

# Almanac

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Ted Koppel

## For 'Peak Week': Ted Koppel

ABC's *Nightline* anchor Ted Koppel has been signed to moderate three two-hour forums during the May 16-20 "Peak Week" of the Penn 250th, presenting them live to campus audiences but also videotaping and editing them to one-hour productions the University will offer to PBS. According to the 250th Celebration's Director Clare Wofford, the interviewer noted for his civilized tenacity will conduct forums on:

--*The Walls Are Coming Down*, on the changing world picture since recent developments in the Soviet Union, Eastern Europe and South Africa;

--*The World Market Place*, on problems and opportunities in developing an international economy; and

--*Technology in Culture and the Arts*, including changes in world culture wrought by computers, television and satellites.

Panel selection will be worked out between Mr. Koppel and the University. He accepted the invitation, Mrs. Wofford said, after a letter from President Sheldon Hackney and a visit from President Emeritus Martin Meyerson.

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## Search Committee: VP/ Grad Ed

Provost Michael Aiken announced at Council Wednesday that Dr. Robert E. Dyson, director of the University Museum and former dean of the School of Arts and Sciences, will head the committee to advise on selection of a Vice Provost for Graduate Education, the new post recommended in the report of the Working Group on Graduate Education (*Almanac* December 5, 1989). The complete committee:

**Faculty:** Robert Dyson, Arts & Sciences, Chair

Jean Henri Gallier, Engineering

Roland Kallen, Medicine

Abba Krieger, Wharton

Ruth McCorkle, Nursing

Edward Pugh, Arts & Sciences

Maureen Quilligan, Arts & Sciences

**Students:** Susan Garfinkel, Arts & Sciences

David Kerosian, Arts & Sciences

## Council: Debating Suspension of Student, Other Issues

Council went into overtime Wednesday to complete its agenda, as officers' opening reports led to extended discussion in the Q & A period--particularly of the VPUL Kim Morrisson's administrative suspension of Christopher Clemente, a Wharton sophomore under arrest in New York City on drug and weapons charges. (See her statement, page 2.) Benjamin Karsch in an Undergraduate Assembly resolution, Reuben Brown of the Black Students' League, and Professor Alan Kors were among those whose questions centered on whether suspension reversed the principle of innocent-until-proved-guilty.

Mr. Brown charged that the action damages Mr. Clemente's defense. In response to Mr. Brown's urging administrative leave instead of suspension, Dr. Morrisson said what shows on the student's record is administrative leave. To Dr. Kors' query on why the student was suspended before a campus hearing was held, Dr. Morrisson said Section VII of the Judicial Charter specifies the steps in the order taken.

**Animal Research Arrest:** Provost Michael Aiken announced the arrest of Michael Winikoff of People for the Ethical Treatment of Animals, who proclaimed his theft of two laboratory rats last month, claiming they were mistreated in psychology research. Campus Police Detective Michael Carroll confirmed that Mr. Winikoff was arrested Wednesday morning during the vigil he began after revealing that he had taken the animals while working undercover as a technician in psychology. Friday Mr. Winikoff was released on his own recognizance and is scheduled for a hearing March 5.

Provost Aiken also said the FBI has been called into the case of the break-in at the Veterinary School and reiterated his and the President's earlier statement (*Almanac* January 16) that if the perpetrator can be found the University will prosecute to the fullest extent. Mr.

Karsch read a UA motion supporting animal research and wishing Dr. Morrison continued success. (Pages 5 through 10 of this issue contain other letters and statements on research involving animals.)

**Honorary Degrees:** Dr. Peter Freyd described the two-stage selection process in which the campus committee, made up of faculty and students with a faculty majority, nominates only candidates from academia and the arts. It then forwards names to a trustee committee, which nominates in politics, business and other fields, and makes the final selection. While students questioned the breadth and diversity of overall results--charging a low percentage of women, minorities and third-world leaders--Dr. Freyd presented as the fundamental issue, "Should we have this committee at all?" and suggested that the perceived value of such degrees is based on an appearance of faculty recognition that is not borne out by the process. Trustees reserve control over honorary degrees, he said he was told, on the ground that faculty are "pretty much in charge of everything else" (earned degrees, faculty appointments, etc.). Undermining the perceived value as Dr. Freyd saw it were that fewer than half of the faculty choices receive the degree (some may decline, but confidentiality clouds analysis); that while faculty are held to the state board of education restriction on awarding degrees to one's own active members, and must wait a year or more after retirement to be eligible for nomination, half the Charter trustees have received honorary degrees; and while the campus committee this year met for two hours each week to deliberate on its portion of the nominations the trustee committee made the final decisions after conferring only an hour, by telephone.

**Campus Center:** After the Campus Center Advisory Committee's formal presentation (to

be published), Dr. Larry Gross said that after observing some 20 years' talk of bridging Walnut Street, with most plans anchoring on the Annenberg Plaza, he believes it has been found that the approach would be too short unless the bridge were steeply arched. He proposed that "37th Street is effectively no longer a street" and could provide a more gradual approach, adding that if the Faculty Club were incorporated into Campus Center planning, a bridge might be anchored there.

**Other Topics:** See page 2 for President Sheldon Hackney's announcements of staffing in community relations and budget planning, and see above the search committee on a new vice-provostship, announced by the Provost. Additions to public safety resources, commended at Council by both GAPSA and UA, are scheduled for publication next week.

## Fraternity Kidnapping Charges

The Office of the VPUL has confirmed that the JIO is investigating collective responsibility of Psi Upsilon (the Castle) as well as individual responsibility of its member Carlton Jackson and pledge Aaron Castellano, who were arrested February 9 and charged with kidnapping a member of Delta Psi (St. A's). According to *Daily Pennsylvanian* coverage the Castle men reportedly abducted the roommate of a St. A's man believed to have been involved in an earlier incident between the two houses. The District Attorney's office was reported to be considering charges against additional members of the Castle.

The two men arrested were released on \$3500 bail; a February 15 hearing was continued to March 7 when the students appeared without attorneys. Related charges include unlawful restraint, false imprisonment, reckless endangerment of another person, simple assault, and using terroristic threats.

## Community Relations...Budget Office Staffing



Cheryl Hopkins

Cheryl Hopkins of Purchasing has been named Director of Community Relations, the post vacated when James H. Robinson retired in June. Ms. Hopkins, a graduate of Douglass College at Rutgers with an economics major and a concentration in finance, joined Penn on graduation in 1984. As purchasing agent and coordinator of the unit's Small Business Program, Ms. Hopkins has spearheaded the "Buy West Philadelphia" initiative which President Sheldon Hackney called a "tremendous success...up from \$1 million four years ago to a goal of \$5 million this year—good for the economy, good for the neighborhood, and good for Penn."

Dr. Hackney also announced that a new post is to be created in his office, Director of Community Partnerships, to coordinate a growing number of cooperative ventures especially with the Philadelphia Schools. One

such venture, at Bartram-Cato, has been renamed by the School Board the Penn-Bartram Cato program, recognizing that about half of the "Say Yes to Education" students are now there (the rest in a number of schools) and Penn students tutor there daily. A new partnership just announced is the Penn-Pew College Access Program for Philadelphia high school students, with guidance and advising funded by the Pew Memorial Trust; Penn has undertaken to raise \$1 million for scholarship aid in conjunction with the program.

**Budget/Planning:** Two members of the Resource Planning and Budget Office—Assistant Director Joseph H. Grum and Senior Analyst Benjamin T. Hoyle—will share on an acting basis for the rest of this fiscal year the responsibilities formerly held by Glen R. Stine, who left to become vice president of the University of Colorado at Boulder.

## Statement of the VPUL on Suspension and Christopher Clemente

Section VII of the Student Judicial Charter gives the Vice Provost for University Life the authority and the responsibility to "suspend" a student temporarily pending a hearing in extraordinary circumstances when the student's presence on campus poses a threat to order, health, or safety.

A suspension used in this instance under the Charter is an administrative action, and appears on a student's record as an administrative leave of absence. It is not a punitive measure. It is not a sanction as the term is used elsewhere in the Charter, where it may be one of a possible series of sanctions available to a Hearing Board panel. Any decision about a student's permanent status under the Charter will be determined by an appropriately constituted Hearing Board panel.

This section provides authority that should never be undertaken lightly, nor used except in extraordinary cases where serious questions are raised about a student's presence on campus. Such questions were raised by the Philadelphia District Attorney's office and by our Department of Public Safety about Christopher Clemente's presence on campus when it seemed likely at the end of last week that he would be released on bail and, his lawyers have said, would return to campus.

According to documents which were given by law enforcement officials to the University,

Christopher Clemente has been indicted on ten felony charges. Six counts involve criminal possession of a controlled substance, three counts involve criminal possession of a weapon of which two are armed felonies, and one count involves criminally using drug paraphernalia. These are extremely serious charges; if he is convicted, they carry possible life sentences.

According to these documents, Mr. Clemente was arrested at an apartment in New York City shortly after midnight on January 10, 1990. A key to this apartment was on his key chain at the time of his arrest. Mr. Clemente was one of two people in the apartment from which police saw thrown from a window a bag containing what was identified to be 2200 vials of crack cocaine, a scale and a loaded 9 mm handgun. Additional guns, drugs and money were confiscated from the apartment. On January 11, a search warrant was issued for his apartment in Van Pelt College House. Among the items confiscated from his apartment and turned over to the District Attorney's office were a series of photographs of Christopher Clemente shown with an array of weapons which appear to be handguns, semiautomatic machine guns and automatic machine guns modified and threaded to accommodate a silencer. Some of these weapons appear similar to weapons that were confiscated from the apartment in New York.

