A Matter of Structure

Before scientists can design drugs to fight diseases, they need to know the surface shape and interior geometry of proteins.

A Penn team from SAS and PennMed has resolved the molecular structure of the elusive lac repressor. On the team, below, are Mitchell Lewis of Biochemistry & Biophysics/Med (rear), Helen Pace, Michele Kercher, and Ponzy Lu of SAS Chemistry.

See page 2.

On the team’s computer-generated graphics, colors identify individual monomers and deoxyoligonucleotides so that when an image’s orientation is changed—to the “overhead” view in the inset, for example—scientists can see that the upper two fragments of deoxyoligonucleotide are separated in space and do not interact in the tetramer.
A Matter of Structure

For more than 30 years, scientists have tried to learn the molecular structure of a protein identified as the lac repressor. Knowing what the protein looks like in three dimensions has long been considered an important step for future discoveries, because the lac repressor has been an extremely useful model of gene regulation. Now, a research team at the University of Pennsylvania has resolved the structure. Their findings were reported in the March 1 issue of Science, the publication of the American Association for the Advancement of Science, and a full-color, computer-generated image of the structure appears on the journal’s cover.

The research team is composed of scientists from the Department of Biochemistry and Biophysics at Penn’s Medical Center, led by Mitchell Lewis, M.A., Ph.D., and from the Department of Chemistry in the School of Arts and Sciences, led by Ponzy Lu, Ph.D. Two other researchers are from Oregon Health Sciences University.

The object of this long search is the protein responsible for regulating a cluster of genes that control the metabolism of lactose in Escherichia coli bacteria. Now that they have a clear picture of the protein’s three-dimensional structure in hand, scientists can understand precisely how the lac repressor functions at the molecular level. One possible result is that the researchers may now be able to customize similar molecular switches to turn selected genes on or off on demand. Such a technology would have significant implications for gene therapy and other molecular medicine.

“You can imagine taking the guts of this repressor and reengineering it to recognize molecules other than this particular sugar or DNA sequence,” says Dr. Lewis, who is the repressor’s lead author on the study. “You could redesign the repressor to respond to a specific drug. You would then be able to turn a gene or set of genes on or off by administering that drug. And I don’t think that’s far down the road. In fact, that’s what we’re hoping to do next.”

The research effort led by Drs. Lewis and Lu places the capstone on three decades of illustrious molecular biology. In the late 1950s, two French scientists, François Jacob and Jacques Monod, described the regulatory role of the lac repressor. In 1965, they won the Nobel Prize for their work. Another Nobel Prize-winner, Walter Gilbert, discovered in 1966 that the repressor was a type of protein, and its 360 amino acids have subsequently been identified and fully sequenced.

In the years since then, however, scientists had tried in vain to determine the lac repressor’s shape. As Dr. Lu has explained, before scientists can design and synthesize drugs to fight diseases, they need detailed information about the surface shape and interior geometry of proteins: “Knowing the protein’s chemical composition is not enough, because molecules with identical composition can have a different structure, and this usually leads to a different behavior. Surface contours and interior geometry determine which molecules can activate a protein and what the protein can do afterward.”

Because proteins are small in size, existing microscopes cannot pick up the nuances of a protein’s shape. What scientists must do is “pack” together millions of the same proteins into an ordered solid, called a crystal, and then use X-ray diffraction to deduce its structure. In this procedure, the crystals are bombarded with X-rays; the patterns made by the X-rays as they bounce off the atoms in the protein crystal are recorded on film. Next, these patterns are analyzed by what The New York Times, in an article on Drs. Lewis and Lu’s achievement, called “complicated mathematical and computational methods”; then the scientists reconstruct the shape of the crystal.

In the case of the lac repressor, this crucial information would allow them to understand the molecular regulation in a typical system. Yet this same protein presented unusual problems and would not crystallize well. At one point, about three years ago, the team tried a novel approach: they sent their crystals into space aboard a space shuttle. The hope was that without the pull of gravity, the “seed” of the crystal would remain in the middle of its flask, allowing proteins to attach anywhere around it, thus forming larger crystals...To the dismay of the Penn researchers, however, even the crystals’ growth in space proved too small for useful analysis.

Finally, in what The New York Times characterized as “an arduous feat that involved luck as well as dogged persistence,” Drs. Lewis and Lu were able to make the crystals. One of the steps involved adding a nickel compound to the molecules that helped them analyze their data.

As a result, their laboratories were able to crystallize the lac repressor in three conditions: bound to DNA, inactivating the lac genes; bound to the sugar, allowing transcription of the genes; and unbound to any other molecules. “This is the first detailed picture of how gene regulation occurs at the molecular level,” Dr. Lewis says. “That’s why it’s exciting, both historically and scientifically.”
President’s Report: A Trip to Asia . . . Superstore at Home

Good afternoon.

I bring you greetings from South Korea and Hong Kong, which I briefly visited in a whirlwind week away from campus at the end of March on behalf of the University.

The objective of the trip was to strengthen Penn’s ties with our great number of Asian alumni, parents, and prospective students.

If I needed further evidence that Penn is becoming an international university, this trip supplied it.

I was taken aback by the number of alumni from all of Penn’s schools and classes dating back four decades. We have some 1,000 alumni in Hong Kong and Korea alone and I had the opportunity to meet with about a quarter of them. I was pleased to learn that our alumni groups in Korea and Hong Kong are among the most active anywhere in the world.

I was also struck by the many parents of current students—I met with about 30 families. I also met a number of applicants who live in Southeast Asia, who, at the time of my visit, were anxiously waiting to hear from our admissions office.

I hope my meetings with them helped achieve one particularly significant purpose of my trip—attracting the very best undergraduate, graduate, and professional students from Southeast Asia.

I visited Asian universities where Penn already has strong relationships. I was also fortunate to have the opportunity to meet with government officials and business leaders, which helped increase Penn’s visibility in parts of the world where our reputation is strong, but could be stronger.

During my visit, I had the opportunity to highlight all of the good things about Penn and to discuss the role of Penn as a leader in the information age. My gracious hosts received me as an emissary from a university they knew to be exceptional. And I hope that after our meetings they came away with a real appreciation for the excellence of education and research that we offer at Penn.

Barnes & Noble Bookstore: Back on the home front, we are very excited about the new Barnes & Noble “Superstore” to be built here at Penn.

The addition of the superstore to our campus will dramatically enhance the quality of life here. As we move forward to implement our Agenda for Excellence, we are deeply aware that enhancing the quality of life for our students is an integral part of our mission.

And in this venture, we all gain. We will have an exciting new bookstore with countless opportunities for an enriched intellectual and cultural life outside the classroom.

Progress on the Agenda for Excellence:
Before the semester closes, I would like to update you on the progress of the Agenda for Excellence.

Executive Vice President John Fry, Provost Chodorow, and I are currently reviewing the strategic plan of each of our major administrative units, and I will be meeting individually with each of the administrative officers to discuss them.

Then, a month from now, each of the schools is due to submit its new or revised strategic plan, building on the framework established in the Agenda for Excellence published last fall.

Over the summer, these school plans will be synthesized with the original Agenda for Excellence to form a comprehensive University strategic plan.

The draft plan will then be reviewed by the Academic Planning and Budget Committee early in the fall, published in Almanac, and presented to the Trustees for final approval at their October meeting.

New Student, Staff, and Faculty Senate Appointments:
In the past few weeks, a number of organizations on campus have been making important appointments for the 1996-97 academic year. I congratulate all of the new appointees and welcome those who will be joining us on Council.

I would like to extend special congratulations to Tal Golomb, the new chair of the Undergraduate Assembly, and Alex Welte, the new chair of GAPSA.

My thanks to Lance Rogers, out-going chair of the UA, and to Victor Prince, out-going chair of GAPSA for their work and dedication to the student body and to this Council.

Special congratulations to Peter Kuriloff, the new chair of the Faculty Senate for 1996-97, and to Vivian Seltzer, as the new chair-elect. My thanks to out-going past chair David Hildebrand, who is parting our company after four years as a chair of the Faculty Senate, and to Bill Kissick, the new past chair.

My congratulations to Karen Wheeler, who will be joining us again in the fall as chairperson of the A-3 Assembly, and to Marie Witt, the new chairperson of the Penn Professional Staff Assembly. My thanks to out-going chairperson Ira Winston for his thoughtful dedication this year.

Conclusion: In concluding my report, I would like to thank all the members of the 1995-96 University Council for a stimulating and productive year of discussion and useful advice.

This is an exciting time of year at Penn. I hope you all enjoy it and have a wonderful summer.

— Judith Rodin

Provost’s Report on ROTC

About two months ago, Larry Gross raised the ROTC issue and said that there comes a time when you have to conclude that you’ve gone as far as you can go and then you need to report on what you’ve done, and where you are. I believe that I have now arrived at that point. The President and I have discussed this at some length. My last conversation with the Army was on Monday, and it confirmed my conclusion that we are now at the end of any useful negotiations.

First, let me take you back a little bit and give you a history of where we’ve been on this, and what I have specifically been doing in my negotiations with the military.

The debate at Penn began in 1990 as a serious issue on the campus. There was a recognition then, as we recognize now, that there is an inconsistency between the University’s non-discrimination policy and the military’s policy, especially in its policies toward gays and lesbians. After much discussion, the Clinton Administration introduced the “don’t ask, don’t tell” policy in 1993. This new policy is no more consistent with our policy than the old one.

Going back to 1990—to the pre-Clinton era—and again, in 1991, the University Council (UC) resolved that ROTC should be terminated no later than the end of 1993, unless the military altered its policy. In the intervening years, the Penn administration actively lobbied the DOD and Congress to alter that policy.

In July of 1993 just about the time the Council’s deadline was expiring, the University’s administration changed, and an interim administration was appointed.

Simultaneously, of course, Clinton was exploring the possibility of changing the policy, and as I said earlier everything was essentially put in abeyance while the new policy was being worked out.

Toward the middle of the 1993-1994 academic year, the interim administration appointed a committee to look at ROTC. That report was made in the spring of 1994. The President and I received that report when we arrived at Penn and discussed it at the first UC meeting we attended in the Fall of 1994.

The conclusion of this committee was that ROTC played an important role in diversifying the Penn student body. It also provided a way for Penn to participate in the diversification and improvement of the officer corps of the U.S. military. However, the committee also recommended that the University attempt to distance itself from the relationship with the military policy since it was inconsistent with our own non-discrimination policy. It recommended three basic options.

(Provost’s report continued next page)
Provost on ROTC (continued from page 3)

The first option was that we create an “arm’s length” arrangement eliminating the modest levels of University support but permitting ROTC to remain on campus as an “association.” The second was that we seek consortial arrangements that would move ROTC off our campus but leave it available for Penn students, ensuring that Penn students continue to have the opportunity for ROTC participation at other area institutions. The third was that we seek some kind of regional consortium that would centralize ROTC off campus at some central location. We all thought at the beginning that the Delaware Valley is a very good place for that kind of centralization, and that was one of the options I pursued.

The committee report recommended that if none of these options was possible, then we should terminate our relationship with ROTC. At the September 1994 UC meeting, all of these options and recommendations were discussed, and the UC voted to accept the recommendations of the committee excepting the one that the relationship be terminated if we failed to negotiate a new arrangement with ROTC.

Since Fall of 1994, I have been working in that framework—that is to say, first and foremost, that I was seeking to change the relationship between Penn and the ROTC units. Second, that I was doing so as a negotiation between contractual parties. We do, in fact, have valid contracts with both the Navy ROTC and the Army ROTC. I operated as a negotiating partner. I knew that the end, if I failed to negotiate changes, that the status quo would essentially remain in place.

To give you an idea of what I have done, I started by discussing with all of the provosts in our area what their situation was and how they felt about consortial arrangements. We have an agreement already with St. Joseph’s for an Air Force ROTC. Our students can go to their ROTC unit at St. Joe’s. They were interested in maintaining the current arrangement; they were not responsive to any further expansion. Villanova has an NROTC unit of its own. It is fully enrolled, and they were interested in maintaining the status quo as well. Temple and Drexel, both of which have Army ROTC, were very interested in partnering with us and, in fact, being the home of, Army ROTC on their campuses to which Penn students would be welcome.

By winter, I had a picture of what the local universities were interested in and willing to do. At the same time, I started to discuss with the military the options they were willing to develop. Throughout this, I started with the local commanders, and depending on the answers, moved on to regional commanders and then to the Department of Defense (DOD) seeking to get the answers at the higher levels that I was not getting at the lower levels.

With the Navy, I wrote to Vice Admiral Timothy Wright, the Director of Naval Training, and ultimately I met directly with the Secretary of the Navy, John Dalton. I got a letter from Principal Deputy Assistant Secretary of the Navy Karen Heath in the course of these negotiations. On the Naval side of the negotiations, we moved very rapidly up the chain of command but then got stuck until the Secretary of the Navy himself got involved. He came to campus to give a speech, and I took that opportunity to meet with him. He made it crystal clear, both in private, and later in public, that the Navy is very pleased with Penn and that the service has no interest in changing that relationship.

With the Army, it has been a much more complicated and drawn-out affair. I spoke on numerous occasions to the local commander, Lt. Col. Ted Majer, about the arrangement. I made contact with Major General James Lyle at headquarters, U.S. Army Cadet Command. I also had discussions with Lt. Gen. Theodore Stroup in the Office of the Deputy Chief of Staff for Personnel at headquarters of the Department of the Army. Just at a time when I thought that these conversations were getting to the stage where we could actually negotiate something, the entire command structure was changed—it is the Army—and we had to start over again.

In the fall and winter of this year, I had conversations with the new regional commander of the Liberty Brigade who is located at Fort Dix, Col. Lonnie Dale Vona. At one point in those conversations, it appeared that Col. Vona and Lt. Col. Majer were going to propose a consortial agreement for the Army centered at Drexel. However, the Army is a hierarchical organization, and the proposal had to go to the next level, and when it did the new regional commander said that he did not want to close the Penn program. This was a program that he regarded as a good program and a healthy program, and he wanted to keep the program open at Penn. Those negotiations came to a close at least at that level.

In the meantime, I had been dealing with the DOD directly in the Office of the Secretary of Defense. That is not just within the services but also pushing the discussion to the administration of the military. I wrote letters and spoke with Edwin Dorn, who is Undersecretary of Defense for Personnel and Readiness. David Morse, who I think all of you know, spoke with Bill Carr, who is in the Office of Accession Policy in the DOD. Those discussions and letters went nowhere. I was able to spend time on the phone talking to these people trying to explain to them what the issues were from our point of view, what it is that we wanted to accomplish in the end. Although they were willing to listen to us and think about it, ultimately they came back and said “No go.”

The latest thing that has happened has been the passage of the Pombo Amendment in February which basically says that an institution that takes unilateral action and creates an anti-ROTC policy will lose its DOD funding in contracts. We studied that very carefully, talked to several people in the Pentagon about how it was going to be interpreted and applied, and we became totally convinced that it simply did not apply to us. We are not acting unilaterally. We have been engaged in a negotiation. The amendment has nothing to do with a mutual agreement; it has to do with unilateral action, and we were not engaged in that. The passage of the amendment is, however, a further sign of the government’s intractability on the issue.

