

UNIVERSITY of PENNSYLVANIA

Almanac

Tuesday, October 3, 1995
Volume 42 Number 6

Welcoming the New Faculty



Photograph by Candace diCarlo

IN THIS ISSUE

- 2 News in Brief: Mayor's Scholars
U.S. Graduate Deans at Penn
SAS Term Chairs:
Wm. Smith Chair to Randall Wright
Scheerr Chair to Michael Katz
- 3 Council: Disciplinary Charter Issues
- 4 Speaking Out:
Complaints on Advising? (Dr. Kelley)
Health Care in Retirement (Dr. Crockett)
Death of Dr. Bonner
- 5 Of Record: Desktop Hardware
Standards for Penn
(Vice Provost's Annual Update)
- 6 Relative Investment Performance
on Tax-Deferred Annuities:
403(b) Update
- 7 OPPORTUNITIES
- 11 CrimeStats, Workplace Events
- 12 Benchmarks: Distancing Doctoral
Education from Faculty Research?
(Dr. Madden)

Pullout:
A Compass Supplement
Introducing the New Faculty

Greeting the Newcomers

At left and on [page 2](#) are photographs from the reception given last Wednesday at Eisenlohr Hall—the home of President Judith Rodin and her husband, Paul Verkuil (far left in this photo). Over a hundred new faculty and companions were escorted by their Deans and/or colleagues to the gathering, where many also met Provost Stanley Chodorow and Trustees Chair Roy Vagelos for the first time ([page 2](#)).

New Faces of 1995

In the center of this issue is a 12-page [supplement](#) produced by *The Compass*, introducing new faculty across the University with a few words from the Deans about their schools' newest members.

NEWS IN BRIEF

This Year's Mayor's Scholars

Thirty-six new Mayor's Scholars—graduates of public, parochial and private high schools in the City who receive scholarships from Penn in an arrangement with the City dating back to 1882—joined the University this fall. They bring to 155 the total number of Mayor's Scholars in the four undergraduate classes, who share approximately \$2.6 million in grant aid from Penn.

The 36 join 90 other freshmen from the City who chose Penn (from a total of 188 Philadelphians offered admission this year). Of the Philadelphia freshmen admitted, 66 who were not selected as Mayor's Scholars will receive \$782,000 in grant aid. The 36 incoming Mayor's Scholars graduated from 14 Philadelphia high schools—eight public schools, five archdiocesan schools and one private school. Their average aid package is \$18,986, consisting entirely of grants and work study, and do not include any student loans.

Penn now has some 486 Philadelphia undergraduates, not counting those enrolled in part-time and evening programs, putting Penn "on target for reaching its goal of having 500 undergraduate students from Philadelphia enrolled by 1997 if applications continue to increase at the current rate," a University statement said.

U.S. Graduate Deans at Penn

Graduate school deans from sixty leading U.S. research institutions came to Penn over the weekend as the Association of Graduate Schools met here for the first time in its history. Two Penn speakers at the 47th Annual Meeting were Dr. James O'Donnell of Classical Studies on "Electrifying the Seminar" and Annenberg School Dean Kathleen Hall Jamieson on "Mass Media and Cynicism About Institutions." Congressman Robert S. Walker (R-PA), also spoke to the group, on federal funding policies of interest to those in graduate education.

Note: This week in *Almanac*, Vice Provost Janice Madden discusses a national organization's proposal for changing the support base for graduate education. See *Benchmarks*, back page.

William Smith Chair: Randall Wright, Economics

Dr. Randall Wright, associate professor of economics, has been appointed to one of the School of Arts and Sciences' three William Smith Term Professorships, created by Alumnus Martin Lipton, Esq., and named in honor of Penn's first Provost.

Dr. Wright, who specializes in monetary economics, labor economics, and macroeconomics, is an alumnus of the University of Manitoba with a Ph.D. from the University of Minnesota.

Since joining Penn in 1987 as an assistant professor, he has earned the 1988 Harry Johnson Prize for the best article in the *Canadian Journal of Economics*, and has received support for his work from the National Science Foundation.

Dr. Wright also serves as a consultant to the Federal Reserve Bank of Minneapolis.

Mr. Lipton, Wh '52, took his law degree at NYU and is a partner in the firm of Wachtell, Lipton, Rosen & Katz. He has served as a Trustee of the University and an Overseer of the School of Arts and Sciences, and was a founding member of the School's Economics Visiting Committee.



Dr. Randall Wright

Stanley I. Sheerr Chair: Michael Katz, History



Dr. Michael Katz

Photo by Sarah Katz

Dr. Michael B. Katz has been reappointed as the Stanley I. Sheerr Endowed Term Professor in History at SAS, Dean Rosemary Stevens also announced this summer.

The Harvard-educated Dr. Katz, co-director of Penn's Urban Studies Program, is "one of the most distinguished and best-known historians of American education in the country," the Dean said. Among his eight major books are the 1975 Albert C. Corey Prize winner, *The People of Hamilton, Canada West: Family and Class in a Mid-Nineteenth Century City*; the finalist for the American Sociological Association's 1990 book award, *The Undeserving Poor: From the War on Poverty to the War on Welfare*; and most recently, *Improving Poor People: the Welfare State, the "underclass," and Urban Schools as History*. A Guggenheim Fellow and fellow of the the Institute for Advanced Study, the Shelby Cullom Davis Center for Historical Studies at Princeton, and the Russell Sage Foundation, Dr. Katz has also served as chair of the history department at SAS.

Also reappointed to SAS term chairs are Dr. Marina Blownlee of Romance Languages, in the College for Women Class of 1963 Chair in Humanities, and Dr. William LaFleur of Asian and Middle Eastern Studies, as Joseph B. Glossberg Professor of Humanities (both announced in *Almanac* December 18, 1990.)



New Faces: Among the new assistant professors who came to last week's reception for new faculty are men and women from all over the country, in a variety of disciplines. Above left is Dr. Sylvia Santaballa, a scholar of Colonial Latin America who joined the Department of Romance Languages this fall. Dr. Scott Nettles, on the right above, arrived in January as a member of the Computer and Information Science Department at SEAS. He was introduced at the reception by his colleague, Dr. Tandy Warnow, who is standing to the right of Provost Stanley Chodorow.



Dr. Barbara Savage of History talks with the Chairman of Penn's Trustees, Dr. Roy Vagelos.

Photographs by Candace diCarlo

At the University Council September 20, Provost Stanley Chodorow asked for the views of members and of observers who had been involved in the drafting of the "Proposed Charter of the University of Pennsylvania Student Disciplinary System and Proposed Code of Academic Integrity," published For Comment in Almanac September 19. With the reminder that he welcomed all feedback by October 6, the Provost answered questions about the meaning of specific passages but, with Moderator Will Harris, indicated that the Council session would be used to gather advice and opinion rather than to debate to conclusion. This one-page synopsis is condensed from the more detailed transcription by the Office of the Secretary for the Council Minutes.—Ed.

Council: Issues Raised re the Draft Student Disciplinary Charter

Preamble: The Provost said that no system can be developed that meets everyone's concerns, but the goal this process was to produce a fair, effective, and open system for handling student disciplinary matters; to make it readable rather than legalistic; and to emphasize mediation over adjudication. While there is a difference between academic integrity cases and conduct cases, he added, the disciplinary hearings for such violations do not differ appreciably from one another. He also noted that those graduate students who fall under the disciplinary guidelines of their individual school would not be subject to these proceedings.

Discussion: To Dr. David Hildebrand's question on the extent to which the new charter would necessitate an additional administrative entities, the Provost said it would not change the fundamental size or structure of the Judicial Inquiry Office, but would create a new mediation service which might be more professionally managed than the current system, and it would reorganize the process for selection and constitution of hearing panels—a major problem in the current system. He said it also creates two student boards to provide members of hearing panels and to engage in educational activities for fellow students. Any new bodies that are created as a result of the new system largely replace existent bodies.

On behalf of the student committee that has been working with the Provost, Wilton Levine described the current draft as a workable and simple document, but he listed as the committee's concerns:

- ... a lack of general oversight by student and faculty members on cases which are not closed; he suggested that the jurisdiction now shown as held by the Director of the Office of Student Conduct in consultation with the Provost and Office of General Counsel be extended to some degree.

- ... that the Provost appoints most individuals to the major positions; he suggested that the Disciplinary Hearing Officer and Disciplinary Appellate Officer be appointed by the Faculty Senate.

- ... that the hearing procedure as written remains prosecutorial and unfair, with the student/respondent against the OSC and University, whose case is likely to be made by a lawyer—unfairly placing student against specialized training. (Ms. Laurie Moldawer reiterated this point later.)

- ... that a committee recommendation—that the Office of Student Conduct present their case in writing to the Hearing Board—is not included.

- ... that the Chair of the Hearing Board should be in charge of the hearing rather than the Disciplinary Hearing Officer.

- ... that the Hearing Board does not make a finding of fact and sanction, but merely a recommendation of sanction to the Provost.

- ... that in the conduct of hearings, if the respondent waives his/her rights to a closed hearing, the University should not require the agreement of all concerned parties for an open hearing; the respondent's willingness to waive his/her own privacy should be sufficient, except in matters where state/federal law require the complainant to be a party to the case.

- ... that although the student committee agrees that the Provost should be able to remove from the Honor Council students who fall out of good academic standing, the Charter should require internal review by the involved students and faculty and a subsequent vote to remove members of the Council for nonperformance of duties.

To Christian Hensley's query on how students would be made aware of a new Charter and procedures, the Provost said the document would be online, and each student would receive a copy upon entry to the University. He also foresees an active program of education led by the Student Conduct Council and the Student Honor Council.

Victor Prince asked if the committee had looked at judicial systems elsewhere, and Mr. Levine reported that the committee researched them at some 20 similar institutions. The Provost added that the committee also examined a "model charter" drafted by lawyers familiar with legal issues in higher education. Mr. Prince also asked about the Provost's power of intervention, and Dr. Chodorow said no system can invariably serve its purpose and the University's mission; as a result, a representative of the institution's mission—such as the Provost—needs to be able to "reach in" and fix what might be broken. Mr. Prince suggested that some specifics of the Provost's oversight be provided in the charter including the reasoning behind it and the process that such an intervention might follow.

Lance Rogers called the proposed judicial charter unacceptable to

undergraduates; comparing issues of the Provost's oversight in the students' Charter with those in Faculty Senate proposals [on sanctions for just cause], he suggested a similar compromise giving the Provost the power to reduce sanctions, but not to increase them. The Provost said he stands behind the reasoning for this element of the Charter in that (1) he is delegated the ultimate responsibility for upholding the mission of the University, and (2) he is the person who must defend the action. He said an increase in penalty, or intervention, would be rare.

Dr. Anthony Tomazinis expressed concern about the method by which differences of opinion will be adjudicated. Mr. Levine noted that the proposal provides for a third person to direct the hearing, but emphasized that the third party is appointed by the Provost as is the person presenting the case for the University—adding that while the Provost should have the ultimate authority, the system should give more ownership to students and faculty.

Dr. David Hackney made a number of suggestions, some of them parallel to those of the students—such as one that the DHO be chosen by the Faculty Senate, and another that the Charter clarify the criteria under which a Provost may intervene. To his comment on the Disciplinary Appeal Officer's being subordinate to the Provost, the latter replied that the DAO as a tenured faculty member would not necessarily be subordinate in that position. President Rodin later noted that there are several instances in which institutional authority is granted to individuals (e.g. the Ombudsman) who have represented the interests of the University community "with the necessary dispassion, fairness, and effectiveness. That a person is appointed by the provost is not *de facto* evidence that the person cannot represent the interests of the wider community."

Among the additional questions and suggestions by Dr. Hackney:

- ... the Charter does not state explicitly that once an individual is found not to be responsible the case is closed. (The Provost replied that this was not the intent, and that once a student is found innocent or not responsible, the case is concluded.)

- ... the requirement that the respondent or witnesses provide a written statement must be qualified in that there are certain situations for which such statements would be legally unwise (i.e. if the student were facing legal challenges outside the University, statements could be subpoenaed). As the Charter is now written, a student refusing to provide a written statement would necessarily be in violation of the charter; language should be added specifying situations under which a student legitimately cannot or should not make statements to the hearing panel or the OSC.

- ... the [confidentiality agreement] is unclear: Would a respondent be permitted to contact an attorney when the attorney would not be permitted to appear on behalf of the respondent? The Provost responded that the respondent does have the right to consult an attorney, and any discussion that surrounded a meeting would be protected by attorney-client privilege.

- ... the Charter places the decision as to whether an attorney is excluded from a disciplinary hearing with the prosecutor/Office of Student Conduct; suggestion made that the Disciplinary Hearing Officer might be a better person to make that decision.

- ... the requirement for a respondent to sign a release to permit the judgment to be made public is perplexing. The Provost replied that the provision was included with applications to graduate and professional schools in mind, in order to comply with the Buckley Amendment.

- ... the 7-day window during which a student may file an appeal with the Disciplinary Appeal Officer should have its opening point altered. By holding a meeting three days after the conclusion of the hearing which notifies the respondent of the decision, there would be no ambiguity as to when the 7-day window begins (i.e. when the respondent received the notification of the result, when it was mailed, etc.). The student and the student's advisor would be invited to that meeting and would not necessarily be required to attend, but the time at which the window begins would be clear for all parties involved.

Next Steps: Asked to elaborate on the process from this point to the arrival at a final document, Provost Chodorow said he would collect all comments on the draft, hold a conversation with the student committee including discussion of the comments and the language of the draft, and make a decision on the final version of the charter after these consultations.

Speaking Out

Complaints/Ideas on Advising?

Dear Colleagues:

During the past two weeks I have been carrying updated *Faculty Resource Guides* door-to-door, distributing them to all academic departments on campus to be delivered to all who have regular contact with students. If you did not get a copy and would like me to send you one, just e-mail me at akelley@dept.english.upenn.edu and I shall quickly oblige.

I know that some of them have arrived because I have received acknowledgments from several of you; but one response, offered anonymously, causes me concern and I hope that the writer thereof will be willing to contact me and provide more specifics. One of my jobs as Liaison to Student Services is to convey suggestions to these services about ways to improve. In several cases in the past, input from the community has been very helpful in making assistance more accessible or more effective. If any of you has particular complaints or suggestions about a service, gleaned from your own experience or the experience of your students, I shall be glad to act as a transmitter of that news if, for some reason, you do not wish to contact the service directly. I can then arrange for you to meet with appropriate people to discuss your concerns or shall act as a go-between if that is more comfortable for you. Unfortunately, a general note that simply describes a service as unhelpful doesn't allow me to understand exactly what sorts of problems may have arisen or to imagine ways to effect a suitable change.

—Alice Kelley, Faculty Liaison
to Student Services

Health Care Cautions

Dean Rosemary Stevens ([September 19 Compass feature](#)) is right to deplore the 180-degree turn in the focus of health care reform that occurred last fall. We have gone from trying to provide coverage for the millions of working families who have no health insurance to economizing dramatically on the existing insurance of Medicare and Medicaid beneficiaries. Dean Stevens stops short of exploring the implications of the Medicare proposals for University faculty and staff—those who are planning for retirement, as well as those already retired.