Evidence of this familiarity with dangerous and illegal weapons together with the serious weapons and drug charges pending in New York and the information provided by the District Attorney are the basis for the administrative action I have taken on behalf of the University after considerable evaluation and personal soul-searching.

Christopher Clemente's innocence or guilt will be determined by the courts in New York. The decision regarding his presence on campus is a judgment call which was made after a review of the information we were given. His permanent status as a student should be determined by an appropriately constituted Hearing Board panel. Members of my staff have been and will continue to be available to help Christopher Clemente and his family in dealing with administrative matters pertaining to his enrollment at the University.

We are deeply concerned about Christopher Clemente and his family, and we are also deeply concerned about the welfare of the University community when the possibilities of danger must be considered. I hope that those who disagree with the action I have taken understand that it is taken with much personal anguish and with the belief that the safety of students, faculty and staff within the University community is of compelling importance.

—Kim M. Morrison, Vice Provost  
for University Life

## FROM COLLEGE HALL

## Numbers of Standing Faculty by Gender, School and Tenure Status

Here is the fourth in a series of data sets showing the gender and tenure composition of the standing faculty by school as of October 31, 1989. For comparison, the previous tables were published in *Almanac*, April 18, 1989.

—Richard C. Clelland,  
Deputy Provost

—Patricia Wilson,  
Assistant to the  
Deputy Provost

Number of Tenured Standing Faculty					Number of Standing Faculty				
School	Men	Women	Total	% Women	School	Men	Women	Total	% Women
Annenberg	9	2	11	18	Annenberg	9	2	11	18
Arts & Sciences	328	55	383	14	Arts & Sciences	410	84	494	17
Dental	40	1	41	2	Dental	48	3	51	6
Education	17	4	21	19	Education	19	8	27	30
Engineering	81	3	84	3	Engineering	101	7	108	6
Fine Arts	26	3	29	10	Fine Arts	30	5	35	14
Law	16	3	19	16	Law	20	7	27	26
Medicine	217	24	241	10	Medicine	666	138	804	17
Nursing	0	19	19	100	Nursing	0	46	46	100
Social Work	8	3	11	27	Social Work	10	6	16	37
Veterinary	67	5	72	7	Veterinary	92	15	107	14
Wharton	102	8	110	7	Wharton	164	12	176	7
Provost	1	2	3	67	Provost	1	2	3	67
	912	132	1044	13		1570	335	1905	18



## Death of Dr. Garfinkel

Dr. David Garfinkel, a pioneer in computer simulation who began as a biochemist and became a professor of computer science in the School of Engineering and Applied Science, died February 9 at the age of 59. A graduate with highest honors of the University of California at Berkeley, he took his Ph.D. in biochemistry from Harvard in 1955 and was a post-doctoral fellow at Penn from 1955 to 1957. After four years' research in biochemistry at the New York State Psychiatric Institute at Columbia University he returned to Penn as a research associate in biophysics, moving in 1963 to assistant professor and director of the Medical School Computer Facility. He was promoted to associate professor in 1965, and in 1972 moved to Engineering where he became full professor in 1977.

Publishing over 250 papers in his complex of disciplines, Dr. Garfinkel was known both for his basic biomedical research and for innovative systems for use in research and hospital settings. He was elected to the New York Academy of Sciences, to the board of the Bioengineering Society, and to numerous distinguished professional organizations and editorial boards.

Dr. Garfinkel is survived by his wife, Lilian Magid Garfinkel; daughters, Susan Laura (now a graduate student here), and Beth Diane, and a sister, Dorothy Sideman.

**Lewis Mumford**, the world-renowned philosopher, literary critic, historian, city planner and writer on architecture who taught at Penn in 1951-56 and again in 1959-61, died in his sleep on January 26 at the age of 94. After declining honorary degrees for many years, the emeritus professor of city planning had accepted the Penn's invitation to receive one at the centennial celebration of the Graduate School of Fine Arts this coming fall. In a career spanning nearly 70 years, Lewis Mumford had taught at the New School for Social Research, Columbia, Stanford and Dartmouth before joining Penn, and later taught also at MIT and Berkeley. He wrote some of the century's most influential and lasting books on cities, culture and the machine age, beginning with *The Story of Utopias* in 1922, through a four-volume series known as the *Renewal of Life* series (*Technics and Civilization*, *The Culture of Cities*, *The Condition of Man*, and *The Conduct of Life*) written between 1934 and 1951, to the 1961 *The City in History*, the 1967 *Technics and Human Development* and its 1971 companion volume, *The Pentagon of Power*--to name just a few of his 30 works. His New Yorker magazine column, "Sky Line," ran from the 'thirties through the 'fifties as a commentary on New York's growth and, in his view, overdevelopment. And he was actively involved in community and regional life, serving on the New York City Board of Higher Education and on the staff of the New York City and Regional Planning Commission, and cofounding the Regional Planning Association of America.

Among his many honors was his election as president of the American Academy of Arts and Letters, and the receipt of the National Medal of the Arts in 1986.

Mr. Mumford is survived by his wife, Sophia, a daughter, Alison and two grandchildren.

**Flora Colton**, a former head of the Reference Department of the University Library, died January 2 at the age of 72. Mrs. Colton earned an MLS at Drexel in 1944 and an MA in

Anthropology at Penn in 1955. As a Penn student, she began at the Reference Department in 1943; in 1952, she was appointed head of the department and directed it for the next 16 years. In 1968, she and her husband George, the head of Lippincott's Reference Department, moved to Chicago; he to the John Crerar Library, she to an ALA headquarters post. On retirement, they moved to Geigertown, Pa.

**Joseph A. Colantonio, Sr.**, former director of the Penn Band, died February 7 at the age of 69. A native of Philadelphia, Mr. Colantonio directed bands at several local schools and was the bandmaster for the Philadelphia Eagles "Sound of Brass". He is survived by his wife, Joan E. Conway Colantonio; sons, James, Michael and Anthony; two brothers; two sisters, and 10 grandchildren.

## OF RECORD

*The following changes to the Tax Deferred Annuity Plan (Retirement Plan for Monthly Paid Staff and Faculty) are effective March 1, 1990:*

### Cashability

At retirement an individual may take as cash up to 100% of balances in CREF, Vanguard and/or Calvert accounts derived from both University and individual contributions.

At separation (after five years of participation in the plan) an individual may take as cash up to 100% of the balances in CREF, Vanguard and/or Calvert accounts derived from their individual contributions. Balances which derive from University contributions are not cashable upon separation.

### Transferability

Participants may transfer 100% (only) of balances from a fund in one University approved retirement carrier directly to an approved fund offered by one of the other two approved University carriers. (Note: Currently, to avoid possible adverse tax implications, transfers must be 100% of accumulation in one fund deposited directly into the newly selected fund.)

### Parameters for Application of These New Features

All above apply to funds in Vanguard, Calvert and CREF. (TIAA policies only permit withdrawal of up to 10% of an account balance at retirement and have no provision for transfers out. No changes are expected for TIAA accumulations until mid-1991. Balances may be transferred into TIAA accounts.)

Policies for former employees will be the same as the policies in effect for current employees with respect to both University and individual contributions.

### Addition of New Funds

Two new CREF funds are available: The Social Choice Fund and the Bond Market fund.

Ten new Vanguard funds have been added for a total of twenty five choices.

*Effective March 1, 1990, the following are the approved funds for University of Pennsylvania Tax Deferred Annuity Plans:*

### The Vanguard Group of Investment Companies

#### Money Market

Vanguard Money Market Reserves  
Prime Portfolio  
Federal Portfolio  
U. S. Treasury Portfolio \*

#### Income

Vanguard Fixed Income Securities Fund  
Investment Grade Portfolio  
High Yield Portfolio  
GNMA Portfolio  
Short Term Bond Portfolio  
U. S. Treasury Bond Portfolio  
Short Term Government Bond \*  
Vanguard Bond Market Fund \*

Wellesley Income Fund

#### Balanced

Wellington Fund  
Vanguard Star Fund \*  
Convertible Securities Fund \*

#### Growth and Income

Windsor Fund  
Windsor II Fund \*  
Trustees Commingled Equity Fund  
U. S. Growth Portfolio  
International Growth Portfolio \*  
Vanguard Index Trust  
500 Portfolio \*  
W.L. Morgan Growth Fund  
Vanguard World Fund  
U. S. Portfolio  
International Growth Portfolio  
Primecap Fund \*  
Quantitative Portfolio\*  
Vanguard Equity Income Fund \*  
Vanguard Asset Allocation Fund \*

#### Aggressive Growth

Explorer Fund  
Vanguard Small Capitalization Stock Fund\*

### TIAA/CREF

#### TIAA

Diversified Portfolio

#### CREF

CREF Stock Account  
CREF Money Market Account  
CREF Social Choice\*\*  
CREF Bond Market \*\*

#### Calvert

Managed Growth Portfolio  
Money Market Portfolio

\* new funds available March 1, 1990

\*\*new account available March 1, 1990

Questions about these plans should be directed to the Benefits Office Ext. 8-7281.

