threats & harassment—1

05/04/96	6:19 PM	4105 Pine	Unwanted calls received
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30th to 34th/Market to University: Simple assaults—1

05/02/96	12:00 PM	Penn Tower	Employee vs. employee
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Outside 30th to 43rd/Market to Baltimore: Rapes (& attempts)—1, Robberies (& attempts)—1, Purse snatches—1, Simple assaults—1

04/29/96	1:34 PM	34th & Girard	Complainant reports bike taken point of gun
04/29/96	3:34 PM	Off Campus	Confidential report
04/29/96	4:13 PM	4600 Spruce	Purse taken by unknown person who fled
05/03/96	3:00 PM	20th & Chestnut	Complainant reports being assaulted

Crimes Against Society

Outside 30th to 43rd/Market to Baltimore: Alcohol & drug offenses—1

05/03/96	10:00 PM	3000 Blk. Walnut	Driver cited for drinking/struck Escort van
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The Compass stories are written and edited by the Office of University Relations, University of Pennsylvania.

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Earlier this year Penn's David Morse and other federal relations specialists in research universities suggested to the Republican Conference—the caucus of fifty-three Republican Senators—a meeting on issues in federal funding of research. Here is a report on the discussion held March 25 in Washington, D.C.

Notes from a Forum on Federal Funding of Research

How should the Federal government approach funding scientific research against a backdrop of declining Federal spending?

Or, put another way, what is the proper level of government and industry spending for university-based research necessary to ensure that U.S. leadership in technology is sustained?

These questions were asked in Washington on March 25 when university presidents, corporate C.E.O.s, directors of national laboratories, and U.S. Senators met for the Senate Republican Conference Issue Forum on Science and Technology. Penn participants in the session included Dr. P. Roy Vagelos, chairman of the University's Board of Trustees; Dr. Michael Brown, Paul J. Thomas Professor of Medicine at the University of Texas Southwestern Medical Center, Nobel Laureate and Penn Trustee, and David Morse, Associate Vice President for Policy Planning (presenting research of Dr. Edwin Mansfield, professor of economics, who was unable to attend).

The meeting examined three key issues: First, the priority of science and technology under tightening fiscal constraints; second, the appropriate roles of government, industry, and universities in supporting research; and third, how to evaluate the success of our nation's investment in science and technology research.

The session was chaired by Senators Bill Frist (R-TN), a former cardiac surgeon and NIH-funded researcher, Mike DeWine (R-OH), Pete Domenici (R-NM), Charles Grassley (R-IA), Frank Murkowski (R-AK), Don Nickles (R-OK), and Ted Stevens (R-AK) also participated, as did the presidents of MIT, Harvard, the University of Texas at Austin, Iowa State University, and the University of Iowa, and North Carolina A&T University.

Participants noted that 50 percent of the industrial innovation and growth since World War II in this country has been due to advances in technology derived from research and development.

"Together, science and technology make possible modern health care, our manufacturing industries, our nation's military security, our housing, transportation, energy generation, environmental protection, agriculture, increasingly even entertainment communication and management of government and industry financial services," said Charles Vest, president of Massachusetts Institute of Technology.

Penn Trustee Dr. Michael Brown noted that decades of research on cholesterol and its role in heart disease have reduced mortality rates by 30 percent and have decreased the need for expensive surgery and angioplasty. "Some scientists are even predicting that coronary heart disease—the most common cause of death in this country—may be a disease of the past within 20 years," he told conference participants.

To reach breakthroughs like this, and sustain similar advances across scientific disciplines, will require continued Federal investment in basic scientific research, participants said. They added that the federal government's investment in research has brought tremendous economic and social returns for the nation and is an essential source of new ideas and knowledge that will benefit society in the future.

Currently the federal government spends about \$70 billion annually on research and development. Universities receive about \$12 billion of it, and tend to focus on long-term basic research.

Senator Frist outlined budgetary concerns facing policy makers and challenged participants to explain how they would "make the case to Senate colleagues that science and technology should remain a priority for scarce federal dollars."

Concerns about limited resources were echoed by Senator Stevens, who noted that approximately 50 percent of all federal expenditures cover entitlement programs such as social security and Medicare, roughly 20 percent over a seven-year period pays for interest on the national debt and only about 30 percent was available for all other federal programs, including research, education and other government functions. Stevens said that without a budget agreement to ensure long-term annual savings, "there will be no controllable expenditures by the year 2010."

"It's against that backdrop that we look at the problem of financing R&D," he said. "I don't think anybody could be more committed to R&D than Pete Domenici and I. But the two of us as chairman of these [appropriations and budget] committees will have to find some way to meet demands on our society in the other areas."

Dr. Vagelos, former chairman and CEO of Merck & Co. Inc., noted that entitlements are ballooning in part because of health care costs which have reached a trillion dollars a year. "If one controlled blood cholesterol in patients who have coronary heart disease . . . the cost of their care would be reduced by one to two billion dollars a year," he said. According to Dr. Vagelos, the best place to look for breakthroughs in such medical treatments is through the "machine" of university research.

In discussing the respective roles of government, industry, and universities in supporting and conducting research, Dr. Vagelos pointed out that universities, supported by the federal government, must continue to undertake longer-term, fundamental research. If government were to try to cede to industry the responsibility for fundamental discovery, the results would be devastating, since industry, he said, is set up to do applied research. Attempting to shift responsibility for basic research to industry would not only not work, said Dr. Vagelos, "it would slow down the overall development process."

According to a report prepared by economist Dr. Edwin Mansfield, companies investing in innovation receive a return of 25 percent a year on average. However, society reaps an even larger reward for the same investment, achieving a 56 percent per year average return.

Dr. Mansfield, who began his studies of the economic effects of academic research in 1977, found that a much greater share of the benefit from investment in research accrues to society because many of the returns go to users of the innovations, imitators and others. He reported that the rate of return for investment in Agriculture research is often over 40 percent—and that in medicine, a recent study of computer tomography (CT) scanners suggested that the return to society was over 200 percent. He also said that his studies are narrowly focused on the measurable results of technical innovations but universities provide other benefits that cannot be easily quantified.