Congress is proposing to reduce the Federal expenditures for Medicare by \$270 billion over seven years. It is important to understand that this reduction is not from current expenditure levels but from projected growth levels—i.e., it represents a reduction in the rate of growth. It is also important to understand the forces driving projected growth: expansion of the elderly population, inflation, and the rapid increase in the proportion of beneficiaries over 80, who have

considerably higher medical costs per capita than younger retirees. If these growth factors are not accommodated by the Medicare budget, we will see deterioration in the quality of health care for the elderly.

There are four ways in which the government can achieve significant savings in its Medicare costs. First, more efficient use of medical resources can be obtained by eliminating unnecessary treatment and by emphasizing preventive care and early diagnosis. Second, the fees paid to hospitals and doctors can be limited through price controls (as is currently the case) or through competition among providers. Third, beneficiaries can be required to pay a higher fraction of program costs. Fourth, the quality of care can be permitted to deteriorate by cutting corners on the services provided.

Only the first of these options will fully protect the interests of Medicare recipients; and there is no assurance whatsoever that the potential for efficiency gains is sufficient to provide the large expenditure reductions promised by Congress. Price controls on Medicare reimbursement of providers, if they are substantially out of line with private market prices, carry the risk of turning the elderly into second-class citizens who have difficulty in finding doctors willing to treat them. This has already happened with Medicaid, where reimbursement allowances are considerably lower than the current Medicare rates.

The last two paths to government saving are unambiguously detrimental to retirees. Under the Congressional proposal, there is a very real possibility that Medicare recipients will have to choose between paying considerably more or receiving lower quality of care.

Those who can afford to do so will probably be able to maintain the fee-for-service plan to which they are accustomed. Fee-for-service offers the patient greater control over his/her own treatment, including unrestricted access to specialists, but is inherently wasteful in that it contains little or no economic incentive to avoid over-treatment or to select cost-effective options. HMOs are more efficient but, especially in the case of for-profit organizations, may contain economic incentives for under-treatment of chronic illnesses (tending to offset the desirable incentives toward preventive care and early diagnosis of acute problems). Those Medicare recipients who choose for-profit HMOs should remember that the first duty of managers and boards of directors is to the stockholder, not the patient, and that primary care physicians and case managers are sometimes rewarded for holding down the number of times they refer patients to specialists.

—Jean Crockett,
Emeritus Professor of Finance

Getting Federal Funding

On Monday afternoon, November 6, the Office of the Vice Dean for Research and Research Training at the School of Medicine will sponsor a seminar on *The Art and Science of Obtaining Federal Funding* to educate fellows, faculty and research trainees on the various funding opportunities available for research.

With a guest speaker—Dr. Claude Lenfant, director of the National Heart, Lung, and Blood Institute, on “Is Research a Productive Career?”—the program also presents faculty members of the University discussing successful ways to obtain research support: procedures involved in preparing a grant; available sources of support for research; and where to get help at Penn. The 1995-96 *Grant Writing Manual* will be distributed.

The seminar will run from 1-4 p.m. (with a light lunch and coffee available beforehand) in Dunlop Auditorium on the ground floor of Stemmler Building. It is designed for junior faculty, fellows, and other research trainees, but all are welcome to attend. To register please call Ameena Al-Amin at 898-1205.

Death of Dr. Bonner

Dr. Walter D. Bonner, Jr., emeritus professor of biochemistry and biophysics at PennMed since 1989, died on August 6 at the age of 75.

Dr. Bonner received his bachelor of science in chemistry in 1940 from the University of Utah and his Ph.D. in biology from Cal Tech in 1946. After completing a postdoctoral fellowship with David Keilin at Cambridge from 1949 to 1951, he returned to the United States and achieved associate professor status with Cornell's botany department. In 1959, he joined Dr. Britton Chance of the Johnson Research Foundation at Penn as a professor of physical biochemistry, and later became professor of biochemistry and biophysics when that department merged with the biochemistry department in 1975.

Dr. Bonner had a fertile research career elucidating the respiratory systems of plants. One highlight of his career was his classic series of papers that identifies a unique electron transfer system (the “alternate oxidase”) that was used to heat plants. After retiring, Dr. Bonner and his wife, Josephine, moved to their farm in Shanesville, PA. He became associated with Albright College as research mentor for undergraduate biology and biochemistry majors, and continued his own research.

Dr. Chance, now the Eldridge Reeves Johnson University Professor Emeritus, called Dr. Bonner “a man of sterling virtues, impeccable integrity, and an intense curiosity of plant biochemistry, especially thermogenesis in the skunk cabbage.” Dr. P. Leslie Dutton, the current Eldridge Reeves Johnson Professor, Chair of Biochemistry and Biophysics, and Director of the Johnson Foundation, added, “Walter brought sophistication and creativity to plant bioenergetics. He had a wonderfully dry sense of humor which made his lab a fun place to be.”

In addition to his wife, Josephine, Dr. Bonner is survived by two sons, Andrew and Brian; a sister, Priscilla Horton; brothers, James, Lyman, Robert and Francis; and grandchildren, Chris, Ian and Caitlin.

—Department of Biochemistry and Biophysics

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

Advance notice of intention to submit is appreciated.—Ed.

Desktop Computing Hardware Standards for Penn

Annual Update

Office of the Vice Provost for Information Systems and Computing—September 18, 1995

Information Systems and Computing, in cooperation with the Penn community, now annually publishes minimum standards for new desktop computers. The standards help hold training and support costs in check and make it possible for people across campus to work together. They clarify buying decisions and help in planning equipment life cycles. For “supported” desktops ISC provides specific training, documentation, and hardware and software problem diagnosis.

Macintosh and Windows computers are the supported standards at Penn. Most of the revised standard configurations are “freshness dated,” with ISC support guaranteed until July 1999. ISC does not recommend mixing Macintosh and Windows computers within an office or workgroup, where a single standard is much easier to support.

Desktop systems purchased under the *previous* standards will continue to be supported until July 1998. ISC will continue to review desktop standards each year in light of University needs and industry changes. As new desktop standards are issued, they too will specify support guarantees.

Support Timetable for Standard Desktop Configurations

Minimum Existing Configurations:	January 1993—July 1996
Summer 1993 recommendations:	July 1993—July 1997
January 1995 ISC Standards:	January 1995—July 1998
July 1995 ISC Standards:	July 1995—July 1999
July 1996 ISC Standards:	July 1996—July 2000

There are two levels of standards: desktops for general-purpose computing (like e-mail, word processors and spreadsheets), and desktops for new administrative systems (like those used for Project Cornerstone). The standards for new administrative systems are somewhat higher than the standards for general-purpose computing. A machine that can access Cornerstone systems can handle general office functions, but the reverse is not necessarily true. Research and instructional computing may require more specialized machines.

The *Computer Connection* offers configurations that match the standards below. In addition, buyers with limited budgets may choose to trade off various components of a desktop system depending on specific needs: for example, memory versus additional hard disk space versus a larger monitor. Remember, it is easier to add additional memory or peripherals later, but some components (like a smaller monitor) cannot be effectively upgraded.

If your school or department is considering major changes or investments, ISC strongly recommends a consultation to weigh pros and cons in today’s rapidly changing environment. Contact Noam Arzt, ISC Director of Information Technology Architecture (arzt@isc.upenn.edu; 898-3029). Up-to-date standards and additional information are available via World Wide Web (URL: <http://www.upenn.edu/isc/> under “Information Technology Architecture and Standards”).

Windows 95 Note: ISC is not supporting Windows 95 as initially released in August, 1995. Generally, you should not install Windows 95 until either ISC or your local support provider can provide appropriate assistance and support. Windows 95 is *not* installed on computers purchased in the Fall 1995 Back-to-School Sale.

Desktop Standards for General-Purpose Computing

If you are buying a new machine, here are the *minimum* standards, to be supported by ISC until July 1999. Buying the best computer you can afford usually pays off in extra years of service from the machine, so you may prefer to buy a more powerful configuration:

Minimum configurations for new general-purpose machines

	MS-Windows	Macintosh
Processor	486DX4 (100 MHz)	PowerPC (60 MHz)
Memory	8 MB	16 MB plus RAM Doubler
Hard disk	350 MB	500 MB
Monitor	15" color SVGA; 17" recom.	15" color; 17" recom.
Support guarantee	Until July 1999	Until July 1999
Today's est. price	\$2400	\$2400
Operating system	Windows 3.1	MacOS System 7.5
On-campus connect.	Ethernet	Ethernet
Off-campus connect.	PPP (28.8 Kbps)	PPP (28.8 Kbps)

Desktop Standards for Cornerstone Administrative Systems

Cornerstone systems will evolve over time with various delivery dates beginning in Fiscal Year 1995-1996 and others beginning in Fiscal Year 1996-1997. If you are purchasing a computer at this time and expect to use any of the Cornerstone Systems (general ledger, purchasing, accounts payable, data warehouse and budget planning) in the future, buy the recommended standard. If you will be an initial user of the Data Warehouse or Budget Planning, then you must be at standard this year to use these systems. Buying the best computer you can afford usually pays off in extra years of service from the machine, so you may prefer to buy a more powerful configuration.

If you are buying a new Macintosh primarily for Penn’s new administrative systems, wait as long as possible to make sure that Macintosh user interfaces to those systems are available as expected. Note that Macintosh computers with DOS co-processors do not satisfy MS-Windows standards.

Minimum configurations for new Cornerstone machines

	MS-Windows	Macintosh
Processor	Pentium (75 MHz)	PowerPC (60 MHz; not 603; 603e is OK)
Memory	16 MB	16 MB plus RAM Doubler
Hard disk	500+ MB	500+ MB
Monitor	15" color SVGA; 17" recom.	15" color; 17" recom.
Optional Peripherals	CD-ROM, SoundBlaster with speakers or headset	CD-ROM, sound built-in
Support guarantee	Until July 1999	Until July 1999
Today's est. price	\$2600	\$2600
Operating system	Windows 3.1	MacOS System 7.5
On-campus connect.	Ethernet	Ethernet
Off-campus connect.	PPP (28.8 Kbps)	PPP (28.8 Kbps)

Desktop Standards for Existing General-Purpose Comp.

The following minimum configurations for general-purpose office computing represent the general departmental purchase recommendations from three years ago. They will be supported by ISC for one more year only. Transition from these configurations as soon as possible to the new purchase standards:

Minimum configurations for existing machines - Supported until July 1996 only

	MS-Windows	Macintosh
Processor	486SX (33 MHz)	68030 (25 MHz)
Memory	8 MB	5 MB
Hard disk	120 MB	80 MB
Monitor	14" color VGA	13" color
Support guarantee	Until July 1996	Until July 1996
Operating system	Windows 3.1	MacOS System 7
On-campus connect.	Ethernet	Ethernet
Off-campus connect.	PPP (14.4 Kbps)	SLIP (14.4 Kbps)

Appendix: Laptop Guidelines

Generally, laptop computers cost more than similarly functioning desktop computers and lag at least a generation behind in technology. If you are planning to purchase a laptop to use as a primary desktop workstation it should comply with the appropriate General-purpose or Cornerstone minimum standard configurations.

Other than some slight differences in peripherals, support for laptop computers is generally no different than for desktop computers. The following guidelines represent ISC’s recommendations for laptop computer configurations:

Guidelines for laptop computers

	MS-Windows	Macintosh
Processor	486DX4 (75 MHz)	Motorola68LC040(33MHz)
Memory	8 MB	8 MB plus RAM Doubler
Hard disk	300 MB	320 MB
Monitor	10.4" dual-scan color	9.5" active matrix color
Today's est. price	\$2400	\$3100
Operating system	Windows 3.1	MacOS System 7.5
On-campus connect.	Ethernet (PCMCIA)	Ethernet (via Dock or SCSI)
Off-campus connect.	PPP (28.8 Kbps PCMCIA)	PPP (28.8 Kbps internal)