--Adrienne S. Riley  
Director, Human Resources

--Dennis Mahoney  
Manager, Benefits

## PennLIN Users Please Note

Approximately 164,000 records for older Dewey classed materials in the Van Pelt and Fine Arts Libraries have now been loaded into PennLIN. These records are identified by the phrase, "Temporary PennLIN Catalog Record. Check Card Catalog For More Details". Because they have been transferred from two earlier generations of library circulation systems, these temporary records are often very brief, and contain a number of typos. In time they will be replaced by complete and accurate bibliographic records. In the meantime we ask users to check the card catalog for full details, and not to report typos and misspellings for temporary records. We do encourage you to report errors in any other PennLIN records. The Catalog Department is in the process of reviewing the database for errors, and welcomes your help in identifying these.

Please note that circulation status information is now available for many items in PennLIN. When a PennLIN record does not indicate circulation status, please ask a member of the Van Pelt or Lippincott Circulation Departments to check whether the item is charged out.

--Patricia E. Renfro  
Associate Director of Libraries

## Do You Have Diabetic Retinopathy?

Volunteers are sought for a six-month study of an experimental drug treatment for blood vessel abnormalities in diabetics by the Diabetes Adjuvant Treatment Study at the Hospital of the University of Pennsylvania.

--Volunteers receive expert medical care of their diabetes and expert eye evaluations at no cost.

--Must be between 21 and 55 years old and on insulin.

--No hypertension and no other major diabetic complication.

--Must not have previous laser treatment of retina.

For further information please call me at 662-2569.

--Peggy Van Antwerp, Nurse Coordinator  
Diabetes Adjuvant Treatment Study

# Speaking Out

## Questions on Equity Study

While you did not request direct feedback from us on the "Results of an Equity Study on Staff Salary and Promotion" (*Almanac*, January 23, 1990), this is written to share our dismay and discontent with the study and the results. This study was presented to us by Dr. Butterfield on the eve of its publication in *Almanac* (hardly sufficient time for us to respond before its publication).

Our discontent stems from the acknowledged and unacknowledged facts that prohibit this report from being viewed as "fair" and "acceptable." These facts and questions include:

1. The exclusion of ungraded positions (187). This could represent high-salaried or low-salaried positions. In any event, when factored out, it skews the analysis of equity. Why were they excluded?

2. The exclusion of positions with missing race codes (111). What effort could have been taken to produce this vital information? Why is it not available? At the very least, when factored out, it skews the analysis of equity.

3. The exclusion of union positions is another cause for concern. Some of these positions are skilled labor jobs from which persons of color and women are often excluded. Some of these positions, classified as A-4, have the same performance expectations of similar jobs classified as A-3. The exclusion of the union positions skews the full picture of pay equity across the board. How many union positions were excluded from the study? Their inclusion would have impact on the outcome in determining equity. If their exclusion was based on the fact of their being contract workers, coaches are also contract workers not excluded from the study.

4. In reviewing pay equity, a report on what this means in salary dollars is important. The percentages referred to in the report do not serve to respond to the employee who questions whether or not he/she is poorly paid, compared to salary ranges

within his/her category.

5. The report fails to give explanations for the exclusion of certain positions. It "was not feasible;" "were probably part-time employees and should be excluded;" were frequent phrases used without explanation. The absence of a clear explanation leaves us suspect.

6. Are reclassifications considered as promotions? When promotion is defined solely as "the assignment to a higher salary grade during the period," it may include reclassification. Reclassifications are made to correct or equalize. Promotions represent advancement. Was reclassification addressed in this study? There seems to be an assumption that employees are currently in the correct/just grade.

7. Why was such an important contract granted to a relative of a senior level administrator of the University? Could his/her participation in preparing this report be an influence (positively or negatively)? How was it insured that this administrator had no influence in the preparation of this report? At the least, there seems to be concern re: "conflict of interest."

8. According to the summary, "education was found to be an important variable in accounting for promotional differences." Lack of this data for more than 40 percent precluded use of "education" as a variable. Was any consideration given to the variable of "experience?" In job specification the phrase "education or equivalent experience" is used. Under these circumstances, the use of "equivalent experience" as a variable in determining equity, would have been seen as a fair and valid variable, along with education.

These questions/concerns have been ones raised by our constituencies. You may conclude from them that we find the report misleading. We continue to have our same questions on "pay equity" for employees here at the University, and call for more information, a different kind/model of collecting data, and a concrete plan of action" (including funds to rectify any pay inequities realized) to insure that all employees,

especially persons of color and women, receive both fair and equal consideration in salary and promotion. For the above stated reasons, we are convinced that the study is absolutely inadequate to the equity concerns of the University. Nor can we agree that the University "efforts over the years to minimize inappropriate pay and promotion differences are in general successful."

--Orneice Dorsey Leslie

AAA--A-1 Tri-Chairperson

--Jim Gray

AAA--A-3 Tri-Chairperson

--Peter B. Vaughan

AAA--A-2 Tri-Chairperson

--Elena M. DiLapi

Director, Penn Women's Center

--Adelaide M. Delluva

Chair, Women's Center Advisory Board

--Michelle M. Fine

President, WEOUP

## Response on Salary Study

Thank you for your questions and comments about the salary equity study. We will make every effort to further clarify the responses you have already received on several of the issues you raise.

When we commissioned the study, we recognized that there would inevitably be limitations in both its structure and scope. We saw it as an important next step in assuring equity in salary and promotion for all members of the Penn Community, especially persons of color and women.

The completed study represents a fruitful beginning. Though it is limited, it has identified a number of areas of concern that we are giving immediate attention, as outlined in *Almanac*, January 23. We have already received a number of questions from the community and suggestions that will help to strengthen future studies. We welcome further comment.

--Sheldon Hackney, President

--Michael Aiken, Provost

--Marna C. Whittington,

Senior Vice President

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



## Letters and Statements on the Break-in and Animals in Research

### Act on Outrage

We continue to be greatly disturbed by the break-in in the laboratory of our colleague, Professor A. Morrison, and the consequences of this act for biomedical investigators as well as the scholarly reputation of the whole University. A similarly disturbing act occurred a few days ago to two members of the Department of Psychology. In the given atmosphere, no investigator in biomedical sciences can feel secure to pursue his/her scholarly endeavor, directed to serve mankind, in spite of the fact that all legal requirements pertinent to the use of experimental animals have been met.

In order to support the faculty and discourage the perpetuation of such outrageous acts we now ask the Executive Officers of this University to:

1. Publicly state the importance of biomedical research (including the use of experimental animals) in the pursuit of basic knowledge and service to mankind; this research has to be carried out in compliance with legal and moral requirements pertaining to the use of experimental animals.

2. Announce a sizable reward for information leading to the apprehension of the perpetrator(s) of the break-in, followed by vigorous legal action against such person(s).

3. Make clear to the public that standing committees already exist at the University of Pennsylvania to review the proposed use of experimental animals in applications for research grants and train veterinarians to care for any animals and monitor their treatment.

--Robert E. Forster,

Chairman, Department of Physiology

--Arnost Kleinzeller,

Emeritus Professor of Physiology

--Sherwin Lee, Research

Assistant Professor of Physiology

--Margaret Price, Research Specialist

--Ronald F. Coburn,

Professor of Physiology

--Mortimer Civan,

Professor of Physiology

--Stephen Baylor,

Professor of Physiology

--Saul Winegrad,

Professor of Physiology

--George McCellan, Research

Assistant Professor of Physiology

--Andrea Weisberg,

Research Specialist in Physiology

--Martin Morad,

Professor of Physiology

--Carol Deutsch,

Professor of Physiology

--Henry Shuman, Research

Associate Professor of Physiology

--Susanna J. Dodgson, Research

Assistant Professor of Physiology

--Avinash Chandler Jerath, Research

Assistant Professor of Physiology

--Lars Cleeman, Research Associate

Professor of Physiology

--Martin Pring,

Associate Professor of Physiology

--Frank P. Brooks,

Professor of Physiology

--George J. Gerstein,

Professor of Physiology

### President Hackney replies:

Provost Aiken and I appreciate the expression by Professors Forster, Kleinzeller and their colleagues, and we welcome the opportu-

nity to restate in the firmest terms possible the University's support of faculty who have been targeted by animal rights extremists.

In addition to the statement we issued on January 15, 1990 following the break-in to Professor Adrian Morrison's office, the Administration conducted a news conference on February 2 to point to the significance of research utilizing animals and to restate our commitment to prosecute to the fullest extent possible the persons responsible for efforts to intimidate our faculty (see the texts starting on page 6). The need to inform the public about the issues we raised on February 2 is, in our view, very important. We will be active at various levels in educating the public about the value of research using animals.

On the issue of rewards, we continue to discuss the merits of the proposal and will consult with the community as our thinking moves forward.

### Indivisible Science

My colleague Professor Adrian Morrison has clearly and effectively recounted the benefits to human well-being arising from animal research and the almost catastrophic losses which could occur if this research were to be lost. There is also another aspect of the use of animals for research and that is the benefits to the animals, themselves. Today, in veterinary clinics, in pet owners' homes, in stables and farms and zoos, animals are spared the painful ravages of many diseases and the crippling effects of injury, by treatment based on modern medicine. How do these animal treatments and cures come about? Mainly, through research on animals--but surprisingly enough, many contributions to the successful treatment of animals are the result of "experimentation" on humans.