"Obviously, knowledge concerning the universe is important for its own sake, and the education of students, which occurs in many academic research projects is socially important as well," Dr. Mansfield said. "Nonetheless, it is important to note that, even if research is evaluated in these relatively narrow terms, its returns seem to have been very considerable."

Senator Frist closed the session by underscoring the importance of sustained investment in basic research, and suggested that the Forum laid valuable groundwork for future policy discussions on R&D priorities among Senators.

— Carl Maugeri, Associate Director, Federal Relations

Currently the federal government spends about \$70 billion annually on research and development. Universities receive about \$12 billion of it.

To the University Community

The Agenda for Excellence sets the goal of increasing the number of sponsored research awards received by Penn faculty. To build the foundations for achieving this goal, the administration has undertaken to improve the support provided to Principal Investigators through a re-engineering of research administration and research accounting processes. We seek to streamline pre-award procedures and to improve both the services and the quality of information provided to PIs after awards are received. We think the improvements in the model proposed by the re-engineering task force will make Penn and its faculty more competitive for extramural research funding than they are now. The proposed model reflects the views that faculty and administrators expressed in extensive surveys and focused interviews. The model also contains innovative proposals to facilitate faculty research programs while assuring adherence to sponsor requirements and University policy. We invite your comments on the model and ask that you forward your remarks to RESADMIN@pobox.upenn.edu.

— Stanley Chodorow, Provost, and John Fry, Executive Vice President

Report of the Research Administration Reengineering Team

Executive Summary

As part of its overall administrative restructuring program, the University of Pennsylvania has committed to redesign the processes that support the University's research activities. Reengineering the management of grants and contracts would make it easier for principal investigators to apply for and manage their grants, assuring appropriate and cost-effective management of institutional risk, and helping the University maintain positive relations with its funding agencies.

The Research Administration Reengineering Team [page S-3] was charged with reengineering the University's sponsored projects support process. The goal was to produce a radical redesign of the process, including technology requirements and a redesigned organizational model, to make the most effective use of resources and to improve service to principal investigators. The process was defined to begin with identifying funding sources and end with close-out of the sponsored project.

Following a project plan delivered by Coopers & Lybrand, LLP, the Team studied the work of previous quality and process management teams. The Team gathered data from principal investigators (PIs), business administrators (BAs), central office staff, sponsors, and others to design a new sponsored projects support process. The process will provide improved information and service to PIs, while reducing the number of reviews without increasing risk to the institution.

The proposed sponsored projects support process is dependent on the development of a comprehensive information system which will support enhanced service delivery by the proposed Research Services organization. Virtually all of the recommendations made by the Team will be realized only through the implementation of this comprehensive information system. Improvements and savings will be realized and maintained by instituting thorough and ongoing training for PIs and BAs. Following, are highlights of the proposed model:

- Standard proposals (defined as a proposal having standard indirect cost rates, no renovated or new space requirements, no matching institutional funds, and not seeking corporate sponsorship) will no longer require review by the dean of the principal investigator's school, and will no longer require review by deans and department chairs of co-investigators schools; however, deans and department chairs will have access to the proposal information at all steps in the process via the sponsored projects information system and database. Until such time as the system is in place, some schools may have a single budget review.
- The process for reviewing non-standard proposals (defined as a proposal having non-standard indirect cost rates, new or renovated space requirements, matching institutional funds, or sponsored by industry) will be streamlined to allow for early and ongoing negotiation of terms and conditions, accessibility of information/data by all required parties, and a non-linear process of obtaining required approvals.
- Training and communication will be a priority for the new Research Services organization. With additional responsibility for proposal and grant management being directed to the field, a height-

ened level of responsibility must be outlined and maintained. The new Research Services organization will assume responsibility for developing and communicating policies, training the field, and ensuring that the field abides by the policies.

- The Reengineering Team has determined that the approval of non-competing continuations can be expedited by relying on the departmental chair's signature. Non-competing continuations are updates or status reports to be filed in the interim years of a multi-year award. No new information is required by the sponsor. They accounted for 40% of all proposals processed by the Office of Research Administration in FY95 (source: Reports of Sponsored Project Activity, Fiscal Year 1995, Fourth Quarter). Non-competing continuations will be transmitted from the department directly to Research Services. It may be determined by the Implementation Team that authority for institutional approval can be delegated to the department level when appropriate.
- A comprehensive information system and coordinated database, integrated with the new Financial Management Information System (FinMIS), is the foundation of the proposed process. It allows for electronic transmission of information at all process steps, reduction of paper in the process, speedier approvals, timely award notification and account establishment, access to and desktop management of award funds, limited need for shadow systems and their support, automatic flagging of milestone actions, accessibility to all pertinent data, and reduced redundancy in data entry. Also, as of April 1996, desktop access to the Sponsored Projects Information Network (SPIN) provides PIs more directed search access to identify funding sources.
- Research Services is designed as a center of administrative expertise and will perform functions necessary to inform and serve PIs, meet all sponsor and federal fiduciary requirements, manage institutional risk, and utilize the latest technology and organizational theory.
- Principal Investigators need improved service in identifying sources of funding, completing accurate budgets, submitting proposals to sponsors on time, gaining University approvals in a timely manner, and accessing financial information about their accounts. The focus of Research Services will be on the needs which were articulated in their responses to the faculty survey and in faculty focus group discussions. A Research Services help desk will draw upon all of the resources needed by PIs in pre- and post-award administration. To do so, all of the providers of sponsored projects support (Research Accounting, Research Administration, Environmental Health & Safety, University Laboratory Animal Resources, Center for Technology Transfer, and the Office of the Vice Provost for Research) must collaborate on communication, information, and service provisions.
- The team identified a need to assign responsibility for collection of overdue sponsored projects receivables at Penn. An estimated \$3,000,000 exceeds 120 days in age. The proposed organization will assume responsibility for the timely billing and collection of future grant and contract receivables and the transition team will address the current problem associated with the long outstanding accounts.

