

Almanac

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Nominations: Deputy Provost

Nominations and applications for the position of Deputy Provost, currently held by Professor Walter Wales who will step down in January, are now being solicited by the search committee. Candidates must be tenured members of the faculty.

The Deputy Provost is the Provost's chief adviser with duties covering much of the range of responsibilities of the Provost. As the principal academic planning officer in the Office of the Provost, the Deputy Provost is concerned with such issues as academic program planning and review, capital planning as it relates to academic programs, enrollment planning and will coordinate the work that the Vice Provosts for Graduate Education and Research do that affects academic planning. The Deputy Provost is also the academic affirmative officer for faculty recruitment and provides the Provost with major advice and help on appointments and promotions, grievances, and personnel matters.

Nominations and applications are due by January 9, 1995 and should consist of a letter with as much detail as possible as to why the nominee or applicant should be considered for the position. Nominations should be sent to the chair of the search committee, Professor Richard Dunn, Department of History, 207 College Hall/6379. Please feel free to contact either Professor Dunn (898-6889; rdunn@mail.sas) or Mrs. Linda Koons (898-8669; koons@pobox), who is staffing the committee, about the search process.

— Office of the Provost

Dean of Vet School: Dr. Alan Kelly

Dr. Alan M. Kelly, one of the nation's leading scientists in muscle disease and muscular dystrophy, has been named Dean of the School of Veterinary Medicine, President Judith Rodin announced. The Trustees will act Friday on the appointment of Dr. Kelly, who has been acting dean of the School for the past year.

Dr. Kelly will become the first Gilbert S. Kahn Dean of Veterinary Medicine and the first head of a North American Vet school whose position is endowed.

Gilbert S. Kahn, who endowed the deanship, is a Miami-based breeder of purebred dogs who became intensely interested in veterinary medicine after one of his dogs died of granulomatous meningo-encephalitis seven years ago. (See also *Almanac* December 12, 1993)

"To have begun my career at Penn as a graduate student and now be given the chance to lead the School of Veterinary Medicine is a great honor," said Dr. Kelly. "I'm grateful that President Rodin had the confidence in me to be part of her new administration."

"Alan's stewardship as Acting Dean has been exemplary," said Dr. Rodin. "In a brief period, he has guided the School of Veterinary Medicine through the continuing challenges it faces and worked to create a sense of optimism and collegiality across the entire School."

Provost Stanley Chodorow said Dr. Kelly "is a distinguished scientist and an excellent teacher, and we are confident that under his leadership, the School of Veterinary Medicine will continue to strengthen its research, curriculum development, clinical activities and professional programs, and enhance its leadership role in veterinary education and care."

A native of the United Kingdom, Dr. Kelly received his degree in veterinary medicine from the University of Bristol in 1962, and came to the U.S. to take the Ph.D. in pathology from Penn in 1967 and joined the Vet School faculty the following year. In 1974, he was the recipient of the Lindback Award for Distinguished Teaching and was chairman of the school's Department of Pathobiology from 1990-94.

Among his research interests are developing methods for transferring genes into skeletal muscle to improve performance and control the progress of chronic muscle diseases. Dr. Kelly is the author of more than 100 book chapters and scientific papers, and is a member of the Royal College of Veterinary Surgeons, The American Society for Cell Biology, and the Pennsylvania Muscle Institute.

Ed. Note: Since Penn now has two very similarly-named deans, note that Medicine's dean has a second "e" in his name: Dr. William N. Kelley.



Dr. Kelly



Dr. Ghandhi

HONORS & ... Other Things

Some of the many honors compiled this fall by Penn people (see pages 5-7) came to the three scholars shown here.

New Teaching Prize

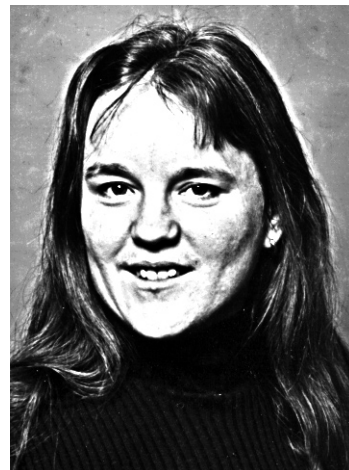
Dr. Jamshed Ghandhi, left, is the first winner of the new Rapaport Prize for teaching in the undergraduate core at Wharton. (See page 5.)

Young Investigators

Drs. Tandy Warnow of CIS and and Karen Winey of materials science and engineering, right, have won National Young Investigators Awards, the former "Presidential Young Investigator" citations that come with five years' support each of the recipients' research. (See page 6.)



Dr. Winey



Dr. Warnow



photo by Frank Ross

Miss Anderson in 1977, talking with students during one of her visits to Penn.

A Night at the Orchestra

On Monday, January 23, the University of Pennsylvania will hold a Night at the Orchestra which will be both a tribute to Dr. Martin Luther King, Jr., and a benefit for the creation of the Marian Anderson Music Study Center at the University of Pennsylvania Library.

The evening includes an 8 p.m. performance by the Philadelphia Orchestra under André Raphael Smith, with the mezzo-soprano Marietta Simpson and the Morgan State University Choir. A reception with the conductor and the soloist is part of the evening, and there is to be a Patron's Dinner beforehand at Ruth's Chris Steak House near the Academy of Music.

Now in the phase of enlisting patrons and sponsors, the project honors two leading figures of the twentieth century who had ties to Penn. Miss Anderson's own gift to the library forms the nucleus of the study center that is being created in her memory.

The Night at the Orchestra is spearheaded by the Office of Library Development, and so far its sponsors include the Office of the VPUL, Penn Women of Color, the University's Black Alumni Society, and Zanzibar Blue.

Those who wish to sign up now can use the form below, returning it with check to
Van Pelt-Dietrich Library Center/6206.

Please reserve the following spaces for:
(name) _____

_____ in preferred seating @ \$100 (this represents a tax-deductible contribution of \$65)

_____ in the family circle @ \$30 (this represents a tax-deductible contribution of \$15)

_____ in the amphitheater @ \$15 (this represents a tax-deductible contribution of \$7)

_____ I am unable to attend, but please accept my contribution of \$_____ for the Marian Anderson Study Center.

(Checks should be made payable to the Trustees of the University of Pennsylvania.)

SENATE

From the Senate Office

The following statement is published in accordance with the Senate Rules. Among other purposes, the publication of SEC actions is intended to stimulate discussion between the constituencies and their representatives. Please communicate your comments to Senate Chair Barbara J. Lowery or Executive Assistant Carolyn Burdon, 15 College Hall/6303, 898-6943 or burdon@pobox.upenn.edu.

Actions Taken by the Senate Executive Committee

Wednesday, November 30, 1994

1. Academic Planning and Budget Committee and Capital Council. Past Senate Chair Gerald Porter reported that the Academic Planning and Budget Committee has met twice since the last SEC meeting and is considering the five-year plan of the School of Social Work.

Capital Council did not meet but there was a mail ballot regarding five projects, most for renovation in the School of Medicine and one for the purchase of a computer for the Laboratory for Research on the Structure of Matter.

2. Role of Faculty in Advising. James Laing, Chair, Senate Committee on Students and Educational Policy explained that the committee is exploring ways to enhance student advising. The committee is currently focusing on steps to improve computer software to provide basic course scheduling information to students so that faculty time with students can be focused on mentoring, tracking students' progress and personal well-being. SEC advised the committee that

1) central advising systems work fairly well for students but that faculty should be involved in the overall planning;

2) advising as a part of the residential system may be workable if a department or school based staff coordinator works with faculty to provide the varying needs of the schools.

3. Removal of a Dean. Arnold Rosoff, member, Committee on Administration reviewed a draft procedure to be used if a faculty votes no confidence in the dean. Revisions were suggested and a new draft procedure will be presented to SEC in the Spring.

4. Revision of Handbook Statement on Faculty Responsibility. Jack Nagel, Chair, SCAFR asked advice on the scope that committee ought follow in responding to a recommendation in the Report of the Commission on Strengthening the Community that the *Handbook* statement be revised. Some SEC members found the current *Handbook* statement (pp. 40-41) to be sufficient, while others believed it to be too detailed. Since the rationale for the proposed revision was unclear it was suggested that SCAFR discuss the recommendation with members of the commission.

5. Informal Discussion with the President. A wide range of topics were discussed that included strategic creative partnerships for research and involvement in the community, how consultation is interpreted, pressing problems facing the University, responsibility center budgeting, review of the campus master plan, and the relationship of State funding to the School of Veterinary Medicine.

OF RECORD

Rules Governing Final Examinations

The rules governing final examinations are as follow:

1. No student may be required to take more than two final examinations on any one calendar day.
2. No instructor may hold a final examination except during the period in which final examinations are scheduled and, when necessary, during the period of postponed examinations. No final examinations may be scheduled during the last week of classes or on reading days.

3. Postponed examinations may be held only during the official periods: the first week of the spring and fall semesters. Students must obtain permission from their dean's office to take a postponed exam. Instructors in all courses must be ready to offer a make-up examination to all students who were excused from the final examination.

4. No instructor may change the time or date of a final exam.

5. No instructor may increase the time allowed for a final exam beyond the scheduled two hours without permission from the appropriate dean.

6. No classes (covering new material) may be held during the reading period. Review sessions may be held.

7. All students must be allowed to see their final examination. Access to graded finals should be ensured for a period of one semester after the exam has been given.

In all matters relating to final exams, students with questions should first consult with their deans' offices. We encourage professors to be as flexible as possible in accommodating students with conflicting schedules. Finally, at the request of the Council of Undergraduate Deans and SCUE, I particularly encourage instructors to see that all examinations are actively proctored.

