

## Implementing Energy Conservation

A major energy conservation initiative has begun here on campus with two goals: to conserve energy and to minimize the impact of rising energy prices on Penn's operating budget. We urge the entire University community to lend their support and cooperation in these efforts as we embark on this ambitious program. The emerging energy problem may be reminiscent of the energy crises of the seventies and eighties when Penn was seeking ways to cope with and solve the critical social and technological problems that developed in the nation's energy consumption.

The recent increases in fuel prices, coupled with energy market volatility, have had an alarming impact on consumers; the operating budgets in Facilities Services have also been strained by these conditions. Increased costs related to utilities such as steam and electricity could adversely affect the resources available to facilities to operate and maintain the campus buildings and grounds.

In order to conserve energy throughout campus, we strongly recommend the following energy conservation measures to be adopted across campus.

### Energy Conservation Recommendations

1. Set thermostats, to 65 degrees when offices, classrooms, labs and other areas are occupied and turn them down further at the end of the workday, to 59 degrees when an area is unoccupied.

While this may seem like a drastic measure, a significant reduction in energy consumption will result from this approach. By setting back the thermostat from 70 degrees to 65 degrees, energy consumption is significantly reduced.

We apologize for any inconvenience and suggest that those accustomed to warmer indoor temperatures may wish to dress warmly and leave a sweater or jacket at work.

2. Remove any items which block vents or radiators to allow for air to flow freely.

3. Besides lowering thermostats, we urge everyone to help conserve electricity by turning off lights—both fluorescent and incandescent—as well as computers, monitors, printers, scanners, copiers and other office and lab equipment when not in use for an extended period—especially overnight and on weekends or whenever possible. If in doubt about the advisability of shutting down a piece of equipment, check with a supervisor first.

4. Notify Facilities/Operations and Maintenance of any excessive drafts around windows or doors that could be alleviated. If there is a window air conditioner in a window, make sure it is properly sealed during the winter months.

5. Keep all exterior doors and windows closed to minimize infiltration of cold outdoor air into the buildings. In cold weather, open shades or blinds to allow direct sunlight to heat your room with solar heat. In many cases this also eliminates the need for electric lighting. At night, close the shades or blinds to keep in the heat.

6. Also notify Facilities when any building is unoccupied or out of service. Facilities/Operations and Maintenance can be reached at (215) 898-5833.

Facilities Services is also taking several additional steps to ensure that all heating and air conditioning systems are operating efficiently. These initiatives have been implemented in cooperation with representatives from the Schools, Centers and the Office of Environmental Health and Radiation Safety.

Given current economic conditions and the drastic energy shortages we are beginning to experience as a nation, we can no longer afford to take energy for granted. Hopefully, we can join together in implementing a wise, sensitive and forward-thinking energy conservation plan.

The concerted dedication and determination of the faculty, staff and students to actively participate in saving energy and resources will help enormously. The occupants of Penn's many buildings each play a vital role in ensuring the best outcome for Penn as well as the environment. Controlling energy costs is something that we must do individually and collectively to maximize energy-related cost-avoidance.

Thank you.

—Omar Blaik, Vice President, Facilities Services

## NFL Charities Grant to Head Injury Center

NFL Charities, an organization of the member clubs of the National Football League, has awarded a \$110,000 grant to Penn's Head Injury Center (HIC) to study the long-term effects of concussions.

Concussions have always plagued physical sports, where contact is part of the game. But football players, such as Troy Aikman and Steve Young, are only among the most visible of the two million Americans that suffer from traumatic brain injuries (TBIs) each year.

"People rarely associate concussions with what they really are: traumatic brain injuries," said Dr. Tracy K. McIntosh, the Robert A. Groff Professor of Neurosurgery and Director of the Head Injury Center. "Brain injury is a silent epidemic in this country, affecting more lives than most people realize."

In fact, the statistics surrounding traumatic brain injuries are staggering. According to numbers compiled by the Brain Injury Association, approximately 5.3 million Americans—slightly more than 2% of the U.S. population—are living with a disability as a result of a severe brain injury. TBI is the leading cause of death and disability in persons under 45 years old, occurring more frequently than breast cancer, AIDS, multiple sclerosis, and spinal cord injury. Each year, approximately 100,000 people die from TBI, and 500,000 more are permanently disabled. Every 15 seconds, someone, usually a young person, suffers from a brain injury.

Despite these numbers, our understanding of the brain's long-term response to injury is still incomplete. "A brain-injured patient may look stable, but cells are still dying. Realizing this is important in developing ways to recover, regenerate, and stem the loss of brain tissue," said Dr. McIntosh. "We hope that by understanding the molecular and cellular sequences of events after trauma, we'll be able to determine when and where cells die in the brain and use that information to develop new therapeutic strategies to treat head injury."

The Penn Head Injury Center is one of seven nationally designated Head Injury Centers by

*(continued on page 2)*

### IN THIS ISSUE

- 2 Senate: SEC Actions; Speaking Out: UCNS Appeal
- 3 Honors & Other Things; Death of Leonard Davis; Computer Recycling and Disposal
- 4 From Maps to Medicine: The Impact of the Genome Project (Beverly Emanuel)
- 6 HERS 2001 Info Session; EHRS Training; Infertility Discussion at Radnor
- 7 Mummenschanz; Update; CrimeStats; Classifieds
- 8 W-2 Form for Calendar Year 2000

**Pullout: February AT PENN**

*The following statement is published in accordance with the Senate Rules. Among other purposes, the publication of SEC actions is intended to stimulate discussion among the constituencies and their representatives. Please communicate your comments to Senate Chair Larry Gross or Executive Assistant Carolyn Burdon, Box 12 College Hall/6303, (215) 898-6943 or [burdon@pobox.upenn.edu](mailto:burdon@pobox.upenn.edu).*

## Actions Taken by the Senate Executive Committee Wednesday, January 17, 2001

**1. Chair's Report.** Faculty Senate Chair Larry Gross reminded SEC that he is working with Paul Mosher to raise consciousness about the state of scholarly publishing. Appointment of the Joint Senate-Administration committee to assess methods of teaching evaluation is moving forward. Professor Gross noted that this is probably the last time SEC will meet at the Faculty Club and he thanked the Club for its help and for use of the space. SEC will begin meeting in a new conference room in College Hall.

**2. Past Chair's Report on Academic Planning and Budget and Capital Council.** Professor Phoebe Leboy stated that the December 12 meeting of Academic Planning and Budget was cancelled, and the next meeting is scheduled for January 23. The only action taken by Capital Council in the past month was consideration of the financial implications surrounding leasing of facilities for the planned "Wharton-West" in the San Francisco area.

**3. Chair of the Senate Committee on Committees.** Faculty Senate Chair-elect David B. Hackney was elected by acclamation.

**4. Proposed Revision of the Almanac Guidelines.** Martin Pring, Chair, Senate Committee on Publication Policy for *Almanac*, introduced the proposed minor and substantive revisions to the Guidelines. He drew attention to changes under the section "As Publication of Opinion" which provide that the *Almanac* editor can determine that part or all of a contribution is irrelevant or unsuitable for publication and can require appropriate changes. The other substantive revision limits letters to 400 words. These revisions call for the editor to consult with the Senate Committee on Publication Policy for *Almanac*. An appeal is provided for the contributor.

A motion was made to endorse the proposed revisions. The motion was adopted unanimously. The proposals will now go to the *Almanac* Advisory Board for discussion and action.

**5. 1999-2000 Report and Recommendations and Policy Issues of the Senate Committee on the Economic Status of the Faculty.** Committee Chair Ed Boe presented the documents (to be published in *Almanac* next month). Senate Chair Larry Gross emphasized that the administration is more forthcoming with more data than in the past and appreciates the committee's efforts. Professor Gross was encouraged by inclusion of the Faculty Senate Chair and the Committee Chair in discussions with the deans for the first time.

A motion was made to approve and endorse the report and the recommendations and policy issues. The motion was adopted unanimously.

Professor Gross extended appreciation and thanks to Ed Boe for his enormous amount of work and creativity, noting that he has raised the bar for faculty salary analysis.

## NFL Charities Grant to Head Injury Center

*(continued from page 1)*

the National Institutes of Health. As Director of Penn's Head Injury Center, Dr. McIntosh and his colleagues and collaborators in Neurosurgery, Bioengineering, Pharmacology and Pathology at Penn have made great progress in understanding and treating traumatic brain injury.

Their accomplishments include the discovery of the first link between traumatic brain injury and the development of post-traumatic epileptic seizures. They were also the first laboratory to identify the contribution of programmed cell death, called apoptosis, in mediating the progressive cascade of cell death observed after TBI. Dr. McIntosh and his colleagues have also pioneered research into the mechanistic relationship between head injury and Alzheimer's Disease and other neurodegenerative disorders and were the first to evaluate the efficacy of

neural stem cell transplantation as a potential therapy for traumatic brain injury. Funding from the NFL Charities grant will support Dr. McIntosh's efforts in furthering this progress.

To learn more about the Penn Head Injury Center, see their web site: [bioeng.seas.upenn.edu/tbilab/](http://bioeng.seas.upenn.edu/tbilab/).

NFL Charities is a nonprofit organization that was formed in 1973 by the 31 member clubs of the National Football League to enable the teams to collectively contribute to charitable and worthwhile causes on a national level. Since its inception, the Board of Directors of NFL Charities has agreed to grant over \$40 million to over 250 different organizations.

The current Board of Directors includes Michael Bidwill, Hon. Jack Kemp, Jeffrey Lurie, John Mackey, Commissioner Paul Tagliabue, Delores Barr Weaver, and Ralph C. Wilson, Jr.

## Speaking Out

### Appeal to the Penn Community

I write out of urgent concern for the University City New School (UCNS). This independent school (Pre-K-8th grade) was founded in 1974 to provide quality, progressive education to the racially and economically diverse community of West Philadelphia. UCNS has been located for 25 years on University property (42nd and Locust) where it has served the families of hundreds of Penn faculty and staff. It has also served the University—by retaining families in West Philadelphia who would otherwise have left for the suburbs.

Today, the UCNS is financially solvent with an annual budget of \$800,000. Its staff of 20 includes teachers of the 3 Rs, plus computer, music, art, dance, and foreign language. The school remains true to its founding goals of economic and racial diversity.

In July, UCNS must vacate its long-term home to make way for the Penn-assisted public school to be built on that site. The Penn-assisted school promises to be an important addition to West Philadelphia, but its catchment area will leave large areas unserved. Thus, it seems crucial to preserve the existing school that has served so well over more than a quarter of a century.

UCNS has found a wonderful new home on the ground floor of Calvary Church at 48th & Baltimore Avenue. Architect John Holland has designed new classrooms, libraries, etc.—more and better space—and the UCNS Board assembled a package of \$350,000, including a significant contribution from Penn, to pay for the renovations.

But the school now encounters an unforeseen obstacle. On January 15 the city's Zoning Board informed UCNS that an occupancy permit will require air conditioning and sprinklers—costing another \$100,000.

UCNS urgently seeks your help. Donations are needed, both small and large. *These funds must be raised immediately* so that the whole deal can proceed and building can start. If not, parents will soon be forced to look for other schools.

The goal could be reached quickly if members of the Penn community will help. Realize that the quality of life and physical safety in neighborhoods surrounding Penn depend—not just on better lighting and tighter security—but also on building and preserving an inhabitable community. *Please join me today in helping to preserve this school.*

—Peter Sterling, Founding Parent  
Advisor to the UCNS Board  
Professor of Neuroscience

P.S.: Your donation is tax-deductible. Checks should be made to: UCNS (labeled "UCNS on the move") 4201 #1C Spruce St., Phila., PA 19104

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

# Honors & Other Things

## Two AICP Fellows

*President Emeritus and University Professor Emeritus Martin Meyerson, and Dr. Anthony R. Tomazinis*, professor of city and regional planning, were recently elected Fellows of the American Institute of Certified Planners.