Benefit Summary

Key benefits of the new sponsored projects support process include:

- Information about sources of funding will be available to PIs and their staff at the desktop.
- Less time will be spent preparing the non-research portions of the proposal: electronic templates of standard forms will be available; a budget template will calculate financial information; access to previous human and animal protocols will be available; submission to Research Services will be electronic.
- Proposal review and approval will take less time: comprehensive training will reduce the number of proposals returned for errors; the PI can continue working on the research portion of the proposal while the non-research portions are being reviewed; electronic submission of non-research portions of proposals to Research Services and fewer signatures will result in less time walking proposals around campus and less time waiting for approvals.
- Notification of award acceptance will be faster and the establish-

ment of the account will coincide with it, allowing PIs to spend acquired funds upon receipt of the award, and thereby reducing the number of payroll and budget reallocations.

- Control of the account activity will reside in the department allowing for real-time tracking of funds, thereby reducing over- and under-spending of awards.

- The number of accounts awaiting close-out will be reduced. The information system will alert Research Services staff of the impending award ending date, who will then take appropriate action to close out awards on time.

The benefits listed above will be the results of improvements to the process made in response to the faculty survey conducted by the Team. Of the 1266 identified active investigators, 341, or 27% responded. Because of the strong response and its correlation to information collected in faculty focus groups, the Team is confident that the table below represents faculty concerns and their solutions.

Faculty Concerns	New Process Benefits
Funding Opportunities Principal Investigators require access to funding sources in both federal and non-federal arenas.	PIs will have access to the Sponsored Projects Information Network (available April 1996) at the desktop, and will have coordinated electronic access to a range of funding sources.
Communications Good communication at all levels is important to principal investigators and administrators alike, and assures consistent messages. <ul style="list-style-type: none"> — communication between the Office of Research Administration and Research Accounting needs improvement. — lack of integration between information systems in Regulatory Affairs and most other offices results in the lack of access to protocol information for some offices. 	Co-location will greatly improve communication and will give PIs and BAs one point of contact for sponsored projects information. The new information system will address this issue. In addition, Research Services will work with the Vice Provost for Research to coordinate all regulatory offices' systems and interfaces with FinMIS.
Management Effective coordination of activities among the Office of Research Administration, Research Accounting and Regulatory Affairs and all other regulatory offices is required--both by traditional means and via data exchange.	Co-location of Research Accounting and Research Administration, and ultimately the new organization, will help to better coordinate the activities and technologies of these offices. A review of all regulatory offices is recommended to investigate opportunities for improved services, use of technology, and efficiency.
Training Good training for PIs, BAs and central administrators is essential to reducing errors, and, therefore, the time required to submit a proposal and manage award resources.	Extensive case-based training will be provided to PIs and departmental business officers. On-going training needs will be continuously assessed.
Approval Process Every step of the approval process must add value for PIs and be timely.	Standard proposals require only the department chair's signature. Non-standard proposals will also be reviewed by the Dean's office.
Account Establishment PIs and BAs require timely establishment of an account.	Account set-up will occur centrally and will be coincident with award notification. Departments will control the budget set-up. Department administrators will be able to set up award budgets without delay.
Financial Information PIs and BAs require on-demand access to the account, the capability to manage funds at the desktop, and the ability to generate accurate and timely reports.	On-line real-time information about account finances will be available at the desktop.
Non-standard Proposals Principal investigators and administrators require a consistent process for managing non-standard proposals and awards, including a system for securing, recording and tracking matching funds.	The new information system will track all non-standard proposals and matching funds, providing management information previously unavailable.
Technology/Data PIs, BAs, and central administrators alike require access to information at every step of the process, and a system that will take advantage of the latest technological advances.	The new information system will capture sponsored projects data necessary at all levels of the University; it will be designed to adapt to technological improvements or regulatory changes.

Recommendations

Introduction

The Research Administration Reengineering Team (the Team) was chartered in August, 1995 as a result of a study conducted in 1994 by Coopers & Lybrand, LLP for the University of Pennsylvania. A Steering Committee consisting of deans and senior academic administrators was formed to provide direction and oversight to the Reengineering Team. In addition, a sub-group of the Steering Committee, the Quality Assurance Team, was formed to assure that technological and organizational aspects were integrated with other campus initiatives.

The Coopers & Lybrand study identified the sponsored research support process as one ripe for radical redesign, with the goals being improved service to faculty, and cost and effort reductions for schools and the central administration. It is important to note that Coopers & Lybrand did not identify this process for redesign due to its failures; rather, because recent technological advances would allow for the development of a world-class sponsored projects support process. The model proposed by the Team meets these goals.

Following a project plan designed by Coopers & Lybrand, the Team defined the current process, gathered data on the functionality of the current process, and redesigned the process, including defining technology requirements and modeling the organization supporting the new process. The Team took advantage of information and data gathered by previous Total Quality Management (1990-1991) and Process Improvement (1992) teams during their assessment of the current process. Current process flow diagrams, organization charts, and job descriptions were analyzed for value to the customers (principal investigators, school administrators, and central office administrators). An intensive, three-month data collection phase followed this analysis and included:

- the design and distribution of a faculty survey seeking identification of obstacles in the current sponsored projects support process
- comprehensive interviews with members of the Steering Committee, deans, central offices, and department and school business offices seeking not only identification of issues with the current process, but also seeking customer requirements for a new process

Research Administration Reengineering Team Steering Committee

Stanley Chodorow, Provost; *Co-Chair*
John Fry, Executive Vice President; *Co-Chair*
Ralph Amado, Acting Vice Provost for Research
David Balamuth, SAS
Robin Beck, UMIS
Al Beers, Comptroller
Susan Croll, School of Medicine
Raymond Fonseca, School of Dental Medicine
Stephen Golding, Finance
Janet Gordon, Office of the Executive Vice President
Dwight Jaggard, SEAS
Alan Kelly, School of Veterinary Medicine
Anthony Merritt, Office of Research Administration
Mark Pauly, Wharton Doctoral Programs
Richard Tannen, School of Medicine