403(b) Performance Update Periods Ending June 30, 1995 Total Returns

	Philosophy	Size \$mm	Latest Quarter	1-Year Avg. Annual	3-Year Avg. Annual	5-Year Avg. Annual	10-Year Avg. Annual	Best & Worst Year For the last Five Years	
								Best	Worst
Calvert Funds:									
Social Responsibility Fund									
Social Investment Bond Portfolio	FII	63	5.8	10.4	7.2	9.0	NA	13.3	-1.5
Social Investment Equity Portfolio	D	89	8.9	6.7	4.4	4.5	NA	10.9	-3.9
Social Investment Managed Growth	B	537	7.2	15.0	8.1	8.1	10.0	15.0	-1.9
Social Investment Money Market	MM	144	1.3	4.8	3.4	4.3	5.7	6.9	2.6
CREF Funds									
CREF Bond Market	FII	795	6.2	11.9	7.5	9.3	NA	14.8	-1.8
CREF Equity Index Account (1)	D	144	9.2	24.3	NA	NA	NA	NA	NA
CREF Global Equities	GCS	3,049	7.3	12.5	15.1	NA	NA	NA	NA
CREF Growth Account (2)	D	631	9.5	27.4	NA	NA	NA	NA	NA
CREF Money Market	MM	3,146	1.4	5.4	3.9	4.8	NA	7.4	3.2
CREF Social Choice	D	982	8.6	19.4	11.8	11.6	NA	19.4	-0.3
CREF Stock Account	D	62,728	8.1	19.0	12.5	10.9	14.2	19.0	4.4
Vanguard Funds:									
Asset Allocation Fund	AA60:35:5	1,394	10.5	23.5	12.5	12.3	NA	23.5	-0.6
Balanced Index Fund	B	483	8.0	19.3	NA	NA	NA	NA	NA
Bond Index Total Bond Mkt Portfolio	FII	2,146	6.0	12.3	7.4	9.2	NA	13.4	-1.3
Convertible Securities Fund	DI	171	5.7	11.5	10.2	10.9	NA	21.5	0.5
Equity Income Fund	DI	901	6.1	20.0	11.4	10.1	NA	20.0	-0.9
Explorer Fund	SC	1,320	6.7	21.7	16.0	14.1	10.1	21.7	6.2
Fixed Income Securities:									
GNMA Portfolio	FIM	6,330	5.3	12.5	6.5	9.1	9.6	14.6	-1.2
High-Yield Corporate Portfolio	FIJ	2,512	5.4	13.6	10.8	11.9	10.5	20.7	1.8
Intermediate-Term U.S. Treasury	FIIG	1,077	7.2	13.2	8.3	NA	NA	NA	NA
Long-Term Corporate Portfolio	FIL	3,014	8.6	16.6	10.0	11.6	10.9	18.0	-2.7
Long-Term U.S. Treasury Portfolio	FILG	777	10.5	18.6	11.1	11.3	NA	20.4	-4.1
Short-Term Corporate Portfolio	FIS	3,338	3.6	8.6	6.0	8.0	8.4	11.9	1.4
Short-Term Federal Portfolio	FISG	1,448	3.7	8.2	5.6	7.5	NA	11.1	0.7
Short-Term U.S. Treasury Portfolio	FISG	862	3.7	8.4	5.7	NA	NA	NA	NA
Index Trust									
500 Portfolio	DI	12,779	9.5	25.9	13.1	11.9	14.3	25.9	1.3
Extended Market Portfolio	D	1,196	9.0	22.0	14.8	12.9	NA	22.0	2.4
Growth Portfolio	D	152	10.3	30.5	NA	NA	NA	NA	NA
Total Stock Market Portfolio	D	1,150	9.2	24.7	13.2	NA	NA	NA	NA
Value Portfolio	D	360	8.7	21.1	NA	NA	NA	NA	NA
International Equity Index Funds:									
European Portfolio	ICS	838	8.2	19.2	10.5	7.9	NA	24.1	-12.6
Pacific Portfolio	ICS	695	-3.5	-10.6	15.2	2.5	NA	45.6	-17.8
Intern'l Growth Portfolio	ICS	3,156	7.4	7.1	12.9	6.0	16.8	25.5	-11.9
Money Market Reserves:									
Federal Portfolio	MM	2,446	1.5	5.3	3.9	4.7	6.0	7.2	3.1
Prime Portfolio	MM	17,540	1.5	5.4	3.9	4.8	6.2	7.4	3.2
U.S. Treasury Portfolio	MM	2,349	1.4	5.0	3.7	4.5	5.8	7.0	3.0
Morgan Growth Fund	D	1,262	11.8	28.0	12.9	11.0	13.3	28.0	-2.7
PRIMECAP Fund	D	2,613	13.9	38.9	23.1	16.5	16.4	38.9	7.0
Quantitative Portfolios	D	729	9.4	24.7	14.0	12.3	NA	24.7	0.3
Small Cap Stock Fund	SC	746	9.3	20.3	16.6	13.4	9.9	25.0	2.3
STAR Fund	B	4,292	7.6	17.7	10.9	11.0	11.7	17.7	2.5
Vanguard Funds:									
Trustees' Equity Fund:									
International Portfolio	ICS	1,011	3.3	2.1	9.4	3.9	15.8	18.0	-14.6
U.S. Portfolio	DI	121	8.7	20.7	13.3	10.4	11.7	22.4	-1.5
U.S. Growth Portfolio	DI	2,876	10.5	28.4	10.6	11.4	12.8	28.4	1.5
Wellesley Income Fund	B	6,489	8.5	16.7	10.8	11.7	11.9	17.6	-0.9
Wellington Fund	B	10,585	8.7	20.1	12.0	11.6	12.6	20.1	2.5
Windsor Fund	DI	12,503	11.4	18.3	15.1	13.1	13.7	18.8	2.3
Windsor II	DI	9,355	8.1	19.7	12.8	12.3	13.6	19.7	3.5
Sector Funds:									
Energy	S	528	4.6	5.9	13.7	7.6	12.2	37.1	-1.2
Gold & Precious Metals	S	600	2.2	-4.0	12.0	6.7	8.7	35.6	-4.2
Health Care	S	994	6.4	35.3	15.9	16.7	18.9	35.3	5.8
Utilities Income	S	637	7.5	15.2	10.3	NA	NA	NA	NA
Indexes To Compare Performance Against									
S&P 500			9.6	26.1	13.3	12.1	14.6	26.1	1.4
Lipper Capital Appreciation Funds Average			9.2	21.5	13.2	11.4	12.1	21.5	0.3
Lipper Growth Funds Average			9.3	22.1	12.6	11.0	12.2	22.1	1.0
Lipper Growth & Income Funds Average			8.1	19.7	11.8	10.9	12.1	19.7	2.0
Salomon Bros. High-Grade Index			9.0	17.6	9.7	11.2	11.8	17.6	-3.6
Lehman Brothers Gov't/Corporate Bond Index			6.5	12.8	7.9	9.6	10.0	14.2	-1.5
Morgan Stanley Capital International-EAFE Index			0.7	1.7	12.7	4.7	16.0	20.3	-11.5
Morgan Stanley Capital International-EMF Index			9.7	-1.6	15.5	14.9	NA	35.0	-1.6
91-Day Treasury Bills			1.5	5.6	4.1	4.7	5.8	6.9	3.2

Relative Investment Performance On Tax-Deferred Annuities

The Benefits Office regularly receives inquiries on the relative performance of investment funds offered under the University's tax deferred annuity program. At left is a table which shows the performance of the various funds for the period ending 6/30/95. The first column shows an abbreviation for the investment philosophy of the fund. (Abbreviations are described below.) The second column shows the overall asset size of the fund in millions of dollars. Columns three through seven show the performance of the funds over various time horizons. Columns eight and nine show the best and worst year for the last five years.

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

—Albert Johnson
Acting Manager of Benefits

PHILOSOPHY KEY

Domestic:

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

International:

ICS	International Common Stock Fund
-----	---------------------------------

Global:

GCS	Global Common Stock Fund
-----	--------------------------

Source: Lipper Analytical Services and fund families.

* Total Return: Dividend or interest plus capital appreciation or depreciation.

(1) CREF Equity Index Account was introduced on April 29, 1994.

(2) CREF Growth Account was introduced on April 29, 1994.

OPPORTUNITIES at PENN

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

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

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

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

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

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

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

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

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

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

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

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

ANNENBERG SCHOOL

Specialist: Clyde Peterson

WORD PROCESSING OPERATOR II (08296CP)

G8;\$17,943-22,400 9-1-95 Annenberg School

PART-TIME (CLERK I) (20 HRS)(09362CP) G4;
 \$6,264-7,692 9-20-95 Library

ARTS AND SCIENCES

Specialist: Nancy Salvatore

COORD. III (09384NS) Design and oversee recruitment efforts for large data collection projects; high level presentations of project to community, government, academic and media organizations; oversee preparation of materials, updating of database, development of appropriate reports; supervise large student and temporary staff. **Qualifications:** BA/BS with linguistics or social science background or equivalent; 2-3 years professional experience; strong written & verbal communication skills; strong supervisory skills; strong background in computer databases & e-mail; knowledge of at least one or more foreign languages (Spanish, Arabic, Korean, Vietnamese, German); some marketing background a plus. **Grade:** P3; **Range:** \$23,900-31,000 9-26-95 Linguistics/LDC

EDITOR, SR. (09404NS) Publish sixty papers each year in the four issues of the journal; develop and maintain production schedule; correspond with authors; copyedit technical manuscripts; proofread galleys and page proof; check reproduction copy and blue line for final corrections; negotiate with and supervise typesetter and printer; plan and administer budget; purchase, maintain and update IBM computer systems and software; supervise Editorial Coordinator and part-time assistants; promote journal through mailings and advertisements. **Qualifications:** BA/BS in English, journalism or liberal arts or equivalent; five-seven yrs. technical editing experience including copyediting, proofreading and overall journal production; computer skills; experience with word processing software, dBase IV and mailings helpful; ability to work independently. **Grade:** P6; **Range:** \$31,900-40,600 9-29-95 Economics

RESEARCH SPEC., JR. (09374NS) Manage laboratory and provide administrative and technical support to the PI; assist with care of research plants; prepare and photograph prints and slides using conventional and computer assisted techniques; assist in the preparation of grants and publications; carry out library searches and catalogue references in database; maintain equipment; monitor expenses and supervise work study students. **Qualifications:** BA/BS in scientific or related field or equivalent experience in plant molecular biology; tissue culture and green house experience preferred; knowledge of Macintosh computers, Excel, Canvas, Word Processing, Endnote and network applications highly

desirable; ability to work with employees at all levels; administrative and bookkeeping experience preferred. **Grade:** P1; **Range:** \$19,700-25,700 9-25-95 Biology **ADMIN. ASS'T. I** (09385NS) Handle telephone & walk-in inquiries from international students; process applications; enter data into computerized student registration system; generate reports; compose routine correspondence; oversee work of student workers; receptionist & switchboard duties as required. **Qualifications:** High school graduate and related post high school training or equivalent; at least 2 years secretarial/clerical experience; excellent organizational & interpersonal skills are essential; fluency in one or more foreign languages highly desirable; knowledge of IBM pc & WP desirable. **Grade:** G9; **Range:** \$17,100-21,400 9-26-95 English Language Programs

ADMIN. ASS'T. III (09386NS) Oversee recruitment, instruction and payment of participants in data collection projects; plan outreach & follow-up with organizations, publications & individuals (usually speakers of other languages); prepare recruiting & advertising materials; register subjects; obtain consent; maintain records; arrange payments; write reports. **Qual:** BA/BS in behavioral or social sciences or equivalent; experience with collection & management of scientific data in academic or industrial settings; both written & verbal communication skills; ability to deal with extensive & diverse telephone inquiries; must be familiar with computers & e-mail, preferably Macintosh office software (Filemaker Pro); knowledge of foreign languages a plus, esp. Spanish, Arabic, Korean, Vietnamese or German. **Grade:** G11; **Range:** \$19,900-25,300 9-26-95 Linguistics/LDC **ASS'T. DEAN ACADEMIC ADVISING I** (08214NS) (Minority candidates encouraged to apply) P5; \$28,800-37,600 8-15-95 CGS

INFO. SYS. SPEC. I (08304NS) (End date: 6/30/96) P3; \$23,900-31,000 9-7-95 SAS Computing/SSC

INFO. SYS. SPEC. II (07103NS) P5; \$28,800-37,600 8-7-95 Sociology

INFO. SYS. SPEC. III (09375NS) P7; \$35,000-43,700 9-22-95 SAS Computing

MANAGER ADMINISTRATION & FINANCE (08213NS) P7; \$35,000-43,700 8-15-95 Chemistry

PROGRAMMER ANALYST II (09318NS) P6; \$31,900-40,600 9-12-95 IRIS

RESEARCH SPEC., JR. (03067NS) P1; \$19,700-25,700 3-24-95 Biology

RESEARCH SPEC., JR. (09356NS) P1; \$19,700-25,700 9-19-95 Biology

RESEARCH SPEC. I (08261NS) (End Date 9/1/96) P2; \$21,700-28,200 8-29-95 Physics/Astronomy

RESEARCH SPEC. II (09339NS) P3; \$23,900-31,000 9-14-95 Chemistry

LIMITED SERVICE (MANAGER II) (06009NS) P3; \$17,923-23,246 6-6-95 English/Theatre Arts

ADMIN. ASS'T. II (04058NS) G10; \$18,700-23,300 8-2-95 Penn Language Center

(Investment Report.
 See **previous page**).

ADMIN. ASS'T. II (06117NS) G10; \$18,700-23,300 6-27-95 Psychology
OFFICE ADMIN. ASS'T. I/III (09338NS) G10/G11; \$18,700-23,300/\$19,900-25,300 9-13-95 SAS Admin.
OFFICE ADMINISTRATIVE ASS'T. I/III (09376NS) G11; \$19,900-25,300 9-22-95 Economics
SEC'Y. IV (09346NS) G9; \$17,100-21,400 9-18-95 SAS Computing
STATISTICAL TECH. (06120NS) G12; \$22,200-28,600 6-27-95 Psychology
TECH., AUDIO VISUAL II (08178NS) G11; \$19,900-25,300 8-9-95 SAS Computing
PART-TIME (TECH. ASS'T. LAB ANIMAL) (08241NS) (20 HRS) G7; \$7,967-9,945 8-22-95 Psychology

DENTAL SCHOOL

Specialist: Clyde Peterson

ADMIN. ASS'T. II (09407CP) Perform administrative & clerical duties; operate standard office equipment; process applications for foreign dentist program; respond to inquiries; schedule applicant interviews; perform data entry; compose correspondence with use of Microsoft Office Professional (Windows); originate & maintain records & filing systems; schedule meetings, international events; assist in production of newsletter. **Qualifications:** High school graduate, BA/BS preferred; two years administrative/secretarial experience at AAI level; proficiency in Microsoft Office Professional (Windows); experience in school admissions; strong interpersonal & organizational skills; experience working with internationals helpful. **Grade:** G10; **Range:** \$18,700-23,300 9-28-95 Int'l Relations
BUILDING SERVICES ASS'T. (40 HRS) (09388CP) Perform receiving & shipping duties & maintain records; sort & distribute mail; perform facility tours; respond to requests from base station to secure unlocked doors; check problem areas; maintain log of activities; move laboratory equipment, furniture, & other items as directed; may assemble furniture/equipment; maintain appropriate safety & security regulations; maintain building directories & signs. **Qualifications:** High school diploma or equivalent; mechanical aptitude; ability to use simple tools; demonstrated interpersonal skills; ability to lift and move 50-75 lbs.; must pass police background security check. **Grade:** G8; **Range:** \$17,943-22,400 9-28-95 Facilities Management
DIR. III (07095CP) P6; \$31,900-40,600 7-25-95 FISOPS
CLERK III (08238CP) G6; \$13,600-16,700 8-21-95 Clinic Management
DENTAL ASS'T. I (40 HRS) (07097CP) (07098CP) G7; \$16,571-20,686 7-24-95 Dental Medicine

ENGINEERING/APPLIED SCIENCE

Specialist: Clyde Peterson

SYSTEM PROG. II (08055CP) (Ongoing Contingent on Funding) P7; \$35,000- 43,700 5-17-95 CIS/IRCS
ADMIN. ASS'T. II (09330CP) G10; \$18,700-23,300 9-18-95 MSE

EXECUTIVE VICE PRESIDENT

Specialist: Nancy Salvatore/Susan Curran

ACCOUNTANT/FINANCIAL ANALYST I (08163NS) P6; \$31,900-40,600 8-30-95 Student Financial Services
ASS'T. MANAGER COMPENSATION (09324SC) P8; \$38,500-48,100 9-11-95 Human Resource Services
CONTRACTS ADMINISTRATOR II (09343NS) P5; \$28,800-37,600 9-15-95 Research Administration
DIR. VI (07041NS) P9; \$42,300-52,900 7-13-95 Student Financial Services
DIR., CENTER TECHNOLOGY TRANSFER (06043NS) Blank; 6-13-95 Ctr. for Tech. Transfer
DIR., FACULTY CLUB (08237NS) P9; \$42,300-52,900 8-21-95 Faculty Club
DIR. INTERNAL AUDIT (08180NS) P12; \$63,700-77,700 8-9-95 EVP
EXEC. CHEF (08236NS) Blank 8-21-95 Faculty Club
FINANCIAL AID OFFICER II (06146NS) P3; \$23,900-31,000 Student Financial Services 7-3-95
MANAGER AUDIT (07032NS) P9; \$42,300- 52,900 7-12-95 Internal Audit
SR. COMPENSATION SPEC. (09323SC) (Application deadline date: 9/27/95) P6; \$31,900-40,600 9-11-95 Human Resource Services
STAFF AUDITOR II (07070NS) P4; \$26,200-34,100 7-19-95 Internal Audit

ADMIN. ASS'T. II (09342NS) G10; \$18,700-23,300 9-15-95 Research Administration
ADMIN. ASS'T. III (40 HRS) (09341NS) G11; \$22,743-28,914 9-15-95 Exec. V. P.
EXECUTIVE SEC'Y. (40 HRS) (07077NS) G12; \$25,371-32,686 7-17-95 Executive Vice President
ELECTRICAL OPERATOR (08220NS) (08221NS) (08222NS) (08223NS) Union 8-18-95 Physical Plant
FINANCIAL SERVICES ASS'T. II (08251NS) G10; \$18,700-23,300 8-30-95 Student Financial Services