Ultimately, neither the Army nor the Navy has wanted to give up Penn as a “host” institution for their programs. The Navy directly through the Secretary of the Navy and the Army through its regional commander made it quite clear that they are not interested in pursuing these negotiations any further.

There are a number of things that I think we can conclude from this. The first is that we are now at a point at which there is nothing to be gained by pursuing these negotiations further. We have talked to everyone all the way up to the top, and we have now gotten definitive answers.

In the meantime, we have continued to be very active as we were—as the administration was back in 1991 and 1992 and, I presume, 1993—in pursuing the matter of changing the policy itself through legal avenues. After discussion with the president, I have joined with the provost at Dartmouth to send a letter to the ACE urging them to file an amicus brief in one or more of the many cases that are now going through the courts dealing with the “don’t ask, don’t tell” policy. We are urging the ACE to take a position against the policy as inconsistent with the nondiscrimination policies on most campuses in this country, certainly most members of ACE. We will pursue all other avenues that appear to us to accomplish the same thing. Penn is committed to doing what it can to change the policy. It is unjustified and unjustifiable.

In addition, we are very concerned about the fate of the individual students who find themselves in the situation in which being members of ROTC and declaring that they are gay or lesbian, find themselves ousted or removed from the program. Many of those students have scholarships from ROTC, and we have undertaken to guarantee that such students will be able to continue at Penn. The actions of ROTC with respect to its members for that reason and other reasons should not affect the ability of students in the program to continue in our program, and we intend to make certain that is the case.

The only other issue that I might mention is the matter of academic credit. There are a very few ROTC courses that receive credit in Wharton, Engineering, and Nursing. It is a faculty decision to grant or not to grant credit, and I have not myself been engaged in any discussion about whether that is appropriate or inappropriate in these cases. That is the end of my report.

—Stanley Chodorow

Postscript on Credit for Courses

After the University Council meeting, the Provost indicated that he will write to the faculties that give credit for ROTC courses and raise the issue with them, that he will also review any benefits provided to ROTC faculty that are not covered by the contracts.—K.C.G.
Exerpts from Q&A: On ROTC

Dr. Larry Gross: As you can imagine, I have some comment on the ROTC report.

I’d like to begin by thanking the Provost for what I believe were very detailed extensive and sincere negotiations. I take seriously the account of the complexity and degree of negotiations. I also have to say I’m not surprised at the outcome, for two reasons.

One, I think it’s abundantly clear that the Department of Defense is not inclined to give any ground on this issue. If anything, the last year or two has shown that the post- “Don’t ask, don’t tell” performance of the Pentagon and the Department of Defense has been, if anything, worse than before. It’s as if they were provoked by the whole issue. There are many accounts, including several published in the Army Times, of the degree to which their punitiveness has not slackened at all after the policy—it’s another way of showing the White House who’s the boss.

But, even more important, I think the negotiations took place in a framework that gave the military no reason to give in. If the ground rule of the negotiation is: “If it doesn’t work out, we’ll leave the status quo,” then what would move the Department of Defense to give any ground? If they know you’re negotiating under an understanding which says if they don’t give in then we’ll leave things the way they are, that is of course fine with them; they never had any problem with the way things were, I don’t see what would have motivated them other than some sense that things would be worse if they didn’t accommodate. I think that’s connected with their saying they like this thing at Penn, why they would want to change it.

We’re left where I expected. I think the recent amendment was the only last component to that piece, and I don’t think it was directed necessarily at Penn. It was directed at universities around the country where this issue has come up. Now we’ve had a recent development at MIT, at least by the faculty. I would be very surprised if MIT felt like endangering its Department of Defense funding; I’ll wait and see, but in much suspense.

I’m somewhat disappointed—“somewhat” might be an understatement—by the conclusion of a process that began, as you said, in 1990. Repeatedly, bodies of the University reported that the ROTC was in violation of University policy. [In addition to those chronicled by the Provost, Dr. Gross mentioned the Senate Committee on Conduct.—Ed.] The last of these bodies was the one that rejected one of the recommendations of the second committee, appointed by the interim administration, in an effort not to deal with the previous record of recommendations. So, there has been a consistent set of responses of advisory bodies and commissions, and the one that gives the “out” [the status quo option] is the one where the process stops. Once that out was there, the outcome was foreclosed.

That leaves us, however, with the question of what to do now and I’m not, on the spur of the moment, going to propose anything very substantial. I need to think about it, and I’m sure others will as well. But I think there are some issues that need to be thought about and that I would urge consideration be given to.

One is the question of harassment of students in ROTC; this is not a small issue, it is an ongoing issue—it is one that has not stopped and the atmosphere as the University accepts the status quo that has been as victory by ROTC. It is very important that the administration make clear by whatever means available that it will actively respond to harassment to students in any way that is possible; because that has already been going on and will only get worse.

I would also suggest some thought be given to the question—and this is the question being raised at MIT—of what there is exactly that prevents open lesbian gay students from participating in ROTC; my understanding is that ROTC students are not commissioned members of the United States military at the time they are students—or are they?

Provost Chodorow: I actually looked into this, but why don’t you finish.

Dr. Gross: If it is the case that they are students, and not commissioned members of the military at that time, then the military’s policy of exclusion doesn’t apply to them. They “Don’t ask, don’t tell” policy strictly interpreted means that while they’re members of the military they may not be asked nor may they tell anyone what their sexual orientation is. There is nothing in it that precludes their being members of ROTC while students at Penn, where being asked or telling are permissible under University policy.

So, it’s not entirely clear to me what there is to prevent them from that.

And third, there is the question of credit. I recognize this a faculty issue, but it seems to me that the administration is fully capable of raising and discussing the issue with appropriate faculties. In my experience, when the administration raises a question with faculties it is at least considered very seriously—perhaps more seriously than if it is raised by a member of the faculty...

[Dr. Gross cites the faculties’ willingness to consider ROTC credit issues during the Vietnam War. Dr. Chodorow indicates he is willing to talk to the deans about approaching faculties. The Provost also notes that all but two ROTC courses are open to enrollment by anyone, but only those who are admitted to the cadet corps can take those two: one called a leadership laboratory and another a field exercise; he adds that cadets also receive stipends. Dr. Gross asks whether this does not make the students “civilian employees,” not subject to the “Don’t ask, don’t tell” rule. The debate on that point is inconclusive, and discussion ends with the Provost’s saying: “The real core issue, as I said earlier, is the policy itself, and I think Penn needs to do—and is in fact committed to doing—what it can to change that policy. It is an unjustified, unjustifiable policy and I think most of us agree about that.”]

COUNCIL Reports and Comments from the Meeting of April 24, 1996
The following agenda is published in accordance with the Faculty Senate Rules. Questions may be directed to Carolyn Burdon either by telephone at 898-6943 or by e-mail at burdon@pobox.upenn.edu.

Panel and Slate for Election Meeting May 7

1. Approval of the minutes of March 6, 1996
2. Chair’s Report
3. Past Chair’s Report on activities of the Academic Planning and Budget Committee and on the Capital Council

Old Business
4. Motion to extend the 1995-96 Senate Committee on Academic Freedom and Responsibility until June 30, 1996 to complete work begun this academic year
5. Continued discussion on Committee on Administration proposed revision of Handbook section on renewal of deans
6. Just Cause Revision
7. Selection of faculty exit interviewers
8. Motion to abolish annual meeting of the Faculty Senate and replace it with a detailed written report of the Faculty Senate Chair
9. Retiree waiver required by University

New Business
10. Selection of four SEC members to serve 1996-97 on the University Council Steering Committee
11. Informal discussion with President Rodin and Provost Chodorow
12. Determine whether SEC meeting scheduled for June 7 should be held
13. Other new business
14. Adjournment by 4:30 p.m.

PPSA Annual Meeting Notice

Panel and Slate for Election Meeting May 7

The Penn Professional Staff Assembly (PPSA) invites professional staff to its annual meeting and election on Tuesday, May 7 from 1-2:30 p.m. in the Faculty Club’s Alumni Hall.

John Fry, Executive Vice President; Clint Davidson, Vice President for Human Resources; Steve Golding, Vice President for Finance; and Art Gravina, Vice President for Facilities, will provide a panel discussion, an opportunity for questions, and small group discussions on topics such as administrative restructuring, the future of employee benefits, facilities and maintenance issues and the new financial management system.

While pre-registration is not required, seating will be on a first-come, first-served basis. Please e-mail your questions for panelists in advance to ppsa@seas.upenn.edu no later than Wednesday, May 1.

During the restructuring process, it is critical for all administrative and research personnel to have their views represented to the University. Participation in the PPSA elections is the first step to making your voice heard.

The Penn Professional Staff Assembly (formerly the A-1 Assembly) serves the administrative and technical staff who fulfill the teaching, research and business missions of the University. PPSA accomplishes its mission by providing a forum for staff to express their opinions on issues facing the University and higher education. In addition, PPSA provides representation on major University committees. It serves as a supportive network to work toward achieving the University’s goals and objectives and enhancing professional status of staff. PPSA also offers seminars and programs to broaden and expand staff’s background and knowledge.

The PPSA Executive Committee consists of the Chair, Vice Chair, Chair-elect, Vice Chair-elect, past Chair, and six Members-at-Large. Members of the Executive Committee will be elected by all A-1 employees who participate in the election.

We are pleased to present the following list of candidates for your consideration. Be sure to vote on Tuesday, May 7.

Candidates for Chair Elect (choose one):
- **James Bean**: Manager, Mail Services. Jim has been involved with the University since 1979, first as an undergraduate (’83) and since 1986 as an employee. He is presently the Manager of Penn Mail Service, a position he has held for the past seven and one-half years. Prior to his current position, he was Supervisor of the Mail Center and an Analyst in the Telecommunications Office. Jim is presently a Master’s candidate in the Dynamics of Organization Program.
- **Gloria Gay**: Associate Director, Penn Women’s Center. Gloria Gay has held her current position for ten years. She earned her MSW from the Penn School of Social Work. Her affiliation with the SSW continues through her participation as a board member. She is an active member of AWFA and the African-American Association. Her community service includes current membership on the Board of Women Against Abuse as well as past efforts in the Family Service Center located at the now-closed Philadelphia Naval Base.

...for Vice Chair-Elect (choose one):
- **Terry Conn**: Director of Administration, Vice Provost for University Life. Terry joined the Division of University Life in 1987 after many years of teaching at the Curtis Institute and the University of the Arts. Her first position here was as Acting Director of College House Programs. She then moved to the Vice Provost’s Office as Executive Assistant and now is Director. She also oversees WXPN. Terry has worked with the Assistant Vice Provost on crisis intervention, served as liaison with the Trustees’ Council of Penn Women, and served on various University-wide committees.

*Thomas McCoy: Operations Supervisor, Telecommunications.* Tommy has worked at Penn in various technical support and supervisory roles. He helped design the installation of ResNet for campus students. He also works on special projects such as the Penn Relays and other programs held at the Palestra and Franklin Field (e.g., Alumni Weekend, Student Move-In). He has served two years in PPSA as member-at-large and has served two years on the Committee for Open Expression.

...for Member-at-Large (choose three)
- **Sheila Armstrong**: Assistant to the Director, Afro-American Studies Program. Sheila has worked for Penn for over 15 years, primarily in areas of financial management. She received her B.A. in Women’s Studies from Temple University and is currently a degree candidate in the Dynamics of Organization Program.
- **Sandy Bates**: Vending Manager, Hospitality Services. Sandy is responsible for over 200 vending machines and 7 manual operations on Penn’s campus. During her 13 years at Penn, she has served as vice chair of the A-3 Assembly. Sandy has also served on the Facilities and Bookstore committees and is currently a member of the Association for Business Administrators.
- **Thea Diamond**: Director of Education at the Annenberg Center. Thea has acted as a liaison between the visiting artists and the Penn community, our West Philadelphia neighbors, and the general public since taking her current position in 1992. Before working at the Center, Thea was a full-time graduate student in English, and she is currently writing her dissertation. She presently serves on the following University committees: Pluralism, Community Relations, and Martin Luther King Jr. Commemorative Planning Day.
- **Chioma Fitzgerald**: Business Administrator, Medical School. Chioma has been a Penn employee since 1989 when she started as an administrative assistant in the Graduate School of Fine Arts. She earned her B.A. degree in Political Science in 1995. She is a member of the Association of Business Administrators and has served on the 1996 Martin Luther King Celebration Committee and The Women of Color Planning Committee.
- **Vicki Lewis McGarvey**: Business Administrator, Genetics. Vicki has been employed by Genetics since 1994, first as the Business Manager of the Cell Center and currently as the Business Administrator for the department. She holds a B.A. and an M.S.B. from the Johns Hopkins University and is currently working toward a doctorate in Higher Education from the Graduate School of Education.
- **Mark West**: Manager, Administration & Finance, SEAS. Mark has worked in grant and contract accounting for eight years, as well as six years in the Comptroller’s Office as an Accountant in the Federal Compliance Group. He is a member of the University of Pennsylvania Association of Business Administrators, and past chair of the ABA’s Steering Committee. Mark is a major in the English Writing program.

---

*Lois MacNamara Assistant Director, Student Activities, GSE for the PPSA Executive Committee*
**Policy for Postdoctoral Fellows in the Physical, Biological, and Health Sciences and in Engineering**

**Letter of Appointment**

When a faculty member makes a firm offer of appointment to a postdoctoral fellow, a letter should be written to the candidate prior to commencement of duties. This letter should set forth at least the basic terms of appointment including the period of appointment (dates of appointment), the stipend level, all included benefits and a statement that the fellow’s appointment is subject to all University policies, and be accompanied by a copy of the Patent Policy and the corresponding Participation Agreement. If the appointment is renewed or extended, that action should be documented by a letter, which includes the foregoing information. The candidate should be required to return a countersigned copy of each letter of appointment or renewal indicating acceptance of the terms set forth, as well as a signed Patent Policy Participation Agreement. The letters (countersigned copies) and signed agreement should be placed in a permanent file kept in the office of the appropriate Department. (If the faculty member is not affiliated with a specific department, the file may be kept in the office of the Institute or Center with which the faculty member is associated.)

**Obligations of Postdoctoral Fellows**

Postdoctoral fellows have certain obligations to their mentor, the laboratory in which they are working, the Department with which they are associated, the grantor whose funds support them, and the University. These obligations include but are not limited to: (i) the conscientious discharge of their research responsibilities; (ii) conformity with ethical standards in research; (iii) compliance with good laboratory practice including the maintenance of adequate research records, and due observation of University standards regarding use of isotopes, chemicals, infectious agents, animals, and the like; (iv) observation of appropriate guidelines regarding human subjects if applicable; (v) open and timely discussion with their mentor regarding possession or distribution of materials, reagents, or records belonging to their laboratory, and any proposed disclosure of findings or techniques privately or in publications; (vi) collegial conduct towards coworkers and members of the research group; (vii) compliance with all applicable University policies. All data and research records generated in University laboratories remain the property of the University.

**Proof of Doctoral Degree**

Eligibility for appointment as a postdoctoral fellow requires an advanced degree, PhD, MD, or equivalent. It is the intent of the University of Pennsylvania that international fellows have advanced degrees which are equivalent to those provided in domestic institutions in order to qualify for appointment as postdoctoral fellows. It is the responsibility of the fellow to provide transcripts which certify that she/he has received her/his degree, and it is the responsibility of the mentor to be sure that this documentation is satisfactory and that it is included in the trainee’s file attached to the letter of appointment. If the trainee has completed the requirements for the PhD but has not yet received her/his degree, then she/he should supply documents certifying that the thesis has been approved and indicating the date when the degree is expected to be conferred; this special exception applies only to trainees receiving their degrees from domestic institutions.