— Stanley Chodorow, Provost

'A Penny Saved' Is a Prize Earned

The University administration wants faculty, staff, and students to submit ideas about how to do things better at Penn—to save money, cut costs, or improve the quality of service. The new program, "A Penny Saved," gets its name from a phrase attributed to Penn's founder, Benjamin Franklin, a prodigious inventor and consummate "idea person." "A Penny Saved" is based on suggestions by Penn employees, and it adds to the "Bright Ideas" initiative proposed by the A-3 Assembly. A similar program has been successfully implemented at HUP, in the federal government, and in business.

Those who submit the best ideas will receive a \$100 gift certificate good at University locations such as the Book Store, the Penn Tower Hotel, the Faculty Club, or the Office of Intercollegiate Athletics—and will have the opportunity to see their creativity at work, from theory to practice. The top three ideas will receive special monetary awards and recognition. Finally, there will be an annual recognition event for special contributors.

"We are establishing this new award in recognition that the best ideas come from those actually doing the job," said President Judith Rodin. "We must move forward with new initiatives enabling us to do business differently, to reinvest in Penn. So many of you have told me that you have good ideas and want to be asked about them. I urge you now to participate. We need the involvement of the entire University community."

All full- and part-time faculty, staff, and students of Penn are eligible to participate and should feel free to submit ideas on any subject. Ideas can be submitted, starting January 3, 1995, to the Office of the Executive Vice President by way of intramural mail, sent to 721 Franklin Building/6293, or by hand delivery to the boxes marked "A Penny Saved" located on the first floors of College Hall and the Franklin Building. Groups as well as individuals can submit ideas, and anonymous suggestions are also welcome. The program will continue throughout the year. The first announcements of ideas selected for implementation will be made March 31.

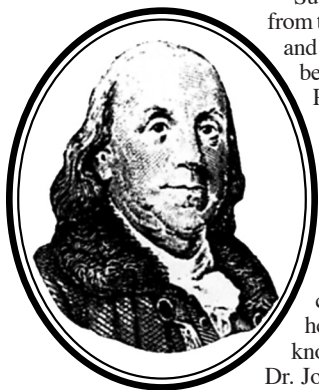
Submissions will be reviewed by a committee composed of representatives from the offices of the President, the Provost, the Executive Vice President, and the individual schools. The ideas accepted for implementation will be put into practice by the appropriate dean or administrator.

President Rodin emphasized that many of the ideas could help make the University administration more cost efficient. The results, she added, will contribute to Penn's central mission of academic excellence. According to Dr. Jack Freeman, the acting executive vice president, for Penn to thrive in the years ahead, it must continue to be innovative, with the focus on delivering the best service possible while keeping costs in line. "Often, the folks working directly on a project can see the best ways to make the project work while keeping costs down—or even reducing costs," he said. "But sometimes people hesitate to come forward with their suggestions. We want everyone to know that their ideas are important and make a difference at Penn."

Dr. John Wells Gould, acting vice president of human resources, added "This program gives the entire University community an opportunity to participate in making this a better place in which to live and work," he said. "The best way to reinvest in our University is to invest everyone's ideas."

President Rodin added that she believed the most valuable capital at Penn is human capital. "The assets we keep in the bank pale when compared with the awesome power and the potential creativity in the Penn community," said Rodin. "People with creative ideas who are imaginative and innovative bring renewal to organizations, and these people need to be acknowledged."

— Office of News and Public Affairs



Lighting Up Penn: 8,600 Safety Devices to Keep an Eye On

To provide students, employees, and visitors safe access to and from campus, Penn keeps about 8,600 light fixtures in operation. An aggressive program has been established to monitor and maintain those lamps and fixtures, outlined here by James M. Miller, director of fire and occupational safety:

University Police and Physical Plant personnel, working night shifts, report the location of burned out bulbs and/or inoperable fixtures to the Physical Plant Operations Control Center (OCC). The information is logged on the computer and a work order is generated for scheduled repairs. In those cases where an entire area is in darkness, electrical repair personnel are dispatched to correct the problem. If repairs cannot be made immediately, University Police are notified to patrol the affected area until appropriate corrective action is complete.

Light fixtures are catalogued according to location, manufacturer, type, model, wattage, and burn life of illuminates. Historical data is maintained to determine efficiency, detect recurrent problems and evaluate equipment. Based on this information, relamping of the various fixtures can be scheduled prior to the anticipated burnout of the bulbs/illuminates.

Night walks are conducted periodically to survey the campus to ascertain the need for additional lights and/or replacement of existing lights. Seasonal changes also affect lighting efficiency, requiring the pruning of trees and bushes that block illumination in walking areas. The night walks are attended by personnel from Physical Plant, Public Safety, Parking, and members of the University Safety and Security Committee.

The widest network for keeping tabs on the lights is the community itself, Mr. Miller said, and reports are welcome day and night. To report the location of a burned-out bulb or an inoperable fixture, call the Physical Plant Operations Control Center at 898-7207/08 or the University Police Communications Center at 898-7297/98. These facilities are in operation 24 hours a day, seven days a week.

To: Part-Time Professionals (A-1)

A core group of part-time professional employees has been meeting throughout this past year to explore issues regarding the legitimate extension of pro-rated benefits to these employees. In order to represent the group as completely as possible, all part-time professional Penn employees are asked to identify themselves by calling Sara Crimm at 898-5262 or Ellen Demarins at 898-8118, or e-mail Julie Vick at VICK@A1.RELAY.

— Susan Greenbaum,
Media Relations Liaison, Nursing

PPSA

December 13 Meeting: Benefits of Part-Time Professionals

A meeting of PPSA is scheduled to discuss benefits for part-time professionals. Members of the ad hoc committee will discuss their experience over the past year and what the future might be. This meeting will be held on December 13, at noon, in the Bishop White Room of Houston Hall. All professional, administrative and research staff are invited.

— Drita Taraila, Chair,
Penn Professional Staff Assembly

Biomed Graduate Studies: Dr. Gaulton is new Director

Dr. Glen Gaulton has been named Director of Biomedical Graduate Studies (BGS), effective January 1, adding the new post to his present one as associate dean for combined degree programs.

Dr. Gaulton succeeds Dr. Willys Silvers, who has been acting director since Dr. Saul Winegrad, the founding director, stepped down in July 1994. Glen's appointment caps an exhaustive search process, and an search committee.

This appointment will permit the closer coordination of two programs, the Ph.D. program and the combined degree program (for students who simultaneously obtain a professional and a research degree), Vice Dean Neal Nathanson said in announcing the appointment.

Dr. Gaulton received his Ph.D. from California at Santa Barbara, followed by postdoctoral training in immunology at Harvard. He came to pathology and laboratory medicine at Penn in 1984. His research interests are in immunology, virology, and viral immunology, and he has a well funded and very productive laboratory.

"Glen is known as an outstanding teacher with an enviable record as a mentor of predoctoral students and post-doctoral fellows," Dr. Nathanson said. "His leadership abilities led to his appointment as Associate Dean for Combined Degree Programs in 1993, and he has been very successful in taking this established program to a new level of achievement."

"The Office of Biomedical Graduate Studies has led a renaissance in our biomedical graduate program over the last 10 years," he continued. "Graduate education is changing, in response to the rapid evolution of biomedical science, and we believe that Glen will provide the strong leadership necessary to respond to present and future challenges and opportunities."

Penn's Way Update: Nearing 65%

The Penn's Way Campaign has surpassed \$253,600, or 63.4 percent toward its goal of \$400,000. And, thus far, six units have exceeded more than 50-percent participation: Business Services (81.11%), Human Resources (80.68%), Information Systems and Computing (63.82%), Morris Arboretum (55.56%), Provost's Office (66.50%), and Vice Provost for University Life (63.18%). University-wide, 25.78 percent of those solicited have participated in the campaign as of December 2.

The campaign's co-chairs cited two more reasons to give through Penn's Way:

"The organized workplace charitable campaign allows the organizations to pool their resources and allows Penn faculty and staff to target their particular causes painlessly through payroll deduction," said Steven Murray, vice president for business services. "It's win-win-win, for us, for the organizations, and for Penn."

Dr. Helen Davies of the School of Medicine said that by giving through the Penn's Way Campaign, we "assist in maintaining the human and social services organizations that will help us if we need them at some time."

The Campaign continues through December 16, with payroll deductions beginning in January for those participants who choose that option. Cash and checks may be used for payment but if cash is used it should be hand-carried to the Payroll Department. Otherwise, pledge cards may be mailed in the pre-addressed envelope to Payroll.



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Operation Santa Claus

The wheels are in motion once again for Operation Santa Claus. This year we decided to do something a little different: we've chosen three local West Philadelphia nursing homes to treat to a special day. The Ralston House, Mercy Douglas and Stephen Smith nursing homes will be treated to a holiday luncheon and gifts from Santa on *Monday, December 19* at the Faculty Club. Some of our senior citizen friends have little or no family and in many cases spend the holidays at the home.

Last year's party for St. Vincent's Orphanage was an overwhelming success. We collected over 800 gifts which were distributed to St. Vincent's and many shelters in West Philadelphia.

We're asking you to help again. We need approximately 400 gifts for senior citizens. Anyone interested in donating money instead of a gift would also be very much appreciated. It would be used to pay for the luncheon and additional gifts. All those interested in participating in this year's project, or who want further information, please contact Yvonne or John at 898-4210; those in Physical Plant can also contact George in the Locksmith's shop.