GRAD SCHOOL OF EDUCATION

Specialist: Clyde Peterson

ASS'T. TO DIR. II (09395CP) Assist in coordination of planning, implementation, development & communication in support of NCAL's programs & policies; assist efforts to identify, evaluate & plan development & funding activities in national & international area; help organize & coordinate responses for project solicitation; assist with grant & proposal preparation; assist with project implementation & outreach & prepare reports as needed; provide editorial & staff support to director. **Qualifications:** BA/BS; 2 years development experience, preferably in an academic environment or equivalent; demonstrated knowledge of organizations, funding agencies & project committees; excellent communication, research, organizational skills required; must be computer literate; experience with contract negotiations; proposal & grant writing experience preferred; some travel may be required. (On-going contingent upon funding) **Grade:** P2; **Range:** \$21,700-28,200 9-28-95 NCAL
COORD. III (09396CP) Serve as coordinator of NCAL & ILI international programs; responsible for day-to-day programs, follow-through, communications & correspondence in support of international programs & policies. **Qualifications:** Masters in Social Sciences or Education; at least two years related work experience, preferably in an academic environment or equivalent; demonstrated knowledge of organizations, funding agencies & project committees; excellent communication, research, organizational skills required; must be computer literate; experience with editing & grant writing preferred; complete fluency in English required & preferably in one other international language; some travel required. (On-going contingent upon funding) **Grade:** P3; **Range:** \$23,900-31,000 9-28-95 NCAL
TECH. PSYCHOLOGY I (09394CP) Assist with research; collect & compile data; interview research subjects; perform library research; assist with analysis of related data, performing such statistical summaries on analyses as ability permits. **Qualifications:** BA/BS in Behavioral Science; 1-2 years research experience desirable; previous computer experience with Word Perfect 6.0 or higher & SAS; PC experience preferred. (On-going contingent upon funding) **Grade:** G10; **Range:** \$18,700-23,300 9-28-95 CHANGES/PED
ASSOC. DIR. NCAL (08267CP) Blank 8-30-95 National Center on Adult Literacy
RESEARCH SPEC. III (08266CP) P4; \$26,200-34,100 National Center on Adult Literacy
ADMIN. ASS'T. I (09364CP) (End date: contingent on funding) G9; \$17,100-21,400 9-21-95 ALPIP/PhilWP

LAW SCHOOL

Specialist: Clyde Peterson

DIR. IV (06035CP) P7; \$35,000-43,700 6-12-95 Law Development & Alumni Rels.
SEC'Y. IV (06002CP) (Ongoing contingent on funding availability) G9; \$17,100-21,400 6-6-95 Center on Professionalism
PART-TIME (ADMIN. ASS'T. II) (28 HRS) (05003CP) (Ongoing contingent on funding) G10; \$10,275-12,802 6-8-95 Inst. for Law & Economics

MEDICAL SCHOOL

Specialists: Ronald Story/Janet Zinser

BUSINESS ADMIN. IV (09321JZ) Coordinate \$35 million in department grants, including administration and maintenance of accurate financial records; prepare consolidated research budget for the Dept. of Medicine; assist in the consolidation of clinical budget for the Dept. of Medicine; develop, implement and maintain research database; produce monthly reports, grant awards, expenses and projected balances; compare ORA's year-to-date numbers for proposals and awards with database

and produce highlight report. **Qualifications:** Bachelors degree in health care administration/finance; four-six yrs. combined experience in finance, payroll systems, salary information, budget preparation, information systems and research grants management required; knowledge of Lotus database software and WordPerfect; basic analytical and detail oriented skills; capable of working independently, under deadlines and ensuring confidentiality; ability to deal effectively with faculty and staff; excellent interpersonal skills. **Grade:** P5; **Range:** \$28,800-37,600 9-19-95 Med/Central Admin.

RESEARCH SPEC. I (08206RS) Carry out molecular protocols & experiments; help trouble shoot experimental problems; screen, subclone, & sequence cDNA in phage & plasmid vectors, perform gel hybridization & restriction mapping; maintain breeding records for transgenic mice; perform cell culture & all forms of electrophoresis & radioimmunoassays; perform & modify polymerase chain reaction protocols; order supplies; maintain radiation safety records; maintain freezer logs; repair broken equipment; assist in preparation of manuscripts; assist in plan for protocol; research experimental design. **Qualifications:** BA/BS with a science background; one to three years experience in a laboratory performing complex biochemical reactions; skills in mathematics, computers, dexterity and interpersonal communications. **Grade:** P2; **Range:** \$21,700-28,200 9-26-95 Medicine/Renal

RESEARCH SPEC. II (09370RS) Collect data; perform quality control data; assist in data analysis; design surveys and questionnaires; conduct interviews; draft papers; prepare and edit statistical tables; create and manage large projects, data files and documentation; conduct information searches; participate in preparation & submission of contract & grant applications, renewal & progress reports; handle routine project correspondence, telephone calls and proof papers; primary source experience design. **Qualifications:** BA/BS or equivalent required, preferably in economics; three-five yrs. experience in similar project; knowledge of statistical packages and management of very large database; aptitude for quantitative work; demonstrated written & oral communication skills; organizational ability and knowledge of word processing & spreadsheet software. (End date: 8/31/96) **Grade:** P3; **Range:** \$23,900-31,000 9-25-95 General Internal Med.

SUPERVISOR (EXEMPT) (09350RS) Supervise team of part-time phlebotomists; complete and process study document; maintain study charts; maintain specimen database; maintain extensive frozen specimen repository; manage lab supply inventory; manage special projects; work with HIV-positive and HIV high risk population and be sensitive to their needs and concerns. **Qualifications:** BA/BS or equivalent required; at least three yrs. phlebotomy experience; demonstrated ability to work with HIV-positive and HIV high risk population; must be a team player with good communication skills; detail oriented and excellent organizational skills. (Off-site location on Girard Avenue at AIDS/drug treatment center) (On-going contingent on grant funding) **Grade:** P2; **Range:** \$21,700-28,200 9-25-95 Psychiatry

ADMIN. ASS'T. III (40 HRS) (09371JZ) Screen, sort and distribute mail and other materials; draft routine correspondence; transcribe and type correspondence, reports manuscripts and other materials; answer phones; photocopying; provide administrative support in hiring process; receive and log in responses to postings/ads; set-up interviews and send out acknowledgment letters; monitor use of overtime, sick-time, vacation time and holiday hours of division personnel; collect and compile data and statistics accurately for reports, budgets and correspondence; coordinate and oversee calendars of Division Chief and Business Administrator. **Qualifications:** High school graduate or equivalent required; BA/BS or some college education preferred; two yrs. experience as AAI or equivalent required; ability to handle multiple task and interact in a professional manner with diverse constituencies; excellent typing skills; knowledge of Macintosh computer systems; experience with word processing equipment and packages including Microsoft Word and data base software; experience in a medical/technical environment; supervisory experience involving office personnel. **Grade:** G11; **Range:** \$22,743-28,914 9-25-95 Medicine/Rheumatology

ADMIN. ASS'T. III (37.5 HRS) (09378JZ) Type and proofread correspondence, scientific papers and research reports; arrange meetings; compose correspondence; coordinate office workflow; obtain, organize, prepare

and maintain all IRB required documentation materials for research studies; prepare study document (FDA Form 1572's budgets, short protocol, investigator brochures, adverse event reports and consent forms); serve as central office coordinator and disseminate information to affiliated clinical research practices; act as liaison to sponsors, physicians, psychiatrists, medical representatives and general public; exercise judgment in implementing office procedures and prioritizing work; organize and maintain office records. **Qual.:** Completion of h. s. business curriculum and related post-high school training or equivalent; some college desirable; two yrs. experience at the AAI level or comparable background, including experience in handling complex records, preferably for research protocols; knowledge of Microsoft Word, WordPerfect and Lotus 1-2-3; ability to create spreadsheet, use and access Internet, conduct literature searches; thorough knowledge of office procedures, practices and methods; ability to type 65 wpm. **Grade:** G11; **Range:** \$21,321-27,107 9-25-95 Psychiatry

RESEARCH LAB TECH III (09382RS) Assist in experiments involving Drosophila genetics, immuno-histochemistry, electron microscopy, protein chemistry & molecular biology; maintain Drosophila stocks; order supplies & maintain lab supplies & equipment. **Qualifications:** BA/BS in biology; laboratory experience with Drosophila genetics, molecular biology, protein chemistry or microscopy desirable. **Grade:** G10; **Range:** \$18,700-23,300 9-26-95 Neuroscience

SCIENCE EQUIPMENT STERILIZATION ATTENDANT (09391RS) Wash and sterilize laboratory glassware and/or lab equipment. **Qualifications:** High school graduate or equivalent; ability to handle fragile materials and follow detailed oral and written instructions. **Grade:** G5; **Range:** \$12,500-15,300 9-27-95 Genetics

SECRETARY III (40 HRS) (07130JZ) Type standard & complex materials; organize & maintain files; operate office equipment & appropriate automation equipment; assist business administrator in maintaining budgetary records. **Qualifications:** High school, graduate; 1 year clerical or secretarial experience, preferably in a university setting; ability to work under pressure; aptitude for details; Lotus 1-2-3 & word processing experience preferred; knowledge of English grammar, spelling & punctuation. *(On-going contingent upon funding)* **Grade:** G8; **Range:** \$17,943-22,400 9-28-95 Infectious Diseases

SECRETARY IV (09393JZ) Type and proofread standard and complex/confidential materials; assist in the preparation of manuscripts and grant applications; develop and maintain record/filing systems; schedule and coordinate appointments and meetings; organize and schedule seminars and arrange itineraries for seminars speakers; make travel arrangements; sort, distribute, open and screen mail; answer telephones; perform literature searches; process purchase orders for office supplies; prepare and shoot slides for presentations. **Qualifications:** Completion of high school business curriculum and related post high school training or equivalent; two yrs. secretarial experience; type 55 wpm; experience with word processing packages using Mac and IBM PC's; excellent oral and written communication skills. **Grade:** G9; **Range:** \$17,100-21,400 9-27-95 Genetics

PART TIME (SECURITY OFFICER) (22 HRS) (05073JZ) Perform facility security tours; greet & assist visitors; communicate by radio & telephone to field personnel, University Physical Plant, University Police & other office personnel; maintain logbook & other records; enforce School & University policies; assist University Police & Philadelphia Fire Department in emergency situations. **Qualifications:** High school diploma or equivalent; ability to interface & deal effectively with individuals at all organizational levels; knowledge of use or ability to quickly learn use of a two-way portable radio system & computer terminal; ability to lift 50 lbs. & climb stairs; good oral & written communication skills; able to work overtime on short notice; must successfully pass police background security check. *(Considered essential employee & as such is required to make it to work regardless of weather or other factors)* *(Saturday & Sunday, 9:00 am - 9:00 pm)* **Grade:** G8; **Range:** \$8,626-10,769 9-28-95 Architecture & Facilities Management

ASS'T. MANAGER II (05057JZ) P2; \$21,700-28,200 5-18-95 Ophthalmology

CLINICAL SPEC. (08235RS) P6; \$31,900-40,600 8-22-95 Cancer Center

CLINICAL SPEC. (08280RS) *(End date: pending grant support)* P6; \$31,900-40,600 9-13-95 Med/Gastroent.

MEDICAL DEPARTMENT ADMIN. OFFICER (07053JZ) Blank 7-21-94 Rehab Medicine

PROGRAMMER ANALYST I (09357JZ) P6; \$31,900-40,600 9-20-95 Psychiatry

REIMBURSEMENT ANALYST I (05104JZ) P6; \$31,900-40,600 9-8-95 Medicine/Billing

RES. SPEC., JR. (07138RS). *(On-going contingent on funding)* P1; \$19,700-25,700 8-3-95 Surgery/HDSR

RESEARCH SPEC., JR. (09360RS) P1; \$19,700-25,700 9-20-95 IHGT

RESEARCH SPEC., JR. (09369RS) *(On-going contingent upon grant funding)* P1; \$19,700-25,700 9-22-95 Surgery/ HDSR

RESEARCH SPEC. I (04098RS) P2; \$21,700-28,200 6-5-95 Hematology

RESEARCH SPEC. I (08172RS) P2; \$21,700-28,200 8-8-95 Genetics

RESEARCH SPEC. I (03098RS) *(On-going contingent upon grant funding)* P2; \$21,700-28,200 8-23-95 Pathology & Lab Medicine

RESEARCH SPEC. I (08257RS) P2; \$21,700-28,200 8-29-95 Biochemistry & Biophysics

RESEARCH SPEC. I (08278RS) P2; \$21,700-28,200 8-31-95 Center for Sleep

RESEARCH SPEC. I (09312RS) *(On-going contingent upon grant funding)* P2; \$21,700-28,200 9-11-95 Pathology & Lab Medicine

RESEARCH SPEC. II (08232RS) *(End date: 9/30/97)* P3; \$23,900-31,000 8-22-95 IHGT

RESEARCH SPEC. II (08239RS) P3; \$23,900-31,000 9-7-95 Radiology

RESEARCH SPEC. II/III (06106RS) P3/P4; \$23,900-31,000/\$26,200-34,100 6-26-95 Hematology/Oncology

RESEARCH SPEC. II/III (08188RS) *(On-going contingent upon grant funding)* P3/P4; \$23,900-31,000/\$26,200-34,100 9-12-95 Surgery

RESEARCH SPEC. II/III (09345RS) P3/P4; \$23,900-31,000/\$26,200-34,100 9-18-95 Hematology/Oncology

RESEARCH SPEC. III (08240RS) P4; \$26,200-34,100 9-7-95 Radiology

RESEARCH SPEC. IV (09372RS) P6; \$31,900-40,600 9-22-95 Medicine/Rheumatology

SYS. ANALYST II (05026JZ) P7; \$35,000-43,700 5-10-95 Ophthalmology

PART-TIME (ASSOC. DIR. IV) (17.5 HRS) (02089JZ) P6; \$13,100-17,050 3-1-95 CCEB

ADMIN. ASS'T. I/II (08256JZ) G9/G10; \$17,100-21,400/18,700-23,300 8-29-95 Faculty Affairs

ADMIN. ASS'T. II (40 HRS) (08260JZ) G10 \$21,371-26,629 9-22-95 Venture & Industry

ADMIN. ASS'T. III (40 HRS) (08273JZ) G11; \$22,743-28,914 8-31-95 Ophthalmology

ADMIN. ASS'T. III (08279JZ) (40 HRS) G11; \$22,743-28,914 8-31-95 Pulmonary

ADMIN. ASS'T. III (40 HRS) (09320JZ) G11; \$22,743-28,914 9-13-95 Anesthesia

ADMIN. ASS'T. III (40 HRS) (09358JZ) *(On-going pending funding)* G11; \$22,743-28,914 9-20-95 Center for Experimental Therapeutics

CLERK II (40 HRS) (08231JZ) *(End date: 9/30/97)* G5; \$14,286-17,486 8-22-95 IHGT

CLERK II (40 HRS) (09322JZ) G5; \$14,286-17,486 9-12-95 Dermatology

FINANCIAL SERVICES ASS'T. III (40 HRS) (08290JZ) G11; \$22,743-28,914 9-12-95 Rehabilitation Medicine

OFFICE ADMIN. ASS'T. I (08301JZ) G9; \$17,100-21,400 9-12-95 Biomedical Grad. Studies

OFFICE ADMIN. ASS'T. II (04084JZ) G10; \$18,700-23,300 4-28-95 Cell & Developmental Biology

OFFICE ADMIN. ASS'T. III (40 HRS) (02030JZ) *(On-going Contingent on Grant Funding)* G11; \$22,743-28,914 2-9-95 Surgery/Neurosurgery

