

A SPIRIT REKINDLED



1984-85 ANNUAL REPORT OF EDWARD J. BOLING, PRESIDENT,
THE UNIVERSITY OF TENNESSEE, TO THE BOARD OF TRUSTEES

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A SPIRIT REKINDLED

The Bible tells the story of the seven fat years of plentiful harvests followed by seven lean years of failed crops. The University of Tennessee, conversely, survived a series of lean years before economic and legislative factors combined to halt the trend and point the institution toward better days.

In short, 1984-85 was a very good year — one of the best since I came back to the University almost a quarter of a century ago.

Better times arrived in step with the state's Better Schools Program, itself a manifestation of a nation-wide realization that our future depends upon the quality of education our young people receive.

As a consequence we see the rekindling of the spirit to excel, to strive for quality in the campus community. This renewed impetus at UT has been provided primarily by two new programs: the Centers of Excellence and the Chairs of Excellence and the significant increase in basic operating appropriations for faculty salary improvement and other instructional and research support.

State administrators and legislators have demonstrated unusual concern for education and shown exceptional ingenuity in providing ways to improve educational quality. Besides establishing, at Gov. Alexander's request, Centers of Excellence — that is, providing additional funds to improve existing academic and research programs in Tennessee's colleges and universities — the 1985 General Assembly, of its own volition and with hearty concurrence by the Governor, enacted legislation to endow Chairs of Excellence in the various senior public institutions of higher learning in Tennessee. The latter legislation involved the contribution of state tax dollars to match private gift dollars, an arrangement unprecedented in this state's history. The impact of these two innovative state initiatives should have a far-reaching effect on quality of education.

Without doubt, the Centers and Chairs of Excellence have been an inspiration and a challenge to every department of the University. Even though a particular department may not acquire either a Center or a Chair, its faculty and staff know they may benefit from regular operating funds which the special appropriations may replace and release for other uses. And the challenge to compete for Centers and Chairs can have its salutary effect.



While they may not have had the impact of improved state support, other factors were at work for the University's benefit in 1984-85. Two of these are:

- A lower rate of inflation. Double-digit inflation eroded purchasing power and negated the increases we received from the state and other sources. The current small inflationary percentage has meant a real increase for UT in funds received this year.

- Private support. Gifts to the University from individuals, corporations, and other private

sources in 1984-85 continued at a level attained during the Tennessee Tomorrow campaign of 1977-80. Annual giving by alumni and friends set another record in 1984-85.

In essence, strong state support plus low inflation plus continued record-level private giving equals good times financially. This in turn generates high morale in the educational community.

One dark shadow remains. This is in the area of federal funding. UT has two major priorities in its list of needs for federal funds — aid for students and money to support research. This year has brought efforts in Washington to reduce the flow of federal dollars to education so the burgeoning national deficit may be brought under control.

Of course, we agree the deficit must be cut; and higher education must accept its fair share of the responsibility for its reduction. We do not want the burden to fall on student aid, however, and we have steadfastly opposed cuts that unfairly penalize students or prevent deserving ones from even attending college.

As I have stated, the public attention being focused on education and the infusion of funds from state and private sources this year have stimulated the desire to excel. We must encourage this revival of spirit. Taxpayers, legislators, and private donors have a right to expect improvement in our schools and in the end product, the college graduate. It is up to us to do things better, to merit the confidence and support of these public and private sources.

In the following pages, the results that this year's financial and educational initiatives have produced at the various campuses and units of the University are set forth, along with continuing needs and future plans.

KNOXVILLE

UT Knoxville's externally funded research awards amounted to \$24.6 million during FY 1984.

The University of Tennessee's Knoxville campus enhanced educational quality in 1984-85 by taking advantage of opportunities provided by increases in state and private support and special linkages with other institutions in the region and around the world.