Reengineering Team

Anthony Merritt, Office of Research Administration
Jill Maser, Office of the Executive Vice President
Kristine Briggs, Office of the Executive Vice President
Elizabeth Garlatti, School of Medicine
Audrey Masciocchi, Physics and Astronomy
Robert McCann, Comptroller's Office
George Palladino, Chemistry
Ed Read, UMIS
Berenice Saxon, Office of Research Administration
Denise Scala, School of Nursing
Paul Weidner, School of Medicine

- work distribution analysis for selected school and central administrative offices, including all seven research and regulatory related offices, in order to understand complications with each step of the current process
- focus groups for both faculty and school administrators, identifying issues with the current process and seeking requirements for a new process
- best practices research, seeking information about the entire sponsored projects support process, particular steps in that process, and the design and application of information systems
- review and analysis of existing technology in central offices and in the field

The process redesign was done by the Team and presented to Steering Committee members, deans, and key faculty and administrators for feedback. After incorporating the feedback, the Team formed sub-teams and worked simultaneously on identifying technology requirements, developing an alternative organizational model, and conducting a cost/benefit analysis.

Project Scope

The process to be analyzed begins with identifying funding sources and ends with close-out of the award. In order to facilitate communications, the Team grouped activities into seven steps:

1. identify funding sources
2. prepare proposal (includes prepare research, prepare non-research portions, prepare human/animal protocols)
3. review/approve/submit proposal
4. negotiate/accept award
5. set up account
6. manage project resources (over the life of the award)
7. close out project and report to sponsor

Areas Identified Outside Project Scope

During the course of the project, several strategic research issues were identified which were beyond the project's scope, yet have significant implications for the University's research enterprise. These matters should be addressed by senior academic officers in the schools and central administration. They include the following:

- What incentives, if any, should be offered to faculty to seek sponsored project support, particularly among faculty who do not traditionally rely on such funding?
- What investments in research infrastructure should the University make?
- How can schools and departments encourage mentoring of younger faculty by more experienced senior faculty in developing sponsored research?
- What can be done, both in schools and centrally, to stimulate and encourage increased interdisciplinary research?
- How can central resources be developed to provide matching funds for the acquisition of research equipment and facilities?
- How can central resources be developed to provide start-up funds for new faculty?

The New Model

The Process Model

The steps in the process for preparing sponsored research proposals and managing the awards do not radically change; rather, radical change in the methods by which these steps are performed, and in the roles which principal investigators, business administrators, and central administrators play, are desirable. Proposed changes include:

- reliance on an information system and database allowing PIs, BAs, and other administrators to access and use information on demand at the desktop
- an emphasis on Research Services serving as a center of expertise,

FOR COMMENT Report of the Research Administration Reengineering Team

which will train the field in all aspects of managing the sponsored projects life cycle, and which will work in teams as a partner of PIs and BAs and other regulatory offices

- enabling principal investigators to focus primarily on research using technology to enable the University to manage its risk and reduce its receivable

An explanation of the benefits of the proposed model follows.

Identifying Funding Sources:

- SPIN is accessed at the desktop (available April 1996 from the Vice Provost for Research home page).
- Vice Provost for Research able to focus on more mission-critical issues.

Prepare Proposal:

- Electronic templates of standard forms are available.
- Budget template will calculate financial information using current University employee benefit and indirect cost rates.
- Electronic assistance is available for non-research portions of the proposal.
- Data is entered once, at the source.
- PIs have more time to concentrate on the research portion of the proposal.
- Previous protocol information will be available on-line.
- Protocol requests will be submitted electronically.

Review/Approve Proposal:

- Non-competing continuations will be approved at the department and delivered directly to Research Services, eliminating the need for approval by the dean.
- Standard proposals will be signed by the department and be delivered to Research Services, streamlining school approvals.
- Early involvement of appropriate key units orchestrated by Research Services will enhance non-standard proposal approvals.
- PIs and/or staff will spend less time walking from site to site for approvals.
- PIs and/or staff will spend less time waiting for approvals.
- PIs will be able to continue working on the research portion of the proposal while the abstract and non-research elements are stepped through the process for review and approval.
- Extensive training by Research Services will reduce the number of errors for which proposals are returned to investigators or departments.

Submit Proposal:

- All parties will be notified electronically of University approval. Research Services maintains only a portion of the proposal (abstract, budget, transmittal form) in its central file, thereby reducing file space required in Research Services and reducing file maintenance costs.
- A copy of the submitted proposal will be maintained by the department office (as often occurs today), thereby reducing the number of copies needed.

Negotiate/Accept Award:

- Negotiation will include the PI and any other pertinent parties, for instance the Center for Technology Transfer and the Office of General Counsel.
- Award notification will be made electronically to all parties, eliminating the need for producing digests of terms. PIs receive notice of awards upon the acceptance of the award by Research Services.

Set Up Account:

- Account set-up will occur centrally and will be coincident with award notification.
- Department administrators will be able to set up award budgets without delay.
- PIs will be able to spend their funds upon award notification and the coincident account set-up.
- The number of budget reallocations will be drastically reduced.

Manage Project Resources:

- All regulatory offices (Regulatory Affairs, Environmental Health and Safety, University Laboratory Animal Resources, Radiation Safety) will have coordinated home pages, allowing access to information at the PI's desktop.

- Research Services will be able to answer all basic questions about the research and regulatory offices via the "Help Desk."
- PIs and BAs will have real-time on-line access to financial information and sponsored project information.
- PIs and BAs will have the ability to track expenditures and other activity and generate reports, eliminating the need for shadow systems.
- PIs and BAs will be able to better manage project funds, reducing the number of over- and underspent awards.
- Research Services will provide departments with reliable, consistent, and prompt assistance enabling departments to responsibly manage the financial aspects of the project.