## Ivy Leaders Summit

*Laura Breyfogle*, a freshman in the School of Nursing, has been selected to attend the Ivy Leaders Summit at Harvard University in February. Ms. Breyfogle, a Massachusetts native, is currently the treasurer of the student nurses group.

## Hollywood Squares Bound

*Joey Tini*, a freshman in the School of Nursing and a native of South Philadelphia, will be appearing on the TV game show *Hollywood Squares* on February 20.

## Big 5 Hall of Fame Inductee

*Chuck Daly*, former Penn basketball coach, was inducted last Saturday into the Big 5 Hall of Fame. Mr. Daly came to Penn in 1971 and guided Penn to a 125-38 record during his six seasons here. During that time, the Quakers also won four Ivy League Championships and made four trips to the NCAA Tournament. He went on to successfully coach in the NBA. Mr. Daly also coached the gold-medal winning "Dream Team" in the 1992 Olympics in Barcelona. He was inducted into the Naismith Memorial Basketball Hall of Fame in 1994, into the Penn Hall of Fame in 1998, and is listed as one of the Top 10 NBA Coaches of all-time. He is listed as the 15th winningest coach in NBA history.

## MLK Awards

This year's Martin Luther King Community Service Award winners were announced at a ceremony on January 18.

*Robert Alsbrooks*, a senior programmer at the Center for Clinical Epidemiology and Biostatistics, received the Employee Award. Mr. Alsbrooks helped to develop and is the director of *Miracle on 34th Street*, an organization that helps people deal with social issues and has initiated a track team, and boys and girls groups. He takes an active part in *Turn Around Mantua* to board up illegal drug houses, clean the streets, work with local law enforcement with community policing and lectures to the community and various local and national agencies on entrepreneurial ventures and its positive impact on drug and crime reduction.

*Dr. Esaul Sanchez*, director of Neighborhood Initiatives, also received the Employee Award. He has helped the community surrounding Penn to improve security in the neighborhoods, revitalize the block captain program and created a network of landlords. He was part of a team who worked with neighbors to install more than 2,500 outdoor lights in the various neighborhoods in West Philadelphia. He founded and manages UC Green, which promotes, coordinates and supports with its partners, projects that realize a cohesive vision of Greening in University City's diverse urban neighborhoods.

*Yael Krigman*, Col'02, received the Student Award. She is also the director of the Philadelphia office of National Student Partnerships (NSP), a non-profit organization which helps and empowers the people of the community to find the jobs, resources, and services necessary to overcome the barriers which prevent them from reaching their goals.

*Kevin E. Vaughan*, Col'77, received the Community Award. Mr. Vaughan, former Region III Director at the U. S. Department of Health and Human Services, uses his community network to forge solutions while tackling complex issues such as outreach for the State Children's Health Insurance Program (S-CHIP) and access to quality childcare.

*Kamau McRae*, a case manager at the Breslin Learning Center, also received the Community Award. A life-long Philadelphia resident, Mr. McRae has always striven to better the world around him. His community service began during his undergraduate years at Penn State at the Women's Resource Center as a domestic violence and sexual abuse counselor. Mr. McRae continued to be a role model for young men through his volunteer work with Blacks Educating Blacks About Sexual Health Issues (BEBASHI) and the Father's Day Rallying Committee in Philadelphia.

## Death

### Mr. Davis, Founder of LDI

Leonard Davis, founder of the Colonial Penn Group, founder of the Leonard Davis Institute of Health Economics and philanthropist, died on January 15 at the age of 76. Mr. Davis founded Colonial Penn Group in 1963, which became one of the country's largest insurance underwriters for older Americans. Mr. Davis—along with his wife Sofie—was instrumental in the founding of the Leonard Davis Institute. The institute was established in 1967 in response to a growing national need for high quality research and education to inform policies critical to the financing and management of the nation's increasingly costly and complex health care system. The Leonard Davis Institute remains one of the only research institutes in the country that integrates medicine, nursing and management expertise and applies it to solving the health care issues of the day.

He received an honorary Doctor of Laws degree from Penn in 1972. The citation read:

With the bold, forthright spirit of a man with a cause, Leonard Davis pioneered group health insurance for the aged against formidable odds. As an initiator of a new field and the founder of a needed range of services for retired persons, he assisted a large, neglected group, showing that the practical visionary is our best Samaritan.

Of strong and imaginative social conscience, he early ascertained that problems in health care could be helped through coordination with the resources of management sciences. The resulting Wharton M.B.A. program in Health Care Administration and the Leonard Davis Institute of Health Economics have made our coalescence of medicine and management a prototype for similar multidisciplinary efforts in other fields and at other universities.

His own healthy outlook and his vigorous energy have illustrated to the less fortunate and the skeptical that taking chances is the most useful of new beginnings. The Trustees of the University, believing themselves fortunate to have his counsel, ask that he be recognized with the honorary degree, Doctor of Laws.

Mr. Davis is survived by sons Alan and Michael; and four grandchildren.

## Computer Recycling and Disposal

Recycling and disposal of older computer equipment is an issue of increasing importance to departments at Penn. Beyond the basic need to clear space in closets or make room for new equipment there are specific concerns regarding environmentally safe disposal and, in many cases, a desire to see systems that still function put to good use in the community. As a starting point for local support providers who need to get rid of old equipment, below are a few recommendations for preparing equipment for recycling or disposal and services that accept equipment donations from departments at Penn.

### Preparing Equipment for Recycling

The following recommendations are from Dave Millar, Information Security Officer:

#### Delete Data from Drives and Storage Media

"When selling or donating old computers, be sure to remove any sensitive data, and make sure that by leaving any commercial software on the machine you are not violating the terms of any software license agreements. Note that files deleted through ordinary means (e.g. dragging to the trash on Windows or Macintosh) can usually be recovered. Use a secure file deletion utility which ensures that the data can not be recovered by successively writing binary ones and zeros over files to be deleted. Pretty Good Privacy (PGP) includes a secure delete function and is freely available for non-commercial use for Windows and Macintosh at [web.mit.edu/network/pgp.html](http://web.mit.edu/network/pgp.html). Norton Utilities' Wipe Info feature will also securely delete files.

"The same advice applies to storage media like computer tapes, disks, diskettes, etc. Be sure to completely remove any sensitive information before disposing of electronic storage media. University Archives and Records offers a service for secure destruction of confidential electronic records. See [www.archives.upenn.edu/home/URC.html](http://www.archives.upenn.edu/home/URC.html). If you need further help finding tools or services to do this, contact [security@isc.upenn.edu](mailto:security@isc.upenn.edu)."

#### Check Software Licenses

"Before transferring computers containing any software, first make sure that Penn is properly licensed to transfer it, that it was not obtained illegally or in violation of license terms, and that the software was never copied illegally or in violation of license terms. Make sure that the transfer conforms with terms of the software license."

### Computer Donations Programs

The following accept equipment from departments, recycling or disposing of it as appropriate:

#### Penn's Center for Community Partnerships

Contact: Isabel Sampson-Mapp or Cory Bowman at (215) 898-2020.

#### Goodwill

Contact: Bob Mattson at (610) 777-7875 x262.

#### Dell Financial Services offers

Asset Recover Services.

#### Environmental Regulations

There are specific EPA guidelines for disposal of some equipment components. In addition, there may be other regulations imposed at the state or local level. The Pennsylvania Department of Environmental Protection web site discusses Electronic Discards within their Household Hazardous Waste web site, but it's not clear the same rules would govern disposal at Penn.

Local organizations such as Nonprofit Technology Resources (which is utilized by Penn's Center for Community Partnerships) appear to take care of the potential hazards identified by the EPA in disposing of computers. Penn's Center for Community Partnerships is also working with Elemental Inc., a local electronics salvager.



## From Maps to Medicine: The Impact of the Genome Project

by Dr. Beverly S. Emanuel, Director of Human Genetics Center; Charles E. H. Upham Chair in Pediatrics

I would like to speak to you on behalf of the numerous scientists involved in the human genome initiative as well as my fellow geneticists, the individuals who will apply the fruits of the Genome Project to medical practice. This wonderful occasion gives me the opportunity to provide you with some background about the program and to speculate a bit about what changes the Genome Project will make to the practice of medicine in the future.

It is particularly fitting that I speak to you on the occasion of the celebration the 295th birthday of Benjamin Franklin, a scientist, inventor and revolutionary thinker! It was Franklin who so aptly stated that "the doors of wisdom are never shut", a concept which exemplifies both the current approach to scientific discovery as practiced within the medical institutions of our extraordinary city and the nature of the Genome Project itself. The celebration of the 250th anniversary of the founding of the Pennsylvania Hospital by Benjamin Franklin and Dr. Thomas Bond, honors another exemplary Philadelphia institution, another facet of the University of Pennsylvania Health System, where I am a faculty member.

I personally feel very much a part of the Benjamin Franklin story, although for fewer years than the 250 or 295, because I was born and raised in Philadelphia which means that the Franklin Institute (one of my favorite sites as a child), the Benjamin Franklin Parkway, the Benjamin Franklin Bridge and Franklin Field were all a part of my daily life. Further, my father, husband, children and I are all graduates of Franklin's University, the University of Pennsylvania, which was founded in 1740. Finally, when my 25th Penn class reunion was held, our class gift to the University was the wonderful George Lundeen bronze statue fondly called "Ben on the Bench". Many of us have sat with Ben and pondered the remarkable changes that have taken place since he walked the streets of Philadelphia. Thus, my Franklin ties go much deeper than the use of bifocals and odometers in my own daily life.

Many of you might be wondering—what is the Human Genome Project? The Genome Project is an exciting international, collaborative scientific effort designed to identify, analyze, and determine how all the genes in the human body are organized. The enormous amount of knowledge it will produce will make it possible to understand and modulate the genetic causes of disease and help keep people "disease free." The result of this monumental undertaking will be to provide us with a complete blueprint for each of the 100 trillion cells which make up the human body. So in the past 25+ years, the once-obscure discipline of molecular genetics has become the central science of medicine. At the heart of genetics is DNA or deoxyribonucleic acid—an extraordinarily long chemical molecule shaped like a twisted ladder. This double helix, deciphered by Watson and Crick in 1953, provides the instructions for everything a cell does—including causing disease. If we're trying to understand something at its most basic level, it makes sense to go and read the instructions, determine the sequence of the genes. This is why one of the goals of the Genome Project is to complete the sequence of the Human Genome.

Genes determine many of our features, such as eye and hair color, but genes can also be responsible for causing many diseases or predisposing us to develop disease. It is estimated that each of us has approximately 50-100,000 genes in our genomes. Each of these genes has the potential for being a disease gene if it contains an error in its DNA sequence. The successes of the Human Genome Project (HGP) have even enabled researchers to pinpoint errors in genes—the smallest units of heredity—that cause or contribute to disease.

The ultimate goal is to use this information to develop new ways to treat, cure, or even prevent the thousands of diseases that afflict humankind. But the road from gene identification to effective treatments is long and fraught with extraordinary challenges. In the meantime, biotechnology companies are ahead of the game with their commercialization of the Genome Project. Such companies are designing diagnostic tests to detect aberrant genes in people either suspected of having a particular disease or those individuals at risk for developing them. Genetic testing has become an increasingly important tool in medical practice.

DNA-based tests are amongst the newest and most sophisticated of the techniques used to identify genetic disorders. They involve direct examination of the DNA molecule itself. Genetic tests are used for several reasons, including: carrier screening, prenatal diagnosis, and newborn screening. They are also used for presymptomatic testing for predicting adult-onset disorders such as Huntington's disease. Alternatively they are used for presymptomatic testing for estimating the risk of developing such diseases as a variety of adult-onset cancers and Alzheimer's disease. The recently commercialized gene tests for such adult-onset disorders (such as Alzheimer's disease and cancers predisposition) are the subject of much of the debate over gene testing. One of the most serious limitations of these susceptibility tests is the difficulty in interpreting a positive result because some people who carry a disease-

associated mutation never actually develop the disease.

