Penn's Faculty—
Keeping Alive the
Spirit of Discovery
Throughout their long and distinguished history, Penn faculty have exemplified the spirit of discovery . . . creativity . . . intellectual leadership. James Wilson (far left), one of the six original Supreme Court justices and a signer of both the Declaration of Independence and the Constitution, organized Penn's law department and delivered the first law lectures in the Federalist period. Alexander Dallas Bache (middle left), professor of natural philosophy and chemistry, was a founder and first president of the National Academy of Sciences and also served as superintendent of the United States Coast Survey from 1843 to 1867. When Emily Lovira Gregory (middle right) became a teaching fellow of biology at Penn in 1888, she was not only the first woman to teach here, but one of the first female scholars to teach anywhere in the universities of the late nineteenth-century. The legacy of Louis I. Kahn (far right) and his pioneering contributions to architecture lives on at Penn in the famed Alfred Newton Richards Medical Research Building, dedicated in 1961 and considered one of the most important constructions in post-World War II America.

Statutory Officers

President
  Sheldon Hackney
Provost
  Thomas Ehrlich
Senior Vice President
  Helen B. O’Bannon
Vice Presidents
  John M. Anderson
  Thomas W. Langfitt
  Ross A. Webber
  Marna C. Whittington
Secretary
  Mary Ann Meyers
Treasurer
  Frank E. Claus
Comptroller
  Alfred E. Beers
General Counsel
  Shelley Z. Green
There are many criteria by which to measure excellence at a university: the achievements of its students and alumni, the coherence and rigor of its academic programs, the breadth of its facilities, the size of its budget, and numerous others. But what is the essential element of a great university, without which it could not survive?

The quality of a university begins with its faculty, who are the standard by which it is ultimately judged. That is why any efforts to strengthen and ensure the continued quality of a university must ultimately focus on its faculty. The faculty, as the saying goes, are the university.

At Penn today, this truism carries more weight than ever. In the next decade, there will be relatively few retirements from our faculty. In the years after 1995, however, the pace of retirements will accelerate to the point where replenishing our faculty with appointments of the same high calibre will be much more difficult.

We need to do everything we can today to ensure the continued excellence of Penn's faculty into the next century. That means working now to attract and to retain the very best scholars, scientists, and teachers, and to provide them with the facilities and support services they need to remain at the forefront of the search for new knowledge in their fields.

Penn has maintained its status as a great university over a long period of time because it has been continually energized over the years with a steady infusion of extraordinarily talented people. The glowing intellectual health that we currently enjoy is testimony to this proud tradition, a tradition that must be perpetuated for our future.

Sheldon Hackney
A Special Place for Creative People

"Let such teach others who themselves excel..."

Alexander Pope

Penn is a special place. There is a spirit that thrives in our intellectual community, a spirit of inquiry and invention. Penn people are motivated to excel—in their disciplines and in their lives.

At the center of this community is a select group of scholars—the faculty of Penn. Through their teaching, opinions, discoveries, and accomplishments, these men and women set the tone of excellence for our University.

University faculty are the modern stewards of learning and culture, much as the great scholars of Renaissance Europe were in their own time. The spirit of discovery that inspired Copernicus, Michelangelo, and da Vinci lives today in the scholars and scientists who work and teach at institutions such as Penn.

Today, we still reap the benefits of Renaissance inventions... movable type, the mechanical clock, the adding machine, the telescope... that produced an explosion of knowledge and broadened the world. And in the contemporary university, new breakthroughs carry on this tradition of development and discovery. ENIAC, the first large-scale, all-purpose, electronic digital computer developed at the Moore School of Engineering, created an industry and changed the world. "Quasicrystals," a new form of matter recently proposed by two Penn physicists, offer the promise of new materials with a wealth of remarkable structural and electronic properties.

Throughout Penn's history, our faculty have been the pioneers whose advancement of knowledge in many fields—science, arts and letters, and the professions has made our University a place where creativity can flourish.

Faculty—A National Resource

The faculties of our major universities are a national resource. As with many of our vital resources, however, the supply of outstanding faculty is not without limit. This fund of capability must continually be built anew. Thus, as 1986 draws to a close, we at Penn—along with the other leading universities of this country—find ourselves at a critical juncture. After 1995, we will see the retirement of many of the distinguished scholars and scientists who joined university faculties during the 1950s and 1960s.

Since I outlined a strategy for strengthening the quality of our undergraduate education three years ago, we have demonstrated that we have the will and

Renaissance painters and sculptors such as Leonardo da Vinci rediscovered the natural beauty of the human form.

Small ships such as this took the great explorers of the 1400s and 1500s on their epic voyages to the Americas and the Indies.

Francis Bacon (1561-1626) outlined an exact system of the natural sciences based on observation and experiment.
the ability as a university to make focused investments for the future. The time has come for us to focus on the most important investment of all—our faculty.

As we begin to seek the talented scholars and scientists who will carry the Penn tradition of excellence into the next century, it is worth examining just what makes our faculty so special. What is it that has moved them to answer the calling of university faculty? Why do Penn faculty choose to come here, and why do they stay? What sort of people do we need to preserve the character of this select group?

Some of the answers can be found in the following pages, in which some of the many exceptional individuals who comprise our faculty are profiled. I hope that, by reading about their experiences and sharing their opinions and perspectives, we will increase our appreciation of just how special a place Penn is.

A Tradition of Innovation

"This is the university that added to its traditional curriculum such subjects as applied mathematics, foreign languages, political science, and economics—all very new at the time. This is the university that introduced multidisciplinary education well before the term was even invented. This is the university that established the country's first school of medicine, then realized that theory could not be separated from practice and consequently developed the system of the teaching hospital now in general use. For all of these reasons, the University of Pennsylvania has been a true pioneer, and as we look back today, it is virtually impossible for us to estimate the contributions this institution has made to free intellectual development."

M. Valéry Giscard d'Estaing

These remarks, made ten years ago by the President of France as he received an honorary doctorate from Penn, say a lot about the character of our faculty—the individuals most responsible for making Penn what it is. For almost two-and-a-half centuries, Penn's faculty have set a standard for scholarship in an atmosphere of intellectual curiosity and creativity.

Penn became the nation's first university in 1765, when John Morgan founded America's first school for the theory and practice of medicine and launched a tradition of pioneering in the arts of healing. It was one of Hippocrates' precepts that, "Healing is a matter of time, but it is also sometimes a matter of opportunity."

From Benjamin Rush's pioneering 1813 treatise on mental illness, Medical Inquiries and Observations Upon the Diseases of the Mind, to the fundamental discoveries in kidney function by Alfred Newton Richards in the 1920s, to the development in 1977 of the contemporary vaccine for pneumococcal pneumonia by Robert Austrian—outstanding physicians in our
School of Medicine have never stopped seeking opportunities for healing.

These are specially talented and motivated people who approach their calling from a variety of perspectives. “The creative process attracted me to plastic surgery,” says Dr. Linton Whitaker, a specialist in plastic and reconstructive surgery at the Hospital of the University of Pennsylvania, “I've always been interested in art and aesthetics and wanted to be a surgeon for as long as I can remember.”

Many of our medical faculty are stimulated by the opportunity to pass on their knowledge and experience to a new generation of physicians. “Teaching (is) what makes my life different from that of many physicians,” notes Dr. Leonard Perloff, prominent vascular and transplant surgery specialist. “I have the luxury of associating with students and residents. I can extend myself beyond my fingers by teaching.”

Since the first course in medicine for dental students was offered here in 1932, the faculty of our School of Dental Medicine have contributed their own legacy of innovation and discovery. Just this year, a new research technique called “protein engineering” was developed to study the molecular structure of the herpes organism. Results of these studies could hold the clue to developing an effective vaccine against herpes virus.

The Wharton School, founded in 1881 as the first collegiate school of business, has been at the forefront of economic and social thought. The groundbreaking theories of Simon Nelson Patten in the late nineteenth century, which conflicted with classical doctrine and heralded Keynesian economics, brought the United States into the mainstream of the developing social sciences—with Penn as a focal point.

In 1980, Lawrence Klein, Benjamin Franklin Professor in both the Wharton School and the School of Arts and Sciences, won the Nobel Prize for his work in econometric forecasting. This mathematical approach to economic modeling allows models to be built of entire economies, and simulations performed on them.

“More young Americans than ever are choosing to make business training a substantial part of their college educations,” notes Marion Oliver, associate dean at the Wharton School. “As the most selective program in the country, Wharton is presented with both a heavy responsibility and, at the same time, a burgeoning opportunity.”

**Cultivating the Intellectual Individualist**

In reviewing President Giscard d'Estaing's com-
ments on Penn’s pioneering tradition, I found his final phrase, “free intellectual development,” to be particularly appropriate. Just as a university is only as great as its faculty, its faculty can achieve their true potential only if the university provides the resources they need in an environment of intellectual freedom.

History is replete with examples of brilliant individuals whose discoveries and perceptions were suppressed by the intellectual or political climate in which they lived and worked. Galileo, for example, was condemned by the Inquisition for demonstrating the Copernican theory of a sun-centered solar system. Even today, in modern democracies, the individual initiative of intellectual pioneers can be discouraged by the “bottom line” structures of a profit-oriented economy. To institutions such as ours falls the responsibility of providing a nurturing environment for the intellectual individualist whose theories or methods may be unorthodox. Penn has a long and proud tradition of celebrating the individual, of providing a supportive environment for promising, albeit unconventional, ideas.