Close-out and Reporting

- Electronic notification to PIs of reporting and close-out deadlines.
- Electronic notification to close-out award and reconcile expenses.
- More conformance to sponsor reporting requirements.
- Timely close-out resulting in timely account deletions.

General Benefits

- Consistent assistance and service by Research Services.
- A trained field resulting in better award management.
- Clear accountability at every step of the process.
- Maximized opportunities for reimbursement through expanded use of the Automated Clearing House system and direct billing.
- A reduced University receivable.

Technology Infrastructure

The redesigned process and organization are dependent on the development of the new information system. The systems must be fully featured and flexible enough to support current and future requirements. They must conform to the University's Business System Architecture, and must be linked to the new Financial Management Information System (FinMIS).

Key Functional Requirements

The Reengineering Team identified several key functional requirements for sponsored projects information systems:

- Provide information to investigators at their desktop, to help identify potential sponsors of research projects;
- Provide information to investigators and business administrators at their desktops, geared toward creating successful proposals, including sponsor and University requirements, required sponsor forms and project milestones;
- Support electronic access to proposal information, to allow on-line review and approvals;
- Where practical, replace paper communication with electronic notification (such as notification of award receipt);
- Capture information on specific projects at the desktop, as early in the process as possible. Store this information in a database accessible to the University at large (with appropriate security), and treat the information as an enterprise resource;
- Capture information on important project deliverables and dates;
- Provide necessary tools for *ad hoc* queries against sponsored project data;
- Provide necessary tools to generate reports.

Core Components

Research Services Web Site

- Develop (and maintain) a set of World Wide Web pages devoted to sponsored research. These pages should include:
 1. Desktop access to SPIN database to identify potential funding sources. Along with desktop access, training must be made available.
 2. Web pages devoted to the major research sponsors, with a common format. Each page will be aimed toward successfully creating an acceptable proposal for that sponsor. The page should include a link to the sponsor's home page (where available), information on sponsor requirements, capability of printing of required sponsor representations and certifications at the desktop (where a paper form is required), and University requirements related to that sponsor. It should also include information on normal terms and conditions of sponsor awards.
 3. Links to web pages outside the University related to sponsored projects.

4. A redesigned web version of the sponsored research handbook.
5. Search capability for all of Research Services web pages, similar to the search capability on the Penn Home Page.
6. Links to the web documents of University regulatory departments such as Radiation Safety and ULAR.
7. A calendar of events related to sponsored projects.
8. A link to Research Services departmental e-mail address.

Electronic Interaction with Investigators and Business Administrators

Facilitate communication with the University research community by initiating or using news groups and electronic mail.

Desktop Access to a University-wide Sponsored Projects Database

A new sponsored project information system will require an investment in new software and hardware. The software must include a new database containing the information plus software to access and manage that information. Key capabilities of this information system include:

1. Allow electronic review and approval of proposals at department chair, dean and Research Services desktop, preferably via the web.
2. Assign a unique identification number to each proposal.
3. Capture proposal abstract and budget information at the principal investigator or business administrator desktop.
4. Provide access to this database via the web for occasional users such as faculty.
5. Provide access to this database via client server application for more frequent users (such as business administrators and Research Services staff).
6. Have the ability to link individual investigators to FinMIS expenditure data via the sponsored projects database.
7. Maintain (or access existing) standard information on researchers, departments, schools, and sponsors.
8. Capture matching funds information.
9. Identify PI and co-investigators for each project. Capture all fund numbers associated with a specific project.
10. Provide on-line documentation of exceptions and subcontracts.
11. Monitor status of protocol utilization.
12. Capture important milestones and dates, such as due dates for technical and other reports, date for continuation application, patent and intellectual property reports, and expected close-out date. Record compliance with sponsor milestones.
13. Capture completion of close-out responsibilities by all required parties.
14. Longer term: Plan for future electronic proposal submission to participating sponsors. Provide templates for proposal data entry which match the sponsor's forms.

Sponsored Project Reporting Requirements

The following general reporting requirements have been identified:

- Provide a statement of current expenditures to PIs on sponsored projects for easy and timely viewing of financial status;
- Provide financial information on sponsored projects to BAs;
- Provide exception reports for financial risk management;
- Provide information on pending proposals which include matching funds;
- Provide the capability to download sponsored project financial information to the desktop for manipulation by desktop analysis and reporting tools.

During the implementation phase of this project, it will be determined which of these requirements have not already been accommodated by FinMIS.

Provide ad hoc Access to Sponsored Project Information

Support strategic planning by:

1. Migrating sponsored project information to Data Warehouse;
2. Allowing information access via University supported query tools (such as Business Objects).

Additional general principles:

- The new system must support the proposed model for sponsored research, with tasks distributed between departments, schools, and central administration, but information shared across the University.
- Structure applications to take advantage of existing desktop hard-

ware and software. Especially for occasional users, applications should be delivered through familiar means such as the world wide web.

- Applications must protect the confidentiality of information in accordance with University security policies.
- Applications must be flexible enough to support both novice and experienced users, and maintain a reasonably similar look and feel.
- Newly acquired applications must be adaptable to changing business and regulatory requirements.
- Systems must adhere to the principles outlined in 'Of Record - Principles for Info Technology', developed as part of project Cornerstone. Adherence to these principles will result in greatest long term cost effectiveness and highest compatibility with other major university data systems. For a copy of this document, see: <http://www.umis.upenn.edu/cornerstone/princip1.html>.
- Sponsored project information must be accessible on-line, and tools and applications must be available to support gathering, analysis and preservation of data.
- Information should only be captured once, at the source. Appropriate edits must be applied when the information is first entered to assure data integrity.

MIS Requirements

New sponsored research project support systems must be fully featured and flexible enough to support current and future requirements. They must conform to the University's Business System Architecture, and especially must be linked to the new Financial Management Information System (FinMIS).

Access

Data must be accessible via the standard communications infrastructure; PennNet (either by direct connection or dial up).