OPERATOR, COMP COMPII (09353JZ) G10; \$18,700-23,300 9-19-95 CCEB

RECEPTIONIST III (40 HRS) (04001JZ) G8; \$17,943-22,400 8-29-95 Ophthalmology

RESEARCH LAB TECH. I (09352RS) G7; \$14,500-18,100 9-19-95 Psychiatry

RESEARCH LAB TECH. I (40 HRS) (09368RS) *(End date: 8/30/97)* G7; \$16,571-20,686 9-21-95 IHGT

RESEARCH LAB TECH. II (40 HRS) (08302RS) G8; \$17,943-22,400 9-7-95 Psychiatry

RESEARCH LAB TECH. II (40 HRS) (09359RS) G8; \$17,943-22,400 9-20-95 OB-GYN

RESEARCH LAB TECH. III (03032RS) *(Ongoing Contingent on Grant Funding)* G10; \$18,700-23,300 3-14-

95 Pathology and Lab Medicine

RESEARCH LAB TECH. III (40 HRS) (06019RS) *(On-going contingent upon grant funding)* G10; \$21,371-26,629 6-7-95 Surgery/Neurosurgery

RESEARCH LAB TECH. III (40 HRS) (06020RS) *(Ongoing contingent upon grant funding)* G10; \$21,371-26,629 6-7-95 Surgery/Neurosurgery

RESEARCH LAB TECH. III (06129RS) G10; \$18,700-23,300 6-28-95 Orthopaedic Surgery

RESEARCH LAB TECH. III (40 HRS) (08174RS) G10; \$21,371-26,629 8-8-95 Anesthesia

RESEARCH LAB TECH. III (08281RS) G10; \$18,700-23,300 8-31-95 Cell & Dev Biology

RESEARCH LAB TECH. III (09311RS) G10; \$18,700-23,300 9-11-95 Psychiatry

RESEARCH LAB TECH. III (09310RS) *(On-going contingent upon grant funding)* G10; \$18,700-23,300 9-11-95 Pathology & Lab Medicine

RESEARCH LAB TECH. III (09319RS) G10; \$18,700-23,300 9-12-95 PA Muscle Institute

RESEARCH LAB TECH. III (06129RS) G10; \$18,700-23,300 9-20-95 Orthopaedic Surgery

SEC'Y. IV (40 HRS) (07140JZ) G9; \$19,543-24,457 8-1-95 Psychiatry

SEC'Y. IV (40 HRS) (07127JZ) G9; \$19,543-24,457 9-7-95 IHGT

SEC'Y., SR. (05083JZ) G11; \$19,900-25,300 5-22-95 Vice Dean for Education

TECH PSYCHOLOGY I (08157RS) G10; \$18,700-23,300 8-7-95 Psychiatry

TECH, PSYCHOLOGY I (08274RS) (40 HRS) G10; \$21,371-26,629 8-31-95 Psychiatry

PART-TIME (COLLECTION ASS'T.) (08276JZ) G10; \$10,275-12,802 8-31-95 Ophthalmology

PART-TIME (CONTROL CENTER OPERATOR) (24 HRS) (08284JZ) (08285JZ) *Work schedule: (S-S, 7:00 AM-7:00 PM & S-S, 7:00 PM-7:00 AM)* G9; \$9,396-11,758 9-8-95 Architecture & Facilities Management

NURSING

Specialist: Ronald Story

PART TIME (SEC'Y. IV) (17.5 HRS) (08165RS) *(End date: 4/30/96)* G9; \$9,396-11,758 8-7-95 Nursing

PART-TIME (SEC'Y. IV) (21 HRS) (08211RS) G9; \$9,396-11,758 8-17-95 Nursing

PRESIDENT

Specialist: Susan Curran/Janet Zinser

ASS'T. DIR. II (06055JZ) P3; \$23,900-31,000 6-14-95 Medical Center Development

ASS'T. DIR. II (09367JZ) P3; \$23,900-31,000 9-21-95 Dev. & Alum. Rels.

ASS'T. DIR. IV (08193JZ) P5; \$28,800-37,600 8-11-95 Dev. & Alum. Rels.

ASSOC. DIR. V (08265JZ) P7 \$35,000-43,700 8-29-95 Dev. & Alum. Rels.

ASSOC. DIR. INDIVIDUAL GIFTS (03029JZ) P7; \$35,000-43,700 3-10-95 Dev. & Alum. Rels.

ASSOC. DIR. INDIVIDUAL GIFTS (09366JZ) P7; \$35,000-43,700 9-21-95 Dev. & Alum. Rels.

ASSOC. EXEC. VP MED. CTR. DEVELOPMENT (05044JZ) Ungraded; Blank 5-15-95 Med. Ctr. Dev.

DEVELOPMENT OFFICER II (07082JZ) P10; \$47,400-59,200 7-19-95 Dev. & Alum. Rels.

DIR. ALUMNI RELATIONS (09309JZ) P11; \$54,500-68,200 9-7-95 Dev. & Alumni Relations

EXEC. DIR. RESOURCE, PLANNING & BUDGET (09344SC) Ungraded; Blank 9-14-95 President's Office

MAJOR GIFTS OFFICER II (06054JZ) P8; \$38,500-48,100 6-14-95 Medical Center Development

PROGRAMMER ANALYST I (08194JZ) P4; \$26,200-34,100 8-11-95 Dev. & Alum. Rels.

STAFF RESEARCHER I (05046JZ) P1; \$19,700-25,700 5-15-95 Dev. & Alum. Rels.

STAFF WRITER II (04062JZ) *(Two Writing Samples Must Accompany Application)* P3; \$23,900-31,000 4-24-95 Dev. & Alum. Rels.

STAFF WRITER III (08199SC) *Two writing samples must accompany application.* P5; \$28,800-37,600 8-14-95 Office of the President

ADMIN. ASS'T. II (37.5 HRS) (08225JZ) G10; \$20,036-24,964 8-17-95 Medical Center Development

ADMIN. ASS'T. II (40 HRS) (08294JZ) G10; 21,371-26,629 9-1-95 Dev. & Alum. Rels.

SEC'Y. III (40 HRS) (08293JZ) G8; \$17,943-22,400 9-1-95 Dev. & Alum. Rels.

PROVOST

Specialist: Clyde Peterson

P-T (COORD. I) (25 HRS) (09381CP) Recruit and interview international speakers for Int'l Classroom program; arrange details of transportation and scheduling; establish and maintain contact with teachers and schools who use the program; maintain program files; work with staff on office organization; coordinate all special events, meetings, conferences, seminars. **Qual.:** BA/BS or equiv. exp.; demonstrated interest and exp. in int'l/intercultural education; excellent interpersonal/organizational skills; computer exp. req. (10-mo. position: Oct.-June) **Grade:** P1; **Range:** \$11,726-15,298 9-25-95 Museum

OFFICE ADMIN. ASS'T. I (09383CP) Schedule reservation for educational groups to visit museum collections; greet and organize groups at arrival; keep records of tour payments and deposits tour income weekly; keep attendance statistics; schedule volunteer guides. **Qualifications:** H. S. grad., some college preferred; two yrs. clerical exp.; exp. in anthropology helpful; excellent interpersonal skills; attention to detail; ability to work under pressure required; computer exp. required. **Grade:** G9; **Range:** \$17,100-21,400 9-25-95 Museum

ASS'T. COACH I (07132CP) P3; \$23,900-31,000 7-28-95 DRIA

ASS'T. REGISTRAR, UNIVERSITY MUSEUM (06047CP) P2; \$21,700-28,200 6-14-95 Museum

CHAPLAIN (08247CP) Ungraded 8-23-95 Prov. Office

HELP DESK ANALYST, SR. (06143CP) P6; \$31,900-40,600 8-18-95 Information Systems & Computing

INFO. MANAGEMENT SPEC. II (two positions, 08191CP and 08192CP) P6; \$31,900-40,600 CRC

INFO. SYS. SPEC. I/II (two positions, 09334CP and 09335CP) P3/P5; \$23,900-31,000/\$28,800-37,600 9-14-95 University Libraries

INFO. SYS. SPEC. II (000439CP) P5; \$28,800-37,600 6-16-95 Biomed Library

INTERN ATHLETICS (07110CP) (End date: eleven months from start date) Blank; \$10,000 7-27-95 DRIA

INTERN ATHLETICS (04023CP) (End date: 6/30/96) Blank; \$10,000 9-14-95 DRIA

PROGRAMMER ANALYST II (09365CP) P6; \$31,900-40,600 9-21-95 IRHE

RESEARCH SPEC. IV (08303CP) P6; \$31,900-40,600 9-7-95 LRSM

SYS. PROGRAMMER IV (01040CP) P9; \$42,300-52,900 5-1-95 DCCS

TECHNOLOGY TRAINING SPEC. (06085CP) P5; \$28,800-37,600 6-21-95 Technology Learning Services

VICE PROVOST FOR RESEARCH (08248CP) Ungraded 8-25-95 Provost's Office

AIDE LAB ANIMAL (40 HRS) (07016CP) (07017CP) (May include shifts other than M-F, overtime, weekends and holiday work) G5; \$14,286-17,486 7-10-95 ULAR

ADMIN. ASS'T. III (07113CP) G11; \$19,900-25,300 7-28-95 IRHE

GARDENING AIDE (40 HRS) (09347CP) (End date: 6/30/97) G5; \$14,286-17,486 9-15-95 Morris Arboretum

OFFICE ADMIN. ASS'T. I (08228CP) G9; \$17,100-21,400 8-18-95 Annenberg Center

SEC'Y. V (09337CP) G10; \$18,700-23,300 9-14-95 Provost Office

TECH. ELECTRONIC III (03006CP) G11; \$19,900-25,300 3-3-95 DCCS

TECH. THEATER SR. (08269CP) G11 19,900-25,300 8-30-95 Annenberg Center

TECH. VET TRAINEE (40 HRS) (09361CP) (May include overtime, holiday work & weekends) G7; \$16,571-20,686 9-20-95 ULAR

LTD. SVC. (SALES CLERK) (09307CP) (Schedule: 12-6 p.m., eves & weekends required) \$10,413-\$12,745 9-11-95 Annenberg Center

P-T (ADMIN. ASS'T. I) (20 HRS) (07135CP) G9; \$9,396-11,758 7-31-95 South Asia Reading Room

P-T (ADMIN. ASS'T. I) (21 HRS) (06089CP) G9; \$9,396-11,758 6-22-95 Provost's Office

P-T (ADMIN. ASS'T. II) (20-25 HRS) (08305CP) G10; \$10,275-12,802 9-7-95 Arthur Ross Gallery

SCHOOL OF SOCIAL WORK

Specialist: Clyde Peterson

ADMIN. ASS'T. I (09349CP) G9; \$17,100-21,400 9-18-95 Youth Policy

VETERINARY SCHOOL

Specialist: Nancy Salvatore

BUSINESS ADMINISTRATOR III (09340NS) P4; \$26,200-34,100 9-14-95 Animal Biology

RESEARCH SPEC. I (08190NS) P2; \$21,700-28,200 8-11-95 Pathobiology

RESEARCH SPEC. IV (07136NS) (Position located in Kennett Square, PA; no public transportation) P6; \$31,900-40,600 8-3-95 Clinical Studies-NBC

STAFF VETERINARIAN (07101NS) (Position located in Kennett Square, PA; no public transportation) Blank 7-25-95 Clinical Studies-NBC

ADMIN. ASS'T. I (07102NS) (On-going contingent on funding) (Position in Kennett Square, PA; no public transportation) G9; \$17,100-21,400 7-25-95 Clinical Studies-NBC

LAB ASS'T. II (09327NS) G8; \$17,943-22,400 9-13-95 VHUP-CLM

RESEARCH LAB TECH. III (40 HRS) (06040NS) (Position in Kennett Square; no public transportation) G10; \$21,371-26,629 6-12-95 Clinical Studies/NBC

RESEARCH LAB TECH. III (40 HRS) (07025NS) (End date: one year, continuation contingent on funding) (Position in Kennett Sq., PA; no public transit) G10; \$21,371-26,629 Clinical Studies/NBC 7-11-95

RESEARCH LAB TECH. III (40 HRS) (07100NS) (Position located in Kennett Square, PA; no public transportation) G10; \$21,371-26,629 7-25-95 Clinical Studies-NBC

RESEARCH LAB TECH III (40 HRS) (08151NS) (End date: one year; on-going contingent on funding) (Position in Kennett Square, PA; no public transportation) G10; \$21,371-26,629 8-7-95 Clinical Studies, NBC

RESEARCH LAB TECH. III (09377NS) G10; \$18,700-23,300 9-22-95 Clinical Studies

TECH. VET I/II (40 HRS) (09326NS) (09328NS) (09329NS) (Schedule: rotating/ nights/weekends) G8/G10; \$17,943-22,400 9-13-95 VHUP

P-T (PHARMACIST ASS'T. I) (27 HRS) (07050NS) (Schedule: M-F 4-8 PM, Sun 8 AM-3 PM) G8; \$8,626-10,769 7-14-95 VHUP-Pharmacy

P-T (SEC'Y. MED/TECH) (20 HRS) (07099NS) G9; \$9,396-11,758 7-24-95 Pathobiology

P-T TECH. VET I/II (26 HRS) (09325NS) (Schedule: Wed., 8 AM-8 PM, Thurs., 8 AM-4 PM & Fri., 12-6 PM) G8/G10; \$8,626-10,769/\$10,275-12,802 9-13-95 VHUP

VICE PROVOST/UNIVERSITY LIFE

Specialist: Clyde Peterson

COORD. V (09389CP) Serve as advisor/consultant to student performing arts organizations regarding organizational issues, funding, facilities, programming & leadership development; serve as primary administrative contact with & advisor to the Performing Arts Council; work with students, faculty & staff to enhance performing arts community at Penn; develop & conduct outreach programs to Penn & Philadelphia communities in conjunction with other Student Life staff. **Qual.:** BA/BS required, Master's preferred; 3 years professional experience in student activities, performing arts, arts management or related field; demonstrated skills in group dynamics, verbal & written communications & staff supervision; sensitivity to needs of a multicultural population; strong interpersonal & advising skills. **Grade:** P5; **Range:** \$28,800-37,600 9-28-95 Student Performing Arts

ASS'T. DIR. RESIDENTIAL MAINTENANCE (07043CP) (End date: 6/30/97) P6; \$31,900-40,600 7-13-95 Residential Maintenance

COORD., TUTORING SERVICES (09363CP) P3; \$23,900-31,000 9-21-95 Academic Support Svcs.