Below is a list of gifts that would be appreciated. Simply choose something off the list, wrap it with a label on the outside of the package marked with what the item is, if it is for a male or female and the size if applicable. *But please, if you are planning to participate, do contact us and let us know so we can have a feel for how many of you are donating.*

- Sweat pants/shirts (men's sizes large & XL) (women's medium & large)
- Socks (men's white & dark) (women's knee socks & knee highs)
- Men's t-shirts and undershirts and thermals (large & XL)
- Women's thermals (medium & large)
- Slippers (slip on) (men's medium & large) (women's small & medium)
- Sweaters and sweater vests (all sizes)
- Perfume, Cologne, Dusting Powder
- Trivia games, puzzles, chess, checkers, old card games, bingo
- Picture frames, posters of flowers or historical things, Model T Ford items
- videos

There has always been a lot of interest from our staff and friends around campus. We are hoping that you will again be able to help. Please help make this another successful holiday project full of joy and giving.

— John De Long,
Senior Director, and

— Yvonne Oronzio,
Administrative Assistant,
Student Financial Services

Speaking Out

Questions on Vacations

If you are a part-time employee (17 1/2 hours a week) but have not completed your probationary period are you eligible for 17 1/2 hours of pay during the "Special Winter Vacation" policy No. 608?

If you are a full-time employee, start date April 6, 1994, at what point during the year do you accrue vacation time? Thank you!

— Andrea King, Division Administrative Assistant, School of Nursing

Response on Vacations

Carol Horne Penn, manager of staff relations, notes that "Special Winter Vacation" refers to the weekdays between Christmas Day and New Year's Day, and responds as follows to Ms. King's questions:

1. Regular full- and part-time staff members including those in the introductory period are eligible for the Special Winter Vacation.

If the special vacation day falls on a day that a regular, part-time staff member is scheduled to work, the staff member is paid at his/her normal rate and does not work. Regular, full-time staff members are paid for time not worked during the entire special vacation period.

If a staff member is required to work during this period, he/she receives the equivalent time off with pay which must be taken within 90 days.

University employees working at HUP and the Wistar Institute are governed by the terms of HUP and Wistar policies. In those cases a staff member should consult with Human Resources at HUP and the Wistar Institute. Union employees are covered by their collective bargaining agreements should

refer to the agreement.

A regular part-time staff person is defined as a person who works between 910 and 1456 hours a year (17.5 to 28 hours per week). In the specific situation, the regular part-time staff member may be eligible to receive 17.5 hours of special vacation pay assuming none of the above referred prohibitions apply.

2. An administrative assistant is a regular, full-time weekly paid staff member. An administrative assistant who started employment with the University on April 6, 1994, accrued vacation from the date his/her employment began; however, he/she is not eligible to use the accrued vacation until May 1, 1995. At that time, he/she will have accrued and may use ten (10) vacation days.

Ed. Note: PennInfo provides the full texts of the *Human Resources Manual* and many other University policies, procedures and guidelines affecting University faculty and staff. Subjects can be searched by keyword, or from the main menu open either *Policies and Procedures* or *Faculty and Staff Facilities and Services*.

Call for D.P. Columnists

We're looking for columnists for next semester. Any person affiliated with the University is eligible to apply. This includes undergraduate students, graduate and professional students, faculty, staff, administrators, alumni, local residents and any person with frequent University contact.

To apply, pick up an application at *The Daily Pennsylvanian* at 4015 Walnut Street, or call at 898-6581 during the day/898-6585 at night and ask to be mailed an application. The application deadline is January 6, 1995.

— Jordana Horn, D. P. Executive Editor

Speaking Out welcomes reader contributions. Short, timely letters on University issues can be accepted Thursday noon for the following Tuesday's issue, subject to right-of-reply guidelines. Advance notice of intention to submit is appreciated.—Ed.

HONORS & . . . Other Things

Prizes and Awards

The Honorable Walter H. Annenberg and *Dr. P. Roy Vagelos*, were presented with The American Assembly's 1994 Service to Democracy Award in late October. Dr. Vagelos, the newly elected chairman of Penn's Trustees, and Mr. Annenberg, Trustee Emeritus as well as chairman of the board of the Annenberg School for Communication, were recognized for "their contribution to the nation." The American Assembly, a national, non-partisan public affairs forum was founded in 1950 by Dwight D. Eisenhower during his tenure as president of Columbia University.

Ms. Kristin Davidson, assistant dean for administration, School of Nursing, won the Bette Landman Award from PACE/NIP for service to the advancement of women in higher education administration in the Commonwealth of Pennsylvania. Ms. Davidson has served as the co-state coordinator for Pennsylvania and is now on the National Executive Board of the American Council on Education's National Identification Program for Women in Higher Education Administration. This was only the second time the award has been given; the first time it went to the woman for whom it is named, president of Beaver College and "the moving force in launching the ACE/NIP program in Pennsylvania."

Dr. George S. Day, Geoffrey T. Boisi Professor of Marketing, has been named the 50th recipient of the American Marketing Association's Charles Coolidge Parlin Award. The award, established in 1945, honors outstanding educators, researchers, entrepreneurs and corporate leaders in the field of marketing. It is named for Charles Coolidge Parlin, regarded by business historians as "the father of marketing research."

Dr. Marshall L. Fisher, professor of operations and information management and co-director of Manufacturing & Logistics Center, has been inducted into the National Academy of Engineering this fall.

Gloria Gay, associate director, Penn Women's Center, was chosen as the National Family Sexuality Education Month Honoree by Planned Parenthood Southern Pennsylvania. She was honored at their Annual Celebration in October.

Dr. Nicholas K. Gonatas, Dr. Ralph and Sallie Weaver Professor of Research Medicine, vice chairman for academic affairs for Pathology and Laboratory Medicine, and director of Neuropathology, has won the 1994 Rous-Whipple Award from the American Society for Investigative Pathology. This award, named after Nobel laureates Payton Rous and George Whipple, has been given since 1976 to those over 50 years of age "for distinguished careers in research and ongoing contributions to the field of pathology."

Dr. Bal K. Goyal, associate professor of restorative dentistry, was recently honored with the Dental School's Alumni Award of Merit for 1994. Dr. Goyal graduated from Penn's Dental School in 1981 and has been on the faculty since 1975.

The Honorable A. Leon Higginbotham, Jr., Trustee Emeritus, received the first Spirit of Raoul Wallenberg Humanitarian Award on November 12 at the American Swedish Historical Museum. The \$5,000 award honors a person "who has alleviated human suffering or injustice," and is given jointly by the Museum and the Elizabeth Ellis Foundation Trust.

Dr. Madeleine M. Joullie, professor of chemistry, received the 1994 Henry Hill Award from the American Chemical Society Division



Dean Lang and the Royal Medallion

of Professional Relations at its national meeting this summer, in Washington, DC. The award honors those who, have "demonstrated outstanding dedication to promoting fair treatment and the well-being of chemists."

Dean Norma Lang, of the Nursing School, was elected an honorary fellow of the Royal College of Nursing of the United Kingdom. The award, which recognized Dr. Lang's "outstanding contributions to the advancement of the science and art of nursing" was conferred in London in October. She was specifically honored "for her work in the field of quality assurance in nursing through the development of standards and measurements to evaluate nursing care." Dr. Lang was also named to the YWCA's Academy of Women Achievers, at a luncheon late last year. The YWCA of the City of New York created the Academy in 1976, to recognize exceptional contributions and accomplishments of women-power in the workforce. Under her leadership, the School of Nursing's graduate programs were ranked first in the country in a March 1993, survey by *U.S. News and World Report*.

Dr. Noam Lior, professor of mechanical engineering, has become the first non-Japanese researcher to receive the prestigious Japan Heat Transfer Society Science Prize for 1994. Dr. Lior shared the prize with Dr. Miyatake and Mr. Hsi-moto of the Chemical Engineering Department at Kyushu University. They collaborated on research involving thermodynamics, fluid-mechanics and heat transfer in flash evaporation. Flash evaporation is a process used widely in water desalination and other distillation processes, and its understanding is important in many diverse fields, including nuclear reactor safety and thin film deposition in the electronic industry. Dr. Lior

Rapaport Award: Dr. Ghandhi

Dr. Jamshed K.S. Ghandhi, associate professor of finance, is the first recipient of the Marc and Sheri Rapaport Undergraduate Core Teaching Award, an annual award for teaching excellence in core courses in the School's Undergraduate Division.

Dr. Ghandhi, an expert in capital markets, banking and the financial aspects of economic development, has taught finance at Wharton since 1965. A recurring winner of Wharton's Silver Anvil and other teaching awards, Dr. Ghandhi was cited especially for his teaching in Finance 101, where his section is one of the most popular introductory courses in the school.

The award, Wharton's first to recognize "quality teaching of required coursework at the undergraduate level," was established with a gift of \$25,000 from Marc H. Rapaport, Wh '79, and his wife. For each of the next five years, the Award will recognize the outstanding classroom work of a single faculty member who teaches one of nine undergraduate core courses in key disciplines such as finance, marketing and management. Each recipient will receive a cash prize at the end of the academic year and will be selected based on Wharton's undergraduate teaching evaluation process.

"Core courses are an integral part of the undergraduate learning experience, and we wanted to create an incentive for teaching excellence," said Mr. Rapaport. "How teachers engage and motivate students during their first year of Wharton courses often sets the tone for the entire undergraduate experience."

The School also gives the two Hauck prizes which total \$30,000 for distinguished teaching. (A photograph of Dr. Ghandhi is on page 1.)

Founding the Johnson Prize

Penn's world-famous Johnson Research Foundation has created a new award for scientists, with the emphasis on imagination.