Penn’s faculty are accustomed to using their own entrepreneurial energies to find ways of accomplishing what they want to do, and exploring what they want to explore. The history of our faculty is full of intellectual individualists who, allowed to pursue their work as they saw fit, produced an extraordinary body of new knowledge: the first American book on botany in 1768 by Benjamin Smith Barton; the establishment of the first psychological laboratory in the U.S. by James McKean Cattell in 1887; the landmark treatise on racial segregation (Reflections on Segregation, Desegregation, Power, and Morals) by Penn’s first tenured black professor, William T. Fontaine, in 1967. Time and again, Penn’s philosophy of encouraging creative faculty to “do their own thing” has paid handsome dividends for the University—and society.

The opportunity to do his own thing brought robotics pioneer Richard Paul to our School of Engineering and Applied Science last year as a professor of computer and information science. Working in private industry was depressing, he says, because of the constrictions it placed on his work. At Penn, Paul has found “the right environment” for what he wants to do. He calls it “Ivy League Robotics”—the development of “smart” robots. Referring to the more than 8,500 industrial robots currently in use as “little more than one-armed mechanical manipulators,” Paul defines smart robots as intelligent machines that can sense, adjust to, and manipulate their environment.

Robert Hare, who invented the oxyhydrogen blowtorch in 1801, made a cannon for demonstrating the explosiveness of hydrogen and oxygen that was used in University chemistry classes for many years.

This mechanical planetarium was commissioned by the College of Philadelphia in 1771 from professor of astronomy David Rittenhouse.
Because of the University’s programs in cognitive science and artificial intelligence, he says, Penn’s robotics laboratory is uniquely capable of concentrating on the development of smart robots. A native of Australia, Professor Paul has definite opinions about his work and its consequences. “Just throwing people out of a job without any concern is obviously a very bad thing to do,” he says, “but if a society considers where automation is going to be needed, (automation) can be very useful—not just in where it’s going to make the most economic profit, which is a blind, stupid way of doing anything.”

Penn not only encourages its faculty to follow their own intellectual curiosity, it also provides an atmosphere in which professional development can take place as a scholar’s or scientist’s interests coalesce.

“Professional development . . . requires exploration,” says Frank Furstenberg, professor of sociology and a nationally known expert on divorce, teenage pregnancy, and other matters relating to the family. “It is necessary to tolerate a certain amount of aimless wandering and false starts in the course of intellectual adventures.”

**Sustaining the Humanist Tradition**

“Life must be lived forwards, but it can only be understood backwards,”

*Søren Kierkegaard*

Faculty who teach the humanities at institutions such as Penn assume a very special role in society. They are the stewards of ideas, the wardens of our history of human thought and relations. “Humanists . . . seem to me obliged by their profession to see the human past as the rich and mysterious matrix of human knowledge and activity,” writes David J. DeLaura, professor of English.

“Humanistic study . . . is inevitably committed to the notion that the past is worth knowing for its own sake.” Since our first provost, William Smith, laid the foundations of the modern liberal arts curriculum more than two hundred years ago, study of the humanities has been the cornerstone of a Penn education.

In the pragmatic atmosphere of the 1980s, students often speak of their desire for an education that will teach them a specific set of skills they feel they need for a high-paying job. When they enter the working world, however, they will eventually move out of a particular job or narrow specialty. Then, they will need broader skills, such as flexibility, judgement, and the ability to manage time, effort, and emotional input, to succeed on higher levels.

“This University,” said Provost Thomas Ehrlich in an address to the class of 1990, “offers an extraordinary range of opportunities.

**Alexander Dallas Bache, professor of natural philosophy and chemistry at Penn, became superintendent of the United States Coast Survey from 1843 to 1867.**

**Joseph Leidy, professor of anatomy, was the first to identify Trichina spiralis as the source of trichinosis in man.**
to develop the habits of inquiry that are the hallmark of the educated woman or man.” By providing students with a wide-ranging humanistic view of the ideas inherited from the past, our liberal arts faculty help them attain the perspective and resourcefulness needed to adapt to new realities in an ever-changing world.

“Literature,” writes Professor DeLaura, “and indeed the liberal arts as a whole are the very basis of self-understanding in our culture. . . .” One of the goals of anthropology, according to professor Alan Mann, “is to further our understanding of who we are and how we got this way.” Bruce Kuklick, professor of history, refers to his discipline as “a form of self-knowledge: it tells us about ourselves, who we are, who we are not. For example, if we study revolution in ancient Rome, we may be interested not only in the peculiar qualities of Roman slave life, but also in the nature of institutions like slavery and feelings of rebelliousness that . . . are part of the human condition.”

The responsibility of stretching young minds to develop the habits of inquiry of which Provost Ehrlich spoke is a great challenge that can also be its own reward. Jeffrey Tigay, associate professor of Hebrew and Semitic languages and literatures, expresses it thus: “Among the greatest lifelong gifts a teacher can give is a sense of how to draw inferences from evidence, how to go from facts to judgements and decisions—in short, how to think critically. The recognition of what the subject matter and the methodology together could contribute to students freed me to follow my heart into a career of research and teaching.”

Stimulating Interdisciplinary Study

In a society increasingly prone to career specialization, the University provides a haven for those interested in working toward new perspectives and understanding via a broad-based approach that combines a number of disciplines. Penn has always provided an atmosphere of cross-disciplinary conversation in which faculty can utilize the vast resources of a major university to make new discoveries in established disciplines—or even start new fields of study. The growing number of for-
mal interdisciplinary programs at Penn reflects the joining together of faculty to pursue shared interests from a variety of perspectives.

Nancy Farriss, professor of history and 1986 MacArthur Fellow, conducted research in several disciplines (including archival, archeological, and ethnographic studies) for her award-winning book, *Maya Society Under Colonial Rule: The Collective Enterprise of Survival.* Farriss cites Penn’s Ethnohistory program, an interdisciplinary program for graduate and undergraduate students that draws on faculty from History, Anthropology, and other departments, as “the most profound influence on my work.”

Larry Gross came to Penn in 1968 when he heard that the Annenberg School of Communications was looking for a “social psychologist with unorthodox interests.” Gross, now a professor of communications, discovered that the Annenberg School provided the climate he needed to “move away from the confines of orthodoxy in social psychology and develop a broader interdisciplinary approach to the study of the arts and symbolic behavior in general.” Professor Gross helped develop, and is now chair of, Penn’s undergraduate inter-school major in Communications, which began in 1975.

“Communications has been described as a crossroad where many disciplines meet,” he says. “The faculty and program of the Annenberg School reflect and support a wide variety of approaches, research methods, and theoretical traditions . . . . We are united in the belief that a better understanding of the nature and processes of communication is one of the keys to the full employment of human potential.”

Emily Lovira Gregory became the first woman to teach on Penn’s faculty when she took the position of teaching fellow in the department of biology in 1888.

Norman Adler, professor of psychology, is founder and chair of the Biological Basis of Behavior Program, an important new area of interdisciplinary study begun at Penn. Adler recalls that he was “turned on by the idea of applying the concepts of biology to behavior” when he first studied biology in high school. He was drawn to our faculty by “the presence of others who shared my enthusiasm for a broad-based study of behavior and the existence of an administrative and academic structure which would allow such a program to be developed.” Adler discovered

The discovery in the 1930s by Penn biologist David Goddard that protein structures can be broken down and reformed into new configurations led to, among other things, the “permanent wave” in hairstyling.
that the University already had the resources in place for the new field of study. “Penn is an unusual community,” he notes, “because the relevant components (college, medical school, veterinary school, and engineering) are located on the same physical campus. Also, there is a tradition here of interdisciplinary courses of study.”

Interdisciplinary study is at the core of what makes Penn’s School of Nursing one of the best in the country. Since nursing training began here one hundred years ago, nursing has evolved into a profession with a broad scope and vast and varied responsibilities. “Now more than ever,” notes associate professor Diane O. McGivern, “the nurse must have a humanizing and edifying education. The opportunity to combine liberal arts and sciences with the direct care of people of all ages in settings as diverse as neonatal intensive care units and corporate employee health services makes . . . the School of Nursing exciting.”

Penn’s School of Nursing, founded in 1935, is the only one among Ivy League institutions to offer baccalaureate, master’s, and doctoral degrees.

Putting Theory into Practice

“How different is theory from practice! So many people understand things well, but . . . do not know how to put them into practice! The knowledge of such men is useless . . . like having treasure stored in a chest without ever being able to take it out.”

This quotation from sixteenth-century historian and statesman, Francesco Guicciardini, is used by James Larkin to illustrate the relationship between theory and practice so essential to his own discipline, education. Dr. Larkin, an associate professor in the Graduate School of Education, describes it as, “a field where a body of developing knowledge is continually tested and informed by practice.” Putting this knowledge to use in society, he says, is what brings the “psychic rewards of teaching (that) make it an inviting and noble profession. These come from experiences like helping a five-year-old begin to read . . . or helping a sixteen-year-old discover the world of literature.”

As an invaluable national resource of learning and scholarship, the faculty of leading universities such as Penn have the opportunity and the responsibility to put their abilities to use for the enrichment of society.

The Alfred Newton Richards Medical Research Building, designed by professor of architecture, Louis I. Kahn, set a standard in its treatment of space and structural techniques.

The introduction of the first large-scale, all-purpose, electronic digital computer, ENIAC, at the Moore School of Engineering in 1946 marked the dawn of the computer age.
Penn's School of Social Work was created seventy-five years ago to serve the Philadelphia community, and its faculty have long been a voice of social consciousness among the deans and schools of our campus, keeping us all aware of our responsibilities as part of a larger community. "We shall continue," says Dean Michael Austin, "to build bridges of collaboration with agencies and foundations in the community and the region."

Robert Mundheim, dean of the Law School and former general counsel to the U.S. Department of the Treasury, was awarded the Department's highest honor, the Alexander Hamilton award, for his role in negotiating the freedom of the American hostages during the 1980-1981 Iranian hostage crisis. An internationally known scholar in corporate law and securities regulation, Professor Mundheim also co-authored the freeze of Iranian assets during the hostage crisis as well as the Chrysler Corporation federal loan guarantees.