Ordinarily, in medical research, new drugs, forms of therapy, and surgical procedures are investigated using animal models. However, before these new findings can be applied to humans, they have to undergo clinical trials under carefully controlled conditions to establish doses that are safe, detect side effects, and compare the value of the new treatment to the existing ones. All of this is essentially a form of human experimentation, the outcome of which is to one degree or other unknown. In the past, application of new medical discoveries frequently awaited the completion of this clinical trial phase of "human experimentation." In any case, the benefits to animals in the way of curing their illnesses are essentially the same as those accruing to humans, both resulting from the more or less continuous interaction of research using animals and clinical trials on human beings. Examples of this interaction are numerous and can be found in the treatment of diseases, in supportive measures, in surgical procedures, etc. Chemotherapy of cancer, particularly in beloved household pets and in prize breeding animals, is a direct result of four decades of interacting animal and human research. The application of antibiotics to disease, of anesthetics to patient care, new laboratory procedures for diagnosis, new orthopedic and other surgical procedures, all reflect animal research followed by testing in the veterinary and human clinics before acceptance into medical practice.

All of this really reflects the overall unity of science and its relation to the unity of the animal kingdom. Knowledge gained in any part of the animal kingdom, or for that matter in any part of science, can be applied--frequently in an unanticipated fashion--to any other part of the animal kingdom or to any part of science. Science is indivisible and animal science and human science are equally indivisible.

Would the animal rights proponents choose to deny animals the benefits of medicine, leaving them instead to suffer, because relief was based in part on animal research? Would these same people oppose animal research intended to cure the AIDS epidemic in Africa or a rabies outbreak? Is it really a moral position to say that animals, domestic or wild, should be denied benefits to their health and well being because these benefits involved the experimentation on animals? Furthermore, who are these people to speak on behalf of animals, at least in such a biased and unbalanced manner?

--Robert Rutman, Professor Emeritus,  
Biochemistry and Molecular Biology

### Thanks for Support

Now that the dust has settled a bit after the break-in at my research facility, I have time to speak to the University community. I wish to express my thanks to my many friends and colleagues from all segments of the University who have supported me with words, supportive letters, and public actions. The Departments of Public Safety and University Relations have been just superb. Out of such a negative experience one learns who are his real friends, who are the real people of courage and conviction.

Several have noted my good fortune in working with a phenomenon in cats that has led to the recognition and successful treatment of a serious sleep disorder, REM Behavior Disorder. We have identified a similar syndrome in pet dogs and cats. But nature does not usually yield her secrets so easily, and the public must understand this. Lewis Thomas, M.D., President-Emeritus of the Memorial Sloan-Kettering Cancer Center in an essay in *Lives of a Cell* has said it best, I think:

"Everyone forgets how long and hard the work must be before the really important applications become applicable. The great contemporary achievement of modern medicine is the technology for controlling and preventing bacterial infection, but this did not fall into our laps with the appearance of penicillin and the sulfonamides. It had its beginnings in the final quarter of the last century, and decades of the most painstaking and demanding research were required before the etiology of pneumonia, scarlet fever, meningitis, and the rest could be worked out. Generations of energetic and imaginative investigators exhausted their whole lives on the problems. It overlooks a staggering amount of basic research to say that modern medicine began with the era of antibiotics."

The same can be said for any medical field. Sleep disorders present very real, serious problems to those afflicted. Much remains to be done to conquer those problems.

--Adrian R. Morrison, Professor and  
Head, Laboratories of Anatomy/Vet.

*As noted in the President's response to the first letter on page 5, the University of Pennsylvania News Bureau issued a series of statements at a press conference on February 2, beginning with an overview of the issues dividing animal researchers and animal rights organizations (below). Statements on the specific points 1 and 3 in the letter appear further below and on pages 7 and 8. All are unedited except for bracketed references. The press kit contained also a statement from the U.S. Department of Health and Human Services, published in Almanac February 6, page 1. An address Dr. Morrison gave to the AAAS on February 18 starts on page 9 of this issue. --Ed.*

## Philosophical Difference Separates University, Animal Rights Groups

The University of Pennsylvania has been the target of several actions by animal rights organizations in the last few weeks. The incidents began over the weekend of January 12, when a national underground group known as the Animal Liberation Front (ALF) informed Philadelphia news media that its members had broken into the office of Dr. Adrian Morrison.

Those incidents include a self-identified animal rights activist claiming responsibility for taking two research rats from a Penn psychology lab while he was employed there as a technician, a series of letters to area newspapers denouncing biomedical research in general involving animals at Penn, and the research of Dr. Morrison in particular, and a rally that People for the Ethical Treatment of Animals (PETA) is planning for [February 3] at Penn's School of Veterinary Medicine.

The animal rights actions against Penn reflect a national trend of actions by these groups intended to abolish all use of animals in research. Universities and their faculty members have become frequent targets. (See enclosed\* February 1990 article from *Washingtonian* magazine, "Beyond Cruelty.") "America's research universities have historically been the most productive source of advances in our understanding of human health and behavior," said Barry Cooperman, vice

provost for Research. (See "Penn Researchers Cite Human Benefits in Defense of Animal Experimentation." [published below].)

"Most of these advances simply would not have been possible without employing animals in the research," Cooperman continued. "Our commitment is to provide humane care for our research animals, and, to the maximum extent possible, minimize their pain or discomfort during the course of experimentation. We believe that the opportunity to improve the human condition justifies the use of laboratory animals."

"It is clear that many animal rights groups disagree with the position of national research universities and the federal and private agencies that support them on this point," Cooperman continued. "Nonetheless, we will continue our research in the belief that a vital part of a university's mission is to seek new knowledge that benefits human life."

As a national research university, Penn is the site of many biomedical, behavioral, and other scientific research projects that utilize laboratory animals. Last year the University received more than \$130 million in grants from federal, state and private sources for biomedical research alone. The approximate \$116 million in funding that came to Penn from the National Institutes of Health (NIH) makes Penn the 9th highest recipient of NIH grants in the nation. (See enclosed news release titled "University of Pennsylvania Among Nation's Leading Biomedical Research Universities." [page 8].)

All research involving animals at Penn must conform to the standards and regulations established by the federal government. Penn's Institutional Animal Care and Use Committee (IACUC) reviews every research and training project involving animals before the project begins. (See enclosed release titled "Committee Insures Humane Animal Use Policies.")

In addition, Penn's University Laboratory Animal Resource (ULAR) program insures responsible and humane care and treatment of all laboratory animals at the University. A staff of specially trained veterinarians, technicians, and technologists provide day-to-day care to the animals. ULAR's procedures adhere to guidelines established by NIH and the U.S. Department of Agriculture. (See enclosed news release titled "Program Cares for Laboratory Animals" [page 8].)

Dr. Morrison is a faculty member at the veterinary school who is an outspoken advocate of using animals in laboratory research. (See enclosed news release titled, "Penn Researcher's Work Advances Knowledge of Sleep Disorders.")

After the ALF break-in to Dr. Morrison's office, University President Sheldon Hackney and Provost Michael Aiken strongly denounced the action. "We want to condemn in the strongest terms the attempt to silence and intimidate Professor Adrian Morrison," they said. "Such tactics are abhorrent to all of us who cherish a free society and our right to express our opinions."

\* The article enclosed with the press kit is available from the News Bureau on request.

## Penn Researchers Cite Human Benefits in Defense of Animal Experimentation

Their stories have formed a long litany of hope: the young child undergoing a new surgical procedure to remove a malignant tumor, the 40-year-old father living and working with a transplanted heart, a woman able to attend her own college graduation because of successful chemotherapy treatments.

These medical miracles --and countless others from organ transplants to new pharmaceuticals --would have remained the musings of science fiction writers without the opportunity to test and refine scientific ideas on laboratory animals, according to many in the research community at the University of Pennsylvania and other institutions.

"There is simply no hope for the control and cure of major disorders that plague us, such as Alzheimer's disease, AIDS and addictions without animal research. The necessary calculations cannot be done in tissue cultures or in humans," said Alan Epstein, a behavioral neurobiologist at Penn's School of Medicine.

Epstein's most recent research involves studies that show deprivation of salt in the early

developmental stages of rats leads to increased cravings for salt in adults. Epstein said his work will directly benefit humans suffering from such diseases as high blood pressure. Methods for controlling salt cravings could lead to more effective treatments for other addictive disorders, such as alcohol and drug addiction, he said.

Another researcher, Adrian Morrison, D.V.M., Ph.D., an anatomy professor at Penn's School of Veterinary Medicine, has worked with cats to study sleep disorders. His research has led directly to treatment for REM behavior disorder, in which people fail to lose muscle tone during dreams (REM sleep) and thrash about, often in a violent and aggressive manner. This disorder can now be controlled by medication.

Morrison's work has also led to advances in understanding disorders such as sleep apnea, in which patients stop breathing for many seconds at a time throughout the night, sudden infant death syndrome (SIDS) and epilepsy.

"Everything we learn about how animals work leads someone (usually not ourselves)

eventually to why something goes wrong and how to correct it, to cure or alleviate the disease," Morrison said.

Morrison has said that basic biological research with animals is necessary but that the work must be humanely and competently performed.

"I relish the fact that my curiosity has fairly directly led to the alleviation of some human suffering. In spite of my three pet cats and general appreciation of animal needs, I still don't believe a rat or a cat is a child or a woman or a man," he said, reference to a statement made by Ingrid Newkirk, a co-director of the People for Ethical Treatment of Animals (PETA).

Newkirk has been quoted as saying: "I don't believe human beings have the 'right to life.' That's a supremacist perversion. A rat is a pig is a dog is a boy."