The Johnson Foundation Prize in Structural Biology, recognizes scientists who have conducted "adventurous and innovative research in structure that is combined with fundamental mechanisms in biology," Dr. P. Leslie Dutton, director of the Johnson Foundation and professor and chairman of biochemistry and biophysics said. "These qualities express the tradition that the Johnson Foundation has upheld since it was established in 1929."

The first two winners came to campus this fall to receive their awards of \$2500 (along with bronze statuettes of Benjamin Franklin) and to spend two days meeting with graduate students and faculty in biochemistry and biophysics:

Dr. John Walker of the University Medical School in Cambridge, England, chosen for his work on the structure and mechanism of action of ATP-synthase, an enzyme that is responsible for producing most of the high-energy compounds that drive the body; and

Dr. Douglas C. Rees of the California Institute of Technology, recognized for his work with nitrogenase, an enzyme that catalyzes the production of ammonia in plants and bacterial and thus is also essential to energy production.

"They're getting this prize for the imaginative way they have interpreted the structures to suggest functional mechanisms," Dr. Dutton said. "It doesn't matter if they are entirely correct. The importance of this work is that it sets the imagination on fire."

"This is the fuel that excites deeper investigations into the secrets not only of biological function, but also of dysfunction and disease...[and] opens the door to remediation."

Penn as Centre d'Excellence

In a ceremony November 29, M. Jacques Andréani, France's Ambassador to the United States, and Provost Stanley Chodorow signed an agreement that formally established Penn as a *Centre d'Excellence* in French Studies.

The French government has created six such Centers of Excellence in the United States, which will emphasize interdisciplinary courses and research in French culture, politics, and science. By establishing these centers, France hopes to improve communications and understanding between the two countries.

The other centers are at Harvard, Princeton, Johns Hopkins, the University of California at Berkeley, and the University of Chicago.

These universities will share approximately \$400,000 a year for the next three years and will have wide discretion in using the money.

The French Institute for Culture and Technology of the University of Pennsylvania was founded in the spring of 1992. Its purpose is to strengthen and enhance relations among the University, the region, and France and French-speaking countries. Dr. Barry S. Cooperman, vice provost for research, is director of the Institute.

The Institute promotes new interdisciplinary trends in French studies, cooperative research, and teaching among interested research groups and departments, the exchange of teachers and students between Penn and France and French culture in general. The Institute also fosters the exchange of ideas between researchers and teachers at Penn and in France, and encourages projects that benefit students and researchers.

HONORS & . . . Other

(continued from page 5)

was also appointed to the Editorial Board of the journal *Energy Conversion and Management*.

Dr. Joan Lynaugh, professor and director of the Center for the Study of Nursing History, is the first recipient of the new Agnes Dillon Randolph Award, named for an educator, public health executive administrator and political leader. It was presented by the Center for Nursing Historical Inquiry at the University of Virginia.

Dr. Ruth McCorkle, professor of oncology and director of the Center for Serious Illness, received the Distinguished Merit Award of the International Society of Nurses in Cancer Care at the Society's 8th International Conference held in August in Vancouver, Canada. This award, given once every two years in recognition of an outstanding contribution to the advancement of the science and art or cancer nursing internationally, acknowledged Dr. McCorkle as a "distinguished nurse scholar, educator and researcher" and cited her "high level of research productivity and commitment as a contributory resource, role model and mentor in cancer nursing."

Dr. Sandra Norman, senior research investigator at the Center for Clinical Epidemiology and Biostatistics at the Medical Center, is winner of a special award for "her work in the fight against cancer in Pennsylvania." This award, sponsored by NCI's Data-Based Intervention Research Program, commended Dr. Norman for her "contributions to program evaluation and data analysis of the state DBIR project."

President Judith Rodin, received the American Association of University Women's fourth annual Achievement Award in September. She was recently named to serve on President Clinton's new Committee of Advisers on Science. She is a renowned expert in research on obesity and aging and on the relationship between psychological and biological processes in health and behavior.

Dr. Albert J. Stunkard, emeritus professor of psychiatry, has received the American Psychiatric Association's Distinguished Service Award at the Association's annual meeting in Philadelphia during the summer. He has also been honored with the Distinguished Scientist Award by the Society of Behavioral Medicine in recognition of Dr. Stunkard's "distinguished career, and for his contribution to the advancement of behavioral medicine."

Dr. Marvin E. Wolfgang, professor of criminology and law, and director of the Sellin Center for Studies in Criminology and Criminal Law, was identified as the "most influential criminologist in the English-speaking world" in a paper that appeared in the spring 1994 issue of the *British Journal of Criminology*.

Three Fulbright Awards

Three of the 800 Fulbright Awards for 1994-95 recently awarded to U.S. scholars went to members of Penn's faculty and staff: Dr. Renee C. Fox, professor of sociology, who will concentrate on Australia; Dr. Arthur B. Harris, professor of physics, who will focus on Israel; and Phyllis H. Lewis, director of the Office of Human Resources, who won an award in the Administrators Program.

Teaching Awards

Dr. Kevin R. Fox, associate professor of medicine, has been honored as the first recipient of the John H. Glick, MD, Prize for Teaching Excellence in Oncology at the University's Cancer Center. The award is funded by the Mayer and Arlene Mitchell Trust, established by Penn alumni Mayer Mitchell, a Mobile, Alabama, realtor and builder, and his wife, Arlene. Dr. Fox, awarded the Ann B. Young Assistant Professorship in Cancer Research in 1989, was cited by Dr. John H. Glick, director of the Cancer Center for "exemplary standards for research, teaching and patient care."

Suzanne Brennan, a lecturer in the School of Nursing, has been named recipient of the School's 1994 Teaching Assistant Award. Ms. Brennan is a psychiatric clinical nurse specialist at HUP where she also is nursing service chief of the brain injury and behavior team.

Professor Ann Strong, professor emeritus of City & Regional Planning, received the Association of Collegiate Schools of Planning Distinguished Planning Educator award for 1993.

Posthumous Honor to Dr. Taylor

The late George W. Taylor, "The Father of American Arbitration," has been chosen for inclusion in the Labor Hall of Fame at the U.S. Department of Labor. A ceremony formally inducting him posthumously is scheduled for January 5 to coincide with the annual meeting of the Industrial Relations Research Association.

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Two More National Young Investigators

Dr. Tandy Warnow, assistant professor of computer and information science and Dr. Karen Winey, assistant professor of materials science and engineering, have both been named NSF National Young Investigators this past spring.

Dr. Winey, named for her work in polymers, is co-director of a new Undergraduate Laboratory for Polymer Science and Engineering which won an NSF award. This lab, co-directed by Dr. Russell Composto, assistant professor of materials science and engineering, will incorporate molecular modeling capabilities giving undergrads access to state-of-the-art equipment for polymers synthesis and analysis.

Dr. Warnow was named for her work in Computational Problems in Evolutionary Tree Construction. She is on the Steering Committee for the Special Year in Computational Support for Molecular Biology at the NSF Science and Technology Center for Discrete Mathematics and Theoretical Computer Science (DIMACS).

(See photographs of Dr. Warnow and Dr. Winey, page 1.)

er Things



Dr. Taylor to the Hall of Fame

Dr. Taylor, who died in 1971, spent most of his life as a professor in the Wharton School. He was also vice chairman and chairman of the War Labor Board during World War II. Dr. Taylor is the 18th person to be selected for the Hall of Fame which honors "men and women who have made major contributions to the improvement of the lives of American workers." Dr. Taylor served under five presidents and is credited with settling more than 2,000 labor-management disputes during his long career.

Elections and Appointments

Dr. Peter B. Bloom, clinical professor of psychiatry, began a three-year term this fall as president of the International Society of Hypnosis. Dr. Bloom is senior attending psychiatrist at the Institute of Pennsylvania Hospital.

Dr. Ann Burgess, chairperson and van Ameringen Professor of Psychiatric and Mental Health Nursing, has been elected to the Institute of Medicine of the National Academy of Science. As an expert on victimology, she serves as a consultant to the FBI and is frequently called upon to help investigate crimes, including those occurring in the workplace.

Dr. Edward S. Cooper, professor of medicine, received the title of "Master" from the American College of Physicians "for being a role model to minority medical students and internists in training, and for his contributions to the understanding of stroke and hypertension. He is a superb physician and teacher, and a distinguished leader in academic medicine." Among his many accomplishments cited by the ACP, Dr. Cooper is the first African American physician to hold a tenured professorship in Penn's Medical School. In 1992 he became the first African American president of the American Heart Association.

Dr. Kenneth R. Laker, professor of electrical engineering, has been elected 1994 vice president of Educational Activities by the Assembly of The Institute of Electrical and Electronics Engineers, Inc. (IEEE). The IEEE is the world's largest technical professional society, with approximately 320,000 members in 150 countries.

Terri Richmond, a Ph.D. candidate at the School of Nursing, has been elected to the American Academy of Nursing. A nurse in the

neurosensory Intensive Care Unit at Thomas Jefferson University Hospital, she was instrumental in the development and implementation of Penn's Tertiary Nurse Practitioner Program.

Dr. Jerome F. Strauss, III, and *Dr. David E. Longnecker*, have been elected to the Institute of Medicine of the National Academy of Sciences for "their professional achievement and demonstrated concern for critical public health issues." Dr. Strauss is the Luigi Mastroianni, Jr. Professor of Obstetrics and Gynecology and director of the Center for Research on Women's Health and Reproduction. He has made major contributions to the mechanism of rupture of fetal membranes and the clinical problem of premature membrane rupture. Dr. Longnecker is the Robert Dunning Dripps Professor and chair of Anesthesia. He

has made major research contributions to the understanding of blood flow and oxygen delivery to tissues during shock, trauma and surgery.