This is a complex issue because, in a broad sense virtually all disease has a genetic component. The vast majority of people never develop skin cancer, yet we all have at least a slight genetic predisposition for it. Given enough exposure to sunlight, nearly all of us would develop it. Thus, even though the sun's ultraviolet radiation is primarily responsible, our genetic makeup is a small but real contributor to the disease. However, there are some people who would get skin cancer even if they never went out in the sun. Their genetic structure is 100% responsible for the disease in the absence of sun exposure.

Even infectious illnesses may have an inherited component. Most people exposed to the human immunodeficiency virus develop AIDS. But some people exposed to the virus do not develop the disease, presumably because they have inherited a gene which confers immunity to the virus. Deciphering this underlying genetic component to many diseases is one of the aspects that makes the Human Genome Project so exciting.

The easiest genetic diseases to understand are those caused by a single gene that has gone awry. Single gene diseases include relatively rare disorders such as cystic fibrosis, phenylketonuria, hemophilia, sickle cell anemia and Huntington's disease. In a sense, the genes for these diseases act like a single time bomb ticking away inside the DNA double helix.

Much more common, and far more complicated, are the diseases caused by malformations in several or many genes that influence each other in complex ways that are poorly understood. Hypertension, diabetes, rheumatoid arthritis, multiple sclerosis, schizophrenia, Alzheimer's, coronary artery disease and numerous other diseases that afflict our species are caused by the interactions of multiple different genes. Each individual gene has a relatively modest effect, but together they determine whether someone is going to develop a disease or not. Multiple gene diseases or what we call polygenic diseases are far harder to understand than those which are caused by single genes.

Complicating matters even further, most genetic diseases result from an interplay between an inherited predisposition and factors in a person's external environment and lifestyle. It's not just the individual cards that you have been dealt, but it also depends upon how you play the hand. It's important to keep this in mind to avoid the dangers that can potentially arise from biological determinism—thinking that everything about an individual is predetermined by the DNA code written in his or her genes.

The DNA is located inside the cell nucleus. As I mentioned, the DNA is in the shape of a double helix which is wound over and over again. Unwinding it reveals the two strands that make up the sides of what is essentially a ladder-shaped molecule. The ladder's rungs are called base pairs and there are 3 billion base pairs of DNA in the human genome. The DNA is organized into individual units, called chromosomes. In humans there are a total of 46 chromosomes in each cell. There are 22 pairs of chromosomes which are designated as autosomes—chromosomes 1 through 22 and a pair of sex chromosomes, XX for females and XY for males.

For many years, in fact since the mid-fifties scientists have been able to look at the chromosomes at the microscope, count them and analyze them. In fact, in a clinical setting, many chromosome tests are performed to determine the genetic or chromosomal composition of an individual.

At present, despite the fact that we can see all of the chromosomes and analyze their composition in a gross sense, we have only identified the complete workings of a fraction of the genes which reside on them. One of the goals of the human genome initiative is to identify the tens of thousands of remaining genes, to isolate them and characterize what they do after assigning them to their precise positions on chromosomes.

Such efforts have already been successful in the search for the cystic fibrosis gene and in the search for the genes responsible for neurofibromatosis, muscular dystrophy, fragile-X linked mental retardation and myotonic dystrophy, some of the earliest disease genes to be identified. The list of identified disease related genes now grows on a daily basis. However, many additional diseases with their respective disease-causing genes remain to be successfully identified and characterized.

In order to accomplish this task, it was necessary to make maps of the human genome. Making maps of the human genome is not very different from making the maps that we are all familiar with. For example, if all that existed was an outline map of the United States and I asked someone who didn't know the geography of the United States where the location of a particular city was, it would be difficult without some roads or markers to help find the way. The same would be true of asking someone about the location of a particular new disease locus. It requires the assistance of a map.

Now if you looked at the same map with one road, for example Route 80,

*(continued past insert)*

which moves from coast to coast—from Philadelphia to San Francisco. If you were able to say that a gene was on the that road, it would help slightly, because you would have narrowed the search for figuring out precisely where that gene is located. However, if we were to mark the length of that road with 15 evenly spaced cities, or markers, it would be a different story.

In this case, if you said that the place in question, or the gene in question, was between Chicago and Des Moines and east of the Mississippi River, you would have narrowed the search for that place or that particular gene considerably. You would then know precisely where to look on the map.

This was one of the very first goals of the human genome initiative, to place a series of evenly spaced, “markers” on all of the chromosomes. These markers permit geneticist to determine where a particular disease gene is located, even if we do not know what the normal gene does. We do this by studying families that manifest the disease and seeing how the markers are inherited in association with the disease in affected families. These are what we refer to as genetic maps.

Physical maps permit us to look at a different view of the genome and these maps are much more detailed than genetic maps. These maps are made by analysis of the chromosomal DNA directly by isolating it and then sequencing it. For this type of map making we start with a particular chromosome, take the chromosome apart by isolating the DNA or genetic material from that chromosome and then put it back together in an ordered array. In the interim, we are able to study each individual fragment in greater detail. That is like making very detailed maps with precise addresses, street names and the like.

Why do we want to map the human genome? Because, this concerted effort will simplify the process and has already hastened efforts directed toward understanding the role that genes play in normal individuals and how genes cause specific diseases when their role is altered. Understanding what genes normally do will permit us to design more appropriate therapies, to correct the impact of defective genes on health.

At Children’s Hospital and Penn we made the decision to map chromosome 22. We chose chromosome 22 for historical and practical reasons. It is the second smallest of the human chromosomes, being comprised of somewhere less than 50 million base pairs, or megabases of DNA. We wanted to know the answers to some very simple questions: What genes are on chromosome 22 and how are they arranged? Knowledge of the fundamental anatomy of the human genome, and for us of chromosome 22, was important to our ultimate goal of understanding how our body works when it is healthy, as well as when it is not healthy.

In addition chromosome 22 has a wealth of pathology associated with non-random chromosomal abnormalities providing us excellent source materials from patients with chromosome 22 related diseases with which to build our maps and a rationale for making the maps. These are the practical reasons. For many of us, it represented a logical extension of many years of scientific work which has focused on diseases caused by these abnormalities of human chromosome 22.

For example, an abnormal chromosome 22 is associated with several forms of pediatric and adult leukemia. In 1960, chromosome 22 was named the Philadelphia Chromosome by Drs. Peter Nowell and David Hungerford when they discovered its’ involvement in chronic myelogenous leukemia at Penn and the Fox Chase Cancer Center. In addition, a number of other birth defect related syndromes are associated with abnormalities of chromosome 22. A missing piece of 22 or a deletion and an extra part of 22 or a duplication. These syndromes were described by pediatric physicians and colleagues in Philadelphia. Hence, we thought it would be appropriate that the Philadelphia chromosome be isolated, analyzed and understood in Philadelphia.

Eventually several of these disorders were studied in my laboratory. Little by little we have made remarkable progress toward understanding why this small chromosome is so prone to disease related rearrangements. As an example, I would like to briefly discuss our recent work related to one of the abnormalities of chromosome 22, the deletion which is associated with a diagnosis named DiGeorge syndrome or velocardiofacial syndrome. This is a defect which can afflict newborns with heart disease, immunologic defect, seizures cleft palate and learning differences. We found that this complicated disease is the result of these children having a portion of one chromosome 22 missing. We know how large the segment is, and that 30 genes are actually deleted. Understanding the organization of chromosome 22 has helped us to more accurately diagnose this disorder because we have been able to design a DNA based genetic test which can now be utilized very early so that the diagnosis can be made when the child is an infant. This has some very important ramifications for early therapeutic interventions to help the families of these children.

However, you can imagine that there might be some questions about this and other disorders. Not all children with the deletion are equally severely affected. Thus, there are questions regarding what is normal and what is a disability or disorder, and who decides? We know that the children with the

deletion can have learning differences or speech difficulties. Are such disabilities diseases? Should they be prevented? Should they be “cured”? Does searching for a cure demean the lives or the very existence of individuals presently affected by disabilities? Genetic information is a powerful tool for improving our health, but it also can potentially be used in ways that are harmful. Protections against the misuse of genetic information are in place for certain aspects of genetic testing, but much work remains to be done.

An increasing number of gene tests (such as this one) are becoming available commercially. Nonetheless scientists continue to debate the best way to deliver them to the public and medical communities, often to individuals that are unaware of their scientific and social implications. While some of these tests have greatly improved and even saved lives, scientists remain unsure of how to interpret many of them. Also, patients taking the tests face significant risks of jeopardizing their employment or insurance status. Further, because genetic information is shared, these risks can extend beyond the individual who has been tested to other family members as well.

Within the next decade, researchers will find most human genes. Explorations into the function of each one—a major challenge extending far into the 21st century—will shed light on how faulty genes play a role in disease causation. With this knowledge, commercial efforts will shift away from diagnostics and toward developing a new generation of therapeutics based on genes. Drug design will be revolutionized as researchers create new classes of medicines based on an approach using gene sequence as well as protein structure function information rather than the traditional trial-and-error method. This new generation of drugs, targeted to specific sites in the body, promise to have fewer side effects than many of today’s medications.

Human Genome Project scientists plan to finish the human sequence by 2003 and establish database of the most common sequence variations that distinguish one individual from another. This knowledge base will revolutionize biology and medicine. What will be different 20 years from now because the human genome was sequenced? How might my medical care differ as a result of “genetic medicine?”

It is likely that virtually complete list of human genes will give us a vast repertoire of potential new drugs. From the current repertoire of 500 or so drugs in 2000, at least six times this number will have been identified, tested, and commercialized in the next 20 years. All will be manufactured by recombinant DNA technology so they will be significantly purer just as human insulin and growth hormone are today.

I predict that an individual’s medical record will likely include a catalogue of single base-pair variations that can be used to accurately predict responses to certain drugs and environmental substances. This will permit a patient to be treated as a biochemical and genetic individual. This will make medical interventions much more specific, precise, and hopefully more successful. In addition, the increased power of geneticists to predict susceptibility to specific diseases will allow an individual to alter his or her lifestyle to reduce the likelihood of developing particular diseases or to be treated with preventive or disease-delaying medications.

Some of the mysteries of early embryonic development will be solved. We should know the timing of expression of most, perhaps all, of the human gene set. We may have learned how to direct differentiation so that a desired cell type or even relatively “simple” organs and parts of more complex organs can be grown for transplantation. In 20 years, we will have made substantial progress towards true “cloning” of certain organs, but many difficult technical steps will probably remain before the successful cloning of a complex organ like a heart or liver.

So the Human Genome Project will have vast and largely positive impacts on people living in 20 years from today. Of the various predictions I have discussed, the knowledge about early embryonic development and gene function is likely to be the most profound because often the most powerful and extensive impacts come from fundamental knowledge, usually in unforeseen ways. As this astonishing treasure trove is introduced into society, we need to be alert to the challenges of the possible misuses of this knowledge about ourselves. Society as a whole, not just genome scientists or geneticists, must address these considerations. It has to be all of us.

The information generated as a result of the Human Genome Project is expected to be the encyclopedia or source book for biomedical science in the 21st century. It will assist us in understanding and eventually treating many of the more than 4,000 genetic diseases that afflict man, as well as the numerous diseases in which genetically-based predisposition plays an important role, heart disease and cancer to name just a few. This research will lead to improved strategies for preventing, diagnosing, and treating disease, and will bring genetic medicine to the forefront of health care in the 21st century. Over the years, we predict that as a result of this international effort, the genome initiative will produce great health benefits and will result in better health care for millions of individuals who suffer from genetically based diseases and for future generations of children and their parents.

## 2001 HERS Program Information Session: February 6

To Penn Women:

Have you heard about HERS and the Bryn Mawr Summer Institute for Women in Higher Education? Ever think about applying? Wonder what the process is? Or want to know what the program is like? Come join us for an Information Session about the 2001 HERS program. Talk with colleagues who have attended HERS in years past and find out about this year's program and application process. The session will be held Tuesday, February 6, 4:30-6 p.m. in room 104, Logan Hall. An informal discussion will also take place on Wednesday, February 7, 5-6 p.m. in the Living Room of the Inn at Penn.