ADMIN. ASS'T. II (08250CP) G10; \$18,700-23,300 8-25-95 Academic Support Programs

ADMIN. ASS'T. II (06112CP) G10; \$18,700-23,300 6-26-95 Penn Women's Center

SEC'Y. IV (08202CP) G9; \$17,100-21,400 8-14-95 Academic Support

WHARTON SCHOOL

Specialist: Janet Zinser

PROGRAMMER ANALYST II (09387JZ) Design, implement & administer computer help desk to support department research & instructional computing; hire, train & supervise computing support work-study students; write technical documentation in support of user applications;

conduct training programs & provide consulting services for faculty, students & staff; plan & deploy end-user computing resources to support faculty instruction & augment departmental computing environments. **Qualifications:** BA/BS or equivalent; 2-4 years experience in computing system support; excellent technical, interpersonal & written communication skills; familiarity with computing requirements in an academic environment; ability to work & communicate with clients possessing wide range of technical expertise; experience with heterogeneous hardware & software environments; familiarity with UNIX, particularly Solaris & HP/UX; knowledge of MS DOS, MS Windows & Macintosh OS desirable; experience with TCP/IP based networks; familiarity with distributed computing environments; experience with at least one high level programming language such as C, Pascal or FORTRAN and one statistical applications package such as SAS, Minitab, or SPSS; hardware maintenance experience with PC & Macintosh workstations & peripherals. **Grade:** P6; **Range:** \$31,900-40,600 9-28-95 Statistics

ASSOC. DIR. IV (08203JZ) (On-going contingent upon continuation of funds) P5; \$28,800-37,600 8-17-95 Snider Entrepreneurial Center-Small Business Dev. Ctr.

ASSOC. DIR. IV (07040JZ) P6; \$31,900-40,600 7-13-95 External Affairs

ASSOC. DIR. V (07066JZ) P7; \$35,000-43,700 7-18-95 External Affairs

BUDGET ANALYST (09316JZ) P5; \$28,800-37,600 9-12-95 Finance and Administration

COORD. IV (09317JZ) (On-going contingent on funding) P4; \$26,200-34,100 9-12-94 UCOP at Penn

DIR. EUROPEAN REGION (07001JZ) (Position in Paris, France) P11; \$54,500-68,200 7-6-95 Int'l Rels.

DIR., WHARTON DEV. SERVICES (08170JZ) P10; \$47,400-59,200 8-18-95 Ext. Affairs

INFO. SYS. SPEC. I (08253JZ) P3; \$23,900-31,000 8-24-95 WCIT

INFO. SYS. SPEC. II (08161JZ) P5; \$28,800-37,600 8-7-95 WCIT

PROG. ANALYST I (09308JZ) P4; \$26,200-34,100 9-19-95 WCIT

PROG. ANALYST III (08295JZ) P4/P6; \$26,200-34,100/31,900-40,600 9-1-95 Computing & Info Systems

PROG. ANALYST III (09354JZ) P4/P6; \$26,200-34,100/31,900-40,600 9-19-95 WCIT

PROG. ANALYST II (04012JZ) P6; \$31,900-40,600 4-10-95 WCIT

SYS. PROG. I/II (07021JZ) P6/P7; \$31,900-40,600/35,000-43,700 8-9-95 WCIT

SYS. PROG. I/II (09315JZ) P6/P7; \$31,900-40,600/35,000-43,700 9-11-95 WCIT

ADMIN. ASS'T. III (08249JZ) G11; \$19,900-25,300 8-24-95 Insurance & Risk Management

P-T (CLERK III) (28 HRS) (09373JZ) (On-going contingent upon funding) G6; \$7,473-9,176 9-22-95 Mktg.

Classifieds

FOR SALE

University City, 3 blocks from campus. Charming 2 bedroom 2 story rowhome, architect renovated, wood floors, skylight, French doors to back yard and patio, wood burning stove, central a/c, W/D, full basement. \$60,000 Call (215) 546-7586.

Sharon Hill—Exceptional mint condition twin! 3 bedroom, 1 1/2 bath, C/A, finished basement. Convenient location. Easy to see. Please call (610) 449-6488.

Highland Park—Lovely, affordable maintenance-free brick townhome. Hardwood floors, skylight, garage. Excellent starter, conveniently located near Penn and easy to see. Please call (610) 449-6488.

HOUSE TO SHARE

Designer decorated, historical. Close to train, near City Ave. Female, non-smoker. Furnished bedroom. Quiet. \$425/mo. (215) 477-0729.

To place a classified ad, please call 898-8721 for rates and deadlines.

For Doctoral Students, October 10: Seventh Annual Conference on Academic Careers

The Career Planning and Placement Service and the Vice Provost for Graduate Education will host the *Seventh Annual Academic Career Conference, A Program for Doctoral Students* on Tuesday, October 10, from 4 to 7 p.m. The programs, listed below, will be held at Houston Hall. Call 898-7530 or send an e-mail message to vick@pobox.upenn.edu to register.

Issues Facing Graduate Education; Ben Franklin Room; 4 to 4:30 p.m.

How changes in higher education will affect your academic career; Dr. Janice Madden, Vice Provost for Graduate Education.

Applying for Dissertation and Postdoctoral Fellowships; Smith-Penniman Room; 4:30 to 5:30 p.m.

Writing a strong application, understanding what organizations want to fund; Dr. Margaret Mills, associate professor of folklore.

Funding resources on campus; Ann Kuhlman, Office of International Programs; Ellen DeMarinis, Reference Librarian, Van Pelt Library; Julie Vick, Career Planning and Placement.

The Insider's Guide to Graduate Education at Penn: A Program for First-Year Students; Ben Franklin Room; 4:30 to 5:30 p.m.

What you and your department can expect from each other; Dr. Janice Madden, Vice Provost for Graduate Education.

Managing relations with your advisor and choosing a committee, completing your program successfully and expediently; a panel of advanced graduate students, moderated by Dr. Madden.

Job Search Techniques in the Mid-90's; Ben Franklin Room; 5:30 to 7 p.m.

Evaluating one-year opportunities and postdocs, different kinds of teaching settings and what they expect of applicants, preparing for the market, helping your recommenders help you; Dr. Roger Allen, professor of Arabic/Asian and Middle Eastern studies; Dr. Kyle Vanderlick, assistant professor of chemical engineering; Dr. Walter Licht, Associate Dean, Graduate Arts & Sciences and professor of history; Dr. Alfred K. Mann, professor emeritus of physics; Dr. Sally Zigmund, professor and chair of biology.

The University of Pennsylvania Police Department Community Crime Report

About the Crime Report: Below are all Crimes Against Persons and Society in the campus report for **September 18 to September 24, 1995**. Also reported were Crimes Against Property including **42 thefts & attempts (1 burglary, 1 of autos, 11 from autos, 7 of bikes and parts) and 6 incidents of criminal mischief and vandalism**. Full reports are in this issue of *Almanac* on the web (<http://www.upenn.edu/almanac/v42/n6>).—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 September 18, 1995 and September 24, 1995. 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: Robberies (& attempts)—1, Simple assaults—3, Threats & harassment—2

09/20/95	1:07 AM	100 Blk. 38th	Assault by establishment employee
09/20/95	1:19 AM	100 Blk. 38th	Assault by establishment employee
09/21/95	9:36 AM	38th & Walnut	Window washers harassing complainant
09/22/95	4:43 AM	38th & Walnut	Currency robbed at knife point/no injury
09/22/95	3:51 PM	Grad Tower B	Complainant received threat
09/23/95	1:05 AM	Houston Hall	Assault occurred during party

38th to 41st / Market to Baltimore: Robberies (& attempts)—1, Purse snatches—1, Threats & harassment—4

09/18/95	6:03 AM	3900 Blk. Spruce	Unknown suspect attempted to rob complainant
09/19/95	9:47 PM	Harnwell House	Harassing calls received
09/21/95	12:32 PM	Evans Bldg.	Harassing letter received
09/23/95	2:37 PM	3928 Pine St.	Threatening calls received
09/24/95	1:01 PM	411 S. 40th St.	Harassing call received
09/24/95	2:11 PM	3900 Blk. Irving	Purse taken by 2 juveniles/arrests

41st to 43rd / Market to Baltimore: Robberies (& attempts)—1

09/18/95	6:12 AM	42nd & Baltimore	Currency taken by unknown male who fled in auto
----------	---------	------------------	---

30th to 34th / Market to University: Robberies (& attempts)—1

09/20/95	10:43 AM	34th & Chestnut	Complainant robbed at gun point/males fled in vehicle
----------	----------	-----------------	---

Outside 30th to 43rd / Market to Baltimore: Threats & harassment—1

09/18/95	12:29 PM	South St. Bridge	Complainant harassed by male
----------	----------	------------------	------------------------------

Reception October 10: Penn Women Who Went to Beijing

All members of the University are invited to hear first-hand about the Beijing Conference and NGO Forum at the Women's Studies reception for Penn participants October 10, from 4:30 to 6 p.m. at the Gold Standard, 3601 Locust Walk.

Forum participants who will attend the reception are Ms. Ellie DiLapi, director of the Penn Women's Center; Ms. Gloria Gay, associate director of the Women's Center; Dr. Farah Griffin, assistant professor of English; Dr. Louise Shoemaker, former dean of the School of Social Work; and Dr. Joyce Thompson, professor of nursing.

Seminar October 12: Women and Investment Planning

A midday seminar on financial issues for women in the workplace will be held Thursday, October 12, from 11:30 a.m. to 1 p.m. in the Faculty Club's Alumni Hall. *Investment Education for Women: Taking Charge of your Financial Future*, is hosted by Human Resources and the Penn Women's Center, with The Calvert Group as sponsor. Guest Speaker Joan Altmark offers strategies for financial independence for women—single, married, divorced, or widowed. For information: 898-7281.

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. Guidelines for readers and contributors are available on request.

EDITOR
ASSOCIATE EDITOR
EDITORIAL ASSISTANT
STUDENT ASSISTANTS

Karen C. Gaines
Marguerite F. Miller
Mary Scholl
Radhika Chinai, Suma CM,
Zack Miller, Stephen Sanford,
Sofia Theophilus, Jenny Tran

ALMANAC ADVISORY BOARD: *For the Faculty Senate*, Martin Pring (Chair), Jacqueline M. Fawcett, Phoebe S. Leboy, William Kissick, Peter J. Kuriloff, Ann E. Mayer, Paul F. Watson; *for the Administration*, Stephen Steinberg; *for the Staff Assemblies*, Berenice Saxon for PPSA, 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.

MANAGING EDITOR Martha M. Jablow
ASSISTANT MANAGING EDITOR Jerry Janda

NEWS STAFF: Barbara Beck, Jon Carolis, Phyllis Holtzman, Carl Maugeri, Esaúl Sánchez, Kirby F. Smith, Sandy Smith.

DESIGNER: Jenny Friesenhahn
SUBSCRIPTIONS: Ellen Morawetz

The Compass, South 1B, 3624 Market Street,
Philadelphia, PA 19104-2615

(215) 898-1426 or 898-1427 FAX: 898-1203

Classifieds: 898-8721

E-mail: jablow@pobox.upenn.edu

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. Jenious, Executive Director, Office of Affirmative Action, 1133 Blockley Hall, Philadelphia, PA 19104-6021 or (215) 898-6993 (Voice) or 215-898-7803 (TDD).

Distancing Doctoral Education from Faculty Research?

by Janice Fanning Madden

This past summer, the Committee on Science, Engineering, and Public Policy (COSEPUP), a joint committee of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine, published their study on graduate education entitled *Reshaping the Graduate Education of Scientists and Engineers*. The 200-plus page report discusses graduate education in the physical, life, and social sciences and in engineering. COSEPUP makes three broad recommendations for doctoral education: (1) doctoral programs should be broader or less specialized; (2) doctoral programs should provide better information and guidance about career opportunities; and (3) a national discussion should take place about graduate level human resource policies. While the second and third recommendations are defined so that no reasonable person could disagree, the first is not sufficiently justified by the study. And, to make matters worse, COSEPUP suggests that government should encourage such broadening by funding graduate students through training grants rather than through research grants.*

Ph.D. education at universities cannot be considered separately from research at those institutions. Successful research programs require successful graduate programs. There are very few research institutions in the world that are not also teaching institutions or universities. The reason that research requires graduate training is that the senior investigator requires highly skilled assistants who are trained in the *specifics* of the research being conducted. For research that is on the frontier of knowledge, the investigator conducting the research is the only person who can provide assistants with the necessary training. These assistants provide intellectual stimulation to the investigator, as well as perform many of the tasks necessary to the project. For these reasons, the training of graduate students is a complement to research. To the extent that graduate training (i.e., the training of research assistants) is necessary to research productivity, it is a by-product of research and uses no additional resources. In that sense, Ph.D. education is "free." The intrinsic complementarity between research and graduate education is best demonstrated by the fact that most research institutions are universities. Simply, basic research without research doctorate programs is more costly or inferior to that produced in the research university.

There are inevitable consequences of this link between doctoral education and research. Doctoral training, as a complement to basic research, is designed to produce researchers. This means that the training provided is specific, not general. As the research is basic and non-proprietary, it is funded by public dollars. There is a mandate to fund such research, and the resulting training, from public moneys because of its nature as a public good. Students pursuing professional study of law, business, etc., are not so subsidized. They are pursuing education that generates productivity that is easily captured by a single entrepreneur and is, therefore, proprietary. This type of training results in profits for private enterprise that private enterprise pays for through higher salaries to these graduates that, in turn, make them willing to incur the necessary tuition.

Due to a leveling, or even cutback, in the extent of the nation's investment in basic research, there have been recent disruptions in the career paths of scientists. The cutbacks appear to have resulted in fewer permanent positions in basic research. Scientists trained for basic research are now seeking employment elsewhere. Private industry employs more of these individuals than in the past. Not surprisingly, private industry demands some different skills from those required by basic research. The question that must be answered, then, is should these changes in career paths and the different skill requirements in private industry affect the way doctoral education is structured? Specifically,

should doctoral education be made more general, as advocated by the COSEPUP report, and should the federal government attempt to influence such changes?

The answer to these questions depend on the answers to three sets of more factual questions about the current situation:

What is the long-run outlook for basic research? Will there be long-run cutbacks in employment that merit plans for a permanent decrease in the flow of research doctorates into basic research?

What are the relative costs and benefits of expending resources to provide more general forms of training as part of the research doctorate? What is the value to industry of the more general skills? What is the value to basic research productivity of the more specific skills? What is the cost to the productivity of the basic research enterprise of devoting resources to the production of more general skills?

If more general skills are desired among research doctorates taking jobs in industry, what is the efficient locus for such training? Are research doctorate programs the best providers of this training? or other programs in the university, such as professional masters programs? or private industry itself?

These questions are critical to deciding how to proceed, but are not even contemplated, much less answered, by the COSEPUP study. If there is only a short run mismatch between the supply of, and demand for, persons with basic research skills, then there is no reason to make permanent adjustments in the educational system. The COSEPUP report, in fact, argues that it is not clear that there is any permanent mismatch between supply of, and demand for, persons with research doctorates. If the different skills required by industry either cost too much to produce within research programs, or are more efficiently provided by on-the-job training in industry, then there is also no reason to adjust the educational system. COSEPUP never addresses this issue.

Even if there is reason to change the nature of graduate education, is there sufficient reason for the government to encourage such changes? The COSEPUP report provides numerous descriptions of innovation currently underway in research doctorate programs. None of these changes are the result of traineeships or other government intervention. They arose because the institutions themselves, in their own attempts to attract the best students and to train them well, saw these changes as beneficial. They occurred within a system that closely tied government funding for research and for graduate education, but that allowed the institutions to compete for the best research assistants, in terms of the quality of the instructional programs. As a result, the nation obtained high quality research and the training of research doctorates in the most efficient manner.