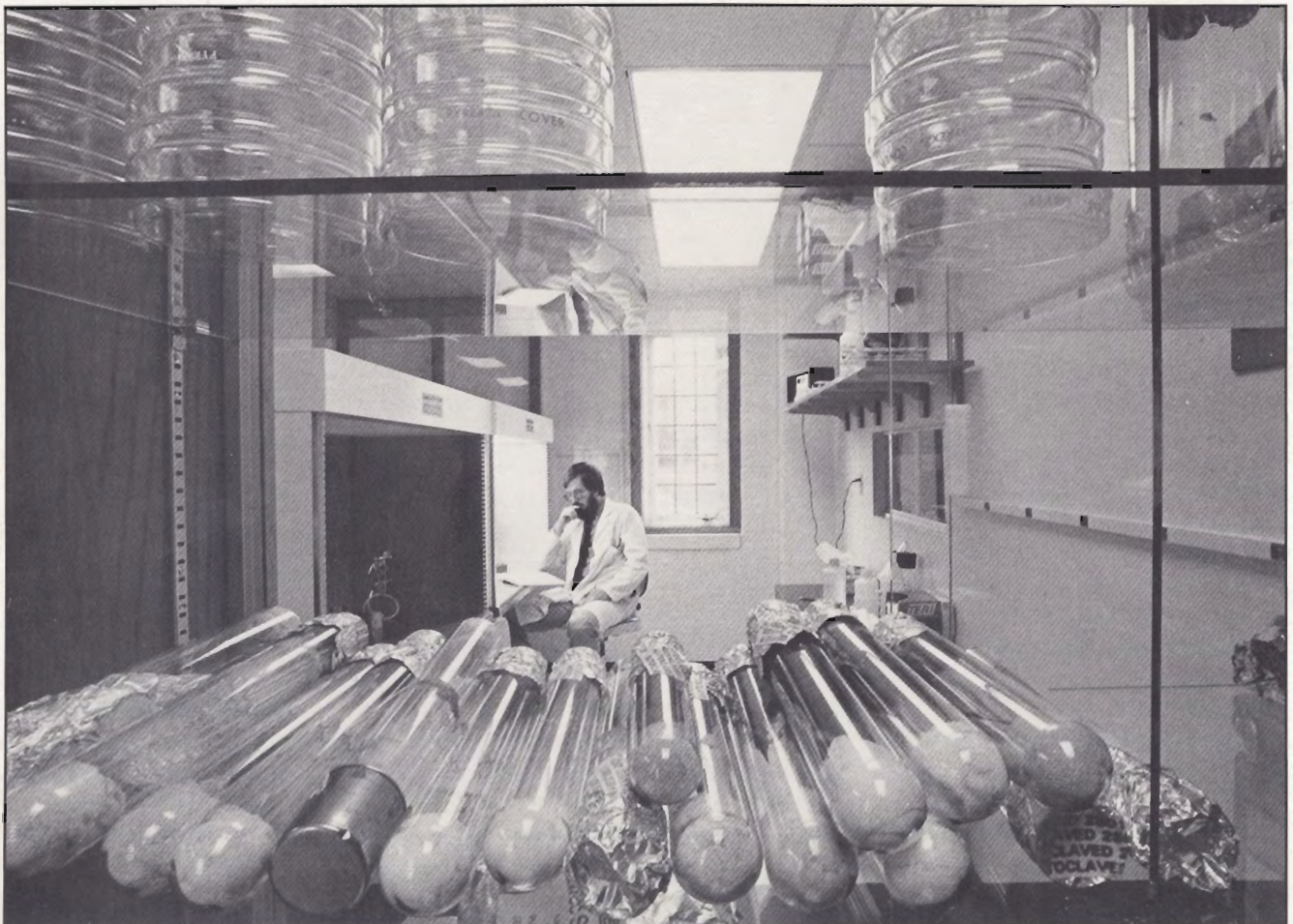
Continuing qualitative improvements have helped UT Knoxville provide a better academic experience for students and carry out research and service programs that advance knowledge and contribute to Tennessee's economic growth.