The University will sponsor the nomination of two women to the Summer Institute for Women in Higher Education Administration, sponsored by Bryn Mawr College and Higher Education Resources (HERS) Mid Atlantic and will fully fund their participation.

Over the years, Penn has supported the enrollment of over 50 women faculty and administrators from schools and departments across the campus. As in the past, a review committee of several HERS alumnae and Penn faculty will select the two nominees for recommendation to HERS. (HERS makes the final selections.)

Applications for those selected by the internal committee will be forwarded to HERS for final review and acceptance in March. For an application or more information, contact Linda Wiedmann by e-mail at [wiedmann@pobox.upenn.edu](mailto:wiedmann@pobox.upenn.edu) or visit [www.upenn.edu/penntrx/Institute/home.html](http://www.upenn.edu/penntrx/Institute/home.html).

*Q. What is the purpose of the Summer Institute?*

A. The Institute offers women faculty and administrators intensive training in education administration pertinent to the management and governance of colleges and universities. It is designed to improve the status of women in middle and executive levels of higher education administration, areas in which women traditionally have been under-represented.

*Q. What are the main curricular areas?*

A. The curriculum focuses on four areas: academic environment, external environment, institutional environment and professional development. Specific work areas include strategic planning, budgeting and accounting, financing higher education, and leadership skills.

*Q. Who makes up the faculty?*

A. The faculty is comprised of women and men from government, foundations, professional associations, and the diverse sectors of North American higher education.

*Q. Who is eligible to apply?*

A. Application for admission is open to women faculty and administrators whose background, experience and present responsibilities indicate a potential for professional advancement in higher education administration.

*Q. When and where will the program be held?*

A. The Institute, a residential experience in its 26th year, will be held from June 24 to July 20, 2001 on the campus of Bryn Mawr College. Although most women live on campus, it is possible to commute. Classes are held from approximately 8 a.m. to 4 p.m. Monday-Friday and from 8 a.m.-noon on Saturday. There are programs and group discussions scheduled for a number of the evenings.

*Q. What is the application process?*

A. Applicants must complete an application form and submit a letter of recommendation. For administrators, this letter should be from the department head or supervisor; for faculty, it should be from a faculty member who is knowledgeable of the candidate's administrative abilities. Submit materials to Linda Wiedmann, AWWA President, CURF, 2nd floor, ARCH, 3601 Locust Walk, no later than Thursday, February 22.

—Linda A. Wiedmann, Associate Director, Benjamin Franklin Scholars/General Honors, Center for Undergraduate Research and Fellowships

## EHRs Training Programs: February

The following training programs are required by the Occupational Safety & Health Administration (OSHA), the Nuclear Regulatory Commission (NRC), and The Commonwealth of Pennsylvania (DEP), for all employees who work with hazardous substances including: chemicals, human blood, blood products, fluids, and human tissue specimens and radioactive materials. These programs are presented by the Office of Environmental Health & Radiation Safety (EHRS). Attendance is required at one or more session, depending upon the employee's potential exposures.

**Introduction to Laboratory Safety at Penn (Chemical Hygiene Training);** provides a comprehensive introduction to laboratory safety practices and procedures at Penn and familiarizes the laboratory employee with the Chemical Hygiene Plan. This course is designed for employees who have not previously attended *Laboratory Safety* at the University. Required for all University employees who work in laboratories. February 6, 1:30 p.m., CRB, Austrian Auditorium.

**Introduction to Occupational Exposure to Bloodborne Pathogens;** this course provides significant information for employees who have a potential exposure to human bloodborne pathogens. Topics include a discussion of the Exposure Control Plan, free Hepatitis B vaccination, recommended work practices, engineering controls and emergency response. This course is designed for employees who have not previously attended *Bloodborne Pathogens* training at the University. Required for all University employees potentially exposed to human blood or blood products, human body fluids, and/or human tissue. February 13, 1:30 p.m., CRB, Austrian Auditorium.

**Occupational Exposure to Bloodborne Pathogens (In a clinical setting);** required for all University faculty and staff who have potential clinical exposures to blood and other human

source material. It is intended for employees with direct patient contact, or those who handle clinical specimens, and administrators who routinely work in a clinical environment. Topics include: risks, protection, work practice controls and emergency procedures. This course is designed for employees who have not previously attended *Bloodborne Pathogens* training at the University. It is available on-line.

**Laboratory Safety—Annual Update;** this program is required annually for all laboratory employees who have previously attended *Chemical Hygiene Training*. Topics include chemical risk assessment, recommended work practices, engineering controls and personal protection as well as an update of waste disposal and emergency procedures. Faculty and staff who work with human source materials, HIV or hepatitis viruses must attend the *Laboratory Safety* and *Bloodborne Pathogens—Annual Update*. February 8, 9:30 a.m., BRB, Room 251.

**Laboratory Safety and Bloodborne Pathogens—Annual Update;** this program is required annually for all faculty and staff who work with human source material, HIV or hepatitis viruses and have previously attended *Occupational Exposure to Bloodborne Pathogens*. Issues in general laboratory safety and bloodborne pathogens are discussed. Topics include bloodborne diseases, risk assessment, recommended work practices, engineering controls and personal protection as well as an update of waste disposal and emergency procedures. Participation in *Laboratory Safety—Annual Update* is not required if this program is attended. February 15, 9:30 a.m., John Morgan, Class of 1962.

**Radiation Safety Training—New Worker;** this program provides information on fundamental radiation concepts and requirements for the use, storage and disposal of radioactive materials at Penn. Personnel working in laboratories where radioactive materials are present are required to

attend this training before beginning their work followed by annual attendance at the training program described below. Training can be completed on-line at ([www.ehrs.upenn.edu](http://www.ehrs.upenn.edu)) under *Radiation Safety Programs, Training for Credit*.

**Radiation Safety Training—Annual Update;** this program updates radioisotope users on current Radiation safety issues and practices. It is required of all personnel who work in areas where radioisotopes are used or stored. Training can be completed on-line.

**Radiation Safety Training—Irradiator Users;** individuals interested in becoming authorized to use an irradiator must first receive operational training from the irradiator licensee and radiation safety training from EHRS. Training can be completed on-line at ([www.ehrs.upenn.edu](http://www.ehrs.upenn.edu)) under *Radiation Safety Programs, Training for Credit*.

Additional programs will be offered on a monthly basis. Check the EHRS web site ([www.ehrs.upenn.edu](http://www.ehrs.upenn.edu)) for dates and time. If you have any questions, please call Bob Leonzio at (215) 898-4453.

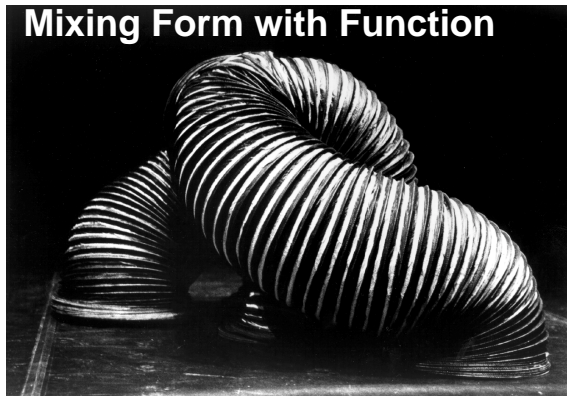
### Infertility Discussion at Radnor

The Penn Center for Reproductive Medicine and Surgery will hold an open house on February 6 from 7-8 p.m. in the Annenberg Conference Room, 2nd floor, at 250 King of Prussia Road. Sponsored by the Department of Obstetrics and Gynecology at Penn Medicine at Radnor, this open house will feature a discussion by infertility experts Samantha Pfeifer and Kurt Barnhart. Both Dr. Pfeifer and Dr. Barnhart are board certified in reproductive endocrinology and infertility as well as obstetrics and gynecology. The event is free but registration is suggested. Call 1-800-789-PENN.



## Mummenschanz: Mixing Form with Function

Dance Celebration, presented by Dance Affiliates and Penn Presents, unveils the latest work by *Mummenschanz*, a Swiss mime troupe that displays figures that can be broken down and built up again. Next, the latest evolution of the wordless theatrical form that was invented by the original *Mummenschanz* trio in 1972 comes to the Zellerbach Theatre at the Annenberg Center—for six shows beginning February 2 and running through February 4. (See February AT PENN).



*Mummenschanz* transcends the barriers of language, nationality and age attracting audiences from 7-97 to achieve an art form that remains universal in its appeal. It combines both organic and geometric elements. They blend three genres: dance, theater and puppetry. Discount Rush tickets are available at the Annenberg Center Box Office for Penn faculty/staff (\$15) and students (\$10). A PENNCARD is required for these discounts. For more information call (215) 898-3900 or visit [www.PENNpresents.org](http://www.PENNpresents.org).

## Update

JANUARY AT PENN

### TALKS

**30** *Have you eaten? Have you jumped into the sea? Have you divorced?—Marriage, Divorce and Competing Conceptions of Freedom in the Peoples Republic of China*; William Alford, Harvard University; 4:30 p.m.; 543 Williams Hall (Center

for East Asian Studies).

**31** *T Cell Production in HIV-1 Disease*; Joseph M. McCune, The Gladstone Institute of Virology, San Francisco; 4 p.m.; The Wistar Institute Auditorium (Cancer Training Program).

**Deadlines:** The deadline for the weekly update is each Monday for the following week's issue. For the March AT PENN calendar it is *February 13*.

See [www.upenn.edu/almanac/calendar/caldead.html](http://www.upenn.edu/almanac/calendar/caldead.html) for details on event submission.

**All Aboard Express Almanac** Want to be apprised of late-breaking news and time-sensitive information that is published only on *Almanac's* website? We will inform you as soon as we post such items if you are on board *Express Almanac*. A free electronic service, *Express Almanac* is sent whenever we add something significant to our website: *Between Issues* news, the latest issue or the AT PENN calendar.

To register, send an e-mail message with "subscribe" as the Subject to [almanac@pobox.upenn.edu](mailto:almanac@pobox.upenn.edu) and include your name, e-mail address, and mailing address. —Ed.

## The University of Pennsylvania Police Department Community Crime Report

**About the Crime Report:** Below are all Crimes Against Persons and Crimes Against Society from the campus report for **January 15 through January 21, 2001**. Also reported were **16 Crimes Against Property: (including 10 thefts and 6 retail thefts)**. Full reports on the Web ([www.upenn.edu/almanac/v47/n20/crimes.html](http://www.upenn.edu/almanac/v47/n20/crimes.html)). Prior weeks' reports are also on-line. —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 **January 15 and January 21, 2001**. The University Police actively patrols from Market Street to Baltimore Avenue and from the Schuylkill River to 43rd Street in conjunction with the Philadelphia Police. In this effort to provide you with a thorough and accurate report on public safety concerns, we hope that your increased awareness will lessen the opportunity for crime. For any concerns or suggestions regarding this report, please call the Division of Public Safety at (215) 898-4482.

01/15/01	12:53 PM	200 S. 34th St.	Subject arrested for disorderly conduct
01/16/01	8:03 PM	3900 blk Chestnut St.	Subject stopped for investigation/w. on warrant/Arrest
01/17/01	3:40 PM	3910 Irving St.	Unwanted phone calls received
01/17/01	8:56 PM	3710 Sansom St.	Counterfeit travelers check used
01/19/01	2:47 AM	3914 Spruce St.	Complainant assaulted by 4 unknown males
01/19/01	7:52 AM	255 S. 38th St.	Unauthorized charges on credit card
01/19/01	8:14 AM	423 Guardian Dr.	Money taken from locked office
01/19/01	10:33 AM	3400 Chestnut St.	Unauthorized charges on credit card

### 18th District Report

8 incidents and 0 arrests (4 robberies, and 4 aggravated assaults ) were reported between **January 15 and January 21, 2001** by the 18th District covering the Schuylkill River to 49th Street and Market Street to Woodland Avenue.