Whatever the ultimate decision about the advisability of investing in traineeship funding for graduate students, there has been no case made for the suggestion that such traineeships be financed by reallocations with the National Science Foundation and other funding agencies, presumably at the expense of research funding. Research funding is provided because basic research is essential to the economic, social, and technological expansion of the country and, therefore, the long run growth in the standard of living for Americans. Cuts cannot be made in basic research without decreasing this growth. Up to now, we have been able to produce research doctorates as a "free good" in the production of research. If that is to change because the research doctorate is to change, then the funding for the production of doctorates should come from those who benefit from the change. There is absolutely no reason to look to basic research for this funding.



* At pages 4-5 of the Executive Summary of *Reshaping the Graduate Education of Scientists and Engineers*:

Most federal support for graduate students is currently provided through research assistantships. Research assistantships are included as parts of grants that are competitively awarded...to support...research.... We recommend an increased emphasis on education/training grants...we recognize that a heightened emphasis on education/training grants could reduce the funds available for research assistantships.

Dr. Madden is Professor of Regional Science, Sociology and Real Estate, and Vice Provost for Graduate Education

UNIVERSITY of PENNSYLVANIA



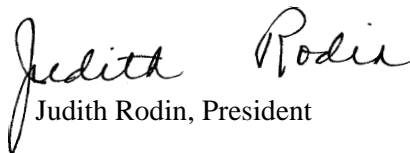
To the University Community:

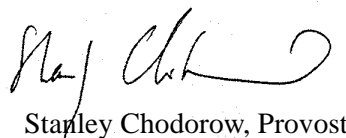
The strength of any great university lies in the quality and dedication of its faculty. As we begin our 256th academic year, we welcome new members of the standing faculty who will contribute to the depth and breadth of Penn's greatness.

They hail from around the globe—Italy, Israel, Brazil, Switzerland, Australia, and all around the United States. We hope that you will get to know them—not only the faculty in your individual school but those in other schools as well. We are introducing new faculty members to you by publishing this insert in *Almanac*.

New faculty members join us at an auspicious moment. Penn's achievements have been nationally recognized in scholarly surveys, in the popular press and in the skyrocketing number of our student applicants.

This recognition rests on Penn's outstanding faculty. The faculty is deeply committed to our students' education and to the pursuit of knowledge in the classroom, the laboratory and the library. As our faculty, students and staff well know, on this campus we integrate excellence—in the professions and the liberal arts, in graduate and undergraduate education, in the sciences and the humanities, and in theory and practice. We expect our new faculty to enhance these pursuits and warmly welcome them to Penn.


Judith Rodin, President


Stanley Chodorow, Provost

SCHOOL OF ARTS AND SCIENCES

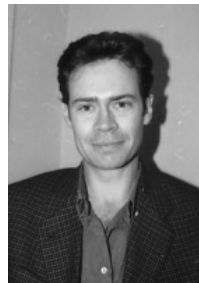


Susan Blum, *Assistant Professor of Anthropology*, is a cultural anthropologist. Her dissertation is on the language of identity and difference in southwest China; Ph.D. from the University of Michigan.



Boyan Jovanovic, *Professor of Economics*, is an applied theorist whose research includes labor economics, macroeconomics and industrial organization. He comes to Penn from New York University; Ph.D. from the University of Chicago.

Warren Breckman, *Assistant Professor of History*, is a modern European intellectual historian specializing in the cultural context of the German theological and political theorists between Hegel and Marx; Ph.D. from the University of California at Berkeley.



Ayako Kano, *Assistant Professor of Asian and Middle Eastern Studies*, is a specialist in modern Japanese literature. She has interests in women's studies and Japanese theater; Ph.D. from Cornell University.



Jose Cheibub, *Assistant Professor of Political Science*, is a native of Brazil. His dissertation title is "Taxation, Political Regimes and Economic Growth in Latin America"; Ph.D. from the University of Chicago.



Ann Moyer, *Assistant Professor of History*, is a cultural historian. Her recent work explains the transformation of music from a branch of mathematics in the Middle Ages to a fine art in the Renaissance; Ph.D. from the University of Michigan.

Thomas Cooley, *Professor of Economics*, is a macroeconomist. His fields of expertise are time series econometrics and dynamic equilibrium modeling. He was on the faculty of Rochester; Ph.D. from the University of Pennsylvania.



Steven Myers, *Assistant Professor of Physics and Astronomy*, is an astronomer who is interested in how the "fossil record" of the early universe provides insights into the formation of galaxies and stars; Ph.D. from the California Institute of Technology.



Steven Feierman, *Professor of History and Sociology of Science*, is an historian and anthropologist of African medicine. He comes to Penn from the University of Florida; Ph.D. in history from Northwestern and a Ph.D. in social anthropology from Oxford.



Erin O'Connor, *Assistant Professor of English*, did doctoral work on the Victorian period that examines disease and deformity in the body as a rhetoric of pathology about the culture as a whole; Ph.D. from the University of Michigan.

Cameron Hurst, *Professor of Asian and Middle Eastern Studies and Director of the East Asia Center*, is a scholar of medieval Japan, Japanese martial arts, and Korean history and culture. He comes to Penn from the University of Kansas; Ph.D. from Columbia University.



Roberto Perli, *Assistant Professor of Economics*, is an expert in macroeconomics and applied game theory; Ph.D. from New York University.





Robert Preucel, *Associate Professor of Anthropology and Associate Curator in the American Section of the University Museum*, works in the field of Native North American archaeology. He comes to Penn from Harvard; Ph.D. from University of California at Los Angeles.



Nida Surber, *Assistant Professor of English*, is a medievalist and Old English specialist. She comes to Penn from the University of Geneva from which she received her Ph.D.

Jacqueline Sadashige, *Assistant Professor of Classical Studies*, is a Roman cultural historian with expertise in Plautus and Catullus; Ph.D. from the University of Pennsylvania.



Emily Thompson, *Assistant Professor of History and Sociology of Science*, is a Historian of technology. Her dissertation brings together music, architecture and the physics of sound; Ph.D. from Princeton University.



Sylvia Santaballa, *Assistant Professor of Romance Languages*, works in the field of Colonial Latin American studies. Her dissertation is on the "Seventeenth-Century Mexican Representation of the Virgin of Guadalupe"; Ph.D. from Brown.



Barbara von Schlegell, *Assistant Professor of Religious Studies*, works in the field of Islamic religion and civilization. Her dissertation is on Sufism in Ottoman Arab lands; Ph.D. from the University of California at Berkeley.

Barbara Savage, *Assistant Professor of History*, did her dissertation in the study of public affairs radio programming by and about African-Americans in the 1940s. J.D. from Georgetown University, Ph.D. from Yale University.



Ken Wolpin, *Professor of Economics*, studies determinants of crime, savings and asset accumulation behavior in low-income countries, and the effect of welfare programs on family support. He comes to Penn from New York University; Ph.D. from City University of New York.



Harold Schiffman, *Professor of South Asia Regional Studies and Director of the Penn Language Center*, specializes in the area of South Asian languages, particularly the Dravidian languages such as Tamil. He is also an expert in linguistic pedagogy. He comes to Penn from the University of Washington; Ph.D. from the University of Chicago.

SCHOOL OF ENGINEERING AND APPLIED SCIENCE

James P. Ostrowski, *Assistant Professor of Mechanical Engineering and Applied Mechanics*, does research on the dynamics and control of mechanical systems for which group symmetries exist and in which there exist momentum-like drift terms that are only indirectly controllable; Ph.D. from the California Institute of Technology.



SCHOOL OF MEDICINE

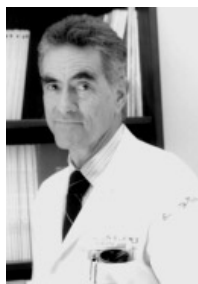


Todra L. Anderson, *Assistant Professor of Obstetrics and Gynecology at HUP*, specializes in the gynecologic and obstetrical care of adolescent patients, as well as laparoscopic surgery; M.D. from the University of Pennsylvania School of Medicine.



Francesca Catella-Lawson, *Research Assistant Professor of Medicine*, specializes in clinical trials with novel anti-thrombolytic agents and oxidative stress in diabetes mellitus; M.D. from the University of Rome School of Medicine.

William G. Baxt, *Professor and Chair of Emergency Medicine*, specializes in the use of artificial neural network for the diagnosis of myocardial infarction; M.D. from Yale University School of Medicine.



Theodore M. Danoff, *Assistant Professor of Medicine*, is a nephrologist who is interested in the role of the chemokine RANTES in interstitial inflammatory responses; M.D. from the Pritzker School of Medicine at the University of Chicago and Ph.D. in immunology from University of Chicago.



Callum J. Bell, *Research Assistant Professor of Pediatrics at CHOP*, is interested principally in the Human Genome Project. He is currently working on a high-resolution physical map of human chromosome 22; Ph.D. in plant genetics and biology from the University of Edinburgh.



David DeNofrio, *Assistant Professor of Medicine at HUP*, is interested in cardiology, emphasizing heart failure and cardiac transplantation; M.D. from Tufts University School of Medicine.

Philip D. Bergey, *Research Assistant Professor of Radiology*, specializes in cardiovascular MR; M.D. from the University of Pennsylvania School of Medicine.



Stephen M. Echterler, *Research Assistant Professor of Otorhinolaryngology-Head and Neck Surgery*, is studying the cellular development of the mammalian auditory periphery; Ph.D. in neuroscience from the University of California at San Diego.



Nancy D. Bridges, *Assistant Professor of Pediatrics, Medical Director of Lung and Heart/Lung Transplantation Program at CHOP*, is interested in pulmonary hypertension, interventional cardiac catheterization and lung and heart/lung transplantation for end-stage cardiopulmonary disease; M.D. from New York University School of Medicine.



Scott E. Edwards, *Assistant Professor of Obstetrics and Gynecology at HUP*, is interested in general obstetrics and gynecology; M.D. from Yale University School of Medicine.

Amy R. Brooks-Kayal, *Assistant Professor of Neurology at CHOP*, is interested in pediatric epilepsy and developmental changes in neurotransmitter systems; M.D. from the Johns Hopkins University School of Medicine.



Wafik S. El-Diery, *Assistant Professor of Medicine*, is interested in cancer genetics, gene therapy for cancer, cell-cycle regulation; Ph.D. in biochemistry and M.D. from the University of Miami School of Medicine.





Charles P. Emerson, *Joseph Leidy Professor and Chair of Cell and Developmental Biology*, is investigating mechanisms controlling muscle cell differentiation in developing embryos; Ph.D. in molecular and cell biology from the University of California at San Diego.



Allen C. Ho, *Assistant Professor of Ophthalmology*, studies angiogenesis and specializes in vitreoretinal diseases including diabetic and AIDS-related retinopathy; M.D. from Columbia University College of Physicians and Surgeons.

Daniel K. Fram, *Assistant Professor of Radiation Oncology (and Director of Radiation Oncology based at Mercer Medical Center, Trenton, N.J.)*, is interested in head and neck malignancies and prostate cancer; M.D. from the University of Vermont College of Medicine.



William S. Hoff, *Assistant Professor of Surgery at HUP*, is interested in trauma systems and trauma triage; M.D. from Jefferson Medical College of Thomas Jefferson University.



Jonathan Garino, *Assistant Professor of Orthopaedic Surgery at HUP*, focuses on avascular necrosis of the femoral head and knee, hip and knee reconstruction, and pelvic reconstruction; M.D. from Georgetown University School of Medicine.



Sandra L. Holloway, *Assistant Professor of Genetics and Howard Hughes Assistant Investigator*, studies cell-cycle control of chromosome segregation; Ph.D. in molecular biology and genetics from the Johns Hopkins University School of Medicine.

Richard M. Gesser, *Assistant Professor of Pediatrics*, specializes in pediatric infectious diseases and herpes simplex virus latency; M.D. from Cornell University Medical College.



Haralambos (Harry) Ischiropoulos, *Research Assistant Professor of Biochemistry and Biophysics*, works with nitric oxide and superoxide mediated tissue injury; Ph.D. in pathology from New York Medical College.



Stephen Gluckman, *Associate Professor of Medicine at HUP, Director of Infectious Diseases and Clinical Services, General Internal Medicine Practice*, is interested in travel medicine, parasites and HIV disease; M.D. from Columbia University College of Physicians and Surgeons.



Thomas A. Jongens, *Assistant Professor of Genetics*, studies the establishment of the germ cell lineage in drosophila; Ph.D. in molecular biology from the University of California at Berkeley.

Garth F. Hall, *Research Assistant Professor of Neurology*, is working on the expression of human tau protein in identified lamprey neurons as an in situ model of the cytopathology of neurodegenerative disease; Ph.D. in biology from Yale University.



Karen F. Kozarsky, *Research Assistant Professor of Molecular and Cellular Engineering*, is focusing her research on in vivo liver-directed gene therapy for familial hypercholesterolemia; Ph.D. in biology from the Massachusetts Institute of Technology.



SCHOOL OF MEDICINE



Peter Larson, *Assistant Professor of Pediatrics, Assistant Director of both the Blood Bank and Apheresis Services at CHOP*, researches vitamin K-dependent coagulation factors; M.D. from University of North Carolina at Chapel Hill.



Diane E. Merry, *Research Assistant Professor of Neurology*, works with molecular mechanisms of neurodegenerative disease; Ph.D. in genetics from the University of Pennsylvania.

Laurie A. Loevner, *Assistant Professor of Radiology at HUP*, is interested in neuroradiology, head and neck radiology, and white matter disease; M.D. from the University of Pennsylvania School of Medicine.



Natasha Mirza, *Assistant Professor of Otorhinolaryngology-Head and Neck Surgery at VAMC*, specializes in head and neck oncology; M.D. from Dow Medical College, Karachi, Pakistan.



Patrick Loll, *Assistant Professor of Pharmacology*, is interested in protein crystallography; Ph.D. in biochemistry and cellular and molecular biology with a concentration in biophysics from the Johns Hopkins University School of Medicine



Donald E. Morgan, *Professor of Audiology in Otorhinolaryngology-Head and Neck Surgery at HUP*, is interested in the computerized adaptive methods for selecting hearing aids; Ph.D. in audiology from Northwestern University.

David Robinson Lynch, *Assistant Professor of Neurology*, is interested in cerebellar diseases; M.D. and Ph.D. from the Johns Hopkins University School of Medicine.



Mark Allen Morgan, *Associate Professor of Obstetrics and Gynecology at HUP, Director of the Division of Maternal-Fetal Medicine*, focuses on maternal-fetal metabolism and high-risk obstetrics; M.D. from the University of Oklahoma School of Medicine.

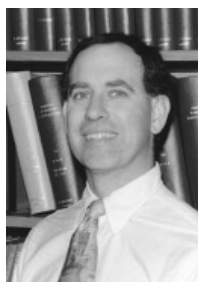


Maureen G. Maguire, *Associate Professor of Ophthalmology*, is interested in clinical research and clinical trials for the major causes of loss of vision in the United States; Ph.D. in biostatistics from the Johns Hopkins University School of Hygiene and Public Health.



Donald M. O'Rourke Jr., *Assistant Professor of Neurosurgery*, specializes in cancer research related to genetic therapies of brain tumors; M.D. from the University of Pennsylvania School of Medicine.

Joseph C. McGowan, *Research Assistant Professor of Radiology*, is interested in the development of magnetization transfer technology and the implementation of derivatives of this technique as well as head trauma, multiple sclerosis, the developing brain and alcoholic injury; Ph.D. in bioengineering from the University of Pennsylvania.