**Stipend Level**

Minimum stipend levels for postdoctoral fellows are to be the NIH recommended postdoctoral stipend levels.*

If these minimal levels of compensation cannot be offered, a proportional (%) appointment should be made to clearly indicate that the appointee is entitled to seek and perform additional University services (teaching, diagnostic laboratory, technical) up to the recommended annual level of compensation.

**Terms of Appointment**

According to current University policy, no doctoral postgraduate can serve at the University of Pennsylvania for more than five years at the status of Postdoctoral Fellow.

**Benefits**

Postdoctoral fellows must have health insurance. Postdoctoral fellows are eligible to receive single person health insurance, as provided under a basic University of Pennsylvania Group Health Insurance Plan. This benefit should be paid as an addition to the stipend and no premium should be deducted from the stipend of the postdoctoral fellow. If the fellow elects family coverage, the difference between the single and family premium will be deducted from the fellow’s stipend. If the fellow elects to waive health insurance coverage through the University, she/he must certify that she/he has alternate insurance which provides at least comparable coverage.

**New Child Leave**

Postdoctoral fellows are eligible to receive up to six weeks’ new child leave with full pay, paid from the same source as the stipend.

**Orientation**

A standard compendium of information should be given to each postdoctoral fellow upon arrival at the University. This compendium should include a registration form to be completed by the postdoctoral fellow, a copy of these guidelines, the Faculty Handbook, the Patent Policy, the telephone directory, parking policies, a clear statement about benefits, the current City, Commonwealth, and Federal taxation policies, sources of information within the University, explanation of the mediation services available. Preferably, periodic orientation sessions should be provided for all new postdoctoral fellows. The departments should arrange e-mail accounts for their postdoctoral fellows and for orientation necessary to use the e-mail account.

**Mediation Services**

It is recognized that from time to time disagreements may arise between postdoctoral fellow and mentor. Postdoctoral fellows should be clearly informed about the options which they can exercise under such circumstances. In particular, they should be made aware of services available through the office of the Ombudsman in the University and in the School of Medicine (separate office).

**Application for Grants**

Each school should set a policy about the rights of postdoctoral fellows to apply for grants as Principal Investigator. If the school policy permits such applications, it is suggested that there be a requirement for approval by a knowledgeble tenured faculty member as well as the usual approval by department chair and dean on the transmittal form.

---

*For example, in 1995 these levels were:

- $19,608—from 0 to less than 12 months of prior postdoctoral experience
- $20,700—from 12 to less than 24 months of prior postdoctoral experience

---

**OF RECORD**

To the University Community

On July 18, 1995, the University Council Committee on Research published For Comment the Report of the Ad Hoc Subcommittee on Policies for Postdoctoral Fellows and Research Associates. On the basis of response to that publication and to a review by the Provost Council on Research, the mandated guidelines in that report were modified as appropriate. The modified mandated guidelines have been approved by the Provost, the Faculty Senate Executive Committee, and the University Council Committee on Research, and are presented Of Record in the following policy which is now in effect.

This policy represents the University’s first comprehensive policy for postdoctoral associates. Efforts in drafting a section on grievance procedures will begin this year and will be published For Comment as a revision to the policy.

We would like to express our personal thanks to all who participated in the initiation and development of this important new policy.

Stanley Chodorow, Provost
Ralph D. Amado, Acting Vice Provost for Research

ALMANAC April 30, 1996
The Wharton School announced its 1996 awards for teaching excellence in the undergraduate and graduate divisions. Award winners will be recognized at the commencement ceremonies on May 21 in the Civic Center’s Convention Hall.

**Undergraduate Teaching Award Winners**

**6th Annual David W. Hauck Award for Outstanding Teaching**

This award, the most prestigious in the Undergraduate Division, is given to recipients for their ability to lead, stimulate and challenge students, knowledge of the latest research in the field and a commitment to educational leadership. The 1996 recipients are:

- **Abba M. Krieger**, professor of statistics and operations research, operations and information management, and marketing. Dr. Krieger previously won the Lindback Award for Distinguished Teaching in 1978, the Helen Kardon Moss Anvil Award in 1971, the David W. Hauck Award in 1991, and the Undergraduate Division Excellence in Teaching Award from 1991-1995.

- **Philip M. Nichols**, Ronald Koenig Term Assistant Professor of Legal Studies. Dr. Nichols previously won the Undergraduate Division Excellence in Teaching Award in 1994. He also won an Excellence in Teaching Award this year.

**Excellence in Teaching Awards**

These awards are given in recognition of outstanding teaching and exceptional commitment to students based on student nominations and teaching evaluations:

- **Suleyman Basak**, assistant professor of finance, receives his first award.

- **Gordon M. Bodnar**, assistant professor of finance, receives his first award.

- **Jamshed K.S. Ghandhi**, associate professor of finance. Dr. Ghandhi previously won the Lindback Award for Distinguished Teaching in 1970, the Helen Kardon Moss Anvil Award in 1975, Graduate Division Class of 1984 Award for Highest Teaching Evaluation in 1984, Graduate Division Excellence in Teaching Award from 1982-1990 and 1995, the David W. Hauck Award in 1992, the Undergraduate Division Excellence in Teaching Award from 1992-1995, and the Marc and Sheri Rapaport Undergraduate Core Teaching Award in 1994.

- **Robert W. Holthausen**, Nomura Securities Co. Professor of Accounting and Finance. Dr. Holthausen was the 1993 winner of the David W. Hauck Award, the Graduate Division Excellence in Teaching Award in 1991, and the Undergraduate Excellence in Teaching Award in 1990, 1991 and 1993.

- **Larry W. Hunter**, Paul Yeakel Term Assistant Professor of Management. In 1995, Dr. Hunter won the David W. Hauck Award and an Excellence in Teaching Award from the Undergraduate Division.

- **William S. Laufer**, assistant professor of legal studies. Dr. Laufer was a 1991 recipient of the David W. Hauck Award and won Undergraduate Division Excellence in Teaching Awards from 1990-1992.

**Marc and Sheri Rapaport Undergraduate Core Teaching Award**

This award is presented to a professor for teaching excellence in a core course in the undergraduate division. This award was established in 1994 by Marc Rapaport (W’79) and his wife, Sheri, to recognize the critical role of core courses. This year’s recipient: (continued next page)
Janice Eberly, James G. Campbell, Jr. Memorial Term Assistant Professor of Finance, is honored with her first award.

Teaching Assistant Award

This award is presented to a teaching assistant for teaching excellence. This year's recipient: Mukund Krishnaswami, W ’96.

The Sigma Kappa Phi Honor Fraternity Outstanding Professor Award in the Evening School will be announced at commencement.

Graduate Division Teaching Awards

Helen Kardon Moss Anvil Award

Created in 1969 and endowed by Helen Kardon Moss, this award recognizes exceptional teaching effort and ability, both inside and outside the classroom. The award consists of an engraved plaque, special recognition at graduation and a cash award. The 1996 recipients:

Howard Kaufold, adjunct associate professor of finance and director of Wharton's Executive MBA Program. Dr. Kaufold was also the 1984 recipient of this award.

Jeremy J. Siegel, professor of finance, wins his first Anvil Award. (See also Undergraduate Excellence in Teaching Award, page 8.)

Excellence in Teaching Awards

These awards, first presented in 1984, are presented to the eight professors with the highest ratings from the student course evaluation forms. Each winning professor must have taught at least two semesters of courses over the last three semesters. The professor with the highest rating is also awarded the Class of 1984 Award.

The Class of 1984 Teaching Award recipients:

Franklin Allen, Nippon Life Professor of Finance and Economics. Dr. Allen is being honored for teaching “Financial Analysis” (FNCE 601). The 1993 winner of the Helen Kardon Moss Anvil Award, he has also won the Graduate Division Excellence in Teaching Award in 1990 and 1993, and the Miller-Sherrerd MBA Core Teaching Award in 1992, 1993 and 1996. In addition, he won an Undergraduate Division Excellence in Teaching Award in 1991.

The other Excellence in Teaching Award recipients:

Michael R. Gibbons, I.W. Burnham II Professor of Investment Banking and chairperson of the finance department. Dr. Gibbons was honored for teaching “Fixed Income Securities” (FNCE 725).

Howard Kaufold for “Financial Analysis” (FNCE 601). (See also his Anvil Award, left, and MBA Core Award, right.)

William L. Kissick, George Seckel Pepper Professor of Public Health and Preventive Medicine, School of Medicine; professor of health care systems, the Wharton School; professor of health policy and administration, School of Nursing. Dr. Kissick was honored for teaching “Health Policy: Planning and Analysis” (HCMB 850) and “Policy and Planning Models in Health” (HCMB 851).

David J. Reibstein, William Stewart Woodside Professor of Marketing. Dr. Reibstein was honored for teaching “Marketing Strategy” (MKTG 777). He also won the Class of 1984 Award in 1995 and 1987. In addition, he was a recipient of the Miller-Sherrerd Core Teaching Award from 1994-1996, and the Graduate Division Excellence in Teaching Award in 1982, 1984-88, and 1993.

Jeremy J. Siegel, professor of finance. Dr. Siegel is honored for teaching “Macroeconomics and Public Policy” (FNCE 602). (See also his Undergraduate Excellence in Teaching and Anvil Awards.)

William C. Tyson, associate professor of legal studies, accounting, and real estate. Dr. Tyson is honored for teaching “Real Estate, Law, Financing and Development” (LGST 804) and “Securities Regulation” (LGST 807). He has won the Class of 1984 Award six times, a Graduate Excellence in Teaching Award every year since 1984, the Helen Kardon Moss Anvil Award (1983), and the Lindback Award for Distinguished Teaching (1987).

Karl Thatcher Ulrich, associate professor of operations and information management. Dr. Ulrich was honored for teaching “Advanced Topics in Quantitative Methods and Operations Management” (OPIM 659), and “Operations Management” (OPIM 622). He also won a Miller-Sherrerd MBA award, below.

Miller-Sherrerd MBA Core Curriculum

Teaching Awards

These awards are presented to eight professors with the highest overall ratings as calculated from the student course evaluation forms, and who teach core courses. Each winning professor must have taught the core course in the two most recent semesters. These awards were established in 1992 and recognize the critical role that core courses play in the Wharton MBA program. This year’s recipients:

Franklin Allen, Nippon Life Professor of Finance and Economics, wins his third Core Award. (See also his Class of 1984 Award, left.) Lawrence Hrebiniak, associate professor of management, was honored for teaching “Competitive Strategy” (MGMT 654). This is his second Core Award.

Christopher Ittner, KPMG Peat Marwick Term Assistant Professor of Accounting. Dr. Ittner wins this award for the third time for “Managerial Accounting” (ACCT 622).

Howard Kaufold, adjunct associate professor of finance and director of the Executive MBA Program, for “Financial Analysis” (FNCE 601), his second Core Award. (See also his Anvil and Excellence in Teaching Awards.)

Jeremy J. Siegel, professor of finance, for “Macroeconomic Analysis and Public Policy” (FNCE 602), his fifth consecutive Core Award. (See his other awards starting on page 8.)

Michael Useem, professor of management and sociology. Dr. Useem wins his fifth consecutive Core Award for teaching “Managing People at Work” (MGMT 621). He was also the recipient of the 1992 Helen Kardon Moss Anvil Award, and the Graduate Division Excellence in Teaching Award (1992-95).

Karl Thatcher Ulrich, associate professor of operations and information management. Dr. Ulrich was honored for teaching “Advanced Topics in Quantitative Methods and Operations Management” (OPIM 659), and “Operations Management” (OPIM 622). (See also his Excellence in Teaching Award, above)

Richard P. Waterman, assistant professor of statistics. Professor Waterman was selected for teaching “Statistical Analysis for Management” (STAT 621).
A Roster of Penn’s John Simon Guggenheim Fellows Over the Years

Last fall the John Simon Guggenheim Foundation set out to gather together all of Fellows from the Delaware Valley, for a reception hosted by President Judith Rodin in Eisenlohr Hall. For Guggenheim Foundation President Joel Conarroe, it was also a homecoming of sorts: he was a professor of English who served as Ombudsman and later as Dean of the School of Arts and Sciences at Penn. Almanac asked for the complete list, and found that there is no definitive list (see end note) but that at least those below have won one or more Guggenheim Fellowships over the years.

Roger D. Abrahams, Hum Rosen
Professor of Folklore and Folklife: 1963.
Fay Ajzenberg-Selove, Professor of Physics: 1965.
Paul D. Allison, Professor of Sociology: 1986.
Albert K. Ando, Professor of Economics: 1970.
Solomon E. Asch, Professor Emeritus of Psychology: 1941, 1943.
Nina Auerbach, John Welsh Centennial Professor of History and Literature: 1979.
Houston A. Baker, Jr., Albert M. Greenfield Professor of Human Relations: 1978.
E. Digby Baltzell, Professor of Sociology: 1978.
Dan Ben-Amos, Professor of Folklore & FolkLife: 1975.
Ernest Bender, Professor of Indo-Aryan Languages and Literatures: 1955.
Ivar E. Berg, Professor of Sociology, 1973.
Charles Clarence Bernheimer, Professor of Romance Languages: 1986.
Sidney A. Bludman, Professor of Physics: 1983.
Allan H. Brown, Professor Emeritus of Biology: 1956.
Norman Brown, Professor of Metallurgy and Materials Science: 1958.
Marina S. Brownlee, Class of 1963 College of Women Professor of Romance Languages: 1993.
Elias Burstein, Mary Amanda Wood Professor Emeritus of Physics: 1980.
John Joseph Cebra, Professor of Biology and Annenberg Professor of Natural Sciences: 1982.
Britton Chance, Eldridge Reeves Johnson Professor Emeritus of Medical Physics and Director of the Johnson Research Foundation: 1945, 1947.
Dorothy L. Cheney, Professor of Biology: 1995.
Tristram Potter Coffin, Professor Emeritus of English: 1953.
Henning Cohen, John Welsh Centennial Professor of History and English Literature: 1960.
Peter Conn, Professor of English: 1984.
Diana Crane, Professor of Sociology: 1974.
Ruth Josephine Dean, Professor Emeritus of English and Romance Languages: 1948.
Joan Elizabeth DeJean, Trustee Professor of Romance Languages and Literatures: 1986.
David Joseph DeLaura, Avalon Foundation Professor of the Humanities and Professor of English: 1967.
Daven Kenneth Dettweiler, Professor of Physiology: 1955.
Richard S. Dunn, Professor of History: 1966.
Elizabeth B. Dussan V., Associate Professor of Chemical Engineering: 1984.
Robert Harris Dyson, Jr., Emeritus Professor of Anthropology and Emeritus Charles K. Williams II Director, University Museum: 1971.
Robert Francis Engs, Associate Professor of History: 1981.
Ralph O. Erickson, Professor Emeritus of Botany: 1954.
Martha J. Farah, Professor of Psychology: 1995.
Renée Claire Fox, Annenberg Professor of the Social Sciences: 1961.
Sherman Frankel, Professor of Physics: 1956, 1978.
Frank F. Furstenberg, Jr., Professor of Sociology: 1982.
Elizabeth Johns, Silfen Term Professor of the History of Art: 1985.
Charles H. Kahn, Professor of Philosophy: 1979.
Akira Kaji, Professor of Microbiology: 1972.
Jeffrey Kalbberg, Associate Professor of Music and Director of Graduate Studies in Music: 1992.
Michael B. Katz, Stanley I. Sheer Professor of History and Director of Urban Studies Program: 1977.
Nicholas A. Kefalides, Professor of Medicine and Biochemistry and Biophysics: 1977.
Abraham Klein, Professor of Physics: 1975.
Igor Kopytoff, Professor of Anthropology: 1984.
Robert Alan Kraft, Professor of Religious Studies: 1969.
Bruce Kaklick, Mellon Term Professor in the Humanities: 1976.
Richard David Lambert, Professor of Sociology: 1956.
Douglas Alan Lauffenburger, Alumni Professor of Chemical Engineering: 1994.
Lynn Hellen Lee, Professor of History: 1978.
Erle Verdan Leichty, Professor of Assyriology and Curator, Akkadian Language and Literature, University Museum: 1963.
John Scott Leigh, Jr., Professor of Biochemistry and Biophysics/Med: 1974.
Leo M. Hurvich, Professor Emeritus of Psychology: 1964.
Elizabeth Johns, Silfen Term Professor of the History of Art: 1985.
Charles H. Kahn, Professor of Philosophy: 1979.
Akira Kaji, Professor of Microbiology: 1972.
Jeffrey Kalbberg, Associate Professor of Music and Director of Graduate Studies in Music: 1992.
Michael B. Katz, Stanley I. Sheer Professor of History and Director of Urban Studies Program: 1977.
Nicholas A. Kefalides, Professor of Medicine and Biochemistry and Biophysics: 1977.
Abraham Klein, Professor of Physics: 1975.
Igor Kopytoff, Professor of Anthropology: 1984.
Robert Alan Kraft, Professor of Religious Studies: 1969.
Bruce Kaklick, Mellon Term Professor in the Humanities: 1976.
Richard David Lambert, Professor of Sociology: 1956.
Douglas Alan Lauffenburger, Alumni Professor of Chemical Engineering: 1994.
Lynn Hellen Lee, Professor of History: 1978.
Erle Verdan Leichty, Professor of Assyriology and Curator, Akkadian Language and Literature, University Museum: 1963.
John Scott Leigh, Jr., Professor of Biochemistry and Biophysics/Med: 1974.
Marjorie B. Levinson, Associate Professor of English: 1986.