Dr. Arnold Thackray, Joseph Priestly Professor of History & Sociology of Science, has been re-elected as the treasurer of the American Council of Learned Societies, the federally-chartered private agency for the advancement of humanistic studies.

Dr. Wayne L. Worrell, professor of materials science and engineering, has been elected a Fellow of the Electrochemical Society for "his many outstanding contributions in understanding the chemical, electrical and electrochemical behavior of high temperature materials." He was honored at the Society's 186th International Meeting in Miami Beach in October.

A New NIH Grant to Penn Provides Three Years' Funding

Minority International Research Training Program

As part of a continuing effort to increase the number of African-Americans, Latino Americans, Native Americans and Pacific Islanders selecting careers in biomedical and behavioral science research, the National Institutes of Health of the U.S. has initiated a program to support international training experience in biomedical and behavioral research for undergraduates, graduate students and faculty who are members of these underrepresented groups. N.I.H. has stated as its goals: "encouraging students to pursue careers in biomedical research by broadening their undergraduate and graduate education through international experiences; promoting qualities of leadership by expanding cultural perspectives and to help prepare the next generation of scientific leaders to work effectively in a global environment; and establishing linkages between U.S. scientists and institutions and established centers of biomedical and behavioral research abroad."

Past experience with pilot programs of this sort has demonstrated an additional and very compelling result of a period spent by a young American of minority background in a laboratory outside of the United States. In the experience of one senior American scholar who has overseen the international experience of a substantial number of undergraduates, "it has the potential to change the lives of minority students profoundly. ...students removed from the social and political context of the United States have been able to revise their views of themselves and to reach beyond other people's perceptions of their abilities."

The biological and biomedical community at the University of Pennsylvania has organized a collaboration with Lincoln University and Howard University to make best use of this opportunity offered by N.I.H. Well-qualified, advanced undergraduate and graduate students working in the biomedical and behavioral sciences areas will be selected from the interested minority students at the collaborating institutions to participate in this program. The basis for selection will include academic record, recommendations, personal interview and previous experience as a researcher working on a research project. It is important that the students not only have the appropriate background and demonstrated academic ability but also the motivation, maturity and personality to take good advantage of this opportunity.

Our goal is to place these selected undergraduates and graduate students in excellent laboratories outside the United States where they will receive the necessary guidance and non-financial support to permit them to make significant contributions to the on-going research in the laboratory. Past experience has shown that with proper selection of the student and the laboratory, these goals can be met. The cost of the program will be borne by a grant from the N.I.H. to the University of Pennsylvania. Included are transportation and living allowance for the student and \$500 per month to the host laboratory to help defray expenses. We feel that not only is this a chance for young Americans from minority backgrounds to expand their vistas, but it is an opportunity for scientists outside the United States to get to know an important part of the U.S. community that has had little exposure abroad but will become a progressively more important component of the American and the international biomedical and behavioral science communities over the next couple of decades.

The application to the National Institute of Health (N.I.H.) for funds to support a Minority International Research Training Program at Penn in collaboration with Lincoln University and Howard University has been funded for 3 years. Resources are available to support approximately nine undergraduate, 9 graduate and 1.5 faculty minorities each year to work in specifically designated biomedical and behavioral science laboratories in the U.K., France, Belgium, Israel, Japan, Botswana and Nigeria for 3-12 months. In general undergraduates would go for 3 months and graduates for 6-12 months. Lincoln University is a full-fledged collaborator and two of their senior faculty have been designated to serve on the Advisory Committee that will assist in running the program.

This new training program not only provides an opportunity to entice young minorities into biomedical and behavioral science research; it is also a fine example of how the University is committed to increasing minorities in biomedical and behavioral research and to developing a close collaboration with local historically black colleges.

— *Saul Winegrad, Professor of Physiology*

For 1994 Emergency Closing

Under normal circumstances, the University never stops operating. The University recognizes that there are times, due to emergencies such as severe weather conditions, when classes may be canceled and/or schools/centers may be closed, except for those that provide essential services. In an effort to insure the safety of faculty, staff and students, timely decisions to modify work schedules will be made. There may be circumstances when classes are canceled, but schools/centers remain open, or vice versa.

Modifications of work schedules may take the form of either a partial or a full closing of the University's operations. In either situation, staffs who are designated as "essential" are expected to remain at work if the closing occurs during their regular work schedule, or to report to work if the closing announcement is made before their regular work schedule begins.

Communicating Modifications of Work Schedules

The University will announce a closing or other modification of work schedules through the following means:

- the University's special information number: 898-MELT(6358);
- through communications from the Division of Public Safety;
- KYW News Radio (1060 AM), the City of Philadelphia's official storm emergency center; the University's emergency radio identification code numbers are "102" for day classes and schools/centers and "2102" for evening classes. The message that accompanies the code number will provide the operating status of the University.

Please note that radio and television stations other than KYW are not to be considered "official" sources of information.

Types of Work Schedule Modifications

Please note that decisions affecting work schedules and cancellation of classes are made by the Executive Vice President in consultation with the Provost. These decisions will be communicated through the channels listed above. Schools/centers may not deviate from the University decision without the prior approval of the Executive Vice President in consultation with the Provost.

Full Closing

A full closing occurs when conditions warrant cancellation of classes and closing of schools/centers, except those providing essential services.

Partial Closing

A partial closing occurs when circumstances warrant the cancellation of classes while schools/centers remain open, or vice versa.

Delayed Opening

Occasionally, circumstances will warrant a delay in the opening time of schools/centers.

Close Before the End of the Normal Work Day

When there is a closing of schools/centers before the end of the work day, appropriate individuals will be contacted by the Division of Public Safety so that they may release staff members in their respective areas. Additionally, the Division of Human Resources will contact members of the Human Resource Council. Individual schools/centers should remain in operation until such an announcement is received.

Recording Absence Due to Emergency Closing

The following practices should be followed by supervisors to record time lost when a staff member is absent due to emergency conditions:

1. If the University is closed after the start of the workday, staff members who reported to work are compensated and the time lost during the period of closing is considered time worked. The time off for staff members who did not report to work should be recorded as vacation or personal leave. If neither is available, the time lost should be considered leave without pay.
2. If the University is closed before the start of the scheduled work day, staff members are compensated for the entire scheduled work day and the time lost is considered administrative leave with pay. The time off should not be charged to vacation or personal leave.
3. If the University is not closed, staff members who do not report to work will be charged personal or vacation leave, provided the absence is approved by the supervisor. If the staff member does not have personal or vacation leave available, the staff member will not be compensated for that day. Sick leave may not be charged unless the staff member was out on sick leave before the emergency conditions arose.
4. If the University is not closed, and the staff member requests permission to be released before the end of his/her scheduled work day, the time lost should be charged to personal or vacation leave. If the staff member does not have any leave time available, the hours not worked should be considered leave without pay. If a closing announcement is made after the staff member's request to leave early was approved, the lost time should be recorded as time worked from the time of the announced closing.
5. If the University is not closed and a staff member arrives late due to emergency conditions affecting transportation, the supervisor may excuse the lateness and consider it as time worked. Late arrival beyond reason should be charged to personal or vacation leave.

Staff members designated as "essential," who work when the University is closed, will be paid at their regular rate of pay and will receive compensatory time equal to the time worked after the closing. Overtime compensation should be computed as normal.

Unionized Staff Members

Staff members in collective bargaining units are governed by the terms and conditions of their respective collective bargaining agreements.

—Office of Human Resources

Relative Investment Performance On Tax-Deferred Annuities

The Benefits Office regularly receives inquiries on the relative performance of investment funds offered under the University's tax deferred annuity program. Below is a table which shows the performance of the various funds for the period ending 09/30/94. The first column shows an abbreviation for the investment philosophy of the fund. (*Abbreviations are described below the performance table*). The second column shows the overall asset size of the fund in millions of dollars. Columns three through seven show the performance of the funds over various time horizons. Columns eight and nine show the best and worst year for the last five years.

The Benefits Office will periodically publish this information in *Almanac* to assist faculty and staff in monitoring the performance of their tax deferred annuity investments. Any faculty or staff member who would like additional information on these benefit programs may call the Benefits Office at 8-7281.

—Dennis F. Mahoney, Manager of Benefits

PHILOSOPHY KEY

Domestic:

D	Diversified Common Stock Fund
DI	Diversified Common Stock Fund With Somewhat Higher Income
SC	Specialty Fund With Small Company Common Stock Orientation
B	Balanced Fund
FIS	Fixed Income Fund (Short-Term Maturity)
FIL	Fixed Income Fund (Long-Term Maturity)
FISG	Fixed Income Fund (Short-Term Maturity—Government Obligations)
FIIG	Fixed Income Fund (Intermediate-Term Maturity—Government Obligations)
FILG	Fixed Income Fund (Long-Term Maturity—Government Obligations)
FIM	Fixed Income Fund (Mortgage-Related Securities)
FIJ	Fixed Income Fund (Low-Rated Bonds)
MM	Money Market Fund
AA 30:40:30	Asset Allocation 30% Stocks: 40% Bonds: 30% Cash Benchmark Fund
AA 60:35:5	Asset Allocation 60% Stocks: 35% Bonds: 5% Cash Benchmark Fund

International:

ICS International Common Stock Fund

Global:

GCS Global Common Stock Fund

Source: Lipper Analytical Services; Fund Family.