Desktop Computing Hardware Requirements

University-wide systems comply with the supported standards for the University desktop. Current recommendations are detailed in the document "Desktop Computing Hardware Standards for Penn: 1995-96 Annual Update," and are updated on a yearly basis. This document is available on the web at: <http://www.upenn.edu/isc/techarch/standards/desktop-95-96.html>.

Software Choices (specifically as applied to applications servers)

There are several components or layers of an information system. The major components are:

1. The database (the "container" for data). The university standard is Oracle.
2. The application development tools, in which applications such as on-line screens and reports are developed. The current university standard development tool is Oracle Forms.
3. *Ad hoc* query tools. These tools allow rapid creation of queries to answer management questions. The current standard *ad hoc* query tool is Business Objects.
4. Where possible, applications should take advantage of supported standard desktop applications such as the Netscape Web browser and Microsoft office components.

Research Services: A New Organization

Vital to the success of the proposed model is the creation of a new organization responsible for the oversight of the sponsored project administration process. The new organization, Research Services, is a center of expertise and unified locus for all sponsored project support activities. Some of the principles upon which the organization is based include:

- a reliance on a comprehensive information system and integrated database;
- a commitment to training both within Research Services and outside the organization;
- a commitment to providing service to principal investigators, business administrators and others involved in the administration of sponsored projects;
- Research Services staff working in teams;
- creating career paths throughout Research Services and the field in

FOR COMMENT Report of the Research Administration Reengineering Team

order to develop a sense of mission, a base of expertise, an institutional memory, and reduced employee turnover.

Research Services will not simply be a processing organization. Research Services will be a partner of the principal investigator, department and school administrators, and other regulatory offices (Regulatory Affairs, Environmental Health and Safety, University Laboratory Animal Resources, Radiation Safety, and the Center for Technology Transfer), lending expertise, providing information, and continually improving service. Teams of Research Services staff will form relationships with groups of faculty to improve service delivery at every step of the process and to exchange knowledge about the process, sponsors, and other aspects of sponsored projects support. Teams will be cross-trained in order to maintain a high level of service and a commitment to meeting sponsor deadlines during peak periods or proposal submissions.

The functions performed by the Federal Compliance group; e.g., indirect cost negotiations, effort reporting and the coordination of all audit activities, will remain a part of the Comptroller's Office. Complete and timely communication and exchange of information must be maintained among and between the Federal Compliance and Research Services staff.

Research Services will be a new service organization, the foundation of which is the delivery of the sophisticated information systems described above. The principles upon which the organization is based call for new positions and job skills. The Implementation Team will work closely with the Division of Human Resources as appropriate during the transition. The Reengineering Team proposes the following positions based on its research to date:

- **Director:** responsible for all aspects of policy and planning. The Director will monitor regulatory changes, ensure University compliance with federal and other applicable regulations, review, institute, and communicate new policy, and work to promote the University's position with sponsors. The Director will also work with the Vice Provost for Research to facilitate a greater rate of awards received.

- **Associate Director for Technology and Training*:** responsible for overseeing the design and maintenance of the information system and database, integrating the system with FinMIS and regulatory offices' technologies, and designing and implementing training programs.

- **Training Director*:** responsible for developing and providing training in conjunction with Research Services team members. The Training Director will also provide ongoing training on policy and procedures to new PIs, new BAs, and the Research Services staff.

- **Technical Support Specialist*:** responsible for the daily operation of the information system and database, as well as procedures for using the system.

- **Team Leaders:** responsible for reviewing proposals, negotiating and accepting awards, and working with Financial Managers (see below) to manage the non-research aspects of the award. Team Leaders, paired with a particular Financial Manager, will work with a specific group of principal investigators and schools, sponsors, or research area, providing a consistent source of information and assistance for PIs. Team Leaders will review proposals for school requirements, will work to minimize institutional risk by ensuring the proper protocols and approvals by regulatory offices are established, and will provide institutional signatures. Team Leaders will also negotiate award/contract terms and conditions and notify all parties via the information system. Team Leaders will work in concert with Financial Managers to ensure the effective management of the award through close-out.

- **Financial Managers:** facilitate the non-research aspects of the award in support of departmental business officers. Financial Managers will ensure the proper flags are entered into the information system for notification of project milestones, will monitor and ensure the billing of sponsors, record and deposit payments by sponsors, approve payroll reallocations, review/audit exception reports, work with Collections to address past-due balances in a timely way, submit sponsor reports, coordinate close-out and final reporting, and manage sub-contracts. Re-

sponsibility for Letters of Credit will rest with one particular Financial Manager. Financial Managers will work closely with Team Leaders on all aspects of the Team Leader's work, to insure that a PI or BA is never without a source of expertise.

- **Research Help Desk Administrator:** responsible for providing answers to frequently asked questions for Research Services and all of the other regulatory offices. The Help Desk Administrator will work closely with the Training Director to identify problems in the field and to update information provided by Research Services.

- **Administrative Assistant:** responsible for general office administration.

During the redesign, the Team noted the history of high employee turnover in Research Accounting. The skills, knowledge and experience of the personnel in both Research Accounting and the Office of Research Administration are valued and necessary for the delivery of excellent service to the University. Staff in these areas often are hired by the schools for their skills at comparatively higher salaries putting the central offices at a competitive disadvantage.

While there is a certain comfort in knowing that qualified staff with accounting skills and knowledge of federal regulations are in place in schools and centers, their short tenure in the central offices causes workflow disruptions and contributes to the backlog of unclosed accounts.

The new Research Services organization addresses the skills necessary university-wide to administer sponsored projects, and emphasizes the role of Research Services in training and education. This provides broader job responsibilities and career opportunities and enhances the central offices ability to retain well-trained and service-oriented staff. The objective is to make team members feel that they are part of the University's research enterprise and that they are inextricably linked with individual faculty members and schools competing for sponsored projects. Individuals in Research Services will be critical to the University successfully meeting its goals for sponsored research activities - dollars and numbers of grants, or market share.