Leigh Lisker, Professor of Linguistics: 1967.

Tom C. Lubensky, Professor of Physics: 1981.

Vicki Maloff, Associate Professor of English: 1992.


Seymour J. Mandelbaum, Professor of Urban History: 1965.


Donald B. Martin, Professor of Medicine: 1974.


John Walker McCoubrey, James and Nan Wagner Farquhar Professor in History of Art: 1964.

Jane Menken, UPS Foundation Term Professor in the Social Sciences and Director, Population Studies Center: 1992.


Margaret A. Mills, UPS Foundation Associate Professor of Folklore and Folklife: 1993.

Perry B. Molinoff, A. N. Richards Professor of Pharmacology/Physiology/Med: 1981.

Eva Morawska, Professor of Sociology: 1987.

Adrian R. Morrison, Jr., Professor of Anatomy/Vet: 1984.

James D. Muhly, Professor of Ancient Near Eastern History: 1978.


M. Frank Norman, Professor of Psychology: 1970.

David Bourke O’Connor, Associate Professor of Egyptology: 1982.


Daniel Joseph O’Kane, Professor of Biology: 1955.


José Miguel Oviedo, Trustee Professor of Spanish Language and Literature: 1972.


Lee D. Peachey, Professor of Biology: 1967.

Daniel D. Perlmutter, Professor of Chemical Engineering: 1964.

Robert P. Perry, Senior Member, Institute for Cancer Research; Professor of Biophysics: 1974.


Robert Plummer, Professor of Physics: 1986.


David Premack, Professor of Psychology: 1978.

Samuel H. Preston, Professor of Sociology: 1984.

James Primosch, Composer; Laura Jan Meyerson Term Professor in the Humanities: 1985.

Maureen Quigligan, May Department Stores Company Professor of English: 1981.

Jay Reise, Composer; Professor of Music: 1979.

Robert A. Rector, James M. Skinner Professor of Science and Associate Dean, School of Arts & Sciences: 1984.


Michele H. Richman, Associate Professor of Romance Languages: 1987.


Alfred J. Rieber, Alfred L. Cass Term Professor of History: 1965.

Philip Rieff, Benjamin Franklin Professor Emeritus of Sociology: 1970.

John W. Roberts, Associate Professor of Folklore and Folklife and: 1994.


Judith Rodin, President and Professor of Psychology, Medicine, and Psychiatry: 1986.

Irwin A. Rose, Professor of Physical Biochemistry: 1971.

Marian Roseman, Assistant Professor of Music/Antropology: 1996.


James F. Ross, Professor of Philosophy: 1982.

Paul Roizin, Professor of Psychology: 1977.

Alvin Z. Rubinstein, Professor Emeritus of Psychology: 1975.


Lewis G. Tilney, Robert Strausz-Hupé Term Professor of Biology: 1975.

Gary Alfred Tomlinson, John Goldsmith Term Professor of Music History: 1982.

Marc Trachtenberg, Professor of History: 1983.

Frank Trommler, Professor of German: 1984.


Greg Urban, Professor of Anthropology: 1993.

Andrew Von Gronicka, Professor Emeritus of German Literature: 1957, 1969.


Anthony F. Wallace, Professor of Anthropology: 1978.


Gino Claudio Segré, Professor of Physics: 1975.

Martin E. Seligman, Bob and Arlene Kogod Term Chair: 1974.

Walter Selove, Professor of Physics: 1971.

Robert M. Seyfarth, Professor of Psychology: 1995.

Julius L. Shaneson, Professor of Mathematics: 1981.

Nathan Silvero, Professor of Chinese Culture and of the History of Science: 1971.

Amos B. Smith, Rhodes-Thompson Professor of Chemistry: 1985.


Carroll Smith-Rosenberg, Trustees’ Council of Penn Women Term Professor in the Humanities and Professor of History: 1990.


Paul J. Steinhardt, Mary Amanda Wood Professor of Physics: 1994.

Saul Sternberg, Professor of Psychology: 1972.

Rosemary A. Steven, Dean, School of Arts and Sciences, and Thomas S. Gates Professor: 1983.


William Harrison Telfer, Professor of Zoology: 1960.


Louis G. Tilney, Robert Strausz-Hupé Term Professor of Biology: 1975.

Gary Alfred Tomlinson, John Goldsmith Term Professor of Music History: 1982.

Marc Trachtenberg, Professor of History: 1983.

Frank Trommler, Professor of German: 1984.


Greg Urban, Professor of Anthropology: 1993.


Anthony F. Wallace, Professor of Anthropology: 1978.


Liliane Weisberg, Professor of German and Comparative Literature: 1991.

Neil Welliver, Professor of Fine Arts: 1983.


Saul Winegrad, Professor of Physiology/Med: 1981.

Eugene K. Wolf, Professor of Music: 1975.


End Notes

In a sense this two-page list is a rough draft. It is based on a file furnished by the Guggenheim Foundation after a search of its full data base, which basically indicated recipients by institution-at-the-time-of-award but was partially updated to reflect, for example, that the host for the reception, Dr. Rodin, had arrived at Penn with a Guggenheim Fellowship in her c.v. Many others who were Guggenheim Fellows before joining Penn will probably need to be found by word of mouth as well. Some on this list have left Penn since receiving the award, and at least two, Dr. Asch and Dr. Palmer, have died since the list was received.

Almanac is interested in additions and changes, and will share them with the University Archives, where efforts are under way to created a comprehensive on-line roster of major honors to Penn faculty, including the Guggenheim, Fulbright, MacArthur and other national and international awards.

Please email information to almanac@pobox.upenn.edu.
PLN’s Holistic Approach to Literacy

By Jon Carolus

Morton Botel’s idea was simple, yet logical. It wasn’t enough to teach a student to read, write or speak properly. The three skills had to be combined. Botel concluded that if students read about something, then wrote about it, then talked about it, they would retain and apply what they learned better.

Botel, a professor at Penn’s Graduate School of Education (GSE), was sure of his holistic theory, but he needed a suitable approach for implementing it. He knew of many attempts to improve student learning that had failed after promising starts, and he didn’t want his approach to suffer the same fate.

“What can we do to make it live?” Botel asked rhetorically. “Lots of people construct frameworks [for curricula], then they die in college classrooms. I was determined to be more active, making it happen.”

Botel achieved his objective in 1982 when he founded the Penn Literacy Network (PLN). Originally its director, Botel is now senior advisor. His daughter, Bonnie Botel-Sheppard, replaced him as director.

Botel’s proud that the core of the PLN—energizing teachers and improving schools—applies to strategic goals four and five in President Judith Rodin’s “Agenda for Excellence.” Those goals encourage Penn to “support strategic investment in programs of continuing education in the arts and sciences and in the professions when they are consistent with Penn’s academic mission and capacities and needs of society” and to “strengthen the links between [Penn’s] academic programs and the public service performed by its faculty, students, administrators and staff.”

Thanks to PLN, more than 7,000 teachers have been trained in Botel’s holistic approach. Moreover, these teachers have been given the opportunity to shape the program.

“The teachers are not just following my prescriptions,” Botel said. “They’re reading, writing and discussing what it should look like in their school.”

PLN representatives travel to schools and identify areas for improvement—how reading, writing and talking across the curriculum can be applied. It’s up to the teachers to decide which approach to take.

“The method provides a great deal of creativity for teachers—how they want to have students read or write or talk about a topic,” Botel explained. “They typically combine subjects, such as literature, social studies and science, as well as phonics and spelling. They have a lot of latitude for inventing and reinventing it.”

Teachers meet regularly to share ideas. They also keep journal entries about their readings, lessons, student responses and personal reflections.

“No other staff development program we performed by its faculty, students, administrators and staff.”

thanks to PLN, more than 7,000 teachers have been trained in Botel’s holistic approach. Moreover, these teachers have been given the opportunity to shape the program.

“The teachers are not just following my prescriptions,” Botel said. “They’re reading, writing and discussing what it should look like in their school.”

PLN representatives travel to schools and identify areas for improvement—how reading, writing and talking across the curriculum can be applied. It’s up to the teachers to decide which approach to take.

“The method provides a great deal of creativity for teachers—how they want to have students read or write or talk about a topic,” Botel explained. “They typically combine subjects, such as literature, social studies and science, as well as phonics and spelling. They have a lot of latitude for inventing and reinventing it.”

Teachers meet regularly to share ideas. They also keep journal entries about their readings, lessons, student responses and personal reflections.

“No other staff development program we have witnessed has the teachers work through their thinking on a regular basis by writing in journals, constantly revising and refining their thought processes, coming to understandings that would not have been possible without the rigor of forcing thought onto paper,” said George P. Faunce, director of special projects for the West Deptford Township Schools in West Deptford, N.J., which has been involved with PLN since 1985.

Botel and colleagues at GSE train instructors through conferences, newsletters and summer workshops. These instructors are typically outstanding teachers and supervisors in the schools that initiated the local PLN seminars.

After teachers from individual schools are trained in the holistic approach, they share their experience with fellow teachers. The results have been impressive.

“Within three years, the entire staff converted, voluntarily, from a basic approach to teaching reading to a holistic approach,” said Gaeton Zorzi, principal of the William Cramp Elementary School in Philadelphia. “I believe our involvement in PLN was the single most-important programmatic factor in turning our school around. I participated personally in three years of the seminars and found them very rewarding. PLN is a powerful vehicle for transformational change in schools.”

Prior to adopting the PLN program, William Cramp ranked 170 out of 175 schools in standardized tests on reading and math. The school rose to 70th place within three years, then 34th place within five years. The percentage of students in grades two through four who are reading on or above their grade levels rose from 24 percent in 1988 to 48 percent in 1993.

The Delcroft School and Harris School in the Southeast Delco School District in Delaware County are hoping for similar success. The schools began using the approach three years ago. Later this spring, PLN will measure students’ achievements based on a new holistic assessment system developed by Botel.

“The superintendent of schools invited me to come in and do an assessment approach and demonstrate the potential of our program,” Botel said. “I agreed to do it if I could do it on a bigger scale, totally connect it to teaching, learning and assessment. Many of the district’s teachers took the training. The actual data [on student achievement] is very promising.”
Larry Gladney Makes Physics Fun for Fifth-graders

Is the theater a good place to learn about physics?

It has been this year for students in Martha Hodges-Gritter’s fifth-grade class at Wilson Elementary School. Through the Annenberg Center’s education department, physics professor Larry Gladney has used stage performances as a springboard for exploring basic principles of physics with the fifth-graders.

On April 11, the Wilson students attended a production of “The Number 14,” a comedy about passengers on a cross-town bus. The actors in the play lurch, bump, and even somersault their way across town in response to the bus’s motion. Afterwards, Gladney demonstrated the physics behind the motion with a series of experiments involving the students.

One of the concepts covered was that of the “center of gravity” of an object—the reason passengers standing on a bus often lose their balance. Using an action figure and a pen (below, right), Gladney showed how a large object with a low center of gravity can balance perfectly on a small surface. After the students tried unsuccessfully to roll several objects down a tightrope without the objects falling off, Gladney produced a wheel with counterweights (below, left). The counterweights lowered the wheel’s center of gravity and thus let it roll down the rope without falling off.

The students also used lasers to explore whether it was possible for a person to stand absolutely still (it wasn’t) and learned how motion detectors worked by trying to copy a line drawn on a blackboard with a plot drawn by the motion detector on a computer.

This was the second get-together this year for Gladney and the students in Ms. Hodges-Gritter’s class. Last fall, after seeing the play “Fish Whiskers” at the Annenberg Center, the students explored ultraviolet light, which was used in the play, with Gladney. The Annenberg Center plans to continue the collaboration with Gladney and a new class of Wilson fifth-graders next year.

The French Paradox and the Consumption of Alcohol

Smoking. Hypertension. Lack of exercise. A high-fat diet. All of these things can lead to coronary heart disease (CHD). Yet the French, who are no strangers to these risk factors, suffer the lowest level of heart disease in the Western World. This is known as “The French Paradox.”

On April 22, Serge Renaud, the scientist who solved this paradox, came to Penn to discuss his findings. Renaud is the researcher who identified the connection between France’s low CHD mortality rates and the moderate and regular consumption of alcoholic beverages.

During his lecture at Meyerson Hall, Renaud emphasized the importance of “moderate and regular consumption”: 20 to 40 grams of alcohol, three or four days per week. He pointed out that this type of drinking reduces the risk of CHD by 20 percent to 60 percent. Binge drinking, on the other hand, increases the risk.

Renaud also noted that wine, particularly red wine, provides more benefits than other alcoholic beverages. According to Renaud, a recent study has shown that wine offers 30 percent to 40 percent more protection against CHD than beer or spirits. This may come as bad news to Americans, who prefer beer. In Mediterranean countries, wine is regularly served with meals, and in France, the moderate consumption of wine is the highest in the world on a population basis.