Notes:

- * Total Return: Dividend or interest plus capital appreciation or depreciation
- (1) CREF Equity Index Account was introduced on April 29, 1994.
- (2) CREF Growth Account was introduced on April 29, 1994.
- (3) Vanguard Balanced Index fund was introduced on November 2, 1992
- (4) Formerly Vanguard Bond Market Fund
- (5) Formerly Vanguard Investment Grade Corporate Portfolio
- (6) Vanguard Index Trust Growth Portfolio was introduced on November 2, 1992
- (7) Vanguard Index Trust Value Portfolio was introduced on November 2, 1992
- (8) Vanguard International Equity Index European Portfolio was introduced on June 18, 1990
- (9) Vanguard International Equity Index Pacific Portfolio was introduced on June 18, 1990
- (10) CREF Equity Index Account was introduced on April 29, 1994
- (11) CREF Growth account was introduced on April 29, 1994
- (12) Formerly Vanguard World: International Growth Portfolio
- (13) Formerly Trustees' Commingled Fund
- (14) Formerly Vanguard World: US Growth Portfolio
- (15) CREF Equity Index Account was introduced on April 29, 1994
- (16) CREF Growth account was introduced on April 29, 1994

403(b) Performance Update Periods Ending September 30, 1994, Total Returns*

403(b) Performance Update Periods Ending September 30, 1994, Total Returns*								Best & Worst Year For the last Five Years	
	Philosophy	Size \$mm	Latest Quarter	1-Year Avg. Annual	3-Year Avg. Annual	5-Year Avg.	10-Year Avg.		
Calvert Funds:									
Social Responsibility Fund									
Social Investment Bond Portfolio	FII	62	-0.2	-5.2	6.0	7.9	NA	15.9	-5.2
Social Investment Equity Portfolio	D	93	0.7	-4.3	3.5	3.8	NA	21.9	-10.8
Social Investment Managed Growth	B	512	2.1	-2.9	5.7	6.2	11.1	17.5	-2.9
Social Investment Money Market	MM	144	1.0	3.1	3.2	4.7	6.0	7.8	2.6
CREF Bond Market	FII	580	0.5	-4.4	6.5	NA	NA	NA	NA
CREF Equity Index Account (1)	D	73	5.3	NA	NA	NA	NA	NA	NA
CREF Global Equities	GCS	2,638	4.3	14.1	NA	NA	NA	NA	NA
CREF Growth Account (2)	D	190	7.0	NA	NA	NA	NA	NA	NA
CREF Money Market	MM	2,847	1.2	3.7	3.7	5.3	NA	8.5	3.1
CREF Social Choice	D	776	2.6	-1.4	8.7	NA	NA	NA	NA
CREF Stock Account	D	55,619	4.6	5.2	9.7	8.9	14.6	31.7	-11.9
Vanguard Funds:									
Asset Allocation Fund	AA60:35:5	1,125	2.5	-2.1	8.2	9.0	NA	27.3	-4.6
Balanced Index Fund (3)	B	400	3.4	-0.2	NA	NA	NA	NA	NA
Bond Market Fund (4)	FII	1,768	-0.5	-3.4	6.0	8.1	NA	15.7	-3.4
Convertible Securities Fund	DI	186	4.3	0.5	11.8	9.5	NA	33.4	-15.5
Equity Income Fund	DI	902	4.4	-2.2	9.4	6.7	NA	26.5	-16.2
Explorer Fund	SC	1,093	9.3	6.0	14.0	12.0	9.3	54.2	-22.8
Fixed Income Securities:									
GNMA Portfolio	FIM	6,003	0.9	-1.0	5.4	8.3	10.3	16.7	-1.0
High-Yield Corporate Portfolio	FIJ	2,185	1.8	1.2	11.5	9.4	11.0	24.8	-9.3
Intermediate-Term U.S. Treasury	FIIG	837	0.2	-4.9	NA	NA	NA	NA	NA
Long Term Corporate Portfolio (5)	FIL	2,607	-0.2	-7.1	7.9	9.3	11.0	20.6	-7.1
Long-Term U.S. Treasury Portfolio	FILG	630	-0.8	-10.1	6.7	8.3	NA	20.6	-10.1
Short-Term Corporate Portfolio	FIS	3,234	0.9	0.7	6.1	7.8	9.2	12.1	0.7
Short-Term Federal Portfolio	FISG	1,609	0.7	-0.4	5.5	7.3	NA	11.6	-0.4
Short-Term U.S. Treasury Portfolio	FISG	710	0.8	0.1	NA	NA	NA	NA	NA
Index Trust									
500 Portfolio	DI	9,126	4.9	3.6	9.0	8.9	14.3	30.8	-9.4
Extended Market Portfolio	D	988	6.6	2.0	12.2	8.9	NA	39.9	-22.4
Growth Portfolio (6)	D	68	7.2	6.8	NA	NA	NA	NA	NA
Total Stock Market Portfolio	D	717	5.6	2.7	NA	NA	NA	NA	NA
Value Portfolio (7)	D	321	2.5	0.5	NA	NA	NA	NA	NA
International Equity Index Funds:									
European Portfolio (8)	ICS	697	4.0	10.6	9.1	NA	NA	NA	NA
Pacific Portfolio (9)	ICS	698	-2.8	8.6	8.9	NA	NA	NA	NA
CREF Bond Market	FII	580	0.5	-4.4	6.5	NA	NA	NA	NA
CREF Equity Index Account (10)	D	73	5.3	NA	NA	NA	NA	NA	NA
CREF Global Equities	GCS	2,638	4.3	14.1	NA	NA	NA	NA	NA
CREF Growth Account (11)	D	190	7.0	NA	NA	NA	NA	NA	NA
CREF Money Market	MM	2,847	1.2	3.7	3.7	5.3	NA	8.5	3.1
CREF Social Choice	D	776	2.6	-1.4	8.7	NA	NA	NA	NA
CREF Stock Account	D	55,619	4.6	5.2	9.7	8.9	14.6	31.7	-11.9
Vanguard Funds:									
Intern'l Growth Portfolio(12)	ICS	2,948	3.2	16.3	11.7	6.4	17.4	24.7	-13.2
Money Market Reserves:									
Federal Portfolio	MM	2,084	1.1	3.5	3.6	5.1	6.3	8.3	3.0
Prime Portfolio	MM	13,952	1.1	3.5	3.6	5.2	6.5	8.5	3.0
U.S. Treasury Portfolio	MM	2,010	1.0	3.3	3.4	4.9	6.0	8.1	2.9
Vanguard/Morgan Growth Fund	D	1,111	6.7	0.9	7.9	8.6	12.9	33.6	-9.9
Vanguard/PRIMECAP Fund	D	1,304	8.5	13.3	14.6	12.4	NA	41.5	-15.8
Quantitative Portfolios	D	613	4.5	1.2	9.7	9.5	NA	31.5	-9.4
Small Cap Stock Fund	SC	595	7.0	4.3	14.5	9.6	9.3	45.9	-27.7
STAR Fund	B	3,826	2.3	0.9	8.9	7.9	NA	26.9	-10.9
Vanguard/Trustees' Equity Fund (13):									
International Portfolio	ICS	1,151	1.3	12.2	9.4	5.2	17.1	21.6	-12.4
U.S. Portfolio	DI	123	5.0	-3.6	10.1	5.9	11.5	29.7	-21.2
US Growth Portfolio (14)	DI	1,965	4.6	5.6	5.8	10.1	12.5	40.3	-2.7
Vanguard/Wellesley Income Fund	B	5,963	-0.8	-4.9	8.5	9.4	12.6	21.8	-4.9
Vanguard/Wellington Fund	B	8,763	3.4	2.9	9.4	8.6	13.1	25.9	-8.5
Vanguard/Windsor Fund	DI	11,107	1.1	3.8	13.6	7.6	14.3	35.6	-27.4
Vanguard/Windsor II	DI	8,096	2.9	1.1	10.8	8.1	NA	32.8	-18.2
Sector Funds:									
Energy	S	463	0.0	-4.5	9.0	8.9	12.4	34.3	-4.5
Gold & Precious Metals	S	753	17.5	42.0	19.6	10.3	10.0	42.0	-9.0
Health Care	S	667	14.7	20.1	10.5	16.4	20.6	53.0	3.5
Utilities Income	S	590	1.4	-11.2	NA	NA	NA	NA	NA
CREF Bond Market	FII	580	0.5	-4.4	6.5	NA	NA	NA	NA
CREF Equity Index Account (15)	D	73	5.3	NA	NA	NA	NA	NA	NA
CREF Global Equities	GCS	2,638	4.3	14.1	NA	NA	NA	NA	NA
CREF Growth Account (16)	D	190	7.0	NA	NA	NA	NA	NA	NA
CREF Money Market	MM	2,847	1.2	3.7	3.7	5.3	NA	8.5	3.1
CREF Social Choice	D	776	2.6	-1.4	8.7	NA	NA	NA	NA
CREF Stock Account	D	55,619	4.6	5.2	9.7	8.9	14.6	31.7	-11.9
Indexes To Compare Performance Against									
S&P 500			4.9	3.7	9.2	9.1	14.5	31.2	-9.2
Lipper Capital Appreciation Funds Average			6.4	0.0	10.1	8.7	12.0	34.4	-15.5
Lipper Growth Funds Average			5.4	1.3	8.8	8.4	12.2	34.4	-13.4
Lipper Growth & Income Funds Average			4.3	2.8	9.1	8.3	12.5	28.9	-11.0
Salomon Bros Long-Term High-Grade Bond Index			0.1	-7.6	6.9	8.8	12.4	19.9	-7.6
Lehman Brothers Gov't/Corporate Bond Index			0.5	-4.1	6.6	8.4	10.6	15.9	-4.1
Morgan Stanley Capital Investment- EAFE Index			0.1	9.8	8.8	2.6	18.2	26.4	-27.6
Morgan Stanley Capital International EMF Index			20.5	41.7	31.5	23.7	NA	41.7	-3.0
91-Day Treasury Bills			1.2	3.9	3.7	5.1	6.0	8.2	3.1

As hospitality revs up for the holidays, the Purchasing Office updates its list of approved caterers.