01/16/01	5:09 AM	4600 Chestnut St.	Robbery
01/16/01	6:34 PM	5140 Cedar Av.	Aggravated Assault
01/16/01	9:43 PM	4643 Pine St.	Aggravated Assault
01/18/01	9:20 AM	4000 Walnut St.	Aggravated Assault
01/19/01	12:00 PM	101 52nd St.	Robbery
01/19/01	12:59 PM	106 38th St.	Robbery
01/20/01	10:44 PM	242 49th St.	Aggravated Assault
01/21/01	1:55 AM	5100 Sansom St.	Robbery

## CLASSIFIEDS—UNIVERSITY

### RESEARCH

**Shoulder Study:** Do you have shoulder pain or tendonitis? You may qualify for *free* therapy. We are studying the effectiveness of a new, scientifically based shoulder exercise program. Testing and treatment are free and will be performed by a physical therapist experienced with managing shoulder problems. Call Jason Bialker, MPT, at Penn Therapy and Fitness to arrange an appointment for initial testing to see if you qualify (215) 614-0680.

The University of Pennsylvania Health System seeks volunteers for an osteoporosis medical research study. If you meet the following description, you may be eligible to participate: A **postmenopausal woman 60 years** or older of normal weight who is not taking estrogen replacement. Volunteers will receive a magnetic resonance imaging (MRI) exam—which produces images of the heel and spine, as well as a dual energy X-ray absorptiometry (DEXA) scan, which uses a small amount of radiation to determine bone density. Both exams—performed on the same day—take approximately 2 hours in total. Participants receive \$60. Please contact Louise Loh (215) 898-5664.

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

*Almanac* is not responsible for contents of classified ad material.

## CLASSIFIEDS—PERSONAL

### HOUSE FOR SALE

**Open Sunday** February 4, 1-3 p.m. Grad Hospital rehab — 1938 Pemberton. Gorgeous 2 BR, 1 1/2 BA on best block! All brand new! Decked yard. \$175,000. (215) 848-7127.

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

*Almanac* is not responsible for contents of classified ad material.



*Almanac*

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

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

EDITOR	Marguerite F. Miller
ASSOCIATE EDITOR	Margaret Ann Morris
ASSISTANT EDITOR	Tina Bejian
STUDENT INTERN	Melissa Kahane
STUDENT ASSISTANTS	Angie Liou; William Yeoh
UCHS INTERN	Shante Rutherford

**ALMANAC ADVISORY BOARD:** *For the Faculty Senate*, Martin Pring (Chair), Peter Freyd, Larry Gross, David Hackney, Phoebe Leboy, Michael W. Meister, Joseph Turow. *For the Administration*, to be named. *For the Staff Assemblies*, PPSA, Michele Taylor; Karen Pinckney, A-3 Assembly; David N. Nelson, Librarians Assembly.

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

# The W-2 Form for Calendar Year 2000

Form <b>W-2 Wage and Tax Statement 2000</b>		9 Advance EIC payment	1 Wages, tips, other compensation <b>A</b>	2 Federal income tax withheld <b>B</b>
c Employer's name, address, and ZIP code  <b>The Trustees of the University of Pennsylvania Philadelphia, Pa 19104-6284</b>		10 Dependent care benefits <b>C</b>	3 Social security wages <b>D</b>	4 Social security tax withheld <b>E</b>
		12 Benefits included in Box 1 <b>F</b>	5 Medicare wages and tips <b>G</b>	6 Medicare tax withheld <b>H</b>
13 See instrs. for Box 13  <b>I, J, K</b>		e Employee's name, address, and ZIP code  <b>BEN FRANKLIN 3500 LOCUST WALK PHILADELPHIA, PA 19104</b>		
15 statutory employee Deceased Pension plan Legal rep. Deferred comp.		b Employer's identification number  <b>L</b>		
16 State Employer's state I.D. number		17 State wages, tips, etc. <b>M</b>	18 State income tax <b>N</b>	19 Name of locality <b>O</b>
		20 Local wages, tips, etc. <b>P</b>		21 Local income tax <b>P</b>

Copy 2 To Be Filed With Employee's State, City, or Local Income Tax Return

Dept. of the Treasury - IRS

The University has recently mailed over 28,000 Calendar Year (CY) 2000 W-2 Forms to our employees' home addresses as they appear on the Payroll File (Employee Database).

An explanation of the contents of the various boxes on the W-2 form is as follows:

**A. Wages, tips, other compensation:** this represents the total amount of Federal Taxable compensation paid or imputed to you during Calendar Year 2000 through the University Payroll System. This amount includes:

- The value of your taxable graduate and/or professional tuition benefits, if you, your spouse and/or your dependent children have received such benefits;
- The value of Group Life Insurance coverage for amounts greater than \$50,000. The premium payments for this excess coverage, if any, have been included as imputed income (see Excess Insurance Premium - below);

Amounts which are excluded from this amount are:

- Tax deferred annuity contributions (i.e., TIAA/CREF);
- Health, Dental and Vision Care insurance premiums that have been sheltered;
- Amounts voluntarily contributed to a dependent care or a medical reimbursement account. Also included this year are fees for Parking, Transit Checks, TransPass and the Van Pool.

**B. Federal income tax withheld:** this represents the amount of Federal Income tax which was withheld from your earnings during the year and paid to the Internal Revenue Service, on your behalf, by the University.

**C. Dependent care benefits:** this represents the total amount which you have voluntarily "sheltered" for dependent care expenses, regardless of whether you have been reimbursed by the University for the expenses associated with this "shelter" as of December 31, 2000.

**D. Social security wages:** this represents the total amount of compensation paid to you during Calendar Year 2000 which was subject to Social Security (FICA/OASDI) tax, including all of your tax deferred annuity contributions and excess life insurance premiums, if applicable, but excluding health and dental insurance premiums and any voluntary dependent care or medical reimbursement account contributions which you have "sheltered".

**E. Social security tax withheld:** this represents the total amount of Social Security (FICA/OASDI) tax which was withheld from your earnings during the year and paid to the Social Security Administration, on your behalf, by the University.

**F. Benefits included in box 1:** if you have received certain fringe benefits, the value of such benefits is shown here, and is also included in Box 1, Wages, tips, other compensation. These benefits include the value of taxable graduate and/or professional tuition benefits and other benefits relating to imputed income. If you have received any of these benefits the University has recently advised you, individually and personally, concerning their taxability; please refer to those communications specifically.

**G. Medicare wages and tips:** this represents the total amount of compensation paid to you during Calendar Year 2000 which was subject to Medicare tax, including all of your tax deferred annuity contributions and excess life insurance premiums, if applicable, but excluding health and dental insurance premiums and any voluntary dependent care or medical reimbursement account contributions which you have "sheltered".

**H. Medicare tax withheld:** this represents the total amount of Medicare tax which was withheld from your earnings during the year and paid to the Social Security Administration, on your behalf, by the University.

**I. Excess insurance premium:** the Internal Revenue Service requires that the premiums paid by an employer for group life insurance coverage in excess of \$50,000 be imputed as income to the employee. The amount which appears in Box 13 and labeled (C) is the value of the premiums paid for this excess insurance coverage. This amount is based on an Internal Revenue Service (IRS) table which identifies premiums for different age groups.

**J. Tax deferred annuity contributions:** this represents the total amount of contributions made by an employee to a retirement plan on a tax-deferred basis. The amount is shown in Box 13 and labeled (E).

**K. Excludable moving expense reimbursements:** this represents the nontaxable moving expenditures that were paid to you as a reimbursement. The amount is shown in Box 13 and labeled (P). If any reimbursements or third party payments were deemed to be taxable income you were notified of these amounts under separate cover.

**L. Employee's social security number:** this is the number that the Federal and State Governments use to identify you with the tax returns that you file, so please review it for accuracy. If the number is incorrect, then the University Payroll system is also inaccurate and you should contact the Payroll Office, immediately, before you file your returns.

**M. State wages, tips, etc.:** this represents the total amount of compensation paid to you during Calendar Year 2000 which was subject

to Pennsylvania State Income Tax, including all of your deferred annuity contributions, if applicable, but excluding health and dental insurance premiums and any voluntary medical reimbursement account contributions which you have "sheltered".

**N. State income tax:** this represents the total amount of Pennsylvania State Income Tax withheld during Calendar Year 2000 and paid to the Commonwealth of Pennsylvania, on your behalf, by the University. If you do not live in Pennsylvania no amount will be reflected in this box.

If you lived a portion of the year in the Commonwealth of Pennsylvania, and another portion in New Jersey or Delaware, you will receive two W-2 forms, one showing the state taxes paid to the Commonwealth of Pennsylvania, the other showing no taxes paid to the other jurisdiction.

**O. Local wages, tips, etc.:** this represents the total amount of compensation paid to you during Calendar Year 2000 which was subject to Philadelphia City Wage Tax, including all of your deferred annuity contributions.

**P. Local income tax:** this represents the total amount of Philadelphia City Wage Tax withheld from your earnings during Calendar Year 2000 and paid to the City of Philadelphia, on your behalf, by the University.

When you receive your W-2 form, please review it immediately to ensure that your name is spelled correctly and that your Social Security number is correct. If you feel that any information on your W-2 is incorrect, review your calculations carefully and compare the information on the form with your final 2000 pay stub.

If you have availed yourself of certain taxable benefits please review any additional information which was provided to you, under separate cover, concerning these benefits and their impact on your tax status. If you still believe that your W-2 is in error, please contact the W-2 Office at (215) 573-3277 or write to W-2 Office, Room 310, Franklin Building /6284.

You should have received, via the U.S. Postal Service, your Federal and State Income Tax Forms and related instructions for filing. Federal Tax forms are available at the Internal Revenue Service, 600 Arch Street, Philadelphia, or by calling (800) TAX-FORM. Pennsylvania Income Tax forms are available at the State Office Building, 1400 Spring Garden Street, Philadelphia, or by calling (888) PA-TAXES. Federal and State forms are also available at many libraries and U.S. Post offices.

—Theresa V. Lafferty,  
Manager, Payroll Department



# February

## AT PENN



Whenever there is more than meets the eye, see our web site,  
[www.upenn.edu/almanac/](http://www.upenn.edu/almanac/).

### ACADEMIC CALENDAR

**16** *Drop Period Ends.*

### CHILDREN'S ACTIVITIES

**6** *Story Hour*; 11 a.m.; Bookstore. Also *February 13, 20 (10 a.m.) and 27.*

### CONFERENCE

**2** *HIV/AIDS in Africa: The Critical Link Between Human Rights and Health*; 8:30 a.m.-5 p.m.; Bodek Lounge, Houston Hall. Registration required: (215) 823-4206 or [Evelyn.Shuster@med.va.gov](mailto:Evelyn.Shuster@med.va.gov) (African Studies Center).

### EXHIBITS

#### Admission donations and hours

*Arthur Ross Gallery, Fisher Fine Arts Library*: free, Tues.-Fri., 10 a.m.-5 p.m., Sat. & Sun., noon-5 p.m.

*Burrison Gallery, Faculty Club, Inn at Penn*: free, Mon.-Fri., 8 a.m.-6 p.m.

*Esther Klein Gallery, 3600 Market*: free, Mon.-Sat., 9 a.m.-5 p.m.

*Institute of Contemporary Art*: \$3, \$2/students, artists, seniors, free/members, children under 12, with PENNCard, and on Sundays 11 a.m.-1 p.m.; open: Wed.-Fri., noon-8 p.m.; Sat. & Sun., 11 a.m.-5 p.m.

*Kamin Gallery, 1st fl., Van Pelt-Dietrich Library Center*; free, for hours see [www.library.upenn.edu/services/hours/hours.html](http://www.library.upenn.edu/services/hours/hours.html).

*Kroiz Gallery, Fisher Fine Arts Building, 220 South 34th Street*: Mon.-Fri., 10 a.m.-5 p.m.

*Meyerson Gallery, Meyerson Hall*: free, Monday - Friday, 9-5 p.m.

*Morris Arboretum*: \$6, \$5/seniors, \$4/students, free with PENNCard, children under 6; Mon.-Fri., 10 a.m.-4 p.m.; Sat. & Sun., 10 a.m.-5 p.m.