Photographs by Candace dcCarlo

Photographs by Jenny Friesenhahn

Questions? Comments? Something newsworthy to report? Contact The Compass at (215) 898-1427 or jandag@pobox.upenn.edu.
Chris Friese, Lois Evans and Linda Aiken look over patient records at the CARE facility.

Undergrad Researcher Cares About CARE

By Jerry Janda

Chris Friese (N’97) never intended to get involved in research. He never even had any interest in it.

Funny how things turn out.

“I’ve learned that research is an exciting thing,” Friese said. “I really got the research bug being here, being with these investigators, learning the things that they’ve been doing, and learning how their research has huge implications for practice.”

“Here” is the Center for Health Services and Policy Research, a Penn organization that designs and implements evaluations for clinical practices within the nursing school. Friese, now a junior, joined the center his freshman year. Not because he wanted to try his hand at research. Because he wanted to work closely with the center’s director, nursing and sociology professor Linda Aiken.

Friese became familiar with Aiken’s work during his first semester. Like all first-year nursing students, he was required to take an introductory course in nursing. The syllabus for this mandatory class included “Charting Nursing’s Future: Agenda for the 1990s,” a book that Aiken co-edited.

Impressed by Aiken’s prominence in the nursing field, Friese was determined to work with her. He didn’t have to wait long for his chance. While riding an elevator in the Nursing Education Building, Friese noticed an ad for the Center for Health Services and Policy Research. Aiken needed work-study students.

It was a golden opportunity that Friese had no intention of missing. Unfortunately, when he applied at the center, he received some bad news. Other nursing students had also seen the ad—earlier. All of the work-study positions were filled.

Friese was undaunted. If the center couldn’t hire him as a paid employee, then he would work for free. He volunteered his services, gratis. Aiken accepted.

At first, Friese spent his time at the center photocopying and filing—duties he performed diligently. However, Aiken quickly recognized the freshman’s potential. Realizing that Friese possessed strong intellectual and organizational skills, Aiken appointed him to the position of research assistant.

“As Friese sharpened his investigative skills, Aiken told Lois Evans, associate professor and director of academic nursing practices, about her researching prodigy. At the time, Evans was establishing the Collaborative Assessment and Rehabilitation of Elders (CARE) Program, a multidisciplinary project between the School of Nursing, the School of Medicine and some departments at HUP.

“Our program is aimed at a group of old people who tend to fall through the cracks,” Evans explained. “They’re not sick enough to get into a nursing home immediately, but they start falling, or they have the flu, and they get depressed and stop eating, and then they get weaker.

“Once they get started, unless something arrests that process, they are on the course for multiple hospital stays, and eventually a nursing home and death. If you intervene early enough and strongly enough, you can produce some sort of plateau and actually improve functions.”

Evans had confidence in CARE, believing that the program could benefit a neglected portion of the elderly population. What she didn’t have was proof.

Aiken and Evans assembled a research team to evaluate the fledgling CARE Program. As a bright research assistant, Friese was one of their first choices. “He showed great promise as a researcher and as a clinician, so we thought he would be an excellent person to take a leadership role in this particular project,” Aiken said.

They also believed that an undergraduate could make a valuable contribution to the project. And vice versa. “Our graduate program is only one year long in the nursing school,” Evans explained. “So the master’s student may get involved in something, but it’s not very long-lived. And this was clearly something that would be a greater experience for someone if they had a longer period of time to be involved in it.”

Friese said that evaluating CARE has been a unique experience. That’s because CARE, itself, is a unique program. Its clinicians specialize in nursing, medicine, rehabilitation, mental health and social services. Under the supervision of a nurse practitioner, they develop individual treatment plans for each patient.

“A lot of these patients may be trying to recover from a stroke or a hip fracture, or may just have been evaluated by a physician who seems to think that they are being deconditioned or increasing in frailty,” Friese said. “So they are referred to the program for a tune-up, to keep them at an optimal level of function.”

Since CARE is so unique, the research team had difficulty finding a group comparable to the program. “Even though we are listed as a CORF [Comprehensive Outpatient Rehabilitation Facility] under Medicare,” Evans said, “I haven’t found any other CORFs in the country that are only serving the very frail elderly, and none of them are

(continued on page 15)
Urban/Suburban Student Volunteers

It was a celebration that brought more than 250 students from 50 area high schools together to break down the walls that divide urban and suburban worlds.

The Greater Philadelphia High School Convocation was held on April 23 at the Zellerbach Theater at the Annenberg Center as part of National Volunteer Week. The convocation was the culmination of a year-long effort by Ted Hershberg, director of Penn’s Center for Greater Philadelphia. Last fall, he challenged city and suburban students to work together to improve the region’s quality of life.

“We wanted to promote regional cooperation and build personal bridges of trust and friendship across the barriers of race, class and politics that characterize the metropolitan area,” he said.

The students launched 13 projects under the following themes: Arts and Culture, Children and Family, Health Care, Housing, Multimedia, Parks and Recreation, and Independent Projects. Last Tuesday, displays filled the lobby of the Annenberg Center, highlighting the results.

Projects included murals painted for SEPTA train stations; various park cleanups; sessions at homeless shelters; housing-renovation work; educational sessions for schoolchildren; and the creation of a video about the differences and similarities between city and suburban high schools.

Teams were organized last December, and each included faculty advisors from a suburban and urban high school. Team leaders were the students themselves.

Students were honored for their volunteer efforts during an awards ceremony hosted by Channel 3 TV Sportscaster Ukee Washington (pictured left, signing autographs).

In a letter to the participants, former Pennsylvania Senator Harris Wofford praised the volunteers for their efforts.

“By participating in the convocation, you are joining thousands of high-school and college students across the country who are making important contributions to their communities,” he wrote.

Wofford, who is now the chief executive officer of the Corporation for National Service, reminded the students that “the broader definition of community—treat the city and the suburbs as key components of a common region—will help us find new and productive ways to work together.”
Teaching Lawyers a New Philosophy

By Robert S. Strauss

What do most prospective law students hope to get out of a legal education? Ask them, and they’ll tell you. A good academic grounding. An opportunity to work with a collegial group of teachers and students. A new way of thinking.

But that’s not all they want. Although they may not admit it, they secretly long for something else: a law degree, debt-free.

No chance, you say? Visions of a six-figure debt stalking the graduate like a drooling brown bear after a honeypot.

Well, come on over to Heidi Hurd’s office, because she has some good news for law students: a financially free University of Pennsylvania law degree.

Ah, yes, but there is a catch. You must be one of the best philosophy students in the land and willing to spend six grueling years in Penn’s nascent joint Ph.D.-J.D. program in philosophy and law.

“This is a unique program,” said Hurd, the associate dean of academic affairs at the Law School. “I’m sure it’s absolutely unique in its financial relations. We guarantee them six years of full financial assistance. The goal is for them to come out of the program to be well-trained academics.

“When you come out of law school in America, you come out with such tremendous debt you feel you have to go into a big law firm. This program was designed to be debt-free. It is designed to allow students to graduate with a first-class education in law and philosophy, so they can become first-class philosophers.”

Certainly, it is a bit flip to call the law-philosophy program merely a free ride through Penn’s Law School. It is, Hurd believes, a cutting-edge academic idea with a rigorous basis. Hurd came to Penn seven years ago from the University of Southern California with the idea of forming this type of program. She herself has a J.D. degree and a doctorate in philosophy from USC, and a master’s degree in legal philosophy from Dalhousie University in Canada. She is jointly appointed in law and philosophy. She coordinates the program with her husband, law professor Michael Moore, and Samuel Freeman of the Philosophy Department.

“Penn has long failed to take its place among the leading institutions that turn out teachers,” Hurd said. “When we go after law professors, we are still looking for people who come from Columbia or Harvard or Yale or Stanford. It’s time Penn stepped up its effort to produce teachers in law and philosophy. I hope this program will make us a teacher of teachers, as well as a teacher of lawyers. This should be good for Penn as an institution as a whole.”

The first two students in the joint law-philosophy program—Joseph Farmer and Ned Diver—are finishing up their second year. The first two years of the program were spent entirely in the Philosophy Department. Next year, Farmer and Diver will become first-year law students. The following two years, they will take courses in both disciplines, so that both degrees will be completed by the end of the fifth year. In the sixth year, they will do their philosophy thesis work.

“We debated about designing an initial couple of courses for the program, but in the end we decided against that,” Hurd said. “We already have a number of courses that fit the program, and we wouldn’t be adding anything by having more.”

Hurd said her biggest hurdle was convincing the Law School to treat the students in the program as academics and, thus, give them complete financial assistance. Now, she hopes the Law School will extend the program to other disciplines.

“We are looking for other things, maybe law and sociology or law and history, so that people will be able to get advanced degrees in those fields in order to become academics,” she said. “The Law School has become an enormously successful theoretical law school. Its future fame lies in that direction, and it has been going that way for about 10 years now. To that end, it should go towards increased multidisciplinary courses.”

Hurd noted that there are four Law School professors with advanced degrees in philosophy, “plus a number of fellow travelers interested in the philosophical.”

“This is the place to go for law and philosophy,” she said. “And that is not just true of the Law School. Penn is an astonishingly philosophical place.”

While the aim of the law-philosophy program is to produce professors, Hurd notes that those completing the program should remain attuned to the important issues of the day.

“As a general matter, the kinds of social problems we face are those that are imminently relative to philosophy and philosophers,” she said. “At a time when personal responsibility is at issue, no one is more attuned than a moral philosopher.” She added that the law component is a bonus.

“Lawyers like to say that law is philosophy with a point,” Hurd continued. “Law is the writing down of political philosophy along with economics and sociology. You can’t be a good lawyer if you aren’t thoughtful on what the law is about. And nowhere else in the academy do we teach about how to think analytically as we do in the Philosophy Department.”

Hurd said that the inspiration of the program has several students in both disciplines looking to get degrees in both law and philosophy even without the free version of law school. And it has resulted in impressive applicants. “Extraordinary people are applying for this program,” she offered. “We will be able to use these fellowships to attract the best and the brightest from around the world.”

Hurd expects virtually all of those who go through the program to become professors, but she said that you never know with philosophers.

“I have a Ph.D. colleague of mine who is doing philosophy-of-mind work for Boeing,” she said. “Maybe one of these folks in the program will be able to put out a shingle and just philosophize.”

Questions? Comments? Something newsworthy to report? Contact The Compass at (215) 898-1427 or jandag@pobox.upenn.edu.
Barnes & Noble to Build Nation’s First University “Superstore” at Penn

PHILADELPHIA, PA. — Barnes & Noble, the nation’s largest bookseller, will build its first university-based “superstore” on the campus of the University of Pennsylvania, Penn President Judith Rodin announced today. The 50,000 square foot store—with almost twice as much space as Penn’s current bookstore—will be constructed at 36th and Walnut streets.

The Barnes & Noble store will become the University’s official bookstore, replacing the current facility at 38th and Locust Walk. It will carry some 130,000 book titles; up to 2,000 periodicals, magazines, foreign publications and newspapers; an academic technology and multimedia center; a comprehensive music department with listening boards; a cafe; and comfortable seating areas. The store, which will open in September 1998, will combine the depth of an academic bookstore with the broad range of titles from a commercial seller. Groundbreaking will begin in the fall.

“I am so pleased to make this announcement,” said Rodin. “The addition of the Barnes & Noble superstore to our community will dramatically enhance the quality of life on campus. The partnership between one of the best book-sellers in the country and one of the nation’s leading Ivy League universities will enrich our students, our community and the City of Philadelphia. It is sure to become a model for all university bookstores.”

“As we move forward to implement our Agenda for Excellence, we are deeply aware that enhancing the quality of life for our students is an integral part of our mission,” Rodin added. “We all gain from having an exciting new bookstore with countless opportunities for an enriched intellectual and cultural life outside the classroom.”

The Penn/Barnes & Noble partnership is a component of the University’s strategic plan. The new store will be open late, offer a broad range of services, and should serve as an anchor to attract other retail businesses and visitors to the West Philadelphia community.

“The partnership combines the best aspects of Penn’s great academic bookstore with the breadth and appeal of a Barnes & Noble superstore,” said Steve Murray, Penn’s Vice President for Business Services. “It is a win-win situation for Penn, Barnes & Noble and the University community.”

Barnes & Noble, the nation’s oldest and largest retail bookseller, currently operates more than 300 campus bookstores, and approximately 370 superstores across the country. The Barnes & Noble superstores are modeled after the company’s “Main Store” in New York City, the world’s largest bookstore. Superstores are large bookstores that offer at least 100,000 titles, music selections, a cafe and other amenities. This is the first time Barnes & Noble has designed, created and built a university superstore.

“We spoke with several companies but selected Barnes & Noble because they are a first-rate company and considered the best in the business,” said Penn’s Executive Vice President John Fry. “Only Barnes & Noble has the credibility, capability and experience to create something of this magnitude.”

The new Penn bookstore will offer all of the services provided by the current bookstore. In addition, the new store will carry double the number of titles, a large and relevant tradebook selection, all University of Pennsylvania textbooks and educational supplies, an expanded assortment of emblematic clothing and gifts, dorm supplies, class rings, a large poster and print department, and art and engineering supplies. The new store will also offer a greatly enhanced discounting policy, including 20 percent off all hardcovers, 30 percent off New York Times hardcover bestsellers, and up to 90 percent off on bargain books.

As part of the partnership with Penn, Barnes & Noble College Bookstores will take over management of the University’s current bookstore on July 1. The store, at 38th and Locust Walk, will remain in operation until the new store opens.

In staffing the new superstore, Barnes & Noble College Bookstores has agreed to give first consideration to all current University bookstore employees, Fry said.

The partnership with Barnes & Noble College Bookstores will enable us to focus our resources on our academic mission, and let the business professionals do what they do best,” said Fry. “Part of our mission in restructuring the University is to seek the most professional management possible for various administrative and business services. That way, we can increase the University’s efficiency and cost effectiveness.”

“At the same time, we highly value our employees, and we were only willing to enter a partnership with a company whose records met our own high standards for employee relations,” added Fry, “a company like Barnes & Noble.”

Under the terms of the partnership, Barnes & Noble College Bookstores will pay approximately half of the estimated $8 million construction costs, Fry said. The University will own the building; the new store is guaranteed to produce at least an additional $1 million annually in revenue to the University.

The agreement with Barnes & Noble College Bookstores is an innovative way to generate additional revenue, Fry said. It is an example of a strategic investment that will yield long-term benefits to the University.

“This is fantastic for Penn students,” said Lance Rogers, chairman of Penn’s Undergraduate Assembly (the student government). “We will have a first-class bookstore with all the extras, and a late-night gathering place for socializing.”

Barnes & Noble College Bookstores will hire a full-time community relations coordinator to work in conjunction with Penn’s Office of Community Relations. The coordinator will create a calendar of events to interest the community, including children’s story hours, book discussions and poetry readings.

“This is a truly extraordinary venture,” said J. Alan Kahn, Chief Executive Officer of Barnes & Noble College Bookstores. “We never before have had the opportunity to build, from the ground up, our concept of the ultimate bookstore. We look forward to working with Penn to develop the country’s finest academic bookstore.”