Other Penn researchers have made use of animal experiments to conduct preliminary trials of new treatments for diseases before testing on humans.

Penn neurologist A.M. Rostami led a team



of scientists who have developed a new treatment for multiple sclerosis (MS), a disease of the central nervous system believed to be caused by malfunctioning T-cells (immune cells). The new treatment, called extracorporeal photopheresis, involves removal of blood from patients with MS and treating T-cells so that the body's immune system recognizes the culprit cells as foreign and destroys them.

The photopheresis technique was extensively tested on laboratory rats before its trial on human patients this fall at the University of Pennsylvania Medical Center.

Michael Zasloff, a geneticist at Penn's Medical School, discovered a new class of antibiotics called Magainins through his experiments with African clawed frogs. Magainins have been shown to have infection-fighting ability superior to commonly used antibiotics such as penicillin.

The Foundation for Biomedical Research, a Washington, D.C.-based educational association that monitors developments in the use of laboratory animals and collects statistical information on the effects of animal research, the Foundation cites the following:

Without animal research

- \* Polio would kill or cripple thousands of unvaccinated children and adults this year.
- \* 7,500 newborns who develop jaundice each year would develop cerebral palsy, now preventable through phototherapy.
- \* Most of the nation's 500,000 insulin-dependent diabetics wouldn't be insulin-dependent. They would be dead.
- \* Many of the 200,000 individuals who benefited from coronary bypass surgery would not be alive.
- \* The U.S. would experience 1.5 million cases of rubella, over 400 times the current annual incidence of the disease.
- \* 50 million Americans would be at risk of death from heart attack, stroke of kidney failure from lack of medication to control high blood pressure.
- \* 100,000 arthritics who each year receive hip replacements would be confined to wheelchairs.
- \* Without cataract surgery, more than a million people this year would lose vision in at least one eye.
- \* Death would be a certainty for the 7,500 desperately ill patients who receive kidney transplants each year.

The Foundation also predicted the effects of halting or curtailing current animal research projects. They stated that without animal research

- \* New surgical procedures to repair congenital heart defects would have to be abandoned or tried for the first time on children.
- \* Developments of techniques that may help restore function to paralyzed victims of spinal cord injuries would stop.
- \* The 30,000 young Americans with cystic fibrosis would have little hope of a normal lifespan.
- \* The 250,000 people with multiple sclerosis would lose the promise of new treatments for the symptoms of this degenerative disease.
- \* Improvement of hearing through electronic stimulation of the inner ear might never benefit any of the 17 million hearing-impaired Americans.
- \* It would be too dangerous to test breakthrough products such as artificial blood, which shows promise of saving the lives of critically injured accident victims.

## Excerpts from Statements

*on the Burglary of the Office of Adrian Morrison, School of Veterinary Medicine (full copies may be obtained from the Office of News & Public Affairs, University of Pennsylvania, 215-898-8721)*

"These terrorist threats are designed to intimidate him (Morrison) because of the legitimate role he has taken in defense of the appropriate use of animals in research...Dr. Morrison, as a veterinarian, has been a major force behind the humane and ethical use of animals in biomedical research for the benefit of both humans and animals...He is a world authority on the nature of sleep and on the brain mechanisms that underlie it. He discovered in his animal research the phenomenon of rapid eye movement (REM), or deep sleep without atonia. As a result, this syndrome is now a recognized clinical disorder in humans."

--Robert Barchi, M.D., Ph.D., Director, Institute of Neurological Sciences

--Alan N. Epstein, M.D., Professor of Behavioral Neuroscience

--James M. Sprague, Ph.D.,

Leidy Professor of Anatomy

--Elliot Stellar, Ph.D., University Professor

Physiological Psychology

in Anatomy

University of Pennsylvania

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"Dr. Morrison's research on sleep in cats has directly led to the identification of the human Rapid Eye Movement (REM) Sleep Behavior Disorder, a condition associated with prominent, often violent and injurious, motor behavior during dream (REM) sleep. Importantly, this animal research led directly to a safe and highly effective treatment. In addition, his work on sleep and epilepsy in cats has extremely important clinical and therapeutic implications for the millions of Americans suffering from seizures...It is ironic that Dr. Morrison's office was targeted, as not only is he an internationally recognized researcher, but he is also actively involved in programs assuring human treatment of research animals."

--Mark W. Mahowald, M.D., Director, Minnesota Regional

Sleep Disorders Center

--Carlos H. Schenck, M.D.,

Department of Psychiatry

Hennepin County Medical Center

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"The most recent criminal acts against Professor Adrian Morrison's office and personal files...are another heinous offense against medicine and science by deluded individuals whose sole intent is to halt medical progress. The American Medical Association considers those persons terrorists who have no regard for human suffering and whose goal is the total elimination of biomedical research despite the cost to society."

--M. Roy Schwartz, M.D.,

Assistant Executive Vice President for Medical Education and Science for the

American Medical Association

## Incurably Ill for Animal Research (iiFAR)

iiFar is a national grassroots organization that seeks to educate the public about the crucial role laboratory animals play in medical science. Founded in the spring of 1985, iiFAR has over 2500 members, many of whom suffer currently incurable diseases such as AIDS, Alzheimer's, cancer, diabetes, hypertension, multiple sclerosis, muscular dystrophy, Parkinson's, among others.

Members share a conviction that they are alive today because of advances in medical and technical research--possible only through animal research--that have led doctors closer to understanding and treating their diseases. A growing number of healthy adults have also joined to express support for medical research that might spare their children and grandchildren from AIDS, heart disease, cancer and other deadly illnesses.

In 1985 Rick Simpson, severely debilitated from multiple sclerosis, was one of 80 patients who participated in an experimental drug therapy program that tested cyclosporine as an MS treatment. The drug had shown positive results in animal tests and although it was not found to cure MS, it seemed to slow the progression of the disease and sometimes effect a remission. Shortly after Simpson began treatment, PETA picketed the university where the study was conducted and called for an end to animal research. Simpson, who directly experiences the benefits of such research, called other patients to discuss forming a pro-animal research group. iiFAR was formed the next day.

## Penn Researcher's Work Advances Knowledge of Sleep Disorders

The office of Adrian R. Morrison, D.V.M., Ph.D., professor of anatomy at the University of Pennsylvania School of Veterinary Medicine, was broken into and vandalized sometime during the period of January 12-14. A group called the Animal Liberation Front claimed responsibility for the break-in.

Dr. Morrison, head of the Laboratories of Anatomy at Penn's Veterinary School, conducts sleep disorder research using cats. He is an authority on the nature of sleep and the brain mechanisms that underlie it, and has described changes that take place in the brain during sleep.

His research has led to information that may yield insights into disorders such as sleep apnea, in which patients stop breathing for many seconds at a time throughout the night, sudden infant death syndrome (SIDS) and epilepsy.

An estimated 7,000-8,000 infants die each year in the United States from SIDS, according to the National SIDS Foundation. Two hundred of those deaths occur in Pennsylvania, while 100 occur in the Philadelphia area.

The Association of Professional Sleep Societies estimates that as many as 20 million people suffer from sleep apnea. Sleep apnea has been connected with heart disease, hypertension, kidney disease and strokes.

Cats are good models for sleep studies because they undergo the same processes in REM

sleep as do humans. Cats also sleep frequently and for relatively long periods of time.

Morrison's research has focused on understanding the nature of REM sleep, the phase of sleep characterized by rapid eye movement. His studies have led to the discovery and subsequent treatment methods for REM behavior disorder, a recognized clinical disorder in which people fail to lose muscle tone in REM sleep and thrash about, acting out their dreams, often in an aggressive and dangerous manner. The disorder can now be controlled with medication. Morrison has also uncovered a similarly naturally-occurring disorder in pet dogs and cats.

Morrison has studied the aggressive aspects of this violent behavior in cats, which could lead to treatments for uncontrolled violent behavior that can occur during waking states. Such treatments could be applicable to humans as well as pet dogs and cats, who are sometimes euthanized by their owners if they exhibit aggressive behavior that cannot be controlled.

Morrison's studies into the nature of REM sleep are also directed toward discovering a treatment for narcolepsy, a sleep disorder in which those afflicted suddenly and without warning enter into REM sleep, or into a state of paralysis without loss of consciousness.

Morrison received his veterinary degree from Cornell University and a doctoral degree in anatomy from Penn. His research is being funded through the National Institutes of Mental Health (NIMH), where he has received the MERIT award, a long-term grant awarded in recognition of continued accomplishment.

Morrison received a Guggenheim Fellowship in 1984, and has served as a visiting professor at the Nencki Institute in Warsaw and at the University of Mexico. He is currently chairman of the committee on animals and research of the Society for Neurosciences, and is secretary general of the World Federation of Sleep Disorders.

## Committee Ensures Humane Animal Use Policies

The University of Pennsylvania's Institutional Animal Care and Use Committee (IACUC) is responsible to the Vice Provost for Research for oversight of all animal care and use at the University, and reviews all research and training projects utilizing animals. All such projects require Committee approval prior to initiation. The Committee has the power to suspend, if the circumstances warrant, any research project involving animals.

The Committee has a total of 16 members appointed by the president of the University. They include scientists, physicians, veterinarians, technical staff experienced in animal research and one or more non-scientists from outside the University. The entire membership meets twice monthly to review research proposals. In addition, the Committee inspects all animal facilities semi-annually and makes recommendations to the Vice Provost for necessary corrections or improvements.