In a book published this spring by the National Center for Higher Education Management Systems,

UT Knoxville was one of three colleges and universities cited for successfully using institutional assessment information to improve service to students. In the annual THEC report on instructional evaluation, such activities have earned UTK 99 out of a possible 100 points in the past two years.

UTK also is one of about a dozen colleges and universities selected for inclusion in another national study of effective programs in higher education. That book, to be published later this year, has received advance billing as the academic world's equivalent of *In Search of Excellence*.

The Board of Trustees' approval of new admis-



Dr. Randy Henke is among faculty who have begun successful businesses as a result of University research.

sions requirements and the transition to a semester calendar should lead to even greater improvements in academic quality and in UTK's attractiveness to outstanding students. A THEC study released last year indicated that Tennessee's brightest students already are making the Knoxville campus their top college choice by a substantial margin.

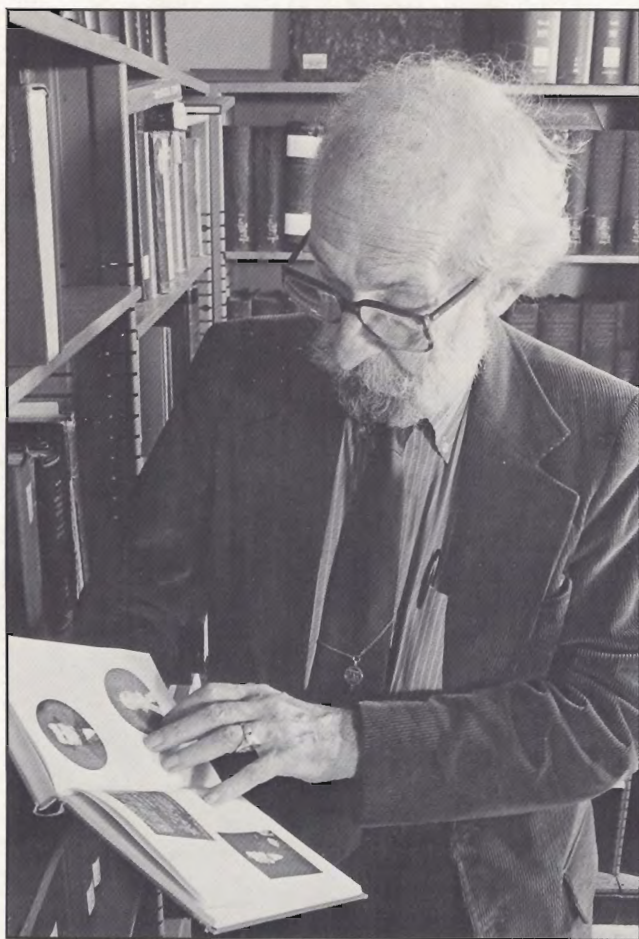
International linkages also proved increasingly important in 1984-85, providing a wide range of learning experiences for students and faculty and more than \$1 million in funding for UTK research and development activities in 14 different countries.

Students, Faculty Earn National Honors

Accomplishments of UTK faculty, staff, and students earned national acclaim in 1984-85.

A team of nuclear engineering undergraduates won first place in the American Nuclear Society's International Student Design Competition.

Dr. Howard Pollio, Distinguished Service



Dr. LeRoy Graf, professor of history for 40 years, retired but continues collecting the papers of President Andrew Johnson.

Professor of Psychology, has been chosen as one of 13 national Phi Beta Kappa Visiting Scholars for 1985-86. Dr. Susan Riechert, zoology professor, has been selected as a National Lecturer for Sigma Xi, the scientific research society.

Dr. Michael Harris, an assistant professor of religious studies, received one of 20 Rockefeller fellowships awarded nationally for his research on the emergence of Afro-American gospel blues.