— Phyllis Holtzman, News & Public Affairs
Listed below are job opportunities at the University of Pennsylvania. To apply please visit:

University of Pennsylvania Job Application Center
Funderburk 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—Funderburk Center, 3401 Walnut St. (Ground level) 9 a.m.-1 p.m.
Blockley Hall—418 Guardian Drive (1st Floor and 2nd Floor; Do not enter Berman Research Center across from B-30)
Houston Hall—34th & Spruce St. (Basement-near the elevators)
Wharton—Steinberg Hall-Dietrich Hall (next to Room 303)

Job Opportunities Hotline can also be reached 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 888-JOB 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 listed on the University’s Web pages (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 888-JOB 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.

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

University of Pennsylvania Job Application Center
Funderburk 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—Funderburk Center, 3401 Walnut St. (Ground level) 9 a.m.-1 p.m.
Blockley Hall—418 Guardian Drive (1st Floor and 2nd Floor; Do not enter Berman Research Center across from B-30)
Houston Hall—34th & Spruce St. (Basement-near the elevators)
Wharton—Steinberg Hall-Dietrich Hall (next to Room 303)

Job Opportunities Hotline can also be reached 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 888-JOB 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 listed on the University’s Web pages (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 888-JOB 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.

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

University of Pennsylvania Job Application Center
Funderburk 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—Funderburk Center, 3401 Walnut St. (Ground level) 9 a.m.-1 p.m.
Blockley Hall—418 Guardian Drive (1st Floor and 2nd Floor; Do not enter Berman Research Center across from B-30)
Houston Hall—34th & Spruce St. (Basement-near the elevators)
Wharton—Steinberg Hall-Dietrich Hall (next to Room 303)

Job Opportunities Hotline can also be reached 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 888-JOB 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 listed on the University’s Web pages (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 888-JOB 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.

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

University of Pennsylvania Job Application Center
Funderburk 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—Funderburk Center, 3401 Walnut St. (Ground level) 9 a.m.-1 p.m.
Blockley Hall—418 Guardian Drive (1st Floor and 2nd Floor; Do not enter Berman Research Center across from B-30)
Houston Hall—34th & Spruce St. (Basement-near the elevators)
Wharton—Steinberg Hall-Dietrich Hall (next to Room 303)

Job Opportunities Hotline can also be reached 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 888-JOB 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.
GRAD SCHOOL OF FINE ARTS
Specialist: Clyde Peterson
COORDINATOR II (04342CP) Manage daily operations of architecture department & supervise clerical staff; work with department chairman on all aspects of academic program; act as liaison between department chairman, college administrative & finance offices; organize conferences, student competitions & special programs; assist students in admissions, registration & other program related issues; Qualifications: Bachelor’s degree in architecture & management; at least two yrs. of experience in architecture administration; excellent interpersonal skills & communication; strong computer skills (Lotus 1-2-3, Wordperfect); ability to manage multiple projects; ability to handle confidential information; ability to prioritize & manage time efficiently; Grade: P2; Range: $19,700-25,700 4-29-96

LAW SCHOOL
Specialist: Clyde Peterson
ADMINISTRATIVE ASSISTANT III (04373CP) Provide high level administrative support to Law Library Director; support Director’s calendar, workflow, faculty committee assignments, teaching responsibilities & research; event planning & budgeting; management of independent project plus recurring events such as reception, fire drills, performance evaluation for staff reporting directly & indirectly to Library Director; provide backup to the Financial Coordinator; projects funded for office supplies for staff of thirty-one & manage the ordering & allocation of supplies; project repair & maintenance costs for floor occupancy; manage the Library & coordinate reporting resolution of building maintenance problems; supervise one assistant; Qualifications: High school graduate with at least two yrs. experience at the AA/BA level; proficiency with computers & word processing; excellent oral & communication skills; demonstrated ability to work independently & prioritize work; attention to detail & ability to handle confidential materials; Application deadline: 5/10/96 Grade: G11; Range: $19,900-25,300 4-26-96 Biddle Law Library

MEDICAL SCHOOL
Specialist: Ronald Story/Janet Zinser
ASSISTANT TO CHAIR II (04368IZ) Coordinate work for Chair of Department of Neuroscience & Neurology, including correspondence, standard protocols, management of secretaries, manage annual scientific newsletter; staff department meetings & faculty search committees; monitor work flow in department & institute; manage & maintain Chairman’s outpatient files for Neurology department & Chairman’s calendar. Qualifications: College degree preferred; six or more yrs. progressive executive administrative experience; preferred knowledge of medical terminology; strong computer, typing & proofreading skills; excellent organizational & time management skills; knowledge of computer database software (Access, Excel) & WordPerfect 6.0 & 5.2; Grade: F; Range: $21,700-28,200 4-26-96 Neuroscience
ASSOCIATE DIRECTOR VI (04378IZ) Manage & implement facilities planning & projects; projects for facilities renovation & new construction, include project management, information systems, project team communication, programming, budgeting, scheduling, activation, planning & special projects. Qualifications: Bachelor’s degree in engineering, architecture, construction administration or related field is required; seven or more yrs. relevant experience in the design & construction industry, preferably in academic & health care environments; excellent organizational abilities; superb oral & written communication skills; ability to respond promptly & accurately to a wide variety of situations; sound judgment in design, construction, & project personnel issues. Grade: P8; Range: $38,500-48,100 4-26-96 Architecture & Facilities Management

COORDINATOR II (04319BS) Responsible for overall laboratory operations; ensure efficient & effective functioning of laboratories & compliance with personnel & environmental safety procedures (biological & radiation safety); maintenance of laboratory equipment; & environmental controls; monitoring of tissue culture rooms, cryo-preservation of tissue: liquid nitrogen, inventory & supplies; direct supervision of 1-2 technician lab workers; develop plan for preventive maintenance; document & evaluations for improved operations, cost-savings & reporting. Qualifications: BA/BS required; at least three-five yrs. of experience in a laboratory setting, strong technical & interpersonal skills; knowledge of 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 4-15-96 IHTG DIRECTOR V (04377IZ) Manage facility employment process for full-time & part-time faculty in the School of Medicine, including appointments, promotions & tenure issues; maintain high level of familiarity with University policy & procedures; work employment of faculty members; provide extensive writing, interpretation, counseling & advice regarding same to Dean, Department Chairs & other staff; provide guidance to faculty members on employment related procedure processes; assist in efforts to establish endowed chairs; direct annual Faculty Extramural Activity Reports process; supervise three staff members; oversee School of Medicine Annual Section. Qualifications: BA/BS, advanced degree preferred; six-eight yrs. related experience; experience/ understanding of higher education administration, especially of personnel & procurement; 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: P6; Range: $38,500-48,100 4-26-96 Office of Faculty Affairs
FINANCIAL ADMINISTRATOR II (04383JZ) Responsible for proposal preparation & award grant & contract proposals (approximately 60+yr.); sponsors consist of clinical & non-clinical; work with P.I. to develop budget & justification; ensure that appropriate overhead & EB rates & inflation factors are applied that Spelling guidelines are met; ensure appropriate level of interdepartmental & business office support, & current expenses incorporated; obtain all necessary department, School & ORA approvals; act as contact person for all matters related to proposal preparation. Qualifications: BA/BS; advanced degree preferred; excellent interpersonal & organizational skills; two years experience in third party physician reimbursement; familiarity with personal computers required; follow grant salary funding for physicians to Dermatology endowed chairs; direct annual Faculty Extramural Activity Reports process; supervise three staff members; oversee School of Medicine Annual Section. Qualifications: BA/BS, advanced degree preferred; six-eight yrs. related experience; experience/understanding of higher education administration, especially of personnel & procurement; 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: P6; Range: $38,500-48,100 4-26-96 Office of Faculty Affairs
FINANCIAL ADMINISTRATOR III (04367JZ) Work with Principal Investigators to prepare budgets for grant applications & clinical studies; prepare &/or review research applications & proposals for grant support; act as liaison with Medical School Business Office; ORA & Regulation Affairs; monitor expenses & prepare monthly reconciliation sheets; prepare reallocation of funds; prepare & present budget for evening & weekend activities; submit proposals for budget increases; maintain computerized grant files; establish & maintain computerized financial files; monitor, review & analyze financial data; monitor, prepare & submit quarterly financial reports; grade: 5/2; Grade: P4; Range: $26,200-34,100 4-25-96 Center for Clinical Epidemiology
FINANCIAL ADMINISTRATOR III (04367JZ) Work with Principal Investigators to prepare budgets for grant applications & clinical studies; prepare &/or review research applications & proposals for grant support; act as liaison with Medical School Business Office; ORA & Regulation Affairs; monitor expenses & prepare monthly reconciliation sheets; prepare reallocation of funds; prepare & present budget for evening & weekend activities; submit proposals for budget increases; maintain computerized grant files; establish & maintain computerized financial files; monitor, review & analyze financial data; monitor, prepare & submit quarterly financial reports; grade: 5/2; Grade: P4; Range: $26,200-34,100 4-25-96 Center for Clinical Epidemiology

RESEARCH SPECIALIST, JR. (04326SR) Performs experiments using investigative techniques including animal surgery, primary cell culture of hepatocytes & other cells, protein separation by SDS-PAGE & immunoblotting, protein kinase assay & cell proliferation studies; performs general laboratory duties; input computer data; perform library searches & routine microscopic; maintain written reports on experiments. Qualifications: BA/BS or equivalent in scientific or related field; one year experience in working with laboratory animals & tissue culture preferred; good organizational & computer skills; exposure to lab work. Grade: P1; Range: $19,700-25,700 4-17-96 Biochemistry/Biophysics

RESEARCH SPECIALIST, JR. (04353SR) Conduct research in neuroimmunology & molecular biology support; use protein expression, purification, peptide synthesis & various spectroscopic techniques; perform general lab maintenance; order supplies; assist in running of laboratory; grade: 5/2; Grade: P4; Range: $19,700-25,700 4-17-96 Biochemistry/Biophysics

RESEARCH SPECIALIST, JR. (04353SR) Conduct research in neuroimmunology & molecular biology support; use protein expression, purification, peptide synthesis & various spectroscopic techniques; perform general lab maintenance; order supplies; assist in running of laboratory; grade: 5/2; Grade: P4; Range: $19,700-25,700 4-17-96 Biochemistry/Biophysics

OPPORTUNITIES at PENN

Grade: Grade: 5/2 Grade: 4/26-96

End date: 4/30/98

Grade: G11

Range: $19,900-25,300

4-26-96 Biddle Law Library
RESEARCH SPECIALIST I (04349RS) Perform wide range of techniques in molecular & cell biology including nucleic acid purification, DNA sequencing, various biochemical & histological assays, including analysis of bacterial, yeast & mammalian cells; cell-free protein translation care & analysis of mice; under limited supervision, perform experiments & research specific experimental design & implement new protocols, write lab reports, analyze data; perform computer searches; order & maintain supplies & equipment; assist in training other laboratory personnel including students.

Qualifications: BA/BS in scientific field & knowledge of molecular & cell biology required; two-four yrs. of laboratory experience in working with recombinant DNA techniques & protein analysis preferred; ability to work independently & interdependently & independently of computer software required; knowledge of laboratory equipment required. (End date: 4/30/98)

Grade: P3; Range: $21,700-28,200, 200-24,226 IHTG

RESEARCH SPECIALIST III (03425RS) Perform specialized research in genetics & molecular biology; perform research testing on patients with hereditary visual impairment; interpret & analyze patient data using ERG, VER, mode, EOG, 100 HUE dark & light adapted & D-15 color test; prepare & perform visual & psychophysical tests; coordinate related patient activity; maintain records, prepare & assist with reports, publications & letters; may supervise clinic personnel & fellows; inventory control. Qualifications: BS/MS in biological sciences preferred; computer literacy desirable; experience with night vision research preferred; one-three yrs. experience in field of visual electrophysiology & psychophysics preferred; demonstrated interpersonal skills. RES, SPEC, I: BA/BS, Masters preferred in science related field; three-five yrs. experience Grade: P2/P3; Range: $21,700-28,200, 230,901-31,000 4-19-96 Ophthalmology

RESEARCH SPECIALIST II (04378RS) Under limited supervision provide technical support in the area of animal models to laboratory personnel, including junior faculty, post-doctoral fellows & technicians with the Department’s research laboratories; independently manage breeding colonies of mice; design strategies for cross-breeding; develop a computer system for documenting pedigree & perform molecular analysis to detect transgenic animals & surgical procedures on small animals, including rats, mice, rabbits; supervise animal facility; manage IACUC submission accounts for animals & animal related charges. Qualifications: BA/BS in a scientific field preferred; three-five yrs. of experience as a Research Specialist I or equivalent required; experience with animal models necessary; previous breeding experience preferred; ability to work independently with minimal supervision necessary; good oral & written communication skills required; computer experience necessary, including working knowledge of word processing & spreadsheet calendar programs; Macintosh experience preferred. (End date: 4/30/98)

Grade: P3; Range: $23,900-31,000 4-22-96 IHTG

STAFF ADMINISTRATOR I (04361RS) Support the Deputy Director of the Institute for Human Gene Therapy (IHGT); ensure efficient & effective operation of the Regulatory Affairs Office; oversee the organization & management of office personnel, reports, files, & forms; maintain systems; serve as liaison with external & internal office, including the Office of Research Administration (ORA) for the University of Pennsylvania & Children’s Hospital of Philadelphia (CHOP), the IHGT & IRB for both the University & CHOP; the Food & Drug Administration, the Recombinant DNA Advisory Committee (RAC) of the National Institute of Health & other government & administrative bodies. Qualifications: BA/BS required; previous experience in office administration or as executive secretary; excellent oral & written communication skills; strong organizational & computer skills; work efficiently with diverse constituencies; ability to work under changing deadlines & priorities; experience on word processor; excellent typing skills required; knowledge of Microsoft Word, Excel & Lotus preferred; familiarity with an academic medical environment desirable. (End date: 4/30/98)

Grade: P1; Range: $19,700-25,700 4-22-96 IHGT

ADMINISTRATIVE COORDINATOR I (40 HRS) (03484HZ) Coordinate & maintain calendar; arrange appointments; make & confirm local & long distance travel arrangements for Division Chief; assist the Division Chief in the preparation of grant proposal text & form; manuscripts, abstracts, journal reviews, clinical trial protocols & patient correspondence; coordinate attending schedule; coordinate office workflow. Qualifications: Associate degree in business related field or equivalent progressive work experience; working knowledge of WordPerfect, Microsoft-Word, Excel & Lotus required; knowledge of spreadsheets necessary. (End date: 4/30/98)

Grade: G9; Range: $20,143,24,457 4-26-96 4-26-96 Medicine/Endo

BUILDING SERVICES ASSISTANT (40 HRS) (04344HZ) Coordinate & maintain calendar; operate audio/visual equipment; produce signs; perform shipping duties & maintain records; sort & distribute mail; deliver & pick-up mail to from various campus locations; move laboratory equipment & furniture; operate audiovisual equipment & printing signs; perform receiving, dispensing & record keeping duties; pick-up, transport & pack for shipment bags of biological infectious waste. Qualifications: High school graduate preferred; ability to lift & carry 50 lbs.; ability to tolerate unpleasant odors; ability to use simple tools; strong customer service & communication skills; must be able to work overtime on short notice. Grade: C8; Range: $17,943-22,400 4-26-96 Architecture & Facilities Management