## Program Cares For Laboratory Animals

The University Laboratory Animal Resource (ULAR) program is responsible for the care and treatment of all laboratory animals used in research at Penn. Specially trained veterinarians, technicians and technologists administer day-to-day care to the animals.

More than 90 percent of animals used in research at Penn are rodents. Other animals include rabbits, amphibians, domestic farm animals, dogs and cats and non-human primates.

ULAR adheres to guidelines for the care and treatment of laboratory animals established by the National Institutes of Health (NIH) and the U.S. Department of Agriculture. On-site inspections from NIH can occur at any time, while USDA inspections occur at least

In evaluating research proposals, the Committee follows the U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research and Training, as well as the National Institutes of Health "Guide for the Care and Use of Laboratory Animals." The Committee asks such questions as: Does the proposal call for the minimum number of animals necessary for valid results? Have the researchers considered non-animal alternatives, where possible? Is pain or distress avoided or alleviated by the proper use of analgesics, anesthetics and sedatives? Are all personnel working with animals appropriately qualified and trained? Will the animals receive necessary veterinary care?

The University adheres to the rules and regulations presented in the Federal Animal Welfare Act, which stipulates how research animals must be cared for. The law is enforced through an inspection program administered by the U.S. Department of Agriculture.

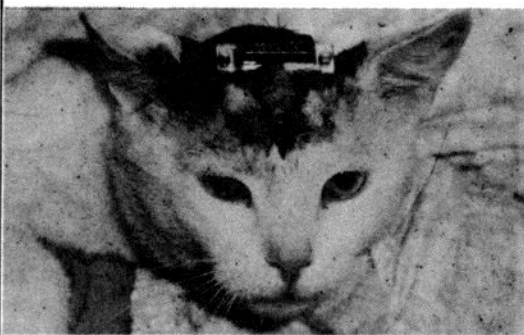
twice a year.

An attending veterinarian for each school directs the animal care and use program in that school and collaborates with faculty who use animals in their work. These veterinarians are specialists in laboratory animal medicine, oversee all animal care and use, and have authority to discontinue any experiment in which they feel proper animal care and use is lacking.

ULAR spends approximately \$1.6 million each year on animal care. Researchers who are approved to use animals pay daily charges that cover the costs of housing, food, water, sanitation and other services. Since 1985, the University has spent nearly \$18 million to renovate, equip and build new animal laboratories and holding and care facilities.

This PETA ad ran in *The Daily Pennsylvanian* on January 25. The cat pictured here is not an animal from Penn research laboratories. Please be advised that photographs provided by PETA may not depict Penn laboratory animals or facilities.  
[Caption by the News Bureau]

## Blow The Whistle On Animal Abuse At Penn



**PETA**

People for the Ethical Treatment of Animals  
P.O. Box 42516, Washington, DC 20015  
(301) 770-7444

Confidentiality assured.  
Animals have no voice but yours.

## University of Pennsylvania Among Nation's Leading Biomedical Research Institutes

The University of Pennsylvania received over \$130 million in grants from federal, state and private sources for biomedical research during fiscal year 1989.

The major portion of this funding, about \$116 million, came from the National Institutes of Health (NIH) of the Department of Health and Human Services. This makes Penn the 9th highest recipient of NIH grants from among more than 100 research institutions.

The remaining funding, about \$14 million, was received from other federal sources, including \$1.5 million from the National Science Foundation, and grants from private foundations and industry. The state of Pennsylvania awarded Penn \$3 million for biomedical research during this period.



## The Importance of Animals for Basic Biomedical Research

Dr. Adrian R. Morrison

The need to discuss the importance of basic biological research using animals today is real, if ludicrous. Although the study of life obviously requires the living, in today's climate of vigorous--and vicious--animal rights activism, biologists and medical scientists are being forced to an unusual degree to defend not only their research with living animals, but even their use of dead animals for teaching. Things have even come to such a pass that the small animal clinic at my own veterinary school can no longer obtain blood to treat sick dogs and cats from animals being euthanized at a local shelter, thanks to the efforts of animal rights activists.

In this paper, I first wish to offer my thoughts on reasons why we must be here today. Then, I shall discuss the nature of basic research. I shall next describe a trap we have been led into in trying to defend ourselves and shall conclude with an example from my own work that will illustrate some of my arguments.

Why is the animal rights movement, on the surface at least, so strong today? [I say "on the surface" because when polled on their support for using animals in biomedical research most Americans vote affirmatively.] I believe that the reasons are: first, that animal rights activists, even physicians and veterinarians among them, are willing to lie or stage photographs or doctor videotapes to promote their cause; secondly, the media has been willing to present this news uncritically for its sensationalism; and thirdly, a scientifically untrained Congress and public believe what they hear and see most often--the distortions presented by the animal rights activists.

The last is the real problem in my opinion. It is the compassionate, but untrained public who react to the distortions depicted in the media by contributing to the coffers of the activists and writing the letters to public officials at their behest. These well-meaning people must be assured that basic biological research is both necessary and humanely and competently performed. It is not Peter Singer's oft-touted book, *Animal Liberation*, that has harmed us most; that book merely provided a rallying point for the activists willing to say, "a rat is a pig is a dog is a boy" or "six million Jews died in concentration camps, but six billion broiler chickens will die this year in slaughterhouses." How many rational and honest Americans do you think would accept those beliefs? However, the activists' other claims of routine torture in laboratories and the media's acceptance of those claims have convinced too many of the citizenry that there may be too much shoddy, unnecessary research causing too many animals to suffer needlessly, even if the activists have not convinced the public that a rat is equal to a boy.

Why has the public been so easily duped? Well, viewing photographs or videotapes of surgical procedures or the results of other experimental procedures (or diseases in humans for that matter) is disturbing to non-medically trained individuals anyway; but when the photographs are staged or the videotapes are trickily edited as the activists have done, the public can easily be revolted and turned against us. Even accurate (a rarity in the activists' literature) written descriptions of experimental procedures are not pleasant to the general reader, but neither are descriptions of naturally occurring disease or injury processes in humans or animals. A choice must be made by society though. Do we continue seeking to understand through experimentation or do we acquiesce to the whims of Nature?

A major problem is that the public really does not have much training in science, let alone understanding of how scientists work. For example, if one does not understand why replication of earlier experiments by others is desirable to verify the generality of the conclusions, it is easy to be misled into believing that a piece of research is "redundant," that a researcher has wasted animal lives by doing something that someone

else has already reported. Often, of course, such replications are performed with the benefit of newly developed, more powerful techniques or new insights.

Another problem is a lack of appreciation of what really motivates scientists. H. L. Mencken described it one way in a piece entitled "The Scientist," originally published in 1919: "The value the world sets upon motives is often grossly unjust and inaccurate. Consider, for example, two of them: mere insatiable curiosity and the desire to do good. The latter is put high above the former, and yet it is the former that moves one of the most useful men the human race has yet produced: the scientific investigator. What actually urges him on is not some brummagem idea of Service, but a boundless, almost pathological thirst to penetrate the unknown, to uncover the secret, to find out what has not been found out before. His prototype is not the liberator releasing slaves, the good Samaritan lifting up the fallen, but a dog sniffing tremendously at an infinite series of rat-holes." As he often did, Mencken overstated the case. We scientists *do* rejoice at the thought that we contribute to societal welfare; nevertheless, we *are* insatiably curious. I argue, though, that our curiosity has immensely benefitted both animals and humans.

Doing science is not the well-structured process that we were taught about in our ninth-grade general science classes. The truly innovative science is much more intuitive; it involves a lot of creativity. The scientist is much closer to the artist than most realize. A scientific experiment requires planning as does the creation of a sculpture from marble; but, as is the case with art, it also must proceed reasonably unfettered. It is our difficult task as scientists, then, to convince the public that allowing us to nose around "an infinite series of rat-holes" is appropriate, even if it means the use and deaths of animals and that many of those "rat-holes" will contain no reward.

The "rat-holes" in Mencken's somewhat inelegant metaphor are, of course, the hypotheses that a scientist proposes to explain various natural phenomena. They are not trivial; for no intelligent, expensively trained individual wishes to devote his life to the inconsequential. It is silly to believe so--as the animal rights activists would like the public to think. Even if not trivial, though, an hypothesis may well turn out to be wrong. Indeed, that is the fate of a great many (most, probably) hypotheses; but it is just as important to learn what is not so as it is to know what is true.

Even if correct, the hypothesis is very unlikely to lead to an immediate cure or even understanding of a disease. But everything we learn about how animals work eventually leads someone (usually not ourselves) to why something goes wrong in the body and how to correct it, to cure or alleviate the disease. Dr. Lewis Thomas, President Emeritus of the Memorial Sloan-Kettering Cancer Institute stated this very well in *The Lives of a Cell*. He wrote, "Everyone forgets how long and hard the work must be before the really important applications become applicable. The great contemporary achievement of modern medicine is the technology for controlling and preventing bacterial infection, but this did not fall into our laps with the appearance of penicillin and the sulfonamides. It had its beginnings in the final quarter of the last century, and decades of the most painstaking and demanding research were required before the etiology of pneumonia, scarlet fever, meningitis, and the rest could be worked out. Generations of energetic and imaginative investigators exhausted their whole lives on the problem. It overlooks a staggering amount of basic research to say that modern medicine began with the era of antibiotics."