*University Museum*: \$5, \$2.50/seniors and students w/ID, free/members, with PENNCard, children under 6; Tues.-Sat., 10 a.m.-4:30 p.m., Sunday (free), 1-5 p.m.

#### Upcoming

**2** *Paintings of William J. Bank, M.D.*; assistant professor of neurology at the School of Medicine, self-taught artist. Opening reception: *February 2*, 4:30-6:30 p.m.; Burrison Art Gallery. *Through February 28.*

*Kate Egan & Deirdre Murphy*; GSFA. Opening reception: *February 8*, 5-7:30 p.m., with poetry reading by Cort Day. Kelly Writers House. *Through February 28.*

**3** *Jon Schueler: About the Sky; a retrospective*; oil paintings by this abstract expressionist who was a pilot in World War II and later spent much of his time living in Scotland; a member of the postwar California School, he originally exhibited with Rothko and Avery; Arthur Ross Gallery. *Through April 15* (Sweet Briar College Alumnae Club).

**15** *KAHN at 100: A Memorial Exhibition*; selection of master drawings, models, sketchbooks, manuscripts and memorabilia by world-renowned Philadelphia architect Louis I. Kahn; Kroiz Gallery. *Through September 15. See Talks.*

**19** *Tokyo Tales*; Klein-Dytham Architecture, Tokyo, Japan; Meyerson Gallery. *Through February 24. See Talks, reverse.*

*Large Print and Digital Works on Paper*; traditional and digital prints by faculty, staff and graduate and undergraduate students from printmaking and digital fine arts departments. Opening reception: *February 23*, 5-7 p.m.; lower gallery, Meyerson Hall. In conjunction with *Penn Printmaking and Digital Symposia. Through March 4. See Fitness/Learning, reverse.*

*Nicholas Coviello*; professor, digital fine arts. Opening reception: *February 23*, 5-7 p.m.; Dean's Alley, Meyerson Hall. In conjunction with *Penn Printmaking and Digital Symposia. Through March 4. See Fitness/Learning, reverse.*

**24** *Bruce Yonemoto*; Los Angeles artist's first one-person American museum show; featuring video installation for the InterCommunication Center in Tokyo; a large, three-channel work, *Hanabi Fireworks*—blurred images of recognizable corporate logos float like apparitions on multiple screens and morph into pyrotechnics. Opening reception: *February 23*, 6-8 p.m.; ICA. *Through April 22.*

*Clint Takeda*; Philadelphia artist; sculptures, drawings, and paintings of imaginary creatures in a Surrealist style. On site, Takeda will create three large, life-size figures: a monkey, a monk, and a scientist. Works relate to images and ideas of sensory deprivation and evolution from pop culture and science fiction films. Opening reception: *February 23*, 6-8 p.m.; ICA. *Through April 22.*

#### Now

*Lisa Yuskavage*; Philadelphia artist's unsettling and provocative paintings; ICA. *Through February 4.*

*Hella Jongerius and Jurgen Bey*; Dutch designers' "Droog" products made from recycled mass-produced objects; ICA. *Through February 4.*

*Mei Ling Hom: Silkworm Grind*; installation focusing on Asian women's experiences; ICA. *Through February 4.*

*Theodore Dreiser's Sister Carrie*; 6th fl., Rosenwald Gallery, Van Pelt-Dietrich Library Center. *Through February 5.*

*MFA First Year Exhibition*; Upper and Lower Galleries, Meyerson Hall. *Through February 11.*

*Pomo Indian Basket Weavers: Their Baskets and the Art Market*; text, video and photos of 120 turn-of-the-century Native American baskets; 2nd fl., Dietrich Gallery, University Museum. *Through February 25.*

*The Diving Board Series*; encaustic paintings on panels by Eleanor Schimmel; Esther M. Klein Gallery. *Through March 3.*

#### Ongoing

*Ancient Greek World; Canaan and Ancient Israel; Living in Balance: Universe of the Hopi, Zuni, Navajo and Apache; Ancient Mesopotamia: Royal Tombs of Ur; The Egyptian Mummy: Secrets and Science; Raven's Journey: World of Alaska's Native People; Buddhism: History and Diversity of a Great Tradition*; University Museum.

*Healing Plants: Medicine Across Time and Cultures*; Morris Arboretum.

**University Museum Tours**  
Meet at the main entrance; 1:30 p.m. Free with Museum admission donation. Info.: [www.upenn.edu/museum/](http://www.upenn.edu/museum/).

**3** *Mesoamerica*

**4** *Archaeology*

**10** *Raven's Journey*

**11** *Ancient Egypt*

**18** *American Southwest*

**24** *Highlights of the Collection*

**25** *China*



### Margaret Mead Film Festival

**February 23 through 25**  
Counter clockwise, from upper right:

- *On and Off the Res' w/Charlie Hill*
- *Seven Hours to Burn*
- *Stairway to Heaven*
- *The Laughing Club of India*

See Films, below.



### FILMS

**5** *HBO Nights: Sex and the City, Sopranos*; 5-7 p.m.; Bistro, Houston Hall. Also *February 12, 19 & 26* (Office of Student Life).

**7** *Head Over Heels* (2001); 9 p.m.; Hall of Flags, Houston Hall. Free passes at 200 Houston Hall (Office of Student Life).

**9** *Woman Human Demon*; 8 p.m.; International House; discussion with director Huang Shuqin to follow (Center for East Asian Studies; International House).

**21** *African Film Festival*; International House; call (215) 895-6569 for show times. *Through February 24.*

#### Margaret Mead Film and Video Festival

Harrison Auditorium, University Museum. Evenings: \$6, \$3/students, senior citizens, PENNCard holders. Saturday and Sunday afternoon screenings free with admission.

**23** *The Laughing Club of India* (1999), *India Cabaret* (1985); 7:30 p.m.

**24** *The Great Mojado Invasion* (1999), *On and Off the Res' w/Charlie Hill* (2000), *Seven Hours to Burn* (1999); 2 p.m.

*Liebe Perla* (1999), *Stairway to Heaven* (1998); 7:30 p.m.

**25** *Santo Forte* (2000), *You Can't Live with Your Mouth Shut* (1999); 2 p.m.

*Zinat, A Special Day* (2000), *The Child the Stork Brought Home* (2000); 7:30 p.m.

#### Department of Slavic Languages

5:30 p.m.; TV Lounge, Modern Languages Program at Gregory House

**6** *Oblomov* (1980); Russian w/subtitles.

**20** *An Unfinished Plan for a Mechanical Piano* (1977); Russian with subtitles.

### MEETINGS

**15** *A-3 General Assembly*; single parent support group; noon-1:30 p.m.; location TBA. Info.: (215) 898-1788.

**16** *Trustees Stated Meeting*; 1:45-2:45 p.m.; Inn at Penn.

**21** *University Council*; 4-6 p.m.; Bodek Lounge, Houston Hall. Info.: (215) 898-7005.

#### Dance Celebration

*The hard-charging, energetic style of River North Chicago Dance will leave audiences breathless, February 15-17. The group, comprised of 13 highly-trained, dynamic professionals, is noted for its varied, eclectic repertoire set to some of the century's greatest, most recognizable music. See On Stage.*

### MUSIC

**2** *Penn Flutes*; 5 p.m.; Bookstore (Bookstore).

**14** *Glee Club*; 5 p.m.; free. Houston Hall Bistro (Penn Performing Arts).

**18** *Amherst Early Music Faculty Concert*; 8 p.m.; Amado Recital Hall, Irvine Auditorium (Music).

**25** *Boys Choir of Harlem*; 3 p.m.; Zellerbach Theatre, Annenberg Center; \$20, \$25, \$30. Info./tickets: (215) 898-3900 or [www.PennPresents.org](http://www.PennPresents.org). See photo, reverse (Penn Presents).

#### International Music Series

All shows at the International House. Tickets: (215) 569-9700.

**3** *Marlon Simon and the Nagual Spirits*; Latin jazz; 8 p.m.; \$15.

**17** *Ban Rra Rra*; Cuban music and dance; 8 p.m.; \$25.

### ON STAGE

**2** *MotherSON*; one-man play; Jewish mother struggles to understand gay son; 8 p.m.; Iron Gate Theater; \$20; free/students. Info.: (215) 898-3900. Also *February 3* (Phila. PFLAG; Beth Ahavah).

*All's Fair in Love and Dwarves*; Mask & Wig's 113th production; 7 p.m., doors; 8 p.m., show; Mask & Wig Clubhouse, 310 Quince St. Info./tickets: (215) 923-4229. *Through March 24.*

**8** *Li'l Abner*; Penn Law School Light Opera Company; 8 p.m.; Zellerbach Theatre, Annenberg Center. \$8; \$5/Penn ID Info./tickets: (215) 898-6791. Also *February 9 & 10.*

#### Student Performing Arts

All shows, 5 p.m.; free. Houston Hall Bistro.

**7** *Without A Net*

**21** *Yof!*

**28** *Onda Latina*

#### Penn Presents

Info./tickets: (215) 898-3900 or [www.PennPresents.org](http://www.PennPresents.org).

**2** *Mummenschanz*; Swiss mime; 8 p.m.; Zellerbach Theatre, Annenberg Center; \$35, \$30, \$25; matinee: \$30, \$25, \$20. Also *February 3*, 2 & 8 p.m. and *February 4*, 3 p.m.

**15** *River North Chicago Dance*; fusion of ballet, modern and jazz dance; 7:30 p.m.; Zellerbach Theatre, Annenberg Center; \$33, \$31, \$29; matinee tickets: \$30, \$28, \$26. Also *February 16*, 8 p.m. and *February 17*, 2 & 8 p.m.

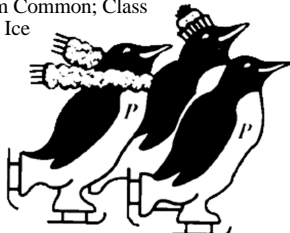
### SPECIAL EVENTS

**3** *Nursing Graduate Education Day*; overview of programs; opportunity to speak with directors; 8:30 a.m.-2 p.m.; lobby, Nursing Education Bldg. (Nursing Graduate Enrollment Management).

**4** *Tu B'Shevat Celebration*; Jewish New Year of Trees; crafts, games and puppet show; 2-4 p.m.; Widener Visitor Center, Morris Arboretum; free w/admission. Registration: (215) 247-5777, ext. 125 (Arboretum).

**7** *Wednesdays with Morrie*; free van ride to the Philadelphia Museum of Art for weekly events. PENNCard required. See [www.upenn.edu/resliv/chas/programs/van.html](http://www.upenn.edu/resliv/chas/programs/van.html) for route; 5-9 p.m. Info.: (215) 898-5551. Also *February 14, 21 & 28.*

**10** *Skate 'Till Your Heart's Content*; Valentine's family skating package for 2 adults and 2 children; 12:30-4 p.m.; Class of 1923 Ice Rink; \$5/family (Sansom Common; Class of 1923 Ice Rink).



**14** *ENIAC 55 Year Celebration*; premiere of film *Mauchly: The Computer and the Skateboard*; 4:30-6:30 p.m.; Heilmeier Hall, Towne Bldg. (SEAS).

*Valentine's Day Dinner*; limited a la carte menu: Chateaubriand for two; 5-8 p.m.; Faculty Club, Inn at Penn; \$23.95/person. Reservations: (215) 898-4618.

**15** *Go West, 3rd Thursdays: Meet Over a Different Menu*; 2-for-1 dinner specials; see [www.UCityphila.com](http://www.UCityphila.com) or 1-888-GOWEST-7 for participating restaurants. See reverse (UCD).

**17** *12th Annual Celebration of African Cultures*; dance, storytelling, music and art; 11 a.m.-4 p.m. featured: *Women's Sekere Ensemble*, group of female percussionists of Nigeria, noon & 2 p.m.; *African Rhythms Drum and Dance Troupe*, 11:30 a.m.; *African-American Stilt Ballet*, young dancers from the Philadelphia area, 1 p.m.; *Images of the Motherland*, interactive program, 1:30 p.m.; *Ballet Shango African Dance Theatre*, dancers and drummers offer West African dance workshop, 12:30 p.m., and finale performance, 3:15 p.m. *The Philadelphia Zoo's "Zoo on Wheels"* 1 to 3 p.m.; University Museum; free w/admission (Museum).