Tennessee students and alumni brought home four gold medals and one silver medal from the 1984 Olympics in Los Angeles.

Emphasizing Academic Quality

UT Knoxville faculty worked to enhance the quality of academic programs in their respective colleges and schools and contributed to national studies to improve education.

UTK was one of 11 colleges and universities to take part in a three-year "Project to Redefine the Meaning and Purpose of the Baccalaureate Degree." Knoxville campus participants played a vital role in the Association of American Colleges study, providing recommendations for evaluating and improving academic programs and making sure students are better prepared.

Alex Haley, the Pulitzer Prize-winning author of *Roots*, has accepted an adjunct faculty appointment in journalism and American studies.

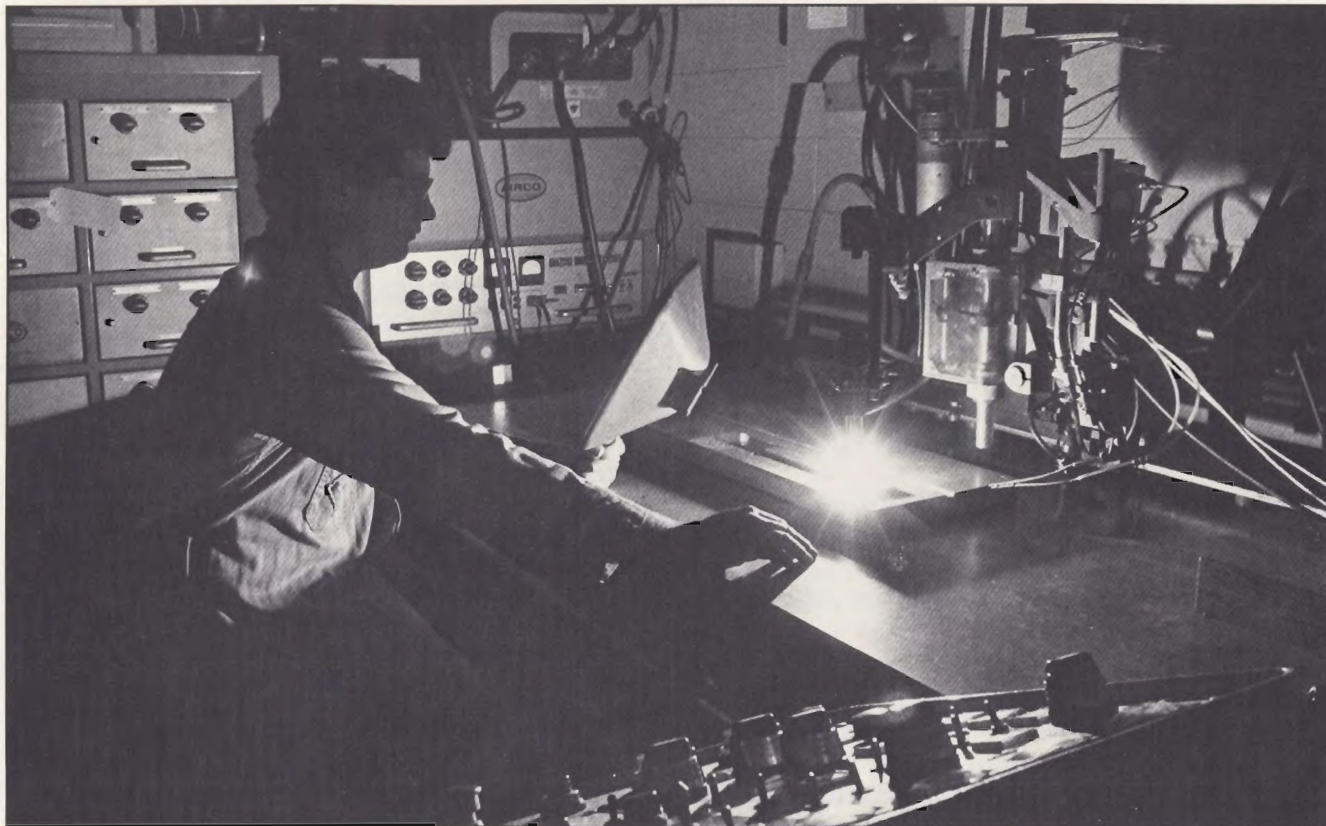
The College of Education has increased its academic standards and appointed 20 Tennessee teachers as faculty associates on the college's new admissions boards.