The size of the new organization will be determined during the transition phases according to results of process changes and the implementation of technology.

Current Organization

Research Accounting

The Research Accounting Department is part of the Comptroller's office. Salary expenditures with benefits in FY95 were \$605,416.

The Research Accounting Department has traditionally experienced a high employee turnover rate, however, the problem has become acute over the past three years. The reasons for the high employee turnover are: low employee compensation as compared to higher salary structures available in the schools for comparable positions; limited opportunity for advancement within Research Accounting; and the attractiveness of the staff to academic departments with research programs once trained in sponsored project accounting and billing requirements. The results of high turnover are:

- Service degradation to departments because they do not have an accountant assigned to service their accounts.

- Cash flow being the highest priority, staff time is directed first to the sponsor billing function, thereby reducing the ability to produce financial reports on a timely basis. The result is a significant backlog in financial reports due to sponsors, and a virtual inability to close accounts that have terminated.

- Lack of an adequately trained staff, with a diminishing base of knowledge to address accounting and billing issues on a timely basis.

- Potential uncollectible receivable amounts due to the late submission of financial reports.

- Potential loss of renewed funding due to the failure to meet sponsor reporting requirements.

- A further demoralizing effect on the remaining staff who are constantly asked to do more with less.

The proposed Research Services model has been designed to address these problems by providing appropriate compensation, training, and opportunities for advancement within the organization.

* The Team recognizes the need to consider the development of these positions in light of overall Division of Finance efforts related to training and technology.

Research Administration

The Office of Research Administration reports to the Vice President for Finance and the Vice Provost for Research. Staff headcount has remained essentially static despite a 28% increase in the number of proposals submitted from FY 90 to FY95. Salary expenditures with benefits in FY95 were \$825,329.

Regulatory Affairs

The Regulatory Affairs office has seen a significant increase in protocol reviews over the past three years due to regulatory changes. The Reengineering Team designed the new process and organization, and The Implementation Team may wish to consider several structures when making its final recommendations, two of which are outlined below:

1. Regulatory Affairs is integrated into Research Services. This model would result in the following improvements:

- Improved communications between Research Services and Regulatory Affairs.

- The ability for staff from Research Services and Regulatory Affairs to view the same proposal simultaneously.

- Improved service to PIs regarding the status of protocols.

2. Regulatory Affairs becomes an independent agency. This model would result in the following improvements:

- Regulatory Affairs serves in the role of independent institutional monitor in order to uphold ethical, scientific, and federal standards for all sponsored project activities involving humans and animals.

- Regulatory Affairs' mission and goals are similar to the other regulatory offices on campus, all of which report to the Vice Provost for Research.

- Communication and data exchange with other regulatory offices will be improved.

- With a direct reporting relationship to the Vice Provost, Regulatory Affairs will be better aligned to adjust to regulatory and other changes. The Vice Provost for Research may be in a stronger position to negotiate favorable changes to protocol review requirements with major federal sponsors.

Transition to

New Research Services Organization

Co-location of Research Accounting and Research Administration

It is recommended that the Research Accounting Department and the Office of Research Administration be co-located as soon as is practical. Co-locating the two offices will enable the resulting "transition organization" to take the necessary steps toward the proposed Research Services organization.

The initial co-location will provide a number of benefits during transition to the new Research Services model, including:

- Facilitate cross-training of research administration and accounting functions.

- Enable extensive cross-training on the new Financial Management Information System (FinMIS).

- Facilitate implementation of improved processes resulting from Implementation Team recommendations.

- Facilitate implementation of new technologies.

- Facilitate migration toward the proposed Research Services model, taking advantage of process and technological improvements, and possibly reducing staff as a result of natural attrition.

New Organization

The full impact of the introduction of FinMIS on July 1, 1996, as well as other variables during the transition period, have made it difficult to recommend a detailed new organization and its various transition stages. FinMIS is expected to affect work processes and workflow in both central and school/department offices; however, changes in the amount and type of work performed have been difficult to predict in most administrative areas.

Opportunities for service improvements and/or economies discovered by the Implementation Team, impacts of regulatory changes, impacts from increases/decreases in the number of proposals or awards, and new

technological advances during the transition period may all have an effect on the transition process and the final Research Services structure.

Concurrent with Transition Activities

Conduct Review(s) of other Regulatory Offices

Given that Research Accounting and the Office of Research Administration collectively make up only 22% of the total budget spent centrally on Sponsored Projects support, it is recommended that the other central offices involved in the process of research administration be reviewed. These offices are the Center for Technology Transfer, Radiation Safety, Environmental Health & Safety, University Laboratory Animal Resources, and the Office of the Vice Provost for Research. A review of these offices, conducted concurrent to implementation activities, should investigate the following:

- Opportunities for improved service to faculty
- Opportunities to develop a common interface for communicating University and federal policies and procedures
- Opportunities to streamline processes
- Identification of areas of risk to be monitored/addressed
- Information to be communicated by the Research Services helpdesk
- Methods to ensure better communication between central offices
- Necessary technology interfaces between regulatory offices and Research Services
- Opportunity to exploit technological advances

Plan and Allocate Resources to Close Outstanding Sponsored Project Accounts

The issue of outstanding sponsored project accounts needs to be addressed. Although Research Accounting has made some headway with the large number of accounts which are overdue for closure, they have not had adequate staffing or resources to address the backlog.

A separate team needs to be assigned to develop a "close-out plan" which should include the following:

- Assessment of the volume of accounts to be closed
- Groupings of accounts by age, sponsor, school, over/under spent amounts, effort to close, other relevant issues, etc.
- Suggested strategies to deal with the closing of each grouping and the institutional impact or risk involved
- A resource plan and proposed timeline which outlines human and other resources necessary to reduce the backlog within a stated period of time.