DELIVERY CLERK (40 HRS) (04384HZ) Deliver & pick-up intramural mail & packages to University & HUP locations; sort & distribute incoming mail; pick-up & deliver materials to various Center City locations & surrounding areas; pick-up mail & materials at the US Post Office; Qualifications: High school graduate preferred; ability to lift up to 30 lbs.; must be able to follow instructions & directions; good communication skills & writing skills. (Work sch: 7:30-4:30) Grade: G6; Range: $13,029-16,000 4-22-96 Dermatology

PSYCH TEC I (40 HRS) (03462RS) (04363RS) Screen & recruit research subjects; make & record patient payments; schedule & administer psychologi- cal tests; conduct baseline & outcome interviews; maintain tracking procedures to locate patients; maintain research records; verify & enter research data; perform computer data entry tasks; work flexible schedule as needed. Qualifications: BA/BS in psychology or biological sciences required; computer literacy desirable; must be able to work effectively with patients; must be detail oriented. (May involve eve- nings/weekends) Contingent on funding. Grade: G10; Range: $21,371-26,629 4-25-96 Psychiatry

RESEARCH COORDINATOR I (40 HRS) (04346RS) Subject recruitment in research protocols; administer interviews; score test batteries; maintain file forms & research records; collect & enter data into data base; assist with & direct all aspects of work including collection of publications/vital signs. Qualifications: High school graduate with some college courses in social/biologi- cal sciences; some exposure to social science research methods; some exposure to lab techniques; other lab procedures (microscopy & photog- raphy); use personal computer; input computer data; perform routine analyses; demonstrate techniques to students; maintain equipment; order supplies; assign tasks to students & perform scoring & analysis for research protocols, using statistical software packages; enter & maintain records, prepare & assist with reports, publications & letters; may supervise clinic personnel & fellows; inventory control. Qualifications: BS/MS in the biological sciences preferred; computer literacy desirable; experience with night vision research preferred; one-three yrs. experience in field of visual electrophysiology & psychophysics preferred; demonstrated interpersonal skills. RES, SPEC, I: BS/MS, Masters preferred in science related field; three-five yrs. experience Grade: P2/P3; Range: $21,700-28,200, 230,901-31,000 4-19-96 Ophthalmology

RESEARCH ADVISOR II (04370RS) Re- search associate or equivalent required; ability to work independently & interdependently & independently of computer software required; knowledge of laboratory equipment required. (End date: 6/30/97)

Grade: G10; Range: $18,700-23,300 4-26-96 Pathology & Lab Medicine

RESEARCH LAB TECHNICIAN II (04372RS) Make cDNA constructs, run Northern & Southern blots; perform in situ hybridization; perform RT-PCR; run sequencing gels; & make retroviral constructs; keep logs & write lab reports; demonstrate techniques to students; attend group meetings; supervise students workers; monitor expenses & evaluate maintain equipment; order supplies. Qualifications: BA/BS in science related field; four-year degree in large field; exposure to lab techniques; take part in lab meetings, input computer data; keep logs & write lab reports; perform library searches; maintain lab equipment & order supplies; assign tasks to students. Qualifications: Associates/BS degree in major field related to molecular biology, biochemistry or biology; exposure to lab work required. Grade: G10; Range: $18,700-23,300 4-26-96 Pathology & Lab Medicine

SECURITY OFFICER/SCHOOL OF MEDICINE (40 HRS) (04347RS) Coordinate & maintain calendar; perform routine duties including pick-up intramural mail & packages; perform receiving/shipping duties & maintain records; sort & distribute mail; deliver & pick-up mail from various campus locations; manage laboratory equipment & furniture; operate audiovisual equipment & printing signs; perform receiving, dispensing & record keeping duties; pick-up, transport & pack for shipment bags of biological infectious waste. Qualifications: High school graduate preferred; ability to lift & carry 50 lbs.; ability to tolerate unpleasant odors; ability to use simple tools; strong customer service & communication skills; must be able to work overtime on short notice. Grade: C8; Range: $17,943-22,400 4-26-96 Architecture & Facilities Management

TECH, VET ANESTHESIA I (04324RS) Assist in surgery in a hospital, in a circulating & anesthesia role; maintain & prepare all supplies & instruments for sterile surgical procedures; perform some biochemical analysis & maintain lab inventory; perform post-operative care of patients; assist in surgical procedures on research & animals. Qualifications: Completion of an accredited animal health technology program or equivalent experience; BA/BS preferred; two yrs. related medical or animal experience; basic understanding of anatomy & physiology; ability to restrain, control & carry small & large animals; familiarity with policies related to the humane & ethical treatment of animals. (Ongoing continuing education funding) Grade: G11; Range: $19,900-25,300 4-19-96 Center for Experimental Therapeutics

PRESIDENT

Specialist, Susan Corran/Janet Zinser

ANNUAL GIVING OFFICER II (04375ZI) Develop & implement fundraising strategies for 55th, 60th & 65th reunion annual giving campaigns & assist with the 30th reunion classes; plan organize & implement reunion events; volunteer to identify & solicit prospects; organize reunion gift committee; oversee memorial program. Qualifications: BA/BS; three yrs. experience in development, alumni school or related field; familiarity with fundraising programs; excellent oral & written communication skills; willingness to travel; valid driver’s license. Grade: G8; Range: $20,000-27,600 4-26-96 Development & Alumni Relations
writing services in support of the advancement goals of the University; coordinate planning, research & production of development newsletters; write copy and collateral material for fundraising programs; work with development officers and faculty to plan and prepare gift solicitations; research and write proposals, speeches and stewardship reports; participate in training workshops; draft gift acknowledgment letters.

**Qualifications:** BA/BS; six-eight yrs. experience in a professional writer and editor; with five yrs. direct experience in higher education or related area; excellent command of language, grammar & spelling, with a good eye for detail; demonstrated skill and experience in editing and producing publications; knowledge of the University environment; ability to relate comfortably to alumni and volunteers, as well as faculty administrators, executive and other staff.  

**Grade:** P7; Range: $35,000-43,700 4-18-96 Development and Alumni Relations

---

**PROVOST**

**Specialist:** Clyde Peterson

**CLINICAL VETERINARIAN (04374CP)** Provide health monitoring, diagnostic, medical & surgical services to research and teaching, in conjunction with clinical, research & teaching; provide instruction to technicians & veterinarians in techniques involved in use of lab animals; advise; required to work with animals which may be infected with biohazardous organisms, carcinomas, tumors; risks: required to work with animals which may be infected with biohazardous organisms, carcinomas, tumors.

**Qualifications:** BA/BS; one year experience in a laboratory or research environment; knowledge of immunology & molecular genetics; ability to work comfortably in a laboratory environment; ability to work independently; ability to work with laboratory animals; multitasking ability.

**Grade:** P1; Range: $54,500-68,200 4-26-96 Provost’s Office

---

**DIRECTOR, RECREATION (04328CP)** Provide services to promote student recreation; coordinate & administer recreation programs; develop & maintain recreation programs for physical activity & social activity; coordinate & administer recreation programs for physical activity & social activity; coordinate & administer recreation programs for physical activity & social activity.

**Qualifications:** excellent experience in coordinating & administering recreation programs; excellent experience in coordinating & administering recreation programs; excellent experience in coordinating & administering recreation programs.

**Grade:** R8; Range: $38,500-48,100 4-25-96 DRIA

---

**LIBRARIAN II/III (04357CP)** Promote, facilitate & implement the development of library services; work with faculty, students & other members of the University community; coordinate library and information center activities; coordinate library and information center activities; coordinate library and information center activities.

**Qualifications:** BA/BS; ALA-accredited MLS or equivalent; demonstrated work experience in a library setting; demonstrated work experience in a library setting; demonstrated work experience in a library setting.

**Grade:** P5/P6; Range: $28,800-37,600/$31,900-40,600 4-24-96 Biomedical Library

---

**SYSTEMS ANALYST II (04359CP)** Analyze request for new systems or systems modifications; prepare feasibility & cost-benefit analyses; prepare design documents; develop design specifications, resource requirements & effort estimates; coordinate design with functional units; write system & operational documentation; supervise change requests processes; provide technical support for staff; develop & maintain systems requirements; develop & maintain systems requirements; develop & maintain systems requirements.

**Qualifications:** BA/BS; MIS or equivalent experience; four yrs. professional experience; excellent interpersonal & verbal communications skills.  

**Grade:** P5/P6; Range: $35,000-43,700 4-24-96 Wharton Computing Systems

---

**OFFICE ADMINISTRATIVE ASSISTANT III (04360CP)** Perform administrative/clerical duties in support of the central administration budget, purchasing, personnel/payroll & other service areas on campus.  

**Qualifications:** Completion of high school business curriculum & related post high school training or equivalent; two yrs. experience in office environment; excellent clerical accounting & office standard/practices; working knowledge of Macintosh computers; strong interpersonal communication skills.

**Grade:** G11; Range: $31,900-35,000 4-26-96 Provost’s Office

---

**WHARTON SCHOOL**

**Specialist:** Janet Zinser

**SYSTEMS PROGRAMMER III (043411Z)** Provide technical support for Unix, Netware & Windows operating systems, networking products & application software at the Wharton School.  

**Qualifications:** Excellent knowledge of TCP/IP & other network protocols; experience in creation of as real-time trading environment for student; provide technical support to the researchers in the Finance Department to enable them to meet the goals of the project; be familiar with the University’s information technology & management.

**Grade:** P7; Range: $35,000-43,700 4-24-96 OEHS

---

**VACATION**

**Pocono Chalet, 3BDR/18, deck, Swimming, fishing, tennis. $350/week, 215-573-9048**
OEHS Training Schedule
OSHA Required Programs

The following training programs are required by the Occupational Safety & Health Administration (OSHA) for employees who work with hazardous substances including: chemicals, human blood, blood products, fluids, or human tissue specimens. These programs are presented by the Office of Environmental Health & Safety (OEHS). Attendance is required at one or more sessions, depending upon the employee’s potential exposures.

Introduction to Laboratory Safety at Penn (Chemical Hygiene Training)

Required for all University employees who work in laboratories. Provides a comprehensive introduction to laboratory safety practices and procedures at Penn and familiarizes the laboratory employee with the Chemical Hygiene Plan. Topics include safe work practices, protective equipment, waste disposal procedures, resources, and emergency procedures. This course is designed for employees who have not previously attended Laboratory Safety or Chemical Hygiene Training at the University. May 14, 1:30-2:30 p.m., John Morgan, Class of 1962

Introduction to Occupational Exposure to Bloodborne Pathogens

Required for all University faculty and staff who are potentially exposed to human source material, human blood or blood products, human body fluids, and/or human tissue. Topics include a discussion of the Exposure Control Plan, free Hepatitis B vaccination, recommended work practices, engineering controls and emergency response. This course is designed for employees who have not previously attended Bloodborne Pathogens training at the University. May 22, 10-11 a.m., John Morgan, Class of 1962.

Laboratory Safety: Annual Update

This program is required annually for all laboratory employees who have previously attended “Chemical Hygiene Training.” Topics include chemical risk assessment, recommended work practices, engineering controls and personal protection as well as an update of waste disposal and emergency procedures. Faculty and staff who work with human source materials, HIV or hepatitis viruses must attend the “Laboratory Safety and Bloodborne Pathogens: Annual Update” (below). May 16, 2-3:30 p.m., John Morgan, Lecture Room B.

Laboratory Safety and Bloodborne Pathogens: Annual Update

This program is required annually for all faculty and staff who work with human source material, HIV or hepatitis viruses and have previously attended “Occupational Exposure to Bloodborne Pathogens.” Issues in general laboratory safety and bloodborne pathogens are discussed. Topics include bloodborne diseases, risk assessment, recommended work practices, engineering controls and personal protection as well as an update of waste disposal and emergency procedures. Participation in “Laboratory Safety-Annual Update” is not required if this program is attended. May 27, 10-30 a.m.-12 noon, John Morgan, Lecture Room B.

Attendees are requested to bring their Penn ID cards to facilitate course sign-in. These programs are offered monthly. Dates are published in Almanac and are available on the OEHS website (http://www.oehs.upenn.edu). If you have any questions, please call Bob Leonzio at 898-4453.

Crime Alert: Two Variations on the Flim-Flam

The Penn Police are currently investigating two separate types of fraud incidents reported in the University City area. Both are considered cases of theft commonly known as “Flim-Flam.”

In the first incident, at 40th and Chestnut Streets, a student was approached by an actor who stated that he was new to the United States and in need of assistance regarding lodgings. A woman entered the conversation posing as a sympathetic passer-by. Ultimately, the student was asked to place her jewelry and cash into a handkerchief along with what was represented as $5,000 in cash. The student was asked to hold the handkerchief for the actor until he obtained secure lodgings. The handkerchief given to the student contained only a roll of paper.

In the second scenario, a female actor, described below, has approached individuals at 32nd and Market Streets during the evening hours requesting help with a dead car battery. The actor has successfully obtained cash, supposedly to purchase a new car battery, and has prefaced her requests by falsely stating that she is an employee of the Newman Center, 3720 Chestnut Street.

First Incident: Black male: 30 years of age, 5’10”, approximately 140 lbs., full lips, brown teeth; last seen wearing: brown and black-patterned shirt, dark baseball cap, blue and white “Fila” sneakers; walks with a distinct limp, has a South African accent; displayed “$5,000.” Black Female: 20-30 years of age, 5’5”; blonde hair; last seen wearing gold earrings.

Second Incident: Black female: 30-35 years of age, 5’5”, black hair; last seen wearing pale purple sweatshirt and tan pants, nose stud with red stone; claims to be an employee of the Newman Center.

Safety Tips:

• Call the police to report the location and circumstances of persons claiming to be in trouble. Refer persons to the police to obtain assistance if they claim to need help with a predicament.

• Do not stop and give directions or other information to strangers.

• If it sounds too good to be true, it usually is! You don’t get something for nothing.

• As always, when there is a problem, use Penn’s Blue Light Emergency phones for immediate contact with the Penn Police Department.

Persons with information regarding the two incidents described above may contact the Penn Police Department at the below-listed telephone numbers:


—Officer Ann Haines and Lt. Susan Holmes

Safety Alert: Caution & Common Sense at the ATM

Always try to be aware of persons near Automatic Teller Machines, especially at night. If a person’s presence concerns you, pass up that particular location and use another machine.

Try to have someone accompany you when you are going to an ATM. Try to park your car close to the ATM. Walk briskly to and from the machine, avoiding conversation with strangers. ATM forms, such as deposit slips, should be collected at a prior visit so that they can be filled out in advance.

Money withdrawn from an ATM should be placed securely out of sight immediately after it is taken from the machine. If you are followed by persons after you use the ATM, go to the nearest open business or place where people are present.

If persons enter an ATM building or walk up to an ATM and stand very close to you while you are in the middle of a transaction, cancel the transaction immediately. Be sure to wait for the machine to return your card before safely putting it away and leaving the area as quickly as possible.

Do not allow yourself to be rushed or crowded by people while you are using the machine as you may leave your card behind in your haste to get out of the situation and, to make matters worse, persons may observe your PIN as you enter it into the machine.