The college also is joining with Memphis State University and the State Department of Education in an alternative certification program to recruit talented non-education majors into Tennessee's secondary school classrooms. The Lyndhurst Foundation of Chattanooga is helping fund the program.

The College of Business Administration has embarked on a four-year, \$2 million plan designed to make the computer an integral part of the teaching and research environment.

The College of Communications, the School of Architecture, and the College of Nursing also have incorporated computer applications into their academic programs.

The College of Engineering, ORNL, and industry have initiated a Measurement and Control Engineering Center, the only education and research program of its kind in the nation. Control Data Corp. donated computer equipment valued at \$500,000 to the Center for Computer Aided Engineering and Manufacturing.



Encouraging Excellence

Building on a relationship between the University and Oak Ridge National Laboratory that dates back to 1943, Tennessee's largest Center of Excellence has strengthened joint programs in the physical, chemical, and life sciences.

The Science Alliance aids both institutions in sharing human and physical resources. It has provided funding for specialized equipment and space renovation, as well as partial support of a heavy ion research facility at ORNL. The Distinguished Scientist Program attracts some of the world's most eminent scientists for joint appointments in areas of mutual research interest.

UTK's four new Centers of Excellence are in theatre, new venture analysis and entrepreneurship, materials processing, and waste management research and education.

Students will also benefit from three Chairs of Excellence established in Knoxville. UTK's largest single estate gift — a \$2.3 million bequest from steel executive Ivan Racheff — will provide matching funds for the Racheff Chair of Excellence in Ornamental Horticulture and the Racheff Chair of Excellence in Materials Science and Engineering.

A Chair of Excellence in English will add a distinguished scholar in English or American literature. That chair is partially funded from the Hodges Better English Fund and the Humanities Endowment in the College of Liberal Arts.

Research Funding Increases

UT Knoxville's externally funded research awards amounted to \$24.6 million during FY 84 — an increase

of \$3.5 million over the previous year. This represented a 17.5 percent increase in overall research funding, including a 29 percent increase in awards from the federal government.

A graduate class in electrical engineering originated the first computer chips designed in Tennessee. The design was relayed by a computer network to Stanford University, and the chips were produced through a National Science Foundation program in the Silicon Valley.

Dr. Leslie Hickok, associate professor of botany, has developed a new procedure for the selection of specific types of mutations in vascular green plants that can be used in the study of plant growth regulators. A greater understanding of these regulators will contribute to increased yields in agricultural crops.

International Programs Consolidated

UT Knoxville consolidated its international programs in 1984-85 in a Center for International Education. The center is responsible for UTK services to approximately 1,000 international students; for programs and services to American students who wish to study, work, or travel overseas (more than 2,000 last year); and the operation of the International House, a facility for sharing ideas from around the world and promoting interaction among students and members of the larger community.

A Council on International Education is chaired by Dr. Don Eastman, executive assistant to the chancellor, to help coordinate and provide a campuswide perspective on international programs.

SPACE INSTITUTE

Twenty-two new research projects involving 16 faculty and more than 25 students were initiated during the year.

The University of Tennessee Space Institute celebrated its 20th anniversary with special events during October and by evaluating, planning, and improving academic programs throughout the year.

The faculty recently has completed an intensive self-study of academic programs. Several steps are under way to improve the quality of graduate education.