Transition Plan

The Team expects the transition from the current process and organization to the proposed process, technology and organization, to begin approximately sixty days after approval of the final report and to continue through calendar year 1998. Ongoing involvement of PIs and appropriate members of the University community is anticipated. Opportunities to pilot new organizational strategies and processes will be investigated. Details regarding certain implementation steps and estimated resources required are listed on page S-8. Specific transition steps include, but are not limited to:

- Establish an Implementation Team, as well as a team or sub-team to review technological needs
- Develop and pilot a streamlined review of non-competing continuations (e.g., have them signed at the department and transmitted directly to Research Services)
- Establish specific procedures for collecting outstanding funds
- Establish or activate links with research-oriented electronic news group for business administrators
- Undertake short-term training
- Co-locate Research Administration and Research Accounting
- Pilot a streamlined review process for standard proposals
- Develop and implement a policy to maintain official proposal copies in the department and eliminate the bulk of central files
- Develop presentations and kits for new PIs and new BAs
- Reengineer the submission and review process for protocols
- Pilot a streamlined review process for non-standard proposals
- Develop and implement comprehensive training programs and standards

The Transition Plan: Some Tasks and Target Dates

Establish the Implementation Team
to be responsible for implementing all approved recommendations made by the reengineering team. The implementation team will have a team leader and representation from Offices of Research Administration, Research Accounting/Comptroller; ISC/UMIS (to lead tech team); faculty; school; department.

Steps to be taken:

- Communicate with Reengineering Team
- Add detail to implementation schedule
- Maintain implementation schedule
- Identify required resources
- Refine and allocate resource requirements
- Evaluate success of implementation phases

Target: 60 days from Steering Committee acceptance

Develop streamlined review of noncompeting continuations.

Some 38% of all proposals are noncompeting continuations—updates of proposals to the sponsor that must be produced in subsequent years of a multiyear award. Such proposals need only be reviewed by the departmental chair. Institutional risk is low, schools will save time and cost, and no procedural changes are required for ORA. Sponsors are already moving toward streamlining this process.

Steps to be taken:

- develop communication plan for announcement of change
- announce change to process and whom it affects
- write policy to reflect change

Target: 90 days from Steering Committee acceptance

Establish collection procedures.

Funds due the University may not be collected on schedule due to poor tracking procedures, lack of a strong collection policy backed by legal counsel, and a lack of designated authority for collecting funds. A total of over \$3 million is overdue (sponsored project accounts 120 days and older)

Steps to be taken:

- designate collection authority/responsibility
- partner with legal counsel for collections
- identify nonpayments
- collect funds
- dedicate staff to collections
- develop tracking process

Target: 90 days from Steering Committee acceptance

Pilot streamlined "standard" proposal review process.

A standard proposal is one that contains no new or renovated space requirements; no non-standard indirect costs, or no matching funds; and no corporate sponsors.

Standard proposals represent approximately 60% of all proposals. Making changes to this process allows schools more time for working with non-standard proposals. On-line access will allow deans to look up information based on the number of proposals that carry full overhead (including off-campus projects, training grants and those for agencies with stated overhead rates less than full), less those with industry and those requiring matching funds.

Steps to be taken:

- form pilot Research Services team
- identify test school(s)
- define requirements for on-line system, links to regulatory offices
- deliver Research Services' home page (sponsor and University information, policies, forms, handbook, etc.)
- train all affected parties
- run pilot for 6 months (to cover two NIH deadlines)
- evaluate pilot
- implement new process
- develop system and links to regulatory offices
- develop Res Serv home page
- develop training materials

Target: By July 1, 1997

Establish Record Retention Policy.

An "official copy" (delivered to the sponsor) includes the final research portion, the final non-research portion, and all appropriate signatures. ORA access to the scientific/technical portion of proposals is rarely needed. For the PI's department to keep the official copy will eliminate duplicate files, speed entry of information into databases, facilitate ultimate on-line transmission of proposal, and save time/effort and space in file maintenance.

Steps to be taken:

- announce change in policy
- communicate with/train deans, principal investigators, and business administrators as to the ramifications of the change, and the importance of maintaining the latest version of the proposal
- negotiate, write policy for PI or department to keep complete proposal
- define portions of proposal to be retained at Research Services

Target: By September 1, 1996

Develop Kits for New PIs and BAs.

Kits are sets of reference materials regarding the research administration processes. Focus group results show that new faculty and administrators need to have basic information about sponsor and University processes, policies, and regulations. Research Administration, as University's signatory for sponsored research, should maintain these reference materials, attend new faculty orientation and deliver oral and print messages—the latter providing an overview and references to electronic information.

Steps to be taken:

- attend FinMIS training & deliver oral and print messages
- provide training in systems, processes, and University/sponsor policies
- identify levels of responsibility/authority
- identify legal issues
- develop and print materials
- develop and maintain database of trainees/attendees

Target: 90 days from Steering Committee acceptance

Implement On-line Protocols Process.

Protocols are required when a proposal calls for the use of human or animal subjects. Committees review protocols at regular meetings. The current process is paper-based, time consuming and labor intensive, while the existing database links with no other and is homegrown.

Steps to be taken:

- form review team
- restructure current process
- develop system requirements for redesigned process
- system upgrades, development

Pilot streamlined process for "non-standard" proposals.

Non-standard proposals are those containing requirements for new or renovated space, non-standard indirect costs, and/or matching funds, and/or seek funding from corporate sponsors. The current process captures approvals in a sequential fashion; data is not available in current systems, and the negotiation of terms occurs too late in the current process.

Steps to be taken:

- establish procedure for early negotiation between Research Services and the sponsor, and including the principal investigator, the Center for Technology Transfer, and the Office of the General Counsel
- communicate process changes to principal investigators
- train principal investigators
- review and define process

Target: January 1, 1998

Training.

Training and communication are required by users of the research administration process. Ongoing training and communication prevents process breakdowns.

- survey process users for needs assessment
- tailor training for different needs
- develop training plan which includes periodic updates and follow-up sessions
- develop school-specific materials
- cross-train Research Services staff
- develop training assessment tool
- develop and maintain database of trainees/attendees

Target: Ongoing