David James Perkel, *Assistant Professor of Neuroscience*, is interested in the cellular basis of vocal learning in songbirds; Ph.D. in neuroscience from University of California at San Francisco.





Helen M. Pettinati, *Research Associate Professor of Psychology in Psychiatry*, is interested in pharmacologic and psychosocial treatments for addiction; Ph.D. in psychiatric research from the Medical College of Pennsylvania.



Patricia J. Sollars, *Research Assistant Professor of Neuroscience in Psychiatry*, specializes in neural transplantation, circadian rhythms and sleep; Ph.D. in neuroscience from the University of Oregon.

Glenn L. Radice, *Assistant Professor of Reproductive Biology in Obstetrics and Gynecology*, is interested in embryology and cancer research; Ph.D. in genetics and development from Columbia University.



James W. Teener, *Assistant Professor of Neurology at HUP*, specializes in the care of critically ill patients with neuromuscular diseases and in neuromuscular complications that arise in the critical care unit; M.D. from the University of Michigan Medical School.



Ramesh Raghupathi, *Research Assistant Professor of Neurosurgery*, is interested in the molecular biology of traumatic brain injury; Ph.D. in biochemistry from Virginia Commonwealth University.



Erica R. Thaler, *Assistant Professor of Otorhinolaryngology-Head and Neck Surgery at HUP*, is focusing on head and neck oncology and chronic sinusitis; M.D. from Harvard Medical School.

P. Preston Reynolds, *Assistant Professor of Medicine*, is interested in the incorporation of professional values and behaviors into medical education; M.D. from Duke University School of Medicine and Ph.D. in history from Duke University.



Laurence A. Turka, *Associate Professor of Medicine*, is interested in transplantation immunology, autoimmunology and T-cell biology; M.D. from Yale University School of Medicine.



Ira Schwartz, *Assistant Professor of Urology in Surgery at HUP*, is working on urologic infections, inflammation, hematuria, scrotal pain, voiding dysfunctions, cancer diagnosis and cancer surveillance post-nonsurgical therapy; M.D. from Jefferson Medical College of Thomas Jefferson University and Ph.D. in pharmacology from Thomas Jefferson University.



Jan Matthijs van de Rijn, *Assistant Professor of Pathology and Laboratory Medicine at HUP*, is interested in immunohistochemistry, application of molecular techniques in surgical pathology, and soft-tissue tumors; M.D. and Ph.D. from University of Amsterdam.

Stephen J. Shochat, *Professor of Pediatric Surgery at CHOP*, specializes pediatric general and thoracic surgery; M.D. from the Medical College of Virginia.



Krista Vandenborne, *Research Assistant Professor of Rehabilitation Medicine*, is interested in skeletal muscle metabolism and nuclear magnetic resonance; Ph.D. in physical therapy from the Free University of Brussels.





Barbara Watson, *Assistant Professor of Pediatrics*, is interested in pediatric infectious diseases. She directs the Vaccine Evaluation Unit at CHOP; M.B. and Ch.B. from the Medical School of the University of Cape Town in South Africa.



Gil Wernovsky, *Associate Professor of Pediatrics and Director of the Cardiac Intensive Care Unit at CHOP*, is interested in critical-care cardiology, management of postoperative low cardiac output, and neurodevelopmental sequelae of neonatal and infant heart surgery; M.D. from Pennsylvania State University College of Medicine.

Barbara L. Weber, *Associate Professor of Medicine, Director of the Breast Cancer Program*, is interested in inherited breast cancer and breast-cancer treatment; M.D. from the University of Washington School of Medicine.



George Woodward, *Assistant Professor of Pediatrics at CHOP*, is interested in the medical and legal issues in pediatric transport; M.D. from Temple University Medical School.



Jennifer Mary Bird, *Assistant Professor of Medicine at HUP*, studies minimal residual disease after bone marrow transplantation for multiple myeloma. Her clinical interests are multiple myeloma, leukemia and bone marrow transplantation. She is a member of the Royal College of Physicians, UK.

Jeffrey A. Boyd, *Associate Professor of Obstetrics and Gynecology*, studies the molecular genetics of human gynecologic cancers; Ph.D. in toxicology from North Carolina State University.

Victor Caraballo Jr., *Assistant Professor of Emergency Medicine at HUP*, specializes in emergency medicine; M.D. from Brown University School of Medicine.

Mildred K. Cho, *Research Assistant Professor of Bioethics in Molecular and Cellular Engineering*, focuses on ethical and social issues in gene therapy and genetic testing; Ph.D. in pharmacology from Stanford University.

Guy S. Diamond, *Assistant Professor of Psychology in Psychiatry at PCGC*, is interested in family psychotherapy research with a focus on depression; Ph.D. in clinical psychology from the California School of Professional Psychology.

Garret A. FitzGerald, *Professor of Medicine and Pharmacology, Director of the Center for Experimental Therapeutics and the Clinical Research Center*, is interested in eicosanoid receptor biology, oxidative stress in human cardiovascular disease and novel anti-thrombolytic therapies; M.D. from the University College (Dublin), National University of Ireland.

Thomas L. Genetta, *Research Assistant Professor of Medicine*, is interested in the molecular biology of vertebrate development; Ph.D. in biochemistry from New York University.

Marc A. Gorelick, *Assistant Professor of Pediatrics*, is interested in the performance of clinical signs in the diagnosis of dehydration in children; M.D. from Duke University School of Medicine.

Robert M. Lavker, *Professor of Dermatology*, studies cutaneous mast cells and the epidermal stem cell; Ph.D. in nutrition and biochemistry from Clemson University.

Kim M. Olthoff, *Assistant Professor of Surgery*, is interested in postoperative complications and multiorgan transplantation; M.D. from Pritzker School of Medicine of the University of Chicago.

Stephen M. Paridon, *Associate Professor of Pediatrics at CHOP*, is interested in pediatric cardiology, myocardial blood flow and metabolism of children with Kawasaki disease through positron emission tomography; M.D. from Case Western Reserve University School of Medicine.

Thomas L. Spray, *Professor of Surgery*, is interested in cardiothoracic surgery; M.D. from Duke University School of Medicine.

John R. Stanley, *Professor of Dermatology*, is interested in autoimmune blistering diseases; M.D. from Harvard University Medical School.

Hansell H. Stedman, *Assistant Professor of Surgery*, is a general surgeon and focuses on human genetics and muscular dystrophy research; M.D. from Harvard Medical School.

Alan H. Stolpen, *Assistant Professor of Radiology at HUP*, is interested in diagnostic radiology and focuses on vascular-targeted contrast agents for MRI; M.D. from Harvard University Medical School and Massachusetts Institute of Technology; Ph.D. in pharmacology from Harvard University.

Paul S. Thornton, *Assistant Professor of Pediatrics at CHOP*, is interested in hypoglycemia and hyperinsulinism. His subspecialties are endocrinology and diabetes; M.B. and B.Ch. from the University College (Dublin).

Peter A. Ubel, *Assistant Professor of Medicine*, studies medical ethics, health-care rationing and medical decision-making; M.D. from the University of Minnesota Medical School.

Yanyan Wang, *Assistant Professor of Pharmacology*, is trained in electric physiology and molecule biology. Her interests are synaptic plasticity, schizophrenia and drug addiction; Ph.D. in pharmacology from Yale University.

SCHOOL OF NURSING



Julie Fairman, *Assistant Professor of Nursing*, researches the relationship of nurse-physician collaboration and the role renegotiation to patient outcomes and the organization of nurses' work, the influence on technology development in critical care, and development of work strategies; Ph.D. and postdoctoral fellowship from Penn.



Jennifer A. Pinto-Martin, *Assistant Professor Nursing*, researches epidemiology, neurological disease and children. She is principal investigator of a project funded by the National Institute of Neurological Disease and Stroke to study neonatal brain damage. She also holds positions at CHOP and the School of Medicine; Ph.D. from the University of California at Berkeley.

William F. McCool, *Associate Professor of Nurse Midwifery*, is an expert in the area of biobehavioral correlates of pregnancy outcomes. His research efforts have focused on the relationship of stress to the intrapartal experiences in pregnant adolescents. He comes to Penn from Yale; B.A. from Penn and Ph.D. from Penn State University.



Eileen Sullivan-Marx, *Assistant Professor of Nursing*, has practiced in community health, acute care, long-term care and primary care settings with diverse populations. Her work on health policy issues has resulted in several key appointments to state and national committees; Ph.D from Penn.



Wanda Mohr, *Assistant Professor of Nursing*, researches ethical decision-making and nursing advocacy in the for-profit psychiatric hospital sector. She provides leadership in the senior year undergraduate curriculum as course director of the psychiatric/mental health nursing course; Ph.D. from University of Texas at Austin.



Antonia M. Villarruel, *Assistant Professor of Nursing*, is recognized in nursing and in the broader health and political arena for her research on cultural diversity and minority issues. Her current studies include the sexual behavior of adolescents and young adults that has both culturally specific and generalizable components; Ph.D. from Wayne State University.

SCHOOL OF SOCIAL WORK



Dennis Culhane, *Associate Professor of Social Work*, is an expert on health and mental services for homeless persons. Dr. Culhane has been at Penn as an Assistant Research Professor of Psychology in Psychiatry and a Senior Fellow at Leonard Davis Institute of Health Economics; Ph.D. from Boston College.



Yvonne Williams, *Assistant Professor of Social Work*, researches socialization to work and family roles and economic conditions and the family life cycle. Her dissertation was titled "Economic Identity: A Measure of the Salience of Economic Self in the Lives of Married Men and Women"; M.S.W. from Temple and Ph.D. from the University of Michigan.

Maureen Marcenko, *Associate Professor of Social Work*, has been a senior research investigator at Penn's Center for the Study of Youth Policy. She brings expertise in mental health services research. Her primary research focuses on the identification and evaluation of family-centered interventions; Ph.D. from McGill University.



Irene Wong, *Assistant Professor of Social Work*, compares socio-demographic differences between homeless families and homeless single individuals, their use of services and their participation in income support programs; M.A. from the University of York, U.K., and Ph.D. from the University of Wisconsin-Madison.



Michael Reisch, *Professor of Social Welfare*, an expert in social policy and social theory, comes from San Francisco State University where he was the Director of the School of Social Work; M.S.W. from Hunter College and Ph.D. from the State University of New York at Binghamton.

GRADUATE SCHOOL OF EDUCATION



Susan Fuhrman, *Dean and George and Diane Weiss Professor of Education*, is Director of the Consortium for Policy Research in Education (CPRE). She was Professor of Education Policy at Rutgers. Her research interests include state policy design, accountability, deregulation and inter-governmental affairs; Ph.D. from Columbia University.



Kathleen Hall, *Assistant Professor of Education*, comes to Penn from the University of Chicago, where she was a Postdoctoral Fellow at Chapin Hall Center for Children. She is concerned with the role that culture plays in how people construct, experience and negotiate the boundaries of belonging and difference; Ph.D from the University of Chicago.

Margaret (Peg) Goertz, *Professor of Education*, is Senior Research Fellow with the Consortium for Policy Research in Education (CPRE). She was professor of public policy at Rutgers. She specializes in education finance and governance, paying particular attention to issues of equity; Ph.D from the Maxwell School of Syracuse University.



GRADUATE SCHOOL OF FINE ARTS



Nadia Alhasani, *Assistant Professor of Architecture*, specializes in architectural technology. She previously taught at Notre Dame and the University of Miami; Master's and Ph.D. from GSFA.



Julie Schneider, *Associate Professor of Fine Arts*, a working artist, chairs the undergraduate program in fine arts. She has taught at Williams and the University of Virginia and chaired the art program at the Interlocken Center for the Arts; B.S. and M.F.A. from the University of Wisconsin.

William Braham, *Assistant Professor of Architecture*, worked with the New York firm of Buttrick White and Burtis while teaching at Penn; M. Arch and Ph.D. from GSFA.



THE WHARTON SCHOOL



David Croson, *Assistant Professor of OPIM*, researches economics of information technology and organization in firm and market contexts; B.S. and M.S. from Penn State and A.B.D. from Harvard.



Roger Edelen, *Assistant Professor of Finance*, works in the field of investments and empirical financial economics; B.S. and M.B.A. from University of Texas at Austin, and A.B.D. at University of Rochester.



David Ellison, *Assistant Professor of OPIM*, specializes in operations management and new product development; B.A. and M.S. from Stanford and A.B.D. from Harvard.



David Musto, *Assistant Professor of Finance*, focuses on financial markets and investments; B.A. from Yale and Ph.D. from the University of Chicago.

Noah Gans, *Assistant Professor of OPIM*, is an expert in operations management, performance analysis and control of queuing systems; B.A. from Harvard, M.P.P.M. from Yale and Ph.D. from Columbia.



Nicholas Souleles, *Assistant Professor of Finance*, is an expert in macroeconomics and consumption theory; B.S.E. from Princeton and A.B.D. from MIT.



Geoffrey Garrett, *Associate Professor of Management*, specializes in international business. He comes to Penn from Stanford; B.A. from Australian National University, and M.A. and Ph.D. from Duke.



Alan Strudler, *Assistant Professor of Legal Studies*, researches jurisprudence, ethics and negotiation. He has taught at Columbia, Cal Tech and Stanford; J.D. and Ph.D. from University of Arizona.

Stephen Hoch, *Professor of Marketing*, is an expert in retail merchandising, pricing and promotion strategy. He was previously chaired professor at the University of Chicago; B.A. from Stanford, M.B.A. from UCLA and Ph.D. from Northwestern.



Gabriel Szulanski, *Assistant Professor of Management*, works in the field of strategic management; B.S. from Technion, Haifa, M.B.A. from Tel Aviv University and Ph.D. from INSEAD.



Urban Jermann, *Assistant Professor of Finance*, researches international economics. In 1994-1995, he lectured at Wharton; B.A., M.A. and Ph.D. from the University of Geneva.



Mary Tripsas, *Assistant Professor of Management*, works in the field of entrepreneurial management; B.S. from University of Illinois, M.B.A. from Harvard and A.B.D. from MIT.

Anne Marie Knott, *Assistant Professor of Management*, specializes in entrepreneurial management; B.S. from University of Utah, M.B.A. and Ph.D. from UCLA.



Karl Ulrich, *Associate Professor of OPIM*, is an expert in product design and development. In 1993-1994, he was a visiting associate professor at Wharton; B.S., M.S. and D.Sc. from MIT.



SCHOOL OF VETERINARY MEDICINE



Susan Crane, *Assistant Professor of Medicine in Field Service*, is a clinician educator who specializes in equine medicine; V.M.D. from Penn.



Patricia M. McManus, *Assistant Professor of Clinical Pathology*, is a clinician educator whose interests lie in marrow failure syndromes; B.A., V.M.D. and Master's from Penn; specialty training at Cornell.

Perry Habecker, *Assistant Professor of Pathology*, is a clinician educator who specializes in large animal pathology and food animal diagnostic techniques; V.M.D. from Penn.



Stuart Meyers, *Assistant Professor of Large Animal Reproduction*, specializes in clinical reproduction with a special interest in male infertility and assisted reproductive technology; D.V.M. from Michigan State and Ph.D. from the University of California, Davis.



Tom Parsons, *Assistant Professor of Swine Production Medicine*, is a large animal veterinarian with a research interest in cell biology, particularly the basic mechanisms used by brain cells and physiological responses to environmental stress; V.M.D. and Ph.D. from Penn.