Research, which is basic to the UTSI academic programs as well as being a technological resource for Tennessee, continues to grow and diversify. Twenty-two new research projects involving 16 faculty and more than 25 students were initiated during the past year. This new research is funded by government agencies and industry in the amount of \$1.5 million, bringing total research funding for the year to more than \$8.5 million.

Center of Excellence Achieves Goals

In the Center of Excellence for Laser Applications, curriculum has been revised and implementation of new course content has begun. The quality of the center's students, as measured by GRE and SAT scores and faculty evaluation, has improved significantly. Two outstanding postdoctoral fellows have joined the Center.

A major goal for the center is establishing an ex-

perimental laboratory. Recently, negotiations were completed for the purchase of a vacuum environmental flow chamber and pumping system from the University of California at Berkeley. This large chamber and other new equipment will give the Center the capability to do work of national significance on space-related laser applications and in basic research.

Space Is Needed

The increase in sponsored research has caused a critical need for laboratory space. Funding for an advanced technology laboratory is anticipated in this session of the General Assembly.

Office space for faculty and staff also is scarce, and obsolete and worn-out equipment seriously impacts the teaching and research functions.

UTSI faculty earned honors in a variety of fields during the past year. Dr. Y.C.L. Wu received the General H. H. Arnold Award of the American Institute of Aeronautics and Astronautics; Dr. John Dicks has been named a Fellow of the American Society of Mechanical Engineers; and Dr. Frank Collins was elected a Fellow of the American Institute of Aeronautics and Astronautics.

The goal of \$100,000 was achieved for the B. H. Goethert Professor Fund and the first B. H. Goethert Professor will be announced in the fall.



The jetwing experimental aircraft is put through test flights at UTSI.

CENTER FOR THE HEALTH SCIENCES

A significant development of the year was a \$1.8 million grant from the W. K. Kellogg Foundation to teach students to be healthy role models.

The 1984-85 year at the UT Center for the Health Sciences has been filled with developments that have enhanced the quality of the instructional, research, and public service programs. Chief among these was the announcement by Gov. Lamar Alexander and UTCHS Chancellor James Hunt on Jan. 7, 1985, that two Chairs of Excellence had been established.

The chairs, one in the Department of Microbiology and Immunology and the other in the Department of Pharmacology, will be held by distinguished biomedical scientists in cancer-related research. The Chairs of Excellence are named for the late Harriet Van Vleet, a portion of whose \$3 million bequest to UTCHS supplies the private funds necessary to match state dollars for the chairs.

An internationally recognized leader in genetic research, Dr. Terrance Cooper, has been named the Harriet Van Vleet Professor in Microbiology and Immunology.

The Van Vleet professorships will serve as the foundation for a Comprehensive Cancer Center, the greatest single need in the biomedical sciences in Memphis and the Mid-South. The center will combine education, research, patient care, and public service.

THEC has approved two Centers of Excellence for UTCHS—a Molecular Resource Center and a Center for Neuroscience. The Molecular Resource Center, which is to receive more than \$497,000 in special state funding, will allow UTCHS scientists to work with the most advanced recombinant DNA technologies. Its purpose is the study and manipulation of genes and the proteins they encode.

The Center for Neuroscience will house an interdisciplinary research effort aimed at understanding the structure and function of the nervous system. This understanding can help combat neurological disease and produce better health care. More than \$418,000 in special Center of Excellence funding has been approved for this project.

Wellness Emphasis Is a First

Another significant development of the year was a \$1.8 million grant from the W. K. Kellogg Foundation to begin the first comprehensive program in the country to teach students to be healthy role models and health promoters, as well as traditional health professionals.

RENEWAL, a year-long campaign to make the College of Dentistry a leader in dental research, exceeded its \$1 million goal.

UTCHS recently became the first health sciences center in the nation to establish a Department of Education. The new department will not offer degree programs, but will integrate its courses into the professional colleges.