**22** *2001 Equal Justice Foundation Auction*; funds will support Penn Law students in public service careers; 6 p.m.; rm. 100, Law School (Law School Sesquicentennial).

**25** *Christian Association Open House*; CA celebrates its new building and honors Philadelphia artist Sam Maitin; includes a panel on *Social Transformation Through the Arts*; 5-7 p.m.; 118 S. 37th St.

### SPORTS

Tickets for basketball games: \$18/side court & lower end court; \$12/upper end court; \$6/seniors, children & PENNCard holders. Info/tickets: (215) 898-6151 or [www.pennathletics.com](http://www.pennathletics.com).

**2** (M) *Basketball vs. Yale*; 7 p.m.

**3** *Wrestling vs. Harvard*; 2 p.m.

(M) *Basketball vs. Brown*; 7 p.m.

**4** *Wrestling vs. Brown & George Mason*; 1 p.m.

**9** (W) *Basketball vs. Harvard*; 7 p.m.

*Gymnastics vs. Temple*; 7 p.m.

**10** (W) *Squash vs. Harvard*; 11:30 a.m.

(M) *Squash vs. Harvard*; 2 p.m.

(W) *Basketball vs. Dartmouth*; 7 p.m.

**11** (W) *Fencing vs. Temple*; 10 a.m.

(W) *Squash vs. Dartmouth*; 11:30 a.m.

*Gymnastics vs. Ursinus*; 1 p.m.

(M) *Squash vs. Dartmouth*; 1:30 p.m.

(M/W) *Fencing vs. Princeton*; 2 p.m.

(M) *Basketball vs. Princeton*; 7 p.m.

**14** *Wrestling vs. Princeton*; 7 p.m.

**16** (W) *Basketball vs. Cornell*; 7 p.m.

**17** (M) *Swimming vs. Harvard*; 1 p.m.

(W) *Basketball vs. Columbia*; 7 p.m.

**23** (M) *Basketball vs. Dartmouth*; 7 p.m.

**24** (M) *Basketball vs. Harvard*; 7 p.m.

## Almanac

Suite 211 Nichols House, 3600 Chestnut St.  
Philadelphia, PA 19104-6106  
(215) 898-5274 or 5275 FAX (215) 898-9137  
E-Mail [almanac@pobox.upenn.edu](mailto:almanac@pobox.upenn.edu)  
URL: [www.upenn.edu/almanac](http://www.upenn.edu/almanac)

Unless otherwise noted all events are open to the general public as well as to members of the University. For building locations, call (215) 898-5000 between 9 a.m. and 5 p.m. Listing of a phone number normally means tickets, reservations or registration required.

This February calendar is a pull-out for posting. *Almanac* carries an *Update* with additions, changes and cancellations if received by Monday noon prior to the week of publication. Members of the University may send notices for the *Update* or *March AT PENN* calendar. Deadlines can be found online at [www.upenn.edu/almanac/calendar/caldead.html](http://www.upenn.edu/almanac/calendar/caldead.html).



TALKS

**1** *Moral and Ethical Dilemmas in the Special-Care Nursery*; Arthur Caplan, Center for Bioethics; noon-1:30 p.m.; suite 320, 3401 Market St. (Center for Bioethics).

*Current Issues Effecting Marine Mammal Conservation*; Laela Sayigh, University of North Carolina at Wilmington; 12:15-1:45 p.m.; Grossman Auditorium, Wistar Institute (Institute for Environmental Studies [IES]).

*Wilkomirski/Wiesel: Problems of Memory and Factuality in Recent Holocaust Memoirs*; Susan Rubin Suleiman, Harvard; 4:30 p.m.; Cherpack Lounge, Williams Hall (French Institute).

*Recent Work*; Claudine Lorenz and Florian Musso, Atelier d'Architecture Claudine Lorenz Florian Musso; 6 p.m.; B-3, Meyerson Hall (Architecture; GSFA).

**2** *Disease Diagnosis, Surveillance and Prevention in the Rodent Lab*; Laura Davis, SmithKline Beecham Pharmaceuticals; 10 a.m.-noon; Medical Alumni Hall, HUP (University Veterinarian).

**5** *Troponin T Isoforms and Heart Failure*; Jian-Ping Jin, Case Western Reserve University; 2 p.m.; Wood Room, 2nd fl., John Morgan Bldg. (Pennsylvania Muscle Institute).

*A New Computational Tool for the Science and Engineering of Complex Fluids*; Venkat Ganesan, University of California—Santa Barbara; 3:30 p.m.; rm. 337, Towne Bldg. (Chemical Engineering).

*Intra Nuclear Position of Virus Episome or Plasmid Vector Affects Transcription and Replication: Cell Biology of Position Control*; Gerd Maul, Wistar Institute; 4-5 p.m.; Austrian Auditorium, CRB (Institute For Human Gene Therapy [IHGT]).

*Recent Work*; Odile Decq, Decq + Cornette Architects, Paris; 6 p.m.; B-1, Meyerson Hall (Architecture; Ewing, Cole and Associates; GSFA).

**6** *Special Panel on Water Management*; Walter Lyon, systems engineering; Susan Lior, Philadelphia Water Commission; Carol Collier, Delaware River Basin Commission; Robert Traver, Villanova University; 6- 9 p.m.; rm. 337, Towne Bldg. (IES; Systems Engineering).

**7** *Role of Cadherins in Animal Morphogenesis*; Ulrich Tepass, University of

TALKS

Toronto; noon; rm. 251, BRB II/III (Center for Research on Reproduction & Women's Health [CRRWH]).

*Functional Materials and Devices via Templated Colloidal Assembly*; Orlin Velev, University of Delaware; 3 p.m.; rm. 337, Towne Bldg. (Chemical Engineering).

*Immunotherapy of Cancer with Live Bacterial Vectors and Their Products*; Yvonne Paterson, microbiology; 4 p.m.; Grossman Auditorium, Wistar Institute (Wistar Institute).

*Covering the World from Cape Town to Moscow: How a Foreign Correspondent Figures Out Where the World is Headed*; Trudy Rubin, Philadelphia Inquirer; 5 p.m.; rm. 402, Logan Hall (International Relations).

*Contemporary Processes in Architecture*; Panel discussion/colloquium, Ali Rahim, architecture; respondents: Ben van Berkel, Van Berkel & Bos Architectural Bureau, Amsterdam; William Braham, architecture; Michael Speaks, Sci-Arc; 6 p.m.; Upper Gallery, Meyerson Hall (Architecture; GSFA).

**8** *Active Transport from Prague 1960 to Los Angeles 2000*; Ernest Wright, University of California—Los Angeles; 4 p.m.; Class of '62 Lecture Hall, John Morgan Bldg. (Physiology).

*The Religious Professional: What Role Should Religious Commitment Play in the Work of Lawyers and Doctors?* Martha Minow, Harvard Law School; 4 p.m.; rm. 240-A, Law School (Law School Sesquicentennial).

*Bidding for the Olympics 2012: Designs, Plans and Politics*; Alexander Garvin, Yale University and Planning Commission of New York City; 6 p.m.; B-1, Meyerson Hall (City & Regional Planning; GSFA).

*Class and Christian Diversity*; Maureen Tilley, University of Dayton; 7 p.m.; 2nd fl. lounge, Logan Hall (Philadelphia Seminar on Christian Origins).

**9** *Rabbits: Biology, Care, Handling, Identification, Nomenclature, Breeding and Genetics*; Norman Lefebvre, Hazelton Research Products; 10 a.m.-noon; Medical Alumni Hall, HUP (University Veterinarian).

*Economic Issues in Comparing Antidepressant Drug Therapy, Psychotherapy, and their Combination for the Treatment of Acute Phase Chronic Depression*; Ernst Berndt, MIT—Sloan;

TALKS

noon-1:30 p.m.; 1st fl. auditorium, Colonial Penn Center (Leonard Davis Institute [LDI]).

*Evolution of Language: from Animal Communication to Universal Grammar*; Martin Nowak, head, Program in Theoretical Biology, Institute for Advanced Study; noon; rm. G-17, Logan Hall (Institute for Research in Cognitive Science [IRCS]).

*Structural Changes that Drive Myosin Molecules along Actin Filaments*; Peter Knight, Leeds University, U.K.; 2 p.m.; rm. 251, BRB II/III (Pennsylvania Muscle Institute).

**12** *The Importance of the Heyue Yingling Ji for the History of High Tang Poetry*; Paul Kroll, University of Colorado; noon; 543 Williams Hall (Center for East Asian Studies).

*Random Walks and Feedback Loops in Autocrine Cell Signaling*; Stanislav Shvartsman, Massachusetts Institute of Technology; 3:30 p.m.; rm. 337, Towne (Chemical Engineering).

*Fetal Gene Therapy: Current Status and Future Potential*; Alan W. Flake, CHOP; 4-5 p.m.; Austrian Auditorium, CRB (IHGT).

*Geometry and Topology of Groups*; Dusa McDuff, SUNY—Stony Brook; four-day lecture series; 4 p.m.; A-6, DRL. Also February 13-15 (Mathematics).

*Urban Flotsam: Stirring the Skin of the Earth*; Raoul Bunschoten Chora, Institute of Urbanism and the Architectural Association, London; 6 p.m.; B-level, Meyerson Hall (Landscape Architecture; GSFA).

**14** *Conditional Gene Targeting in Mice: Uncovering New Functions for Foxa2 (HNF3b)*; Klaus Kaestner, genetics; noon; rm. 251, BRB II/III (CRRWH).

*Discussion on Hans Jonas' Essay "Philosophical Reflections on Experimenting with Human Subjects"*; Renée Fox, Center for Bioethics; noon-1:30 p.m.; rm. 320, 3401 Market St. (Center for Bioethics).

*Engineering Antibody Therapeutics: Applications to Bacterial Toxins*; Jennifer Maynard, University of Texas—Austin; 3:30 p.m.; rm. 337, Towne Bldg. (Chemical Engineering).

*BRCA1 and DNA Repair*; Wen-

TALKS

Hwa Lee, University of Texas—San Antonio; 4 p.m.; Grossman Auditorium, Wistar Institute (Wistar Institute).

*Styles of Love Poetry*; Edward Hirsch, poet, reads from Hirsch's book *On Love*; lecture by religious studies professor Ann Matter on St. Valentine; 5-6:30 p.m.; Kelly Writers House (Penn Humanities Forum; Writers House).

*The Louis I. Kahn Memorial Lecture*; Tadao Ando, Osaka, Japan; 6:30 p.m.; University Museum. Info.: [www.foundationforarchitecture.org](http://www.foundationforarchitecture.org). See *Exhibits* (Foundation for Architecture; GSFA).

**15** *Texte et Musique au Moyen Age: Desir Narcissique ey Voix Feminine dans le Motet 7 de Guillaume de Machaut*; Kevin Brownlee, Romance Languages; noon; Class of 1947 Meeting Room, Houston Hall (French Institute).

*Re-engineering Philadelphia's Urban Watersheds: Clean Water, Green City*; Howard Neukrug, Philadelphia Water Dept.; 12:15-1:45 p.m.; Grossman Auditorium, Wistar Institute (IES).

**16** *Rabbit Diseases*; Marcia Etheridge, SmithKline Beecham; 10 a.m.-noon; Medical Alumni Hall, HUP (University Veterinarian).

*TBA*; Ray Fabius, IntelliHealth.com; noon-1:30 p.m.; 1st fl. auditorium, Colonial Penn Center (LDI).

**19** *Expanding the Influence of an Already Powerful Cell-Enhancing Dendritic Cell Function Through Genetic Modification*; Ronald Crystal, Cornell University; 4-5 p.m.; Austrian Auditorium, CRB (IHGT).