University-Approved Caterers

Aaron The Caterer	2482 79th Ave., Philadelphia, PA 19150	Aaron Boyd	215-276-4033
Au Bon Pain Bakery/Cafe	19 Fid Kennedy Ave., Boston, MA 02210	Cust. Service Rep	1-800-765-4227
Blt's Catering	443 Shurs Lane, Philadelphia, PA 19128	Bill Shapiro	215-483-5478
Callahan Catering	93 Lancaster Ave, Paoli, PA 19301	Peter Callahan	215-296-7769
Catering By Design	3500 Cresson Stret, Philadelphia, PA 19129	Peter Loevy	215-843-9338
Catering, Inc.	16 Great Valley Parkway, Malvern, PA 19355	Lou Marrocco	215-651-0900
Catering To You	P.O. Box 237, Mendenhall, PA 19357	Jenny Armitage	215-388-2894
Capri Caterers, Inc.	1612 Mckean St., Philadelphia, PA 19145	Thomas Croce	215-467-3311
Chef's Market	231 South St., Philadelphia, PA 19147	Edward Barranco	215-925-8360
Cricket Catering, Inc.	2901 Normandy Rd., Ardmore, PA 19003	Drew Skinner	215-642-3440
Culinary Concepts	1406 S. Front St., Philadelphia, PA 19147	Mike Antolini/Jim Israel	215-755-7747
Culinary Design	2747 Limekiln Pike, Glenside, PA 19038	Glenn Pitt	215-885-4581
Day By Day Catering	2101 Sansom St., Philadelphia, PA 19103	Robin Barg	215-564-5540
Ellsworth Scott & Staff, Inc	P.O. Box 27559, Philadelphia, PA 19118	Ellsworth Scott	215-224-0480
Faculty Club	200 S. 36th Street, Philadelphia, PA 19104	Ellen Iannarella	215-898-3464
Feast Your Eyes	914-20 N. 2nd St., Philadelphia, PA 19123	Seth Schwarzman	215-923-9449
Fiesta Caterers	1947 Snyder Ave., Philadelphia, PA 19145	William Mancini	215-334-3000
Finley Catering, Inc	1003 West Chester Pike, Havertown, PA 19083	Stephen Finley	215-446-6400
Fresh On 47th Street	352 South 47th St., Philadelphia, PA 19143	Barbara Scott	215-748-2230
Garden Caterers	2148 S. Opal Street, Philadelphia, PA 19145	Michael Siciliano	215-334-0152
Gold Standard At Penn	3601 Locust Walk, Philadelphia, PA 19104	Roger Harman/Elizabeth Evans	215-387-3463
Imperial Inn Restaurant	146 N. 10th St., Philadelphia, PA 19107	Luis Sust	215-627-5588
Insatiable Delights	343 Limekiln Pike, Glenside, PA 19038	Mona Tilman	215-884-7095
Jack Francis Catering	300 Maple St., Conshohocken, PA 19428	Patty Francis	215-825-0776
Jack Kramer's Catering	4215-17 Chestnut Street, Philadelphia, PA 19104	Jack Kramer	215-662-5300
John Rothchilds Catering	P.O. Box 795, Ardmore, PA 19003	John Rothschild	215-649-7633
Jeffrey Miller Catering	20 S. Union Ave., Lansdowne, PA 19050	Jeffrey Miller	215-622-3700
Jimmy Duffy & Sons, Inc.	1456 Lancaster Ave., Berwyn, PA 19312	Paul Duffy	215-647-0160
Joe's Peking Duck House	925 Race St., Philadelphia, PA 19107	Patrick Lee	215-922-3277
Mamere Catering	6013 W. Valley Green Rd., Flourtown, PA 19031	Dorothy Yoskin	215-233-5854
Manna Caterers	1704 Hillcrest Rd., Philadelphia, PA 19118	Donna Hecker	215-836-1034
Mcfadden Catering, Inc.	20 S. White Horse Pike, Somerdale, NJ 08083	Kevin Mcfadden	215-222-4322
Memorable Affairs	1101 Little Lane, Warminster, PA 18974	Chris Auman	215-674-1047
Moveable Feast	4443 Spruce St., Philadelphia, PA 19104	Natalie Wells	215-387-0676
Museum Catering Company	33rd and Spruce St., Philadelphia, PA 19104	Bruce Nichols	215-898-4089
My Favorite Muffin & Bagel Cafe	224 S. 40th Street, Philadelphia, PA 19104	George Turbett	215-222-5599
Pace One Catering	P.O. Box 108, Thornton, PA 19373	Jim Hunte	215-459-3702
Parissa, Inc.	110 S. 16th St., Philadelphia, PA 19102	Sonya Dawkins	215-569-2844
Peach Tree & Ward	363 York Rd., Willow Grove, PA 19090	Jon Weinrott	215-657-3111
Penn Tower Hotel	34th & Civic Center Blvd., Philadelphia, PA 19104	Natalka Swavely	215-898-1546
Perfect Setting Caterers	18 Woodmere Court, Paoli, PA 19301	Deborah Diehl	215-889-2040
Robert Fair Caterers, Ltd.	918 Springdale Drive, Exton, PA 19341	Robert Fair	215-524-7111
Shackamaxon	510 N. 10th St., Philadelphia, PA 19123	Eric Von Starck	215-763-5201
Sheraton University City	36th and Chestnut St., Philadelphia, PA 19104	Mike Baldino	215-387-8000
Skolnik Bagel Bakery	Houston Hall, 3417 Spruce St., Philadelphia, PA 19104	Margie Bartlett	215-222-6555
Soula, Ltd.	623 S. 3rd. St., Philadelphia, PA 19147	Aspassia Argirou	215-923-7174
Street Corner Cuisine	P.O. Box 588, Bryn Mawr, PA 19010	Richard Hovsepian	215-525-2229
Supreme Catering Services	P.O. Box 25022, Philadelphia, PA 19147	Mary Sywkiw	215-665-0865
Tastefully Yours	P.O. Box 28332, Philadelphia, PA 19149-0332	Faye R. Miller	215-725-2176
Tuxedo Caterers	P.O. Box 714, Bala Cynwyd, PA 19004	Jewel Mann	215-848-6777
University of Penn Catering	3401 Walnut St., Suite 323a, Philadelphia, PA 19104	Sondra Siegel	215-898-9457

Please follow the guidelines listed below to determine when a purchase requisition or a C-form should be used:

A purchase requisition and a formal contract that sets terms and conditions is required for catering services under the following circumstances:

- when a deposit is required.
- when the price for services is \$2000 or more.
- when the caterer requires a signed contract for services under \$2000.

Please remember the following when completing the purchase requisition:

- an original contract from the caterer must accompany the requisition. If a deposit is required, an original invoice must also accompany the requisition. Faxes and copies are not acceptable and will be returned.
- menus and price sheets do not qualify as contracts.
- the contract cannot be signed by the department.
- purchase requisitions must be sent to the purchasing department at 3401 Walnut St., Suite 421A.

A C-6 form is required to pay caterers after the event if the amount is under \$2000. The C-6 must have an original invoice with a photocopy attached, and the business purpose of the event must be written in the description box. Please send all C-6 forms for catering services to the Travel Office at 308 Franklin Building/6284. Any questions may be addressed to Shelley Kardon at 898-1453.

—Purchasing Office

WANTED

The A-3 assembly is on the lookout for A-3 employees who fit the following description: dependable, results-oriented, team player, excellent worker, and a high achiever. These qualities must not go unnoticed!

This person must be found! If you know of someone who fits the above description, please turn him/her in to the A-3 Assembly



Employee Recognition Committee by submitting the form and information requested below.

The form and necessary information must be returned to Betty Thomas, A-3 Employee Recognition Committee Chair, 212 Franklin Building/6270 by December 21.

If you have any questions or concerns, call Betty at Ext. 8-7233.

Nominee's Name _____ Nominee's Position _____

Nominee's Campus Address _____ Ext. _____

Your name _____ Your Position _____

Your Campus Address _____ Ext. _____

Do you supervise the nominee? YES _____ NO _____

On an attached piece of paper, please provide specific examples of the nominee's actions, attitudes and abilities that you feel qualify this person for this award. For example:

1. How does the nominee show dedication to his or her position in his or her department?
2. How does the nominee demonstrate team work skills?
3. How does the nominee demonstrate a high level of communication skills?
4. How does the nominee show dedication at work or in his or her personal life?
5. How does the nominee contribute to helping others outside work?
6. Please write one to two paragraphs stating why you feel this individual should be honored by the A-3 Assembly Employee Recognition Committee.

About the Crime Report: Below are all Crimes Against Persons and Society listed in the campus report for the period **November 21 through December 4, 1994**. Also reported were Crimes Against Property, including 78 thefts (including 6 burglaries, 2 of auto, 17 from auto, 9 of bikes & parts); 16 incidents of criminal mischief & vandalism; 2 of fraud & forgery. Full reports are in *Almanac* on PennInfo. —Ed.