William Labov, professor of linguistics and a founder of Penn's nationally respected Linguistics Laboratory, provided critical testimony that freed a man wrongfully accused of phoning bomb threats to Los Angeles International Airport. The man, an air cargo handler for a major airline, was acquitted on the basis of linguistic evidence supplied by Professor Labov which demonstrated conclusively that the voice on the tape recordings of the bomb threats could not have belonged to the accused.

Ralph Brinster, professor of reproductive physiology at the School of Veterinary Medicine, has been pioneering the use of gene transplantation in animals to unravel the mysteries of how genes are expressed throughout their development. Aside from its potential for enhancing the quality, productivity, and disease-resistance of com-

---

**Quotation of the Day**

_— Professor Erie Leichty, co-editor of the world's first Sumerian dictionary._

_The work of Penn biologist Andrew S. Binns in regenerating tobacco plants from isolated cells has provided an important step toward genetically engineered crops._
commercial livestock, this transgenic technology may also revolutionize scientists' understanding of genetic processes and genetically-based diseases in humans, including cancer.

At the Graduate School of Fine Arts, architecture chairperson, Adele Santos, is leading the way in the application of her discipline to the "real world," as she calls it. "I have a very strong feeling," she says, "that the problems we tackle in school must have some kind of basis in reality. I want my students to be aware of the dimensions of the world they live in... For example, the global housing problem is mind-boggling. And we must deal with issues of energy and conservation." A firm believer that her students can play an important role in solving the community's housing and urban design problems, Professor Santos recently became involved with a student design project in a blighted section of North Philadelphia. "I came up with the notion," she explains, "that there was a way to take the unemployment and the vacant land in this part of the city and turn them into something positive."

By putting their special knowledge and expertise into practice, the faculty of leading universities are in a unique position to reap the "psychic rewards" of which James Larkin speaks. University faculty can even shape the perspectives through which society views important issues, as when our School of Veterinary Medicine led the way this year in developing a new sensitivity toward the treatment of animals by establishing the nation's first professorship in Human Ethics and Animal Welfare.

The faculty of a great university are leaders—in the classroom, on the campus, in society. It requires a very special place to provide the scholarly resources, the intellectual stimulation, and the interactive environment they must have to reach their full potential. As we commit to recruiting Penn's faculty of the future, we also renew our commitment to maintaining this University as a place where talented scholars can freely develop and explore their intellectual curiosity and creativity.
In Recognition of Their Accomplishments...

Penn's faculty continued to set a standard of excellence in 1986, as reflected by the following list of awards and fellowships:

John Simon Guggenheim Fellowships
- Paul Allison, Associate Professor of Sociology
- Frank Bowman, Professor of Romance Languages
- Drew Faust, Associate Professor of American Civilization
- Germán Gullón, Professor of Romance Languages
- Thomas Hughes, Professor of History and Sociology of Science
- Gerald S. Lazarus, Professor and Chair of Dermatology
- Marjorie Levinson, Associate Professor of English
- E. Ward Plummer, Professor of Physics
- Janice Rudway, Associate Professor of American Civilization
- Gillian Sankoff, Professor of Linguistics
- Robert Zurier, Professor of Medicine and Chief of Rheumatology at the Hospital of the University of Pennsylvania

MacArthur Fellowships
- Nancy Farriss, Professor of History
- David Rudovsky, Visiting Associate Professor of Law
- Leo Steinberg, Benjamin Franklin Professor of Art History

Presidential Young Investigator
- Patrick Harker, Stephen M. Feek Term Assistant Professor of Decision Sciences

Fulbright Scholars
- Setha Low, Associate Professor of Anthropology
- Jack Nagel, Associate Professor of Political Science

Photography/Illustration Credits:
- Front Cover: Andris/Hendrickson
- Pgs. 2-3: Bettmann Archive (except Benjamin Franklin—University of Pennsylvania Archives)
- Pgs. 4-5: University of Pennsylvania Archives (except cannon—Bettmann Archive)
- Pgs. 6-7: University of Pennsylvania Archives
- Pgs. 8-9: University of Pennsylvania Archives (except nursing photo, used courtesy of the School of Nursing)
- Pgs. 10-11: Rosemary Certo, Pennsylvania Gazette (Andrew Binns); the University Museum (Sumerian quotation); C.F. Peters Corp (score from Makro Kronos); the Daily Pennsylvania (Drew Faust); Robin Miller (Ruzena Bajcsy); Hospital at the University of Pennsylvania (X-ray photo)
# Financial Report
for the year ended June 30, 1986
University of Pennsylvania

## Table of Contents

<table>
<thead>
<tr>
<th>Page</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>A Message from the Vice President for Finance</td>
</tr>
<tr>
<td>16</td>
<td>Five Years of Financial Performance</td>
</tr>
<tr>
<td>17</td>
<td>A Five-Year Review of Current Funds</td>
</tr>
<tr>
<td>18</td>
<td>A Five-Year Review of Investments</td>
</tr>
<tr>
<td>20</td>
<td>Associated Investments Fund Balance Sheet</td>
</tr>
<tr>
<td>21</td>
<td>Associated Investments Fund Statement of Income</td>
</tr>
<tr>
<td>22</td>
<td>Management Responsibility for Financial Statements</td>
</tr>
<tr>
<td>23</td>
<td>Report of Independent Certified Public Accountants</td>
</tr>
<tr>
<td>24</td>
<td>Balance Sheet</td>
</tr>
<tr>
<td>26</td>
<td>Statement of Changes in Fund Balances</td>
</tr>
<tr>
<td>28</td>
<td>Statement of Current Funds Revenues, Expenditures, and Other Changes</td>
</tr>
<tr>
<td>29</td>
<td>Notes to Financial Statements</td>
</tr>
<tr>
<td>33</td>
<td>Trustees of the University of Pennsylvania</td>
</tr>
</tbody>
</table>
A Message from the Vice President for Finance

Overview

The University of Pennsylvania was founded in 1740 as a charity school for the purpose of instructing poor children for free. It was initially located in a single building at 4th and Arch Streets in Philadelphia.

Penn has made substantial achievements since its modest beginnings in 1740. The University is now the largest private employer in Philadelphia and occupies 726 acres and 116 buildings in West Philadelphia. The replacement value of the physical plant is over $2 billion and the annual operating expenditures are in excess of $800 million. The University has made a significant commitment to capital investment in its academic, research, and clinical facilities. Over $250 million of new construction and renovation are currently underway on campus.

Fiscal Year 1986 was the 11th consecutive year that the University had an excess of revenues over expenditures from unrestricted operations. Both the Educational and General and Health Services operations had positive operating results. During FY 86, the fund balances of the University increased $149 million—the largest increase in its history. The total fund balance of the University as of June 30, 1986 is $1.1 billion.

This was a particularly important financial year for the University because, in addition to the positive operating results and important capital investments in the University, long-term financial commitments supporting the University-wide five-year planning process were put in place.

In 1981, the University community began a series of discussions that led to the publication of Choosing Penn's Future. Choosing Penn's Future committed the University to a comprehensive planning process that has resulted in a clear definition of the University's priorities and has guided investments in educational and research programs. The three priorities defined in the planning process were: undergraduate education, research excellence, and student financial aid and assistance.

The Undergraduate Education Fund was established in FY 86 to provide support for the development and implementation of initiatives to enhance the undergraduate experience at Penn over the next five years.

During FY 86, a new Research Facilities Development Fund in the amount of $2 million was provided from unrestricted operations for laboratory and other research-related renovations. The University intends to fund this program annually from its unrestricted operations.

Both of these funds represent the allocation of current unrestricted resources toward the support of priorities developed and embraced by the entire University community. The resolve and commitment shown in the creation and implementation of these funds is key to the continuation of the outstanding progress made by the University of Pennsylvania.

Current Operations

Total current funds revenues generated by the University of Pennsylvania from all sources were $848.6 million during FY 86. This represents a 10.3% growth over FY 85 revenues. Revenue from tuition and fees increased 9.6% over FY 85 and continued to provide over 22.5% of the current funds revenues of the University. The University has experienced an increase in the quantity and quality of applicants, at both the undergraduate and graduate levels, over the last several years. It expects this trend to continue and, as a result, expects no erosion in its tuition and fee revenues for the foreseeable future.

Health Services revenues for the University are comprised of the revenue from the Hospital of the University of Pennsylvania, a 700-bed tertiary care facility located on campus, and the clinical patient services revenue of the 1,100 medical school faculty and house staff who practice medicine on behalf of the University. In FY 86, revenues from the Hospital increased 8.5%, while clinical practice revenues increased 14.0%. The Health Services revenues continued to provide approximately 40% of the total operating revenues of the University of Pennsylvania.

During FY 86, grant support from the Federal Government increased 11.8% over FY 85. The University has an excellent research faculty that continues to compete well in attracting funds from the government for its research efforts. This source provided 15.4% of the FY 86 operating revenues.

Health Services operations, student tuition and fees, and U.S. Government grants provide over 76% of the operating revenue of the University. Growth in all three sources of revenue was strong despite the distinct pressures each faced, such as efforts on the part of third party payers to control health care costs, a shrinking pool of college age students, and increasing government efforts to reduce the funding for indirect and direct costs of government research.
Investments and Endowment

The University’s Endowment and Similar Funds consist of true, term, and quasi-endowment funds along with life income, annuity, and unitrust funds. During the past fiscal year the balances of these funds increased from $373.9 million to $447.7 million. This $74 million increase consists of realized gains of $40 million and additions to endowment of $34 million (new gifts and reinvestment of income into endowment principal).