*New Uses of Old Buildings: Methodologies for Compatible Designs*; Gabriella Caterina, University of Naples; 6 p.m.; B-level, Meyerson Hall (Graduate Program in Historic Preservation; GSFA).

**20** *Cross Talk Between Two Component Signaling System*; Mark Goulian, physics & astronomy; noon; 2nd fl. conference room, Vagelos Research Labs (Institute for Medicine & Engineering).

*Will Lowering Pharmaceutical Prices Jeopardize Breakthrough Research? The Moral Crusades*; Donald Light, Center for Bioethics; noon-1:30 p.m.; rm. 320, 3401 Market St. (Center for Bioethics).

**21** *Biological and Molecular Basis of Breast Cancer Prevention*; Jose Russo,

TALKS

Fox Chase Cancer Center; noon; rm. 251, BRB II/III (CRRWH).

*Institute for Law and Economics Law and Entrepreneurship Lecture—Private Equity: Difficult Investing in a Difficult Time*; Paul Levy, L' 72; 4:30 p.m.; rm. 245-A, Law School (Law School Sesquicentennial).

*Philadelphia Self-Taught Art*; John Ollman, Fleisher-Ollman Gallery, on the history of self-taught art in Philadelphia; 5-6:30 p.m.; 1st floor, 3619 Locust Walk. Registration required; (215) 573-8280 (Penn Humanities Forum).

**22** *Tokyo Tales*; Mark Dytham, Klein Dytham Architecture, Tokyo, Japan; 6 p.m.; B-3, Meyerson Hall. See *Exhibits* (Architecture; GSFA).

**23** *Occupational Health in Laboratory Animal Medicine*; Christian Newcomer, University of North Carolina School of Medicine; 10 a.m.-noon; Medical Alumni Hall, HUP (University Veterinarian).

**26** *Block Copolymer Micelles in Water*; You-Yeon Won, Massachusetts Institute of Technology; 3:30 p.m.; rm. 337, Towne Bldg. (Chemical Engineering).

*Gene and Immunotherapy for Cancer: Making the Tumor a Better Place to Die*; Richard G. Vile, Mayo Clinic; 4-5 p.m.; Austrian Auditorium, CRB (IHGT).

*Planning for a New Century: The Big Issues*; panel discussion and book signing; Jonathan Barnett, city & regional planning; 6 p.m.; B-3, Meyerson Hall (City & Regional Planning; GSFA).

**27** *The Divine Image of India*; Ann Sloan, history of art; 1 p.m.; Faculty Club, Inn at Penn (Women's Club).

*Style and Meaning in Music*; Leon Botstein, Bard College; 5-6:30 p.m.; rm. 200, College Hall (Penn Humanities Forum; Music; Germanic Languages & Literatures).

**28** *Translational Delay in Mammalian Germ Cells*; Robert Braun, University of Washington; noon; rm. 251, BRB II/III (CRRWH).

*Structural Insights into Recognition and Regulation in Tyrosine Kinase Signaling*; Michael Eck, Dana-Farber Cancer Institute; 4 p.m.; Grossman Auditorium, Wistar Institute (Wistar Institute).

FITNESS/LEARNING

*Jazzercise*; 5:30-6:30 p.m.; Tuesday and Thursday; Newman Center; first class free; \$4.50/class, \$3.50/students; Carolyn Hamilton, (215) 662-3293 (days) or (610) 446-1983 (evenings).

*Class of 1923 Ice Rink Public Skating Sessions*; Mon. & Wed., 1:30-3 p.m.\*; Tues., noon-1:30 p.m.\*; Thurs., noon-1:30 p.m.\* & 7-9 p.m.; Fri., 8-10 p.m. & midnight-2 a.m.; Sat., 12:30-2:30 p.m., 8-10 p.m. & midnight-2 a.m.; and Sun., 12:30-2:30 p.m. Class of '23 Ice Rink, 3130 Walnut St. Admission: \$5.50; \$4.50/PENNCard; (\*indicates \$1-off admission); skate rental: \$1.50/per session (Class of '23 Ice Rink).

**1** *Salsa Lessons*; 5-7 p.m.; Houston Hall Bistro; free (Ballroom Dance).

**5** *Strictly Speaking Toastmasters Meeting*; 6:30 p.m.; Penn Bookstore. Also February 19 (Bookstore).

**15** *Swing Lessons*; 5-7 p.m.; Houston Hall Bistro; free (Ballroom Dance).

**20** *Caring for Older Parents*; Sarah Kagan, gerontologic nursing, Mary Ann Forciea, geriatric medicine, Brian Duke, Regional Initiative in Geriatrics, Marilyn Kraut, Quality of Work Life; 4-6 p.m.; auditorium, ARCH (AWFA).

**21** *Etiquette in the Workplace*; Mary Mitchell, Mitchell & Associates; 12:15 p.m.; Terrace Rm., Logan Hall (PPSA, A-3 General Assembly, Human Resources).

**22** *Meet Me at the Living Room*; informal networking with fellow Penn women; 5-6 p.m.; Living Room, Inn At Penn (Association of Women Faculty & Administrators).

**23** *Penn Printmaking and Digital Symposia*; two workshops—*Non-toxic Printmaking With Digital Enhanced Processes*; Nick Coviello, instructor; 9 a.m.-noon; and *Experimental Digital Techniques*; Joshua Moseley, Fine Arts digital professor and Brian Kreydatus, Fine Arts printmaking professor, instructors; 1-4 p.m. Both workshops: printshop, basement, Morgan Bldg. Registration required: (215) 898-8374 or [murphy@pobox.upenn.edu](mailto:murphy@pobox.upenn.edu). Opening reception: February 23, 5-7 p.m.; lower gallery, Meyerson Hall. See *Exhibits, reverse*.

**ISC Technology Training Group** All classes are held at Sansom Place West/3650 Chestnut Street, 2nd floor. Registration required: (215) 573-3102. Info.: [learnit@pobox.upenn.edu](mailto:learnit@pobox.upenn.edu) or [www.upenn.edu/computing/isc/ttg](http://www.upenn.edu/computing/isc/ttg).

**Hands-on Windows Courses**

**1** *Introduction to Access 2000*

**5** *Intro. to Filemaker Pro 4.0*

**13** *Introduction to Windows 2000*

**15** *Intermediate Word 2000*

**19** *Intermediate Excel 2000*

**21** *Advanced PowerPoint 2000*

**27** *Intermediate Access 2000*

**Hands-on Macintosh Courses**

**7** *Advanced Word 98*

**20** *Creating a Web Page*

**Morris Arboretum** Call (215) 247-5777, ext. 125 for registration and additional information.

**11** *Gardens of Scotland*; slide lecture by Arboretum horticulturist Mike Tuszynski; 2 p.m.; Upper Gallery, Widener Visitor Center; \$5, free/members.

**24** *Basic Propagation: Starting with Seeds*; learn basic seed-sowing techniques; 9:30 a.m.-12:30 p.m.; Arboretum greenhouse; \$25, \$23/members.

**25** *Green Infrastructure: Transforming Our Towns with Trees*; Pulitzer Prize-winning author Tom Hylton; 2 p.m.; Upper Gallery, Widener Visitor Center; \$5, free/members.

**Office of Community Housing** Noon-1 p.m. & 1-2 p.m.; 4046 Walnut St. Info./RSVP: (215) 898-7422 or [bramsey@pobox.upenn.edu](mailto:bramsey@pobox.upenn.edu).

**5** *Community Housing 101. Also on February 28.* Held at rm. 720, Franklin Bldg. on February 14.

**7** *Tax Planning.*

**19** *Homeowner's Insurance.*

**21** *Credit Counseling and Repair.*

**26** *Home Inspection.*

**Quality of Worklife Workshops** All sessions: 11:30 a.m. -1 p.m; rm. 223, Golkin Room, Houston Hall. Registration required: [www.hr.upenn.edu/training\\_coursecatalog/search\\_criteria.asp](http://www.hr.upenn.edu/training_coursecatalog/search_criteria.asp). Info.: (215) 898-5116 or [rosenthal@hr.upenn.edu](mailto:rosenthal@hr.upenn.edu).

**7** *Summer Child Care Options*; assess your child's interests, and explore options for summer activities.

**21** *Handling the Difficult and Angry Customer*; techniques for customer service approach to dealing with difficult and angry customers.

READINGS/SIGNINGS

**14** *PPSA Book Discussion Group*; Pat Croce's *I Feel Great and You Will Too!*; 12:15-1:15 p.m.; Bookstore (PPSA).

**Penn Bookstore**

**1** *The Doctor Makes a Dollhouse Call*; author Robin Hathaway; noon.

**7** *Animal Patients: 50 Years in the Life of an Animal Doctor*; Edward Scanlon, alumnus; noon.

**8** *The Moral Stake in Education: Contested Premises and Practices*; signing and lecture by Joan Goodman, education, Howard Lesnick, law; noon.

*Finding Fish: a Memoir*; Antwone Fisher, screenwriter; Black History Month; 2 p.m.

**9** *On Her Own Ground: The Life and Times of Madam C.J. Walker*; A'Lelia Bundles, journalist; Black History Month; noon.

**15** *The Sound of Sleet, A Painter's Life*; readings by Magda Salvesen, widow of artist Jon Schueler; 1 p.m. See *Exhibits*.

**16** *A Force More Powerful: A Century of Non-Violent Conflict*; authors Jack DuVall, Peter Ackerman; noon.

**Kelly Writers House** 3805 Locust Walk. Info.: (215) 573-WRIT, [wh@english.upenn.edu](mailto:wh@english.upenn.edu) or [www.english.upenn.edu/~wh/](http://www.english.upenn.edu/~wh/).

**7** *Speakeasy: Poetry, Prose & Anything Goes*; open mic performance; 8 p.m. Also February 21.

**12** *Tony Kushner*; readings by Pulitzer-winning author of *Angels in America: A Gay Fantasia on National Themes*; 7 p.m.

**14** *Loved Poems and Poems about Love*; group readings and discussion; 3 p.m. Call or e-mail to RSVP.

**17** *The Laughing Hermit Reading Series*; poets Brenda McMillan, Molly Russakoff; 4 p.m.

**18** *Live at the Writers House*; a one-hour spoken-word and music radio show; 11 p.m.

**Let's Hear It for the Boys!**

*With the dual musical heritage of the European boys choir and the African-American church choir, The Boys Choir of Harlem has an artistic repertoire ranging from classical music to jazz, contemporary songs, gospels, spirituals and specially commissioned works by leading African-American composers. See Music, reverse.*

3rd Thursdays:  
February 15  
Dine in a New  
Direction!

Join friends, colleagues, and neighbors after work or after class at one of University City's delicious restaurants—and indulge in 2-for-1 entrees.\*

To obtain the 3rd Thursday special, ask your server for the 3rd Thursday special discount.

Free metered parking after 6 p.m. on 3rd Thursdays in University City!

**Participating Restaurants**

*Academic Bistro* (BYOB)  
2 for 1 on entire \$22 prix fixe. Culinary Academy, Drexel University  
33rd & Arch Sts.  
(215) 895-2992  
(reservations required)

*Pizza Rustica* (pizzas only)  
3602 Chestnut St.  
(215) 895-3490

*2 Goodfellas* (Italian, BYOB)  
4101 Walnut Street  
(215) 382-3600

*Marigold Dining Room* (American, BYOB)  
501 S. 45th St.  
(215) 222-3699

*Palladium Restaurant & Bar* (American)  
3601 Locust Walk  
(215) 387-3463

*Shula's Steak 2* (American)  
3600 Chestnut St. (Sheraton University City)  
(215) 386-5556

*The Restaurant School* (Italian, American)  
4207 Walnut Street  
(215) 222-4200

*Sitar India* (Indian, BYOB, excludes buffet special)  
60 S. 38th St.  
(215) 662-0818

\* Excludes beverages, tax, and gratuity and may not be used with other promotions. Discount taken on entree of equal/ lesser value.

For more information call 1-888-GOWEST-7 or visit [www.universitycitydistrict.org/](http://www.universitycitydistrict.org/).

February  
AT PENN