Avoid giving your PIN or ATM card or both to anyone—even if persons claim to work for the bank, state that they are law enforcement officials, or if they promise to share a large amount of cash with you. Contact the bank that issued the ATM card immediately if you think that the card has been lost or stolen.

Use ATMs Located Inside University Buildings Whenever Possible

Main Lobby, Harnwell House/High Rise East* 3820 Locust Walk
Plaza Entrance, Nichols House/Grad Tower A 3600 Chestnut Street
Mellon Bank Building* 36th & Walnut Streets
Ground Floor Cafe, Steinberg-Dietrich Hall 3620 Locust Walk
McClelland Lounge, The Quad 3700 Spruce Street
Ground Floor of the Ravdin Building, HUP 3400 Spruce Street
Main Lobby, Penn Tower Hotel 399 South 34th Street
Johnson Pavilion, Medical School Complex 37th & Hamilton Walk
Lower Level, Plaza Entrance, Houston Hall 3417 Spruce Street
The Food Court 3409 Walnut Street
The Book Store 3729 Locust Walk

—Officer Ann Haines

* Depository Capability
Three Ways to Mark Mother's Day May 12—Food, Flowers & Folk Dance

The Penn Tower Hotel opens its newly renovated Grand Ballroom to the public on Mother’s Day. There will be seatings at 10:30 a.m., noon, 2 and 4 p.m., with popular piano music. The menu will include filet of sole with shrimp and crabmeat, seafood pasta, breast of chicken chasseur and a cook-to-order omelet station, dessert bar, espresso, cappuccino and more. $24.95/adult, $12.95/child (tax and gratuity included). Call 387-8333 ext. 7127 for reservations.

The Faculty Club hosts its annual Mother’s Day buffet, 1:30-3:30 p.m. Specials of the day include fruit and cheese, salads, chef-carved roast leg of lamb, salmon osso bucco, penne arabiatta, potato parsnip puree, desserts, coffee and tea. $16.50 plus 18% service charge. Call 898-4618 for reservations.

At the Morris Arboretum, where Mother Nature was already celebrating spring with hosts of golden daffodils (above), Morris Dancers join in on Mother’s Day with spirited English folk-dancing and music, 1-3 p.m. The entertainment comes with Arboretum admission: $4/adult, $3/seniors, $2/students—and free for PennCard holders and children under six.

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 15 through April 21, 1996. Also reported were Crimes Against Property, including 41 thefts (including 3 burglaries, 3 thefts of auto, 12 thefts from autos, 8 of bicycles and parts); 4 incidents of injury and fraud; 15 incidents of criminal mischief and vandalism; and 1 incident of arson. Full crime reports are in this issue of Almanac on the Web (http://www.upenn.edu/almanac/v42/n30/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 the dates of April 15 and April 21, 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, Simple assaults—1.
04/15/96 10:23 AM Butcher Dorm Harassment by email/VSSS notified
04/15/96 4:17 PM Speakman Dorm VSSS continuing investigation/student vs. student
04/15/96 4:33 PM Houston Hall Compl. being harassed by girlfriend’s exboyfriend
04/15/96 4:45 PM Johnson Pavln. Actor harassed and assaulted by actor
04/16/96 8:03 PM Steinberg Cntr. Employee vs. supervisor dispute
04/21/96 1:00 AM 3700 Blk. Spruce Student assaulted by other students

35th to 41st/Market to Baltimore: Robberies (& attempts)—1
04/21/96 3:15 AM 300 Blk. 40th Robbery/simulated gun/male 225 lbs., blue jacket

30th to 43rd/Market to University: Threats & harassment—1
04/15/96 3:36 PM University Museum “Vulgar” namepin left on complainant’s desk

Crimes Against Society

34th to 38th/Market to Civic Center: Disorderly conduct—2
04/17/96 6:10 PM Houston Hall Male passing stolen gift certificate/cited
04/20/96 5:32 PM Chestnut Dorm Student discharged fire extinguisher/cited & released

38th to 41st/Market to Baltimore: Disorderly conduct—1
04/19/96 7:27 PM 3900 Blk. Spruce Disorderly conduct arrest/citation/warned & released

30th to 43rd/Market to University: Disorderly conduct—2
04/19/96 9:22 PM 33rd & Chestnut Person cited for fighting
04/19/96 10:16 PM 33rd & Chestnut Person cited for disorderly conduct/underage drinking

Almanac

3601 Locust Walk, Philadelphia, PA 19104-6224
Phone: (215) 898-5274 or 5275 FAX: 898-9137
E-Mail: almanac@pobox.upenn.edu
URL: http://www.upenn.edu/almanac

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

EDITOR
Karen C. Gaines
ASSOCIATE EDITOR
Marguerite F. Miller
EDITORIAL ASSISTANT
Mary Scholl
STUDENT ASSISTANTS
Rachael Chinai, Suma CM, Zack Miller, Stephen Sanford, Jenny Tran

UCHS STUDENT INTERNS
Maurice Anderson

ALMANAC ADVISORY BOARD: For the Faculty Senate, Martin Pring (Chair), Jacqueline M. Fawcett, Phoebe S. Loboy, William Kissack, Peter J. Kurkoff, Ann E. Mayer, Paul F. Watson; for the Administration, Stephen Steinberg; for the Staff Assemblies, Berenice Saxon for PPSSA, Diane Waters for the A-3 Assembly, Susan Williamson for Librarians Assembly.

The Compass stories are written and edited by the Office of University Relations, University of Pennsylvania.

ACTING MANAGING EDITOR
Jenny Janda
DESIGNER
Jenny Friesenrath
CLASSIFIEDS
Ellen Morawetz

The Compass, South 1B, 3624 Market Street, Philadelphia, PA 19104-2615
(215) 898-1426 or 898-1427 FAX: 898-1203
Classifieds: 898-3622
E-Mail: jandaj@pobox.upenn.edu

The University of Pennsylvania’s journal of record, opinion and news is published Tuesdays during the academic year, and as needed during summer and holiday breaks. Its electronic editions can be accessed at the Penn Internet (accessible using your PennCard) include HTML and Acrobat versions of the print edition, and interm information may be posted in electronic-only form. Guidelines for readers and contributors are available on request.

The University of Pennsylvania values diversity and seeks talented students, faculty and staff from diverse backgrounds. The University of Pennsylvania does not discriminate on the basis of race, sex, sexual orientation, religion, color, national or ethnic origin, age, disability, or status as a Vietnam Era Veteran or disabled veteran in the administration of educational policies, programs or activities; admissions policies; scholarship and loan awards; athletic or other University administered programs or employment. Questions or complaints regarding this policy should be directed to Anita J. Jenkins, Executive Director, Office of Affirmative Action, 1133 Blockley Hall, Philadelphia, PA 19104-6021 or (215) 898-6993 (Voice) or 215-898-7803 (TDD).

As the Spring Term Winds Down...

Almanac is nearing the end of weekly publication. There will be issues on May 7 and 14, and a combined issue May 21/28. After that, the schedule is “as needed” until mid-July, when Volume 43 begins.

Note that the Update in the issue of May 14 will cover a two-week period (May 15-28); its deadline is May 6.

May 6 is also the deadline for the Summer at Penn pullout calendar, which lists events that take place June, July, and August.

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

The University of Pennsylvania values diversity and seeks talented students, faculty and staff from diverse backgrounds. The University of Pennsylvania does not discriminate on the basis of race, sex, sexual orientation, religion, color, national or ethnic origin, age, disability, or status as a Vietnam Era Veteran or disabled veteran in the administration of educational policies, programs or activities; admissions policies; scholarship and loan awards; athletic or other University administered programs or employment. Questions or complaints regarding this policy should be directed to Anita J. Jenkins, Executive Director, Office of Affirmative Action, 1133 Blockley Hall, Philadelphia, PA 19104-6021 or (215) 898-6993 (Voice) or 215-898-7803 (TDD).

The University of Pennsylvania values diversity and seeks talented students, faculty and staff from diverse backgrounds. The University of Pennsylvania does not discriminate on the basis of race, sex, sexual orientation, religion, color, national or ethnic origin, age, disability, or status as a Vietnam Era Veteran or disabled veteran in the administration of educational policies, programs or activities; admissions policies; scholarship and loan awards; athletic or other University administered programs or employment. Questions or complaints regarding this policy should be directed to Anita J. Jenkins, Executive Director, Office of Affirmative Action, 1133 Blockley Hall, Philadelphia, PA 19104-6021 or (215) 898-6993 (Voice) or 215-898-7803 (TDD).
Why Children's Theatre? by Thea Diamond

The term “children’s theatre” may be a misnomer, for it encapsulates a spectrum of Western and non-Western lively arts including theatre, music, dance, mime, maskwork, puppetry, acrobatics and storytelling. Moreover, many children’s productions, performed by trained professionals, rival Broadway extravaganzas aimed at adults. Perhaps children’s theatre ought to be called “Spectacle for all ages,” since it exercises everyone’s imaginations, familiarizing us with foreign cultures, building respect for people from all walks of life, relaxing us, relieving our stress, and sending us back to the daily grind enriched and renewed. At its very best, children’s theatre empowers and educates even as it exhilarates and entertains.

In the last thirty years children’s theatre has grown up. Mercifully, it has moved beyond the pie-in-the-face brand of humor that struck me even as a child as such a desperate, cruel way of getting laughs. America’s entertainment industry has discovered the consumer potential of small kids; thus all commercials as well as animated cartoons and feature films are now targeted directly to young audiences. However, mass marketing often panders to our worst instincts, desensitizing children to violence and “difference” rather than opening their eyes and hearts, refining their emotions, enlightening them and transporting them beyond the known to new realms.

Because they are half the length of adult presentations, children’s shows have story lines and characterizations that are often sketched in impressionistically, yet with an incision that adds to their poignance. When it comes to humor, the artists are schooled in New Vaudeville and the sly references and subtle Monty Pythonesque jokes, they do appreciate the fact that children. Even when boys and girls don’t understand the sly references children’s theatre is not minimized either. Sometimes the wit operates of the seventies at the same time as it delights youngsters by validating the knowledge that the joy and wonder of live movement, melody and songs, plays, and movement pieces that deliberately tackle issues attempt to promote community and harmony. Because theatre companies must justify the funding they receive, the artists often create shows, plays, and movement pieces that deliberately tackle issues relevant to childhood. Green Thumb Theatre from Canada has examined the difficulties of peer pressure and fear of the dark. Théâtre Bouche Découues has won awards for its play about child abuse. “Bill’s New Frock” from Scotland is a light-hearted comedy about a boy who wakes up a girl and must suffer the travails of the feminine gender for a day. Despite the messages of such plays, theatre companies are careful to blend educational elements into the diversion with the knowledge that the joy and wonder of live movement, melody and dialogue must outweigh didacticism. Fun is still the bottom line.

Beyond Bozo the Clown

Today’s clowns like Fred Garbo, Bob Berky, Weird Al Simmons and Tom Kubineck are much more sophisticated, clever and funny than Bozo. The humor is not dependent on the stupidity of red-nosed, red-winged klutzes falling down and getting hurt—it derives from visual puns, breathtaking physical agility, and the anachronistic use of strange objects. Anyone who has ever heard Robert Minden (a former psychology professor from California turned children’s performer) play the eerie siren song of the saw will be forever haunted by that otherworldly sound and will never regard a household tool in quite the same way. Tail of Fishturn in America deliberately satisfies adults who yearn for the folk music of the seventies at the same time as it delights youngsters by validating their concerns, such as learning to share with siblings.

As the lyrics in children’s songs testify, the verbal component in children’s theatre is not minimized either. Sometimes the wit operates on two levels, appealing to grown-ups but going over the heads of children. Even when boys and girls try to puzzle out the adult references and subtle Monty Pythonesque jokes, they do appreciate the fact that moms, dads and older relatives are enjoying themselves as much as they are. This adds to the child’s fun and makes the occasion a bonding experience, a special child-centered event that emphasizes and elevates the value of the pint-sized members of our society. (And even as a child as such a desperate, cruel way of getting laughs.

The limitations of the stage keep theatre artists searching constantly for innovative ways to express ideas and conflict. It is impossible to do justice to car chases on stage, or to show Rambo or James Bond wiping out an army of bad guys while dangling from a helicopter. And yet when violence is depicted on the stage (as in “Dragonwings,” about the Chinese immigrant experience in turn-of-the-century San Francisco), it takes on even greater weight than ketchupy death scenes in film, because the bodies being acted on are real and getting “hurt” before our very eyes. If we are identifying, projecting, feeling what the characters are going through, we will suffer the physical assault, too. More so than television, cartoons and film, children’s theatre is redefining about reinforcing the truth that the infliction of pain is not funny or cool.

An Intersection of Art and Mind

Yet groups like Théâtre Fantastique from Paris opt for the sensationalism of film, not its hyper-reality, by making advanced technology work in a live medium. Actors wear electro-luminescent lamps and lazer-powered fiber optics on their costumes. Unseen computers on their backs control the high tech designs that ultraviolet radiation illuminates in their choreography. The audience knows that it is witnessing a one-of-a-kind event. Thus the difficulties posed by the stage can serve as inspiration for theatre’s greatest achievement—illusion.

Consider the five gymnasts in Circus Eloize from Montreal, Canada: One young man turns bicycle riding into an art, manipulating a ten-speed as if it were a “tauro.” Holding onto the handlebars of the circling bike, he effects a handstand. Another soloist climbs a ladder that is not secured, and makes it balance while he performs gravity-defying feats in the air. Théâtre Dynamo, an acrobatic group from Quebec, gives new meaning to the term “falling in love” when two young gymnasts flip themselves head over heel and hang upside down forever, dramatizing mutual infatuation. This was one of the most beautiful moments I have ever seen on stage.

The kind of theatre I am describing calls for a leap of imagination on the part of both performer and audience member. Our commitment of faith in the impossible makes possible the transformation of the everyday and ordinary into the unusual and extra-ordinary. Without being in any way pontifical or overtly educational, the performing arts teach us to take stock of our existence and to appreciate circumstances that we often take for granted. Troupes such as De-ba-jeh-mug-theatre Company from Canada introduce us to pre-Columbian Indian customs, clothing, and myths while enchanting us with spellbinding drama. Other companies like the African American Dance Ensemble, Shikisha, or Tamakko-Za from Japan, make visible cultures that we often take for granted. Troupes such as Madre Tierra inform us that the instruments they use—turtle shells, donkey jaw bones, gourds—were first assembled by indigenous peoples of the Andes in order to duplicate the sounds of nature, we are hushed and reverential.

While the Philadelphia International Theatre Festival for Children operates under the assumption that the educational values of theatre are embodied in the performances themselves—a given in all art—the accompanying Children’s Symposium emphasizes the useful application of the arts in academic disciplines. This year, professors of physics, electrical engineering, microbiology, biochemistry, and other subjects will join the visiting artists participating in workshops, high-lighting channels through which the arts intersect with curricular content, and ways that our studies inform and depend on the arts and vice versa. If children’s theatre teaches us anything, it demonstrates the interconnectedness of life and the need for playtime in everyone’s schedule.

Thea Diamond is Director of Education at Penn’s Annenberg Center for the Performing Arts, now celebrating its Silver Anniversary. For more information about the twelfth annual Philadelphia International Theatre Festival for Children, please call the box office at 898-6791. For more about the Children’s Symposium, now in its seventh year, Ms. Diamond is at 898-9080.