As indicated in a Five-Year Review of Investments on pages 18 and 19, the market value of the University’s total endowment has increased from $218 million at June 30, 1982 to $540 million at June 30, 1986. According to the most recent study by the National Association of College and University Business Officers (NACUBO), the University’s endowment is among the 20 largest in the country.

Most of the University’s true, term, and quasi-endowment is invested in the Associated Investments Fund (AIF), a unitized pooled investment fund which as of June 30, 1986 was valued at $462 million.

The AIF is managed, together with all other University investments, by the Investment Board of the Trustees of the University of Pennsylvania. The performance of the AIF, as reflected by the chart and graph on page 20, has been excellent. Recent NACUBO studies indicate that the University’s AIF performance has ranked in the top 5% of all university endowment funds over the most recent three- and five-year periods.

In FY 81, the Trustees implemented a spending rule for the AIF in order to protect the endowment against the effects of inflation. During FY 86, $11 million or 38% of total AIF income earned was reinvested. Since the inception of the spending rule policy, $45.6 million has been reinvested, which represents over 9% of the AIF’s market value at June 30, 1986.

The outstanding investment performance of the AIF, together with the implementation of the spending rule, has permitted the University to dramatically increase the purchasing power of the endowment. As an example, a $10,000 gift invested in the AIF on July 1, 1981, would have grown over the five years ending June 30, 1986 to a total market value of $21,386 in the AIF. Of this increase in market value, $8,273 would be attributable to appreciation of the basic gift and $3,113 attributable to reinvestment under the Spending Rule. In addition, a total of $3,348 would have been spent for the program purposes of the gift.

Summary

Fiscal Year 1986 was a productive year for the University of Pennsylvania. The University was able to continue making significant investments in its faculty, facilities, and programs while balancing the budget and increasing its fund balances. The coming year will be equally challenging as the University adapts to tax reform, copes with the continuing pressure to decrease federal expenditures, and continues to invest in the people and programs that make the University of Pennsylvania a very special institution.

Marna C. Whittington
Vice President for Finance

Five-Year Growth in Fund Balances

Year Ended June 30 (millions of dollars)
Five Years of Financial Performance
(thousands of dollars)

Unrestricted:
Change in unrestricted fund balance:
  Educational and general

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$ 54</td>
<td>$ 278</td>
<td>$ 298</td>
<td>$ 278</td>
<td>$ 359</td>
</tr>
<tr>
<td>Health services:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Hospital</td>
<td>15,826</td>
<td>9,790</td>
<td>4,406</td>
<td>(2,191)</td>
<td>701</td>
</tr>
<tr>
<td>Clinical practices</td>
<td>1,246</td>
<td>6,530</td>
<td>11,024</td>
<td>11,252</td>
<td>9,775</td>
</tr>
<tr>
<td>Graduate Hospital</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td>Total health services</td>
<td>17,169</td>
<td>16,417</td>
<td>15,527</td>
<td>9,158</td>
<td>10,573</td>
</tr>
<tr>
<td>$17,223</td>
<td>$16,695</td>
<td>$15,825</td>
<td>$ 9,436</td>
<td>$10,932</td>
<td></td>
</tr>
</tbody>
</table>

Unrestricted Fund Balance:
  Educational and general

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$ 388</td>
<td>$ 334</td>
<td>$ 56</td>
<td>(242)</td>
<td>(520)</td>
</tr>
<tr>
<td>Health services:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Hospital</td>
<td>35,082</td>
<td>19,256</td>
<td>9,466</td>
<td>5,060</td>
<td>7,251</td>
</tr>
<tr>
<td>Clinical practices</td>
<td>61,659</td>
<td>60,413</td>
<td>53,883</td>
<td>42,859</td>
<td>31,607</td>
</tr>
<tr>
<td>Graduate Hospital</td>
<td>(2,788)</td>
<td>(2,885)</td>
<td>(2,982)</td>
<td>(3,079)</td>
<td>(3,176)</td>
</tr>
<tr>
<td>Total health services</td>
<td>93,953</td>
<td>76,784</td>
<td>60,367</td>
<td>44,840</td>
<td>35,682</td>
</tr>
<tr>
<td>$94,341</td>
<td>$77,118</td>
<td>$60,423</td>
<td>$44,598</td>
<td>$35,162</td>
<td></td>
</tr>
</tbody>
</table>

Restricted:
Net change in restricted fund balance
Net current restricted fund balance

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$ 2,504</td>
<td>$ 4,142</td>
<td>$ 6,178</td>
<td>(875)</td>
<td>$ 2,557</td>
</tr>
<tr>
<td></td>
<td>$48,141</td>
<td>$45,637</td>
<td>$41,495</td>
<td>$35,317</td>
<td>$35,192</td>
</tr>
</tbody>
</table>

How it was Provided (by Source)

- Health services: 39%
- Student tuition and fees: 22%
- U.S. Government grants: 15%
- Gifts and private grants: 6%
- S & S auxiliary enterprises: 6%
- Investment income: 4%
- Commonwealth appropriations: 3%
- S & S educational: 3%
- Other sources: 2%

How it was Spent (by Source)

- Health services: 37%
- Instruction: 21%
- Research: 13%
- Auxiliary enterprises: 6%
- Student aid: 6%
- Operations & maintenance: 4%
- General institutional expense: 4%
- Other educational activities: 4%
- General administration: 2%
- Libraries: 2%
- Student services: 1%

100%
### A Five-Year Review
of Current Funds

(thousands of dollars)

#### Revenues and Other Additions:
(by source)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition and fees</td>
<td>$190,579</td>
<td>$173,939</td>
<td>$162,089</td>
<td>$144,451</td>
<td>$126,647</td>
</tr>
<tr>
<td>Commonwealth appropriations</td>
<td>29,667</td>
<td>26,776</td>
<td>23,914</td>
<td>23,102</td>
<td>21,996</td>
</tr>
<tr>
<td>U.S. Government grants</td>
<td>128,054</td>
<td>114,424</td>
<td>110,061</td>
<td>96,677</td>
<td>98,157</td>
</tr>
<tr>
<td>Investment income</td>
<td>29,915</td>
<td>31,992</td>
<td>24,324</td>
<td>19,413</td>
<td>19,016</td>
</tr>
<tr>
<td>Gifts and private grants</td>
<td>53,799</td>
<td>45,304</td>
<td>44,658</td>
<td>35,212</td>
<td>37,813</td>
</tr>
<tr>
<td>University Hospital</td>
<td>224,628</td>
<td>207,033</td>
<td>180,258</td>
<td>170,114</td>
<td>140,751</td>
</tr>
<tr>
<td>Clinical practices</td>
<td>104,967</td>
<td>92,101</td>
<td>82,591</td>
<td>77,329</td>
<td>58,368</td>
</tr>
<tr>
<td>Other educational activities</td>
<td>21,584</td>
<td>19,072</td>
<td>17,412</td>
<td>22,372</td>
<td>17,276</td>
</tr>
<tr>
<td>Other sources</td>
<td>21,434</td>
<td>14,642</td>
<td>11,565</td>
<td>6,597</td>
<td>8,210</td>
</tr>
<tr>
<td>Auxiliary enterprises</td>
<td>45,657</td>
<td>46,317</td>
<td>38,312</td>
<td>34,746</td>
<td>31,604</td>
</tr>
<tr>
<td></td>
<td><strong>$853,281</strong></td>
<td><strong>$771,600</strong></td>
<td><strong>$695,184</strong></td>
<td><strong>$630,013</strong></td>
<td><strong>$559,838</strong></td>
</tr>
</tbody>
</table>

#### Expenditures and Other Deductions:
(by function)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction</td>
<td>$171,439</td>
<td>$156,514</td>
<td>$141,183</td>
<td>$126,513</td>
<td>$117,779</td>
</tr>
<tr>
<td>Research</td>
<td>105,461</td>
<td>88,385</td>
<td>84,464</td>
<td>71,681</td>
<td>72,928</td>
</tr>
<tr>
<td>Libraries</td>
<td>13,472</td>
<td>11,858</td>
<td>11,173</td>
<td>9,950</td>
<td>8,594</td>
</tr>
<tr>
<td>Other educational activities</td>
<td>32,314</td>
<td>26,904</td>
<td>24,131</td>
<td>23,642</td>
<td>21,558</td>
</tr>
<tr>
<td>Student aid</td>
<td>48,267</td>
<td>43,802</td>
<td>40,458</td>
<td>36,590</td>
<td>35,434</td>
</tr>
<tr>
<td>Student services</td>
<td>12,911</td>
<td>12,014</td>
<td>10,892</td>
<td>9,658</td>
<td>8,328</td>
</tr>
<tr>
<td>University Hospital</td>
<td>208,802</td>
<td>197,243</td>
<td>175,852</td>
<td>172,305</td>
<td>140,050</td>
</tr>
<tr>
<td>Clinical practices</td>
<td>103,721</td>
<td>85,571</td>
<td>71,567</td>
<td>66,077</td>
<td>48,593</td>
</tr>
<tr>
<td>Operations and maintenance of plant</td>
<td>34,596</td>
<td>33,114</td>
<td>30,366</td>
<td>27,589</td>
<td>24,987</td>
</tr>
<tr>
<td>General institutional expense</td>
<td>35,404</td>
<td>28,457</td>
<td>25,425</td>
<td>24,264</td>
<td>22,652</td>
</tr>
<tr>
<td>General administration</td>
<td>17,590</td>
<td>15,566</td>
<td>15,217</td>
<td>12,963</td>
<td>10,849</td>
</tr>
<tr>
<td>Auxiliary enterprises</td>
<td>49,577</td>
<td>51,335</td>
<td>42,453</td>
<td>40,220</td>
<td>34,597</td>
</tr>
<tr>
<td></td>
<td><strong>$833,554</strong></td>
<td><strong>$750,763</strong></td>
<td><strong>$673,181</strong></td>
<td><strong>$621,452</strong></td>
<td><strong>$546,349</strong></td>
</tr>
</tbody>
</table>