The University of Pennsylvania Police Department Community Crime Report

This summary is prepared by the Division of Public Safety and includes all criminal incidents reported and made known to the University Police Department between the dates of **November 21 through December 4, 1994**. 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: Aggravated assaults—1, Threats & harassment—2

11/22/94	11:40 AM	Steinberg/Dietrich	Harassing phone calls received
11/22/94	6:53 PM	Quad Office	Harassing phone calls received
12/04/94	6:00 AM	3700 Blk. Chestnut	Actor assaulted UPPD officers

38th to 41st/Market to Baltimore: Robberies (& attempts)—5, Threats & harassment—1

11/22/94	1:30 AM	Hamilton Court	Harassing phone calls received
11/22/94	9:30 PM	200 S. 40th St.	Robbery of cash at gunpoint
11/23/94	2:33 AM	4000 Blk. Walnut	Robbery at gunpoint
11/25/94	7:12 PM	3900 Blk. Sansom	Robbery by 2 males
11/25/94	7:30 PM	4000 Blk. Spruce	Robbery by 4 males
11/29/94	10:29 PM	4000 Blk. Walnut	Attempted robbery by group of males

41st to 43rd/Market to Baltimore: Purse snatches—1

11/24/94	12:48 PM	42nd & Locust	Pocketbook taken by force
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30th to 34th/Market to University: Threats & harassment—1

12/03/94	1:04 PM	Museum	Harassing phone calls received
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Outside 30th to 43rd/Market to Baltimore: Robberies (& attempts)—3,

Purse snatches—1, Threats & harassment—1

11/24/94	12:10 AM	200 Buckingham Pl.	Juveniles took pocketbook
11/26/94	4:56 PM	4401 Spruce St.	Purse taken
11/29/94	5:37 PM	500 Blk. 42nd St.	Male w/gun took wallet & contents
11/29/94	8:11 PM	4400 Spruce	Harassing calls received
12/03/94	5:31 PM	41st & Chester	Male w/gun took wallet & contents

Crimes Against Society

38th to 41st/Market to Baltimore: Disorderly conduct—1

11/29/94	6:51 PM	3935 Walnut St.	Male acted disorderly
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Update

DECEMBER AT PENN

CONFERENCES

9 *The Albert R. Taxin Brain Tumor Symposium*; welcoming remarks, Giovanni Rovera, director, Wistar; 11 a.m.-6 p.m.; Auditorium, Wistar Institute; to register call: 898-3987 (Wistar).

ON STAGE

7 William Shakespeare's *Midsummer Night's Dream*; Marigold Theatre presentation directed by Henry Gleitman; through December 20; all showings, 8 p.m.; tickets on Locust Walk and in Annenberg box office (Ivy Wong, 417-6805).

9 A. R. Gurney's *Love Letters*; directed by Barb Elia; also December 10; St. Mary's Church; both showings, 8 p.m.; tickets available at the door: \$5 general admission, \$3 students and seniors (Helen Faith, 387-8360).

SPECIAL EVENTS

13 Medical book sale; \$6-32 price range; 11 a.m.-5 p.m.; Harrison Room, Penn Tower; for info call 387-8333; also held on December 14.

TALKS

7 *Representing Women in American Politics*; Beth Reingold, Emory; 4:30 p.m.; Anspach Lounge, Stiteler Hall (political science).

8 *Ethics as a Pillar for Health Care Reform*; Arthur Caplan, Center for Bioethics; LDI Health Policy Seminar; postponed until spring.

Deadline: January 17 is the deadline for February at Penn.

Free Cocaine Treatment

Free, confidential help is available at the Penn Medical Center. The *Alternatives in Cocaine Treatment Program* is an individualized, comprehensive outpatient program for adults with cocaine problems who have used the drug within the last month. Open weekdays from 9 a.m. until 7 p.m., the program is located at 3600 Market Street and 3900 Chestnut Street. For more information or to arrange an appointment, call 662-2845 or 243-9959.

Correction: On page S-1 of the supplement in *Almanac* November 15, Dr. Samuel Z. Klausner was incorrectly listed as emeritus. He is a full-time member of the standing faculty. We regret the error. —Ed.



Almanac

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Undergraduate Research Experience

by Robert Rescorla

How did James Joyce's historical and literary context affect the style of his writing? What is the role of second messenger systems in storing human memories? How have the different patterns of immigration affected assimilation of groups into American society? Questions of this sort deeply engage Penn's faculty. We spend enormous amounts of time and energy formulating, analyzing, and drawing conclusions about such questions. And we derive considerable intellectual stimulation and pleasure from the effort. An ideal undergraduate program would systematically engage our students in such activities, exposing them to the excitement of the enterprise and showing them this aspect of our own lives.

There are many educational reasons to embed undergraduate education in the context of a research university. But surely one of the strongest is the opportunity that a University setting can provide for undergraduates themselves to participate in research. For many students such opportunities can be the most rewarding experiences of their undergraduate careers.

The goal of giving undergraduate students research experience is not to press them into being premature graduate students. Rather, to my mind, there are three goals that are well served by this kind of experience. First, it helps students better appreciate the nature of knowledge. It is in the attempt to add to our knowledge that one really comes to understand what it is to know something. One must confront the methodological and conceptual issues surrounding the nature of knowledge in a given discipline. This cannot help but give one new respect for knowledge as well as a healthy skepticism for its origins and permanence. Second, working through the steps of doing research in any field helps sharpen analytic and communication skills. Such skills will generalize to new domains and enable our students to reason well about the new problems they will face in the future. Third, there is an excitement about doing research which is difficult to match. It is a heady experience to be the first to know something, whether it is a fact about the physical world, a new understanding of a piece of art or literature, or a novel appreciation of a social interaction. It is the kind of experience that motivates our faculty; and it is the kind of experience that will excite our undergraduates, helping to instill a love of learning.

Of course, research means different things in different disciplines. So what goals can we set for the research experiences that we offer our students? One formulation is that we should try to give our students the experience of creating the same sort of product as they are asked to read and learn about in their courses, the sort of product that their professors generate in their own research. A typical result of a students' researches would be a substantial written document that advances a thesis and conducts an analysis of that thesis by one or more of the methodologies accepted in the discipline. In some disciplines the appropriate methodology would involve empirical techniques, in others theoretical work, perhaps of a quantitative sort, whereas in others it would involve bringing to bear the writings of previous thinkers in the field. But we can ask students to engage in the kind of activity that we as faculty members spend our own time doing. This will give students an enriching experience. But of equal importance, it will create a better understanding of what the faculty do and why they do it.

But to what degree is such a goal really achievable at a university like Penn? What means do we have for involving undergraduates in research? Of course, the most familiar model is that of the independent study course, in which students work in a one-on-one manner with faculty mentors. Penn already provides abundant opportunities for independent study. Approximately one-fourth of students in the College avail themselves of those opportunities, under the guidance of faculty in the College and in several of the other schools of the University. (Indeed, the topics listed at the beginning of this essay include undergraduate independent study projects funded by the College Alumni Society.) Clearly, one of Penn's distinctive features is the flexibility that it provides for undergraduates to

do research with faculty in graduate and professional schools. A related, but educationally less well-articulated, opportunity is often provided by work study programs. Many College students get their first entry into research through their work study positions. We certainly need to encourage students to take advantage of these opportunities.

But it is clear that engaging all undergraduates in research through the means of independent study courses would overtax our already-stretched faculty resources. Moreover, in some disciplines students may need more educational background than can reasonably be given at the undergraduate level to prepare them for this sort of work. So we must look for other models by which we can give research experience. Certainly what is successful will vary by discipline, but one model that seems to work well in some of the social and natural sciences is a seminar-sized course in which small groups of students collaborate on research projects. For instance, in recent years the Psychology Department has created a set of "Research Experience" courses and required all of its majors to take at least one. The goal of these courses is to expose students to the full process of doing research in psychology. Students work with faculty members to formulate a research question, familiarize themselves with the relevant extant literature, design an empirical study intended to address that question, collect (or locate) the data themselves, and conduct an analysis of those data. They then work either collaboratively or individually to produce a written document describing their work in the format that would be expected of a professional publication, and they give oral presentations of their work to the peers in their class. This model can be conducted with a wide variety of different contents ranging from clinical and social psychology to behavioral neuroscience.

By working in groups of 3 or 4, students get the experience of doing front line research on questions of their own devising, but without the attendant cost in faculty time of individual research projects. Equally importantly, by working in groups, the students gain other educationally valuable experiences. For instance, they develop the skills involved in collaborative work toward a common goal. They come to view each other as intellectual resources. Perhaps most important of all, they carry intellectual questions outside of the classroom, challenging each other and learning from each other in settings not dominated by the presence of a faculty member. Exit interviews conducted by the Psychology Department suggest that their students see this sort of experience as one of the highlights of their undergraduate experience. Penn's students are not alone in holding this view. The Light Report, evaluating the assessment seminars at Harvard, asked recent graduates to characterize the intellectual experiences that were seminal for them. By far the most frequently identified experience was one in which a small group of students worked closely with a faculty member in pursuit of a common intellectual goal.

How far one can generalize such a model to other disciplines remains to be seen. Several other College departments have similar courses, but their implementation may prove difficult in some fields. Indeed, in some disciplines it may be hard for a department to provide any research experiences for its majors. Such disciplines may have to look to other departments, or to the College or University more generally, to provide research opportunities for their majors. For instance, Mathematics already sees some of its majors gaining research experience in social and natural science departments.

But clearly one of the challenges we face as we contemplate strengthening the undergraduate experience at Penn is devising new ways of bringing research experience into the curriculum. Successfully doing so can be expected not only to enrich the experience of our undergraduates but also to enliven the scholarly and research activities of our faculty. Undergraduate research experience is one of the places that we can see the synergy between the scholarly and teaching components of faculty lives, components which are all too frequently characterized as competing with each other.

This article, third in a series developed by the Lindback Society and the College of Arts and Sciences, is by the SAS Associate Dean for Undergraduate Education. Dr. Rescorla is also professor of psychology and Director of the College.