This brings me to the trap I referred to earlier, one that the animal rights activists gleefully spring at every opportunity. When a scientist

has been attacked and the defamations begin to mount, those colleagues familiar with his work will quickly (one hopes!) leap to his defense and correctly refer to the relevance of his findings to a particular malady. We have been conditioned to think this way, of course, by many years of writing grant applications that demand a statement of relevance to a medical problem. Our statements are true, of course, but most often in the sense described by Lewis Thomas. The activists have not read Thomas or would gladly ignore him if they did; for their response is to trot out a captive physician with the requisite medical specialty, who is willing to ignore that he took the Oath of Hippocrates to do no harm to his patients and state that the scientist's work has no immediate application and, therefore, no worth. There is actually a society composed of such "physicians!" Our task as biomedical scientists is obvious but not easy. We simply must state over and over again in various ways and in different forums the essential truth expressed by Thomas. We should be willing to state boldly that creative basic research with no immediately perceived benefit is proper and, indeed, necessary and state that the history of medicine is on our side.

Let me finish my remarks by trying to give them a concreteness with an example from my own work on the neurophysiology of sleep. It is an example of basic work that played a major role in leading to the recognition of a dangerous and debilitating sleep disorder. What is relevant here, though, is that the experiments I performed were initiated with a different purpose entirely.

I study a fascinating phenomenon: rapid eye movement (REM) sleep, the phase of sleep when we dream and one of the great mysteries of today. All mammals have REM sleep. I use cats because their sleep is like that of humans; there is a vast amount of information available on the functioning of their nervous systems; and we must explore even single nerve cells deep within the brain to understand its workings in sleep, something obviously not readily done in humans. My particular interest is understanding how the muscle paralysis that accompanies REM sleep is generated. Each time we sleep, we humans and our pet dogs and cats are paralyzed during each of several REM periods for

many minutes at a stretch because the spinal nerve cells causing the body musculature to contract are inactivated. Fortunately, the heart and diaphragm muscles keep contracting.

Remarkably, the paralysis of REM sleep can be eliminated by a small amount of damage in a particular part of the lower brain, the pons. Following experimentally placed lesions, cats will engage in very elaborate behaviors, including walking and predatory-like attack, whenever they enter REM sleep. Our work and that of Professor Jouvet of France, the initial discoverer of REM sleep without paralysis, has recently led Drs. Schenk and Mahowald in Minneapolis to recognize a similar syndrome in humans called REM Behavior Disorder. Among other things, it had to be distinguished from epilepsy or psychotic episodes. Humans, usually older men, act out their dreams, frequently injuring themselves or their bed partner. Fortunately, medication will prevent such episodes. We have, incidentally, discovered a similar syndrome in pet dogs and cats that we have published in the *Journal of the American Veterinary Medical Association*.

The point I wish to make is that we stumbled on REM sleep without paralysis because Jouvet had initially thought he had eliminated REM sleep by damaging the pons. We wished to replicate that finding and then to study certain aspects of "REM-less" cats. We soon realized that what Jouvet had really done was to create the condition of REM sleep without paralysis, not recognizing at the time the true import of his discovery, perfectly reasonable when one is at the frontier of a new research area. Thus, REM Behavior Disorder was eventually discovered because I was initially intrigued by the idea of doing away with REM sleep and studying the consequences for cat behavior, at the time just an interesting "rat-hole."

I do wish to end, however, by noting that even though I firmly believe I am best left to sniff freely but responsibly at any rat-hole striking my fancy, I still relish the fact that my curiosity has fairly directly led to the alleviation of some human suffering. Furthermore, in spite of my three pet cats and general appreciation of animal needs, I could never believe a rat or a cat is a child or a woman or a man.

## Nassau Fund Awards: Twenty Winners in 1990

The Nassau Fund Faculty Advisory Committee and the Council of Undergraduate Deans have completed their selections for the 1989-1990 Nassau Fund.

This year, forty-nine proposals were reviewed by the Committee and forwarded to the Council of Undergraduate Deans. The Council approved for funding twenty proposals. They are as follows:

Eva C. Beyer, "The Effects of Exposure to Lethal Temperatures on Egg Survivorship and Development Rate in Two Species of Lizards, *Sceloporus merriami* and *Urosaurus ornatus*."

Su-Yin Bundgaard, "Eduard Steichen: His Contribution to the Idea of Tonalism and the Relevant Comparison of His Photography to Painting."

George T. Chou, "Active Stereovision."

Jacob K. Cogan, "Petitioning in Early America: An Insight into the Development of Political Behavior in Four States, 1750-1800."

Lichuan Fang, "Control of Phrenic Motor Neurons and Somatic Motor Neurons Mediated by Differences in Receptor Distributions."

Angela S. Glisan, "Chemical Analysis of Components Involved in Primate Scent Communication: Steroids and Protein-Bound Odorants."

Michael S. Hanson, "The Political Economy of State Budgetary Policies."

Christopher S. Law, "The Effects of Protease Inhibitors on the Expression of Specific Oncogenes in Radiation Transformed Cells and the Hamster Cheek Pouch."

Mary M. McManus, "The Cognitive Development Representational Systems."

Kathleen Nicoll, "Analysis of Inactive Spring Deposits as a

Base for Paleoclimatologic Interpretation: Recognition and Location of Fossil-Spring Travertine Using Satellite Images of the Kharga Oasis, Western Desert, Egypt."

Matthew H. Olins, "The Study of the Development of Pocomania and Myalism in Jamaica."

Marianne P. Pavlovitz, "A Comparative Analysis of the Care of Elderly with Hip Fractures Insured by Either Medicare, Medicaid or Private Health Insurance."

Mondhipa Ratnarathorn, "Stably Transfected Cell Lines with Specific Thyroid Hormone Receptors."

Andrea Stern, "Efficient and Equitable Food to the Needy."

Toan Tran, "Analysis of Fiber Sensor in Degraded Motor Oil."

Courtney Tuttle, "The Development of Credit in France in the Nineteenth Century."

Katherine Whitney, "Drinking in Shikoko: The Photographic Context."

Joseph A. Yanez, "Plzt via Spray Pyrolysis."

Christopher Yoo and David Elfenbein, "The Purification and Characterization of RNA Duplex Unwinding/Modifying Activity."

Adam D. Zoia, "The Borderlands as Policy Vis a Vis the Soviet Economy and the Ethnic Question."

The funding distribution is as follows: fourteen proposals from the College of Arts and Sciences; three proposals from the School of Engineering and Applied Science; two proposals from the Wharton School and one proposal from the School of Nursing. Unfortunately, twenty-nine proposals were not able to be funded.

-- Doris Gonzales, Office of the VPUL



## To the University Community:

# Volunteers Needed for Committee Service

Dear Colleague:

Once again the Committee on Committees begins its work with an invitation to the faculty and administrative staff to nominate themselves for service on University committees.

We will be spending most of the spring term assembling lists of prospective members who are most interested in and most qualified for service on the 14 key committees listed here. They are the advisory bodies that will help shape academic/administrative policy, administer certain all-University projects, such as honorary degrees and long-term disability, and assist operations, such as the Book Store and Libraries, to be of greater service to the campus.

To make our committees effective we need to consider the largest possible pool of candidates with the broadest range of experience and viewpoints. We encourage faculty and staff who have not previously participated to volunteer so that we can have an appropriate blend of new ideas and experience.

Before submitting your name you may wish to have a better understanding of the work being done by a particular committee. One way to obtain such information is by reviewing the committee reports which have been published in *Almanac* (see November 29, 1988 issue).

Except where noted, all of the committees listed here are open to both faculty and staff. We plan to submit our recommended committee member lists to the Steering Committee in May. In order that we may meet this deadline we ask you to make your nominations by February 23.

### The 1990 Committee on Committees

Sol H. Goodgal (microbiology/med)  
 Laura L. Hayman (nursing)  
 John A. Lepore (civil systems/engr)  
 Vicki Mahaffey (English), *chair*  
 Ann E. Mayer (legal studies)  
 Susan Moss (Col '91)  
 Russell Muth (neurol/med--A-3 Assembly)  
 Almarin Phillips (chair-elect, Faculty Senate)  
 C. Eli Pringle (GAS)  
 Joyce M. Randolph (international programs)  
 Jack E. Reece (history)

## Committees and Their Work

**Book Store Committee** considers the purposes of a university bookstore and advises the director on policies, developments, and operations.

**Communications Committee** has cognizance over the University's communications and public relations activities.

**Community Relations Committee** advises on the relationship of the University to the surrounding community.

**\*Disability Board** continually evaluates the disability plan, monitors its operation, and oversees the processing of applications for benefits and the review of existing disability cases.

**Facilities Committee** keeps under review the planning and operation of the University's physical plant and all associated services.

**\*Honorary Degrees Committee** does most of its work, intensively, during the fall term; solicits recommendations for honorary degrees from faculty and students and submits nominations to the Trustees.

**\*International Programs Committee** is advisory to the director of international programs in such areas as international student services, foreign fellowships and studies abroad, exchange programs, and cooperative undertakings with foreign universities.

**Library Committee** is advisory to the director of libraries on policies, development and operations.

**Personnel Benefits Committee** deals with the benefits programs for all University personnel. Special expertise in personnel, insurance, taxes or law is often helpful.

**Recreation and Intercollegiate Athletics Committee** has cognizance of all programs in recreation, intramural and club sports, and intercollegiate athletics; advises the athletic director on operations and recommends changes in policy when appropriate.

**Safety and Security Committee** considers and recommends the means to improve safety and security on the campus.

**Student Affairs Committee** has cognizance of the conditions and rules of undergraduate and graduate student life on campus.