#### Expenditures and Other Deductions:
(by object)

**Salaries and wages:**

- **University:**
  - Total salaries and wages: $371,483
  - Current expense: $439,197
  - Equipment: $22,874

**University Hospital:**

- Clinical practices: $25,425

**Health Services:**

- University Hospital:
  - Total salaries and wages: $308,537
  - Current expense: $347,391
  - Equipment: $17,253

**General institutional expense:**

- Total salaries and wages: $24,264

**General administration:**

- Total salaries and wages: $12,963

**Auxiliary enterprises:**

- Total salaries and wages: $42,453

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and wages:</td>
<td>$222,447</td>
<td>$203,897</td>
<td>$187,293</td>
<td>$178,337</td>
<td>$165,989</td>
</tr>
<tr>
<td>University Hospital</td>
<td>95,599</td>
<td>88,011</td>
<td>80,347</td>
<td>78,480</td>
<td>66,719</td>
</tr>
<tr>
<td>Clinical practices</td>
<td>53,437</td>
<td>44,392</td>
<td>40,597</td>
<td>38,905</td>
<td>31,175</td>
</tr>
<tr>
<td></td>
<td><strong>$833,554</strong></td>
<td><strong>$750,763</strong></td>
<td><strong>$673,181</strong></td>
<td><strong>$621,452</strong></td>
<td><strong>$546,349</strong></td>
</tr>
</tbody>
</table>
### A Five-Year Review of Investments

(Thousands of dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Stocks</th>
<th>Bonds</th>
<th>Short-term</th>
<th>Real estate</th>
<th>Other</th>
<th>Total Investments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cost</td>
<td>Market</td>
<td>% of Total</td>
<td>Cost</td>
<td>Market</td>
<td></td>
</tr>
<tr>
<td>1986</td>
<td>$174,349</td>
<td>$272,521</td>
<td>29%</td>
<td>$161,010</td>
<td>$226,962</td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>$158,203</td>
<td>$172,386</td>
<td>30%</td>
<td>$158,691</td>
<td>$158,691</td>
<td></td>
</tr>
<tr>
<td>1984</td>
<td>$123,457</td>
<td>$148,825</td>
<td>25%</td>
<td>$106,413</td>
<td>$107,295</td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>$158,345</td>
<td>$125,345</td>
<td>41%</td>
<td>$97,763</td>
<td>$79,534</td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>$120,806</td>
<td>$79,534</td>
<td>27%</td>
<td>$71,890</td>
<td>$70,896</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>Endowment</strong></td>
<td><strong>% of Total</strong></td>
<td><strong>Associated Investments Fund:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$813,477</td>
<td>$925,253</td>
<td>100%</td>
<td>$735,780</td>
<td>$810,651</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Endowment</strong></td>
<td>$34,684</td>
<td>100%</td>
<td>$364,223</td>
<td>$437,064</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$358,357</td>
<td>$461,806</td>
<td>100%</td>
<td>$290,419</td>
<td>$359,121</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>Per share value</strong></td>
<td><strong>% of Total</strong></td>
<td><strong>Per share income</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$358,357</td>
<td>389.40</td>
<td>1%</td>
<td>24.56</td>
<td>25.41</td>
<td>19.42</td>
</tr>
</tbody>
</table>

*True, term, and quasi-endowment only; does not include life income, annuity, and unitrust funds reported in the Financial Statements with Endowment and Similar Funds.*
Associated Investments Fund Balance Sheet

June 30, 1986
(Thousands of dollars)

Investments:
Short-term Fund $6 $6
Equity Fund 222,271 316,735
Fixed Income Fund 131,818 140,697
Real estate 1,000 1,000
Venture capital 2,541 2,677
Other 721 691
Investments end of year $358,357 $461,806
Investments beginning of year $290,419 $359,121

Fund:
Invested by participating funds
Undistributed accretions:
Net undistributed gains realized on sales, etc., of investments and withdrawals of participating funds and gains availed of
Excess of market value of investments over cost
244,708
113,649
103,449
$461,806

Number of participating units
1,186,027
Per share value end of year
$389.40
Per share value beginning of year
$329.90

A.I.F. Total Return Performance Comparison
Annual Total Return Compounded Quarterly
Periods ended June 30

<table>
<thead>
<tr>
<th></th>
<th>1982</th>
<th>1983</th>
<th>1984</th>
<th>1985</th>
<th>1986</th>
<th>5-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.I.F.</td>
<td>1.1</td>
<td>50.0</td>
<td>4.0</td>
<td>38.0</td>
<td>26.4</td>
<td>22.4</td>
</tr>
<tr>
<td>Composite Index</td>
<td>(4.2)</td>
<td>49.4</td>
<td>(2.4)</td>
<td>30.2</td>
<td>30.7</td>
<td>18.9</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>11.4</td>
<td>60.9</td>
<td>(4.7)</td>
<td>30.8</td>
<td>35.7</td>
<td>19.3</td>
</tr>
<tr>
<td>Shearson Lehman Govt./Corporate</td>
<td>13.3</td>
<td>29.1</td>
<td>1.8</td>
<td>28.7</td>
<td>20.6</td>
<td>18.3</td>
</tr>
</tbody>
</table>

Compounded total return is used commonly for evaluating investment performance. This convention measures both capital appreciation and income, and assumes the reinvestment of income on a periodic basis.

The Composite Index is constructed to show what the A.I.F. return would have been if the A.I.F. had been invested in the S&P 500 Composite Stock Index and the Shearson Lehman Government/Corporate Bond Index on a weighted basis equal to its actual equity and fixed income allocations during the five-year period.
Associated Investments Fund Statement of Income

For the year ended June 30, 1986
(thousands of dollars)

<table>
<thead>
<tr>
<th>1986</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest received on bonds, net of accrued interest on bonds purchased</td>
</tr>
<tr>
<td>Dividends received on common stocks</td>
</tr>
<tr>
<td>Other income</td>
</tr>
<tr>
<td>Total income</td>
</tr>
<tr>
<td>Less:</td>
</tr>
<tr>
<td>Salaries, fees, postage, etc., allocable to fund</td>
</tr>
<tr>
<td>Indirect expenses recovered on yield</td>
</tr>
<tr>
<td>Total expenses</td>
</tr>
<tr>
<td>Total net income</td>
</tr>
<tr>
<td>Less: Income reinvested in principal</td>
</tr>
<tr>
<td>Net income distributed to participating units</td>
</tr>
</tbody>
</table>

Fiscal year 1986:

Total net income per share | $ 24.86  |
Distributed net income per share | $ 11.79  |
Management Responsibility for Financial Statements

The financial statements displayed on pages 24 to 32 have been prepared to conform with generally accepted accounting principles governing colleges and universities. The management of the University of Pennsylvania is responsible for the objectivity and integrity of these financial statements.

The University maintains a system of internal accounting controls which are utilized in accumulating and controlling its financial transactions. Such controls are maintained by the establishment and communication of accounting and financial policies and procedures, by the selection and training of qualified personnel, and by an internal audit program designed to identify weaknesses in internal control in order to permit management to take appropriate corrective action on a timely basis.

The financial statements have been examined by Coopers & Lybrand, Certified Public Accountants. Their audit opinion, as shown on the opposite page, expresses an informed judgment as to whether the University’s financial statements, as prepared by management, considered in their entirety, present fairly its financial position, changes in fund balances, and current funds revenues, expenditures, and other changes in conformity with generally accepted accounting principles.

The auditor’s opinion is based on audit procedures described in the first paragraph of their report, which include obtaining an understanding of University systems, procedures and internal accounting controls, and performing tests and other auditing procedures to provide reasonable assurance that the financial statements are neither materially misleading nor contain material errors. While the auditors make extensive tests of University procedures and controls, it is neither practical nor necessary for them to scrutinize a large portion of the University’s transactions.

The Trustees of the University of Pennsylvania, through its Committee on Audit comprised of five trustees not employed by the University, is responsible for engaging the independent certified public accountants and meeting with management, internal auditors, and the independent auditors to ensure that each is carrying out their responsibilities and to discuss auditing, internal control, and financial reporting issues. Both the internal auditors and the independent auditors have full and free access to the Committee on Audit.

Marna C. Whittington
Vice President for Finance

Alfred F. Beers
Comptroller
To: The Trustees of the University of Pennsylvania

We have examined the balance sheet of the University of Pennsylvania as of June 30, 1986, and the related statements of changes in fund balances and current funds revenues, expenditures and other changes for the year then ended. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We previously examined and reported upon the financial statements of the University for the year ended June 30, 1985, totals of which are included for comparative purposes only.

In our opinion, the financial statements referred to above (pages 24 to 32 inclusive) present fairly the financial position of the University of Pennsylvania as of June 30, 1986, and the changes in fund balances and current funds revenues, expenditures and other changes for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Coopers & Lybrand

1900 Three Mellon Bank Center
Philadelphia, Pennsylvania
September 11, 1986
## Balance Sheet

**Balance Sheet**

June 30, 1986 with comparative 1985 totals

(Thousands of dollars)

<table>
<thead>
<tr>
<th>Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>1986</td>
</tr>
<tr>
<td>$8,561</td>
<td>$11,625</td>
</tr>
<tr>
<td>$112,619</td>
<td>$109,313</td>
</tr>
<tr>
<td>$61,677</td>
<td>$65,007</td>
</tr>
<tr>
<td>$11,342</td>
<td>$10,393</td>
</tr>
<tr>
<td>$735,780</td>
<td>$813,477</td>
</tr>
<tr>
<td>$989,709</td>
<td>$986,907</td>
</tr>
<tr>
<td>$6,737</td>
<td>$6,097</td>
</tr>
<tr>
<td>$112,619</td>
<td>$109,313</td>
</tr>
<tr>
<td>$813,477</td>
<td>$813,477</td>
</tr>
<tr>
<td>$986,907</td>
<td>$986,907</td>
</tr>
<tr>
<td>$6,097</td>
<td>$6,097</td>
</tr>
<tr>
<td>$1,433,455</td>
<td>$1,623,469</td>
</tr>
</tbody>
</table>

### Assets:

- **Cash**
- **Accounts receivable, net of allowances**
- **Investments**
- **Plant, net of depreciation**
- **Due from Graduate Hospital**
- **Interfund balances:**
  - Advances for plant
  - Other

### Liabilities and Fund Balances:

- **Accounts payable and accrued expenses**
- **Deposits, advances and agency funds**
- **Deferred income**
- **Long-term debt**
- **Fund balances**

### The nature of specific fund balances is as follows:

- Externally restricted
- Internally designated
- Unexpended endowment income
- U.S. Government grants
- Life income, annuity, and unitrust funds

<table>
<thead>
<tr>
<th>Current Funds</th>
<th>Plant Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Educational and General</strong></td>
<td><strong>Endowment and Similar</strong></td>
</tr>
<tr>
<td>Unrestricted</td>
<td>Funds</td>
</tr>
<tr>
<td>$2,654</td>
<td>$8,971</td>
</tr>
<tr>
<td>$10,092</td>
<td>$18,480</td>
</tr>
<tr>
<td>$7,290</td>
<td>$56,830</td>
</tr>
<tr>
<td>$8,191</td>
<td>$48,872</td>
</tr>
<tr>
<td>$38,496</td>
<td>$4,123</td>
</tr>
<tr>
<td>$6,737</td>
<td>$564</td>
</tr>
<tr>
<td>$18,143</td>
<td>$185,031</td>
</tr>
<tr>
<td>(1,064)</td>
<td>($606,343)</td>
</tr>
<tr>
<td>$74,589</td>
<td>$227,392</td>
</tr>
<tr>
<td><strong>Health Services</strong></td>
<td><strong>Unexpended</strong></td>
</tr>
<tr>
<td>$60,241</td>
<td><strong>Invested</strong></td>
</tr>
<tr>
<td>$62,414</td>
<td>$992,537</td>
</tr>
<tr>
<td>$448,234</td>
<td>$35,500</td>
</tr>
<tr>
<td>$227,302</td>
<td>$6,213</td>
</tr>
<tr>
<td>$592,837</td>
<td></td>
</tr>
<tr>
<td>$47,656</td>
<td>$63,899</td>
</tr>
<tr>
<td>$1,122</td>
<td>$12,100</td>
</tr>
<tr>
<td>$25,423</td>
<td>$238</td>
</tr>
<tr>
<td>$342,967</td>
<td>$129,543</td>
</tr>
<tr>
<td>$357,158</td>
<td>$227,377</td>
</tr>
<tr>
<td>$975,542</td>
<td>$305,460</td>
</tr>
<tr>
<td>$1,106,999</td>
<td>$98,867</td>
</tr>
<tr>
<td>$48,141</td>
<td>$365,460</td>
</tr>
<tr>
<td>$62,414</td>
<td>$592,537</td>
</tr>
<tr>
<td>$447,234</td>
<td>$32,098</td>
</tr>
<tr>
<td>$84,414</td>
<td>$241,674</td>
</tr>
<tr>
<td>$19,491</td>
<td>$29,651</td>
</tr>
<tr>
<td>$16,043</td>
<td>$192,491</td>
</tr>
<tr>
<td>$48,825</td>
<td>$59,216</td>
</tr>
<tr>
<td>$13,521</td>
<td></td>
</tr>
<tr>
<td>$48,141</td>
<td>$447,690</td>
</tr>
<tr>
<td>$62,414</td>
<td>$88,507</td>
</tr>
</tbody>
</table>
Statement of Changes in Fund Balances
For the year ended June 30, 1986 with comparative 1985 totals
(thousands of dollars)

<table>
<thead>
<tr>
<th></th>
<th>Total 1985</th>
<th>Total 1986</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginning Balances</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenues and Other Additions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unrestricted current funds revenues</td>
<td>637,904</td>
<td>700,259</td>
</tr>
<tr>
<td>U.S. Government grants</td>
<td>83,400</td>
<td>93,142</td>
</tr>
<tr>
<td>Gifts and private grants</td>
<td>76,759</td>
<td>84,431</td>
</tr>
<tr>
<td>Investment income</td>
<td>30,276</td>
<td>(35,874)</td>
</tr>
<tr>
<td>Additions to plant (including $43,326 charged to current expenditures)</td>
<td>44,070</td>
<td>54,673</td>
</tr>
<tr>
<td>Other additions, net</td>
<td>18,063</td>
<td>28,782</td>
</tr>
<tr>
<td></td>
<td>1,715</td>
<td>1,099</td>
</tr>
<tr>
<td></td>
<td>892,217</td>
<td>1,099,350</td>
</tr>
<tr>
<td>Expenditures and Other Deductions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current funds expenditures</td>
<td>722,099</td>
<td>790,200</td>
</tr>
<tr>
<td>Expensed for plant</td>
<td>10,897</td>
<td>11,347</td>
</tr>
<tr>
<td>Interest on debt</td>
<td>8,212</td>
<td>17,229</td>
</tr>
<tr>
<td>Provisions for depreciation</td>
<td>24,671</td>
<td>56,943</td>
</tr>
<tr>
<td>Other deductions, net</td>
<td>1,676</td>
<td>5,294</td>
</tr>
<tr>
<td></td>
<td>767,525</td>
<td>860,313</td>
</tr>
<tr>
<td>Transfers Among Funds—Additions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Deductions):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mandator y:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal on debt</td>
<td>(3,617)</td>
<td>(3,666)</td>
</tr>
<tr>
<td>Interest on debt</td>
<td>(13,041)</td>
<td>(3,832)</td>
</tr>
<tr>
<td>Other transfers:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect costs recovered on:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment income</td>
<td>2,175</td>
<td>(2,117)</td>
</tr>
<tr>
<td>Restricted gifts</td>
<td>1,711</td>
<td>(1,711)</td>
</tr>
<tr>
<td>Funds functioning as endowment</td>
<td>500</td>
<td>(3,471)</td>
</tr>
<tr>
<td>Physical plant development</td>
<td>(11,691)</td>
<td>(20,679)</td>
</tr>
<tr>
<td>Other, net</td>
<td>(490)</td>
<td>177</td>
</tr>
<tr>
<td></td>
<td>406</td>
<td>662</td>
</tr>
<tr>
<td></td>
<td>54</td>
<td>17,199</td>
</tr>
<tr>
<td></td>
<td>2,504</td>
<td>2,911</td>
</tr>
<tr>
<td></td>
<td>73,759</td>
<td>21,212</td>
</tr>
<tr>
<td></td>
<td>32,367</td>
<td></td>
</tr>
<tr>
<td>Net Increase in Fund Balances</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$388</td>
<td>$93,953</td>
</tr>
<tr>
<td></td>
<td>$48,141</td>
<td>$62,414</td>
</tr>
<tr>
<td></td>
<td>$147,686</td>
<td>$58,867</td>
</tr>
<tr>
<td></td>
<td>$535,460</td>
<td></td>
</tr>
</tbody>
</table>

Ending Balances

Current Funds

<table>
<thead>
<tr>
<th>Unrestricted</th>
<th>Educational and General</th>
<th>Health Services</th>
<th>Restricted</th>
<th>Loan Funds</th>
<th>Endowment and Similar Funds</th>
<th>Unexpended</th>
<th>Invested</th>
</tr>
</thead>
<tbody>
<tr>
<td>$334</td>
<td>$70,784</td>
<td>$45,637</td>
<td>$960,403</td>
<td>$373,939</td>
<td>$677,505</td>
<td>$333,092</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>369,017</td>
<td>332,272</td>
<td></td>
<td>92,428</td>
<td>714</td>
<td></td>
<td>11,152</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>59,454</td>
<td>260</td>
<td></td>
<td>8,996</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>27,500</td>
<td>2,379</td>
<td></td>
<td>6,104</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>54,673</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>399,017</td>
<td>332,272</td>
<td>179,382</td>
<td>1,605</td>
<td>51,129</td>
<td></td>
<td>17,714</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>39,270</td>
</tr>
<tr>
<td></td>
<td>345,290</td>
<td>363,040</td>
<td>150,580</td>
<td></td>
<td></td>
<td>11,347</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17,229</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>26,943</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5,994</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>345,290</td>
<td>363,040</td>
<td>150,580</td>
<td></td>
<td></td>
<td>11,347</td>
<td>49,766</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Endowment Fund s

<table>
<thead>
<tr>
<th>Unexpended</th>
<th>Invested</th>
</tr>
</thead>
<tbody>
<tr>
<td>$373,939</td>
<td>$677,505</td>
</tr>
<tr>
<td>$333,092</td>
<td></td>
</tr>
</tbody>
</table>

See accompanying notes to financial statements.
Statement of Current Funds Revenues, Expenditures, and Other Changes
For the year ended June 30, 1986 with comparative 1985 totals (thousands of dollars)

<table>
<thead>
<tr>
<th>Total 1985</th>
<th>Total 1986</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unrestricted</td>
<td><strong>Educational and General</strong></td>
</tr>
</tbody>
</table>