**Student Fulbright Awards Committee** evaluates applications from graduating seniors and graduate students and makes recommendations to the Institute of International Education, which awards Fulbright grants on behalf of the State Department; all of its work is done, intensively, in October.

**Undergraduate Admissions and Financial Aid Committee** has cognizance over undergraduate recruiting, admissions, and financial aid matters that concern the University as a whole but are not the specific responsibility of individual faculties.

\* Open to faculty only. One or more administrators serve as liaison to most of these committees.

Mail to: Committee on Committees, Office of the Secretary, 121 College Hall/6382

Committee \_\_\_\_\_  
 Candidate \_\_\_\_\_  
 Title or Position \_\_\_\_\_  
 Campus Address \_\_\_\_\_

Committee \_\_\_\_\_  
 Candidate \_\_\_\_\_  
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Committee \_\_\_\_\_  
 Candidate \_\_\_\_\_  
 Title or Position \_\_\_\_\_  
 Campus Address \_\_\_\_\_

# Update

FEBRUARY AT PENN

## CONFERENCES

**23 Women in Scholarship: There Are No Limits;** seventh annual national graduate women's studies conference; Registration 5 p.m., Myerson Hall. To register call, 222-7776 (Women's Studies Program). Through February 25.

## FITNESS AND LEARNING

**21 Self-Defense Clinics;** Loren Lalli; noon-1 p.m., Smith-Penniman Room, 2nd floor, Houston Hall. Registration: Ext. 8-4481 (Public Safety and Victim Support and Security Services). Also February 22.

**27 How to Get the Most Out of the University Libraries;** 10 a.m.-noon, Room 502, East Wing, Van Pelt Library. Registration: Ext. 8-7091.

## MUSIC

**21 Organ Recital;** Hans Uwe Hielscher, organist,

Wiesbaden Cathedral; 12:05-12:35 p.m., Irvine Auditorium (Curtis Organ Restoration Society).

**22 Bases Loaded!** Penn Glee Club's 128th annual production; Alumni Society sponsored show on the 23rd; 8 p.m., Zellerbach Theatre. Information: Ext. 8-6791 (Penn Glee Club) Through February 24.

**24 Mask and Wig Show;** family day; 1 p.m., Clubhouse, 310 S. Quince Street. Reservations and information: Ext. 8-7811 (Alumni Relations).

**25 Great Black Music: Ancient to the Future; The Art Ensemble of Chicago;** 8 p.m., Annenberg Center. Tickets: Ext. 8-6791 (Relache, Annenberg Center).

## ON STAGE

**24 Salon De La Mer, Featuring: The Well of Horniness;** 9 p.m., Christian Association Auditorium. Reservations: Ext. 8-6791 (The Women's Theatre Festival At Penn).

**25 On The Road Gender-Bending at Penn: A Black Woman's Perspective;** Anna Devere Smith; 8 p.m., Room 17, Logan Hall. Reservations: Ext. 8-6791 (The Women's Theatre Festival At Penn).

## TALKS

**21 The Penn Tutoring Center... Here and Now;** Rhonda Frederick, assistant director, Penn Tutoring Center; 7 p.m., Kings Court/English House. Information: 3-7277 (Kings Court/English House).

**22 Oral Tradition in Work, Ritual and Play: Examples from Uganda;** Zebiya Rigby; 10:45 a.m., Classroom II, University Museum. Reservations and information: Ext. 8-9092 (Membership Office and the Women's Committee of the University Museum).

**23 Intercellular Communication Mediated by VIP in the Cerebral Cortex;** Pierre Magistretti, University of Lausanne Medical School; 11 a.m., Pharmacology Seminar Room, Mezzanine Suite 100-101, John Morgan Building (Department of Pharmacology).

**Hormonal and Developmental Regulation of SP-A Gene Expression in Fetal Lung;** Carole Mendelsohn, biochemistry and ob/gyn, UT Health Science Center, Dallas; 12:15 p.m., Seminar Room, ground level, John Morgan Building (Institute for Environmental Med).

**Towards the "Complex Universe": Breaking Out of the Closed Systems Paradigm in IR Theory;** Joydeep Bhattacharya, political science; 3 p.m., Anspach Lounge, 1st floor, Stiteler Hall (Departments of Political Science and International Relations).

**26 You and Your Aging Skin;** Nancy Reilly of surgical nursing; 12:30-1:30 p.m., Ralston-Penn Center, 3615 Chestnut. Reservations: 662-2746 (Center for Study of Aging and Research & Training, Center for Rehabilitation of Elderly Disabled Individuals).

**27 "Islamic" Reason, "Western" Reason: A Critical Evaluation;** Mohammed Arkoun, University of Paris (Sorbonne); 5 p.m., Lower Egyptian Gallery, University Museum (Leon Lecture Series, School of Arts and Sciences and Middle East Center).

**Swim...Don't Sink! Exam Preparation;** Sue Newman, director, URIS; 7 p.m., Kings Court/English House. Information: Ext. 3-7277.

## Department of Public Safety

This report contains tallies of part 1 crimes, a listing of part 1 crimes against persons, and summaries of part 1 crime in the five busiest sectors on campus where two or more incidents were reported between February 12, 1990, and February 18, 1990.

**Total:** Crimes Against Persons-2, Thefts-30, Burglaries-1, Attempted Thefts of Auto-1, Thefts of Auto-1.

Date	Time Reported	Location	Incident
<b>Crimes Against Persons:</b>			
02/13/90	6:00 PM	Lot 13	Cash taken from attendant, suspect fled
02/14/90	12:36 PM	3700-blk Walnut	Person attacked, jaw broken/male fled
<b>34th to 36th; Locust to Walnut</b>			
02/12/90	3:49 PM	Van Pelt Library	Unattended wallet & contents
02/13/90	6:36 PM	Van Pelt Library	Unattended wallet & contents
02/13/90	10:02 PM	Van Pelt Library	Unattended wallet & contents
02/13/90	11:03 PM	Van Pelt Library	Unattended wallet & contents
02/15/90	9:00 PM	Van Pelt Library	Unattended wallet & contents
02/17/90	4:26 PM	Van Pelt Library	Unattended wallet & contents
<b>34th to 36th; Spruce to Locust</b>			
02/12/90	2:47 PM	Houston Hall	Metal ladder taken
02/12/90	9:11 PM	Houston Hall	Unattended purse taken
02/13/90	4:41 PM	Houston Hall	Unattended tape recorder taken
02/14/90	7:46 PM	200-blk 36th	Purse tkn/recovrdr/actor fled
02/15/90	3:06 PM	Houston Hall	Cash tkn fr unattended coat
<b>37th to 38th; Spruce to Locust</b>			
02/12/90	3:12 PM	McNeil Building	Unattended wallet taken
02/13/90	4:33 PM	Vance Hall	Unattended wallet taken
02/14/90	12:33 PM	Vance Hall	Unattended wallet taken
02/16/90	3:12 PM	McNeil Building	Unattended wallet taken
02/16/90	10:41 PM	McNeil Building	Unattended wallet taken
<b>36th to 37th; Spruce to Locust</b>			
02/15/90	4:35 PM	Steinbrg/Dietrich	Unattended backpack taken
02/16/90	11:34 PM	Steinbrg/Dietrich	Unattended wallet taken
02/15/90	4:35 PM	Steinbrg/Dietrich	Wallet taken from backpack
<b>37th to 38th; Locust to Walnut</b>			
02/13/90	2:12 PM	Bookstore	Unattended bag fr atop lkrs
02/13/90	3:35 PM	Bookstore	Unattended backpack fr atop lkrs
02/14/90	12:36 PM	3700-blk Walnut	See crimes against person entry

**Safety Tip:** Engrave all of your valuables with your own identifying number to deter burglars and help return property if stolen. Most burglars will pass up taking your valuables if they know you have them engraved. Valuables engraved are difficult to sell or pawn.

## 18th Police District

Schuylkill River to 49th Street, Market Street to Woodland Avenue  
Reported crimes against persons from 12:01 AM February 5, 1990 to February 11, 1990.

**Total:** 17 Incidents, 1 Arrest

Date	Time	Location	Offense/Weapon	Arrest
02/07/90	12:35 PM	4618 Chester	Robbery/strong-arm	No
02/07/90	6:51 PM	110 S. 42	Robbery/knife	No
02/07/90	8:07 PM	4514 Locust	Robbery/knife	Yes
02/08/90	1:55 AM	4400 Baltimore	Robbery/gun	No
02/08/90	4:02 PM	4857 Chestnut	Robbery/shotgun	No
02/09/90	1:51 AM	4314 Locust	Robbery/strong-arm	No
02/09/90	10:41 AM	4600 Hazel	Robbery/strong-arm	No
02/10/90	12:52 AM	4251 Sansom	Robbery/strong-arm	No
02/10/90	3:51 AM	206 S. 46	Robbery/gun	No
02/10/90	3:51 AM	206 S. 46	Robbery/gun	No
02/10/90	3:51 AM	206 S. 46	Robbery/gun	No
02/10/90	3:51 AM	206 S. 46	Robbery/gun	No
02/10/90	5:30 PM	4800 Woodland	Robbery/strong-arm	No
02/10/90	10:00 PM	4201 Walnut	Robbery/gun	No
02/10/90	11:06 PM	1210 S. 45	Robbery/knife	No
02/10/90	11:25 PM	3900 Sansom	Robbery/strong-arm	No

## Almanac

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