### Revenues:
- Tuition and fees: $191,268
- Commonwealth appropriations: 29,667
- U.S. Government grants:
  - Direct costs: 38,146
  - Indirect costs: 13,014
- Investment income: 9,476
- Gifts and private grants: 43,871
- University Hospital: $224,628
- Clinical practices: 104,967
- Sales and services:
  - Auxiliary enterprises: 48,657
  - Other educational activities: 20,738
  - Other sources: 17,051
- Other: 207,033

### Expenditures:
- Instruction: 141,290
- Research: 20,577
- University Hospital: 149,720
- Clinical practices: 198,012
- Operation of maintenance of plant: 30,192
- Student aid: 27,920
- General institutional expense: 14,728
- General administration: 16,891
- Libraries: 12,501
- Student services: 12,542
- Auxiliary enterprises: 44,410
- Other educational activities: 25,683
- Other sources: 769,022

### Other Changes:
- Provision for depreciation (Note 1): (13,655)
- Excess of restricted receipts over transfers to revenues: 28,502
- Transfers among funds:
  - Mandatory: (16,658)
  - Other, net: (36,558)
- Net Increase in Fund Balances Before Adjustment: 5,792
- Adjustment to convert basis of presentation (Note 1): (5,738)
- Net Increase in Fund Balances: $54

### Net Increase in Fund Balances

See accompanying notes to financial statements.
Notes to Financial Statements

1. Significant Accounting Policies

Basis of Presentation: The accompanying financial statements are presented in accordance with principles of "fund accounting" for educational institutions in order to observe limitations and restrictions placed on the use of available resources. These resources and related expenditures are recorded in separate funds and summarized for accounting and reporting purposes into fund groups in accordance with specified activities or objects.

As discussed under "Plant" below, depreciation is recognized in the invested plant fund. The current provision for depreciation has also been reported in the statement of current funds revenues, expenditures, and changes in order to show the effect of the use of plant resources for current operating purposes; additions to plant funds funded from current unrestricted funds have not been included in current funds expenditures. The University recognizes, however, that under its present basis of fund accounting, depreciation is not an expenditure of, and the related depreciable plant assets are not included in, current unrestricted funds. Accordingly, an "adjustment to convert basis of presentation" to generally accepted fund accounting principles for educational institutions is made, comprised of the following (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>Educational and General Services</th>
<th>Health and General Services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation</td>
<td>$13,655</td>
<td>$13,258</td>
<td>$26,943</td>
</tr>
<tr>
<td>Plant additions</td>
<td>(19,393)</td>
<td>(4,691)</td>
<td>(24,084)</td>
</tr>
<tr>
<td></td>
<td>(5,738)</td>
<td>$8,597</td>
<td>$2,859</td>
</tr>
</tbody>
</table>

Investments: Investments are stated at cost. Cost for donated securities is fair value as determined upon receipt. The cost of investments sold is determined by using an average cost for those investments acquired prior to July 1, 1985 and first-in, first-out basis for those investments acquired thereafter.

The majority of the University's endowment funds have been pooled in the Associated Investments Fund (A.I.F.) which is invested primarily in two investment pools, an Equity Fund and a Fixed Income Fund. Each participating fund earns investment income on the basis of subscribed units, which are acquired or disposed of at market value determined on a quarterly basis. A spending limitation is in effect on this income, and unexpended A.I.F. income ($11,072,000 in 1986) is reinvested in internally designated endowment funds.

Plant: Plant is generally stated at cost, less accumulated depreciation (computed on the straight-line basis), except that museum and library contents are not depreciated.

Interfund Transactions: Interfund balances represent advances which will be eliminated through collection of gift pledges, appropriations of other receipts, refinancing through external borrowings, or charges to current unrestricted expenditures and unexpended plant funds. Interest is charged internally on a majority of plant fund advances. The majority of plant fund advances will be amortized by 1992. Additionally, for financial reporting purposes, the University treats all cash as unrestricted, and each fund's share of cash is recognized in the interfund balances.

The current unrestricted fund recovers certain indirect costs incurred to carry out projects funded by investment income and current restricted gifts.

Health Services Revenues and Allowances: Revenues of the Hospital and clinical practices are derived primarily from patient services and are accounted for at established rates on the accrual basis in the period the service is provided. Appropriate allowances to give recognition to third-party arrangements and uncompensated care are also accounted for on the accrual basis. Adjustments to the estimated allowances, resulting from settlements with the respective third-party payors, are recorded in the year in which they are settled.

Gifts: Gifts are recorded as collected. Gift pledges (approximately $65,200,000 at June 30, 1986) are not included in the accompanying financial statements because it is not practicable to determine their net realizable value.

2. Investments

A summary of investments at June 30, 1986 is as follows (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>Cost</th>
<th>Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term</td>
<td>$357,304</td>
<td>$357,335</td>
</tr>
<tr>
<td>Stocks</td>
<td>174,349</td>
<td>272,821</td>
</tr>
<tr>
<td>Bonds</td>
<td>260,486</td>
<td>273,284</td>
</tr>
<tr>
<td>Real estate</td>
<td>8,363</td>
<td>8,363 (a)</td>
</tr>
<tr>
<td>Other</td>
<td>12,975</td>
<td>13,450</td>
</tr>
<tr>
<td></td>
<td>$813,477</td>
<td>$925,253</td>
</tr>
<tr>
<td>Beginning of year</td>
<td>$735,780</td>
<td>$810,651</td>
</tr>
</tbody>
</table>

(a) Stated at carrying value.

In connection with a University sponsored loan program, the University is required to invest in certificates of deposit of the lending institution. At June 30, 1986, short-term investments restricted under this arrangement aggregated $16,490,000. Certain other investments have been pledged as collateral (see Note 5).
3. Plant
The components of plant at June 30, 1986 are as follows (in thousands):

<table>
<thead>
<tr>
<th></th>
<th>Educational and General Services</th>
<th>Health Services</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$17,338</td>
<td>104</td>
<td>$17,442</td>
</tr>
<tr>
<td>Buildings</td>
<td>421,650</td>
<td>93,682</td>
<td>515,332</td>
</tr>
<tr>
<td>Contents</td>
<td>218,764(a)</td>
<td>130,657</td>
<td>349,421</td>
</tr>
<tr>
<td></td>
<td>657,752</td>
<td>224,443</td>
<td>882,195</td>
</tr>
<tr>
<td>Less accumulated depreciation</td>
<td>189,713</td>
<td>85,575</td>
<td>275,288</td>
</tr>
<tr>
<td></td>
<td>$468,039</td>
<td>$138,868</td>
<td>$606,907</td>
</tr>
</tbody>
</table>

(a) Library and museum contents not subject to depreciation aggregate $36,030,000 at June 30, 1986.
(b) Includes $80,486,000 of construction in progress and $170,399,000 capitalized under leasehold agreements (see Note 5).

4. Due from Graduate Hospital
In consideration for the separation of Graduate Hospital from the University in 1977, the University holds an unsecured note receivable ($5,687,000 at June 30, 1986) with an effective interest rate of 5.2%, (original face amount of $3,727,000 and stated interest of 10%), payable over 40 years. Graduate Hospital has also borrowed $1,000,000 from the University under a line of credit for that amount, with an annual interest rate of 6.8%, at June 30, 1986. Any borrowings outstanding under this line of credit at July 1, 1990 will be converted to a term loan payable over five years.

5. Long-Term Debt
Long-term debt outstanding at June 30, 1986 is as follows (in thousands):

Principal of leaseholds payable:
- Pennsylvania Higher Education Facilities Authority (PHEFA) (a) $46,055
- Department of Education of the Commonwealth of Pennsylvania (b) 13,701
- The Hospitals and Higher Education Facilities Authority of Philadelphia Hospital Revenue Bonds (c):
  - 1984 Series, net of unamortized bond discount of $2,190 106,021
  - 1978 Series, net of assets of the restricted funded depreciation subaccount of $11,217 28,407
- PHEFA:
  - 1985 Series Revenue Bonds, net of unamortized bond discount of $1,532 (d) 94,743
  - 1985 Second Series Revenue Bonds (e) 10,610
  - Floating/Fixed Rate Bonds (f) 24,285
  - Note payable 1,186
- Mortgages:
  - 9 1/2%, payable in 1993 (g) 20,250
  - 9 1/2%, payable through 1999 3,670
  - 2 1/2%-3 3/4%, payable through 2008 4,464
  - Other 2,470
- Other 1,296

(b) Aggregate annual payments under four building leases extending through 2004 are approximately $1,473,000, including interest at a 6.5% effective rate.
(c) The Hospital, through the University and the Authority, has a long-term leasing arrangement for certain hospital facilities, which provides for the Hospital to make minimum net annual rental payments to the Authority. The agreement provides for the Authority to transfer its title to the Hospital after all obligations of the lease have been satisfied.

The Series of 1984 Bonds, other than the Term Appreciation Bonds, (current interest bonds) mature in varying annual amounts ranging from $1,735,000 in 1988 to $4,065,000 in 1999 with two final maturities of $20,460,000 in 2003 and $48,800,000 in 2009. The term appreciation bonds, with a principal amount of $5,181,000, do not pay any current interest but bear interest payable at maturity with a yield of approximately 10%. The current interest and term appreciation bonds are subject to early redemption in 1994 and thereafter at premium rates. The Hospital’s annual rental payments range from $10,597,000 to $11,084,000 and represent amounts equivalent to bond principal and interest expense (rates ranging from 6 3/4% to 10%), and trustee fees.

The Series of 1978 Bonds mature in varying annual amounts ranging from $1,405,000 in 1989 to $1,300,000 in 1997 with two final maturities of $11,970,000 in 2007 and $16,050,000 in 2008. The Hospital’s rental payments range from $3,695,000 in 1987 to $307,000 in 2008 and represent amounts equivalent to bond principal and interest.
6. Retirement Benefit Plans

Retirement benefits are provided for academic employees and certain administrative personnel through direct payments to various annuity funds. The University’s policy with respect to its contributions is to provide up to 9% of eligible employees’ salaries. The University’s contributions to these funds amounted to $10,646,000 in 1986.

The University has noncontributory defined benefit plans for substantially all other full-time employees. Contributions to the plans are accrued and funded based on current service costs and amortization of pension costs over periods of 25 to 40 years. The provision for pension expense related to the noncontributory plans aggregated $5,768,000 in 1986.

The actuarially determined present value of accumulated plan benefits and plan net assets determined as of the most recent valuation date (July 1, 1985) is as follows (in thousands):

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Accumulated plan benefits:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987</td>
<td>$5,267</td>
</tr>
<tr>
<td>1988</td>
<td>23,049</td>
</tr>
<tr>
<td>1989</td>
<td>7,069</td>
</tr>
<tr>
<td>1990</td>
<td>7,080</td>
</tr>
<tr>
<td>1991</td>
<td>7,419</td>
</tr>
</tbody>
</table>

The plans’ assumed rates of return used in the actuarial computations ranged from 6% to 8%.

In addition to providing pension benefits, the University provides certain health care and life insurance benefits for active and retired employees. Substantially all of the University’s employees may become eligible for those benefits if they reach normal retirement age while working for the University. Those and similar benefits for active employees are provided through an insurance contract whose premiums are based on the benefits provided during the year. The University recognizes the
cost of providing those benefits by expensing the annual premiums, which were approximately $16,948,000 for 1986. The cost of providing those benefits for approximately 1,400 retirees is not separable from the cost of providing benefits for more than 11,700 active employees.

7. Assets Held in Trust by Others

Assets held in trust and managed by outside fiscal agents are not included in the University's balance sheet. Income earned on all such assets approximated $1,779,000 in 1986. Those assets of which the University is sole or principal beneficiary of income had a reported cost of $18,170,000 at June 30, 1986 ($28,455,000 market value).

8. Contingencies

The University has guaranteed certain obligations, principally mortgages and leases on properties owned by related parties, totaling approximately $12,450,000 at June 30, 1986. The University accrues for estimated uninsured losses arising from asserted malpractice claims and for estimated losses arising from incidents reported to management for which it is likely that claims will be asserted. Due to the lack of statistically significant historical claims experience, the University is not able to reasonably estimate losses for unasserted claims arising from unreported incidents.

Various lawsuits, claims, and other contingent liabilities arise in the ordinary course of the University's education and health care activities. While the ultimate disposition of the aforementioned contingencies is not determinable at this time, management believes that any liability resulting therefrom will not materially affect the financial position of the University.
The Trustees of the University of Pennsylvania

The Hon. Arlin M. Adams
Of Counsel
Schneider, Harrison, Segal & Lewis
Philadelphia, Pennsylvania

Gustave G. Amsterdam, Esq.
Lawyer
Philadelphia, Pennsylvania

The Hon. Leonore Anneberg
Former Chief of Protocol of the U.S.
Wynnewood, Pennsylvania

The Hon. Walter H. Anneberg
Former Ambassador to Great Britain
President and Director
Philadelphia, Pennsylvania

Mr. Walter C. Arader
President
Philadelphia, Pennsylvania

Mr. Gordon S. Bodek
Director and Retired President
Bobrick International
North Hollywood, California

Mr. Alan C. Bowser
Silver Springs, Maryland

Richard P. Brown, Jr., Esq.
Partner, Morgan, Lewis & Bockius
Philadelphia, Pennsylvania

Mr. I. W. Burnham II
Honorary Chairman
Drexel Burnham Lambert, Inc.
New York, New York

Mr. Howard Butcher III
Chairman Emeritus
Butcher & Singer, Inc.
Philadelphia, Pennsylvania

Mrs. Susan W. Catherwood
Bryn Mawr, Pennsylvania

Mr. Henry M. Chance II
Former Chairman
United Engineers and
 Constructors, Inc.
Philadelphia, Pennsylvania

Dr. Gloria Twine Chisum
Research Psychologist
U.S. Naval Air Development Center
Philadelphia, Pennsylvania

Dr. Constance E. Clayton
Superintendent of the School District of
Philadelphia, Pennsylvania

Mr. D. Michael Crow
Executive Vice President
Trammell Crow Residential Companies
Irving, Texas

Mr. Paul J. Cupp
Former Chairman
American Stores Company
Philadelphia, Pennsylvania

Mr. Charles D. Dickey, Jr.
Director and Retired Chairman
Scott Paper Company
Philadelphia, Pennsylvania

Mr. F. Eugene Dixon, Jr.
Management Trustee
Lafayette Hill, Pennsylvania

Mr. G. Morris Dorrance, Jr.
Chairman and Chief Executive Officer
CoreStates Financial Corp.
The Philadelphia National Bank
Philadelphia, Pennsylvania

Mr. Robert G. Dunlop
Director (Former Chairman)
Sun Company
Radnor, Pennsylvania

Mr. John W. Eckman
Rorer Group, Inc.
Fort Washington, Pennsylvania

Mr. Robert A. Fox
President, R.A.F. Industries
Elkins Park, Pennsylvania

Mr. James J. Gavin, Jr.
Vice Chairman and Director
Borg-Warner Corporation
Chicago, Illinois

Mr. Bruce J. Graham
General Partner
Skidmore, Owings & Merrill
Chicago, Illinois

Dr. F. Otto Haas
Former Chairman and Director
Boehm & Haas Company
Philadelphia, Pennsylvania

Dr. Sheldon Hackney
President, University of Pennsylvania

Dr. John H. Hellwege
President, General Alumni Society

Mr. Stephen J. Heyman
Partner, Nadel and Gussman
Tulsa, Oklahoma

Dr. Arden A. Higginbotham, Jr.
Judge, U.S. Court of Appeals,
Third Circuit
Philadelphia, Pennsylvania

Mr. Reginald H. Jones
Former Chairman and Chief
Executive Officer
General Electric Company
Fairfield, Connecticut

Dr. Carl Kaysen
David W. Skinner Professor of
Political Economy
Massachusetts Institute of
Technology
Cambridge, Massachusetts

Dr. Ralph Landau
Listowel Incorporated
New York, New York

Mr. Leonard A. Lauder
President and Chief
Executive Officer
Estee Lauder, Inc.
New York, New York

Mr. Robert P. Levy
President and Chairman
DRT Industries, Inc.
Philadelphia, Pennsylvania

Mr. Edward J. Lewis
President and Chief
Executive Officer
Oxford Development Company
Pittsburgh, Pennsylvania

Mr. William Thomas Lockard
Associate in Public Finance
Stone & Youngberg
San Francisco, California

Mr. David J. Mahoney
Former Chairman and Chief
Executive Officer
Norton Simon, Inc.
New York, New York

Mrs. Margaret R. Mainwaring
President, University of Pennsylvania

Mr. G. Morris Dorrance, Jr.
Former Chairman and Director
Mellon National Corporation
Mellon Bank, N.A.
Pittsburgh, Pennsylvania

Mr. C. B. McCoy
Director, (Former Chairman)
E. I. du Pont de Nemours &
Company, Inc.
Newark, Delaware

Paul F. Miller, Jr.
Senior Partner
M. Miller, Anderson and Sherrerd
Bala Cynwyd, Pennsylvania

Mr. Paul S. Miller
Kadison, Pollock, Woodard, Quinn & Rossi
Los Angeles, California

Anthony S. Minisi, Esq.
Partner
Wolf, Block, Schorr & Solis-Cohen
Philadelphia, Pennsylvania

Mr. John P. Mulroney
President, Rohm and Haas
Company
Philadelphia, Pennsylvania

Mr. John B. Neff
Managing Partner and Senior Vice President
Wolling Management Company
Valley Forge, Pennsylvania

Mr. James A. Pappas
President
Pappas Management Corporation
Boston, Massachusetts

Mr. Ralph S. Saul
Director, CIGNA Corporation
Philadelphia, Pennsylvania

Bernard G. Segal, Esq.
Senior Partner
Schnader, Harrison, Segal & Lewis
Philadelphia, Pennsylvania

Mr. Alvin V. Shoemaker
Chairman
The First Boston Corporation
New York, New York

Mr. Wesley A. Stanger, Jr.
Executive Director,
MacKay-Shields
Financial Corporation
New York, New York

Mr. Saul P. Steinberg
Chairman and Chief
Reliance Group Holdings, Inc.
New York, New York

Mr. Michael L. Tarnopol
Senior Partner
Bear, Stearns and Company
New York, New York

Mr. Sarks Tarzian
Chairman, Sarkis Tarzian, Inc.
Bloomington, Indiana

The Hon. Richard L. Thornburgh
Governor of the Commonwealth of Pennsylvania
Harrisburg, Pennsylvania

Robert L. Trescher, Esq.
Counsel, Montgomery, McCracken,
Walker & Rhoads
Philadelphia, Pennsylvania

The Hon. John H. Ware, III
Former State Senator and
Member, U.S. House of
Representatives
Chairman, President and Director
Penn Fuel Gas, Inc.
Oxford, Pennsylvania

Mr. Frederick J. Warren
Partner, Brentwood Associates
Los Angeles, California

Mrs. Jacqueline G. Wesley
President
National Conference of Christians and Jews
New York, New York

Morton H. Wilner, Esq.
Counsel, Wilner and Scheiner
Washington, D.C.

Mr. Charles S. Wolf
President and Chief
Executive Officer
York Container Company
York, Pennsylvania

Mr. D. Robert Yarnall, Jr.
Chairman, Envirite Corporation
Plymouth Meeting, Pennsylvania

*chairman