A joint venture by UTCHS, five other hospitals, and Memphis urologists has resulted in a plan to purchase a shock wave kidney lithotripter. The lithotripter, used for non-invasive kidney stone disintegration, will be located at UT's William F. Bowld Hospital.

An epilepsy center was established as a joint venture of UTCHS, Baptist Memorial Hospital, and Semmes Murphy Clinic. The departments of neurology and neurosurgery are involved in this center.

Notable student achievements of the year included the following.

- The Student American Pharmaceutical Association chapter in the College of Pharmacy was named outstanding chapter in the nation.
- Graduates of the College of Community and Allied Health Professions continue to score well above average on state and national examinations, and all graduates successfully completed their licensure examinations.

- Dentistry students taking Part One of the National Board Examinations in the summer of 1984 scored well above the national average.

The College of Pharmacy enrolled its first class in the entry-level doctor of pharmacy program in fall 1984. For budgetary and quality reasons, only 50 students



were accepted, but the 1985 entering class is expected to expand to 65 students.

The 1984 forum, "The Biology of Transplantation," was the first of its kind in the nation as well as the inaugural session of the annual scientific conference established with a \$250,000 gift from the Crippled Children's Hospital Foundation. More than 300 physicians, health professionals, and students attended.

Major Grants For Research

Major grants received during the year included \$1.2 million to Dr. Henrietta Bada from the National Institutes of Health for research on neonatal brain disorders; a \$1 million, seven-year Jacob Javits neuroscience investigator award to Dr. Stephen Kitai to continue his studies on how brain cells communicate; and a \$2.5 million, seven-year contract from the National Heart, Lung, and Blood Institute to Dr. William

Applegate for study of systolic hypertension in the elderly.

UTMRCH Opens New Pavilion

In October 1984, the \$44 million East Pavilion opened at UT Memorial Research Center and Hospital in Knoxville. The 12-story addition has 300 private patient rooms and greatly increased space for surgery, radiology, and both the intensive care and newborn nurseries.

Other significant developments of the year included opening of a Multispecialty Breast Center, which is a cooperative effort among physicians and includes a mammography unit; the hospital's first kidney transplant; addition of the UT Lifestar aeromedical service to serve a 150-mile radius around Knoxville; and a new initiative in osseointegration, a dental implantation technique.

MARTIN

*The Campaign for Quality surpassed its goal
a full year ahead of schedule.*

Improving the quality of education was the University of Tennessee at Martin's focus during 1984-85. Innovative programs and trend-setting goals marked the University's academic year, while a host of internationally renowned speakers and artists graced its lecterns and stages.

Center Graduates Forty

Forty West Tennessee elementary and secondary teachers of science and math comprised the first "graduating" class of the Center of Excellence in Science and Mathematics. UTM plans to expand this service to other teachers who wish to return for additional academic instruction, academic credit, and certification credentials.

The Center is sponsoring the Math and Science Academy and a Science Olympiad. The Math and Science Academy will draw professors from nearly 40 teacher preparation institutions throughout the state to compile teaching aids which will supplement the instruction of science and math in grades K-12. UTM also recently hosted the first Science Olympiad in the state, which combined athletic and academic challenges for public school students.

Chair of Excellence Emphasizes Economics

One million dollars, half from the state and half from private funds, was set aside to endow the Tom E. Hendrix Chair of Excellence in Free Enterprise. The chair's purpose is to provide in-service education, workshops, symposia, and resource materials to economics teachers in West Tennessee.

Special emphasis will be given to improved teaching of economics in the elementary and secondary schools, expanded research into the free enterprise system, broader public awareness and appreciation of free enterprise principles, and expanded course offerings in economics.

Campaign Exceeds Goal

The University's first capital campaign, the Campaign for Quality, surpassed its goal a full year ahead of schedule. The three-year campaign set out in July 1983 to raise \$2 million for projects such as upgrading academic programs, establishing an endowed faculty development fund, increasing library holdings, and providing



scholarships. The goal was surpassed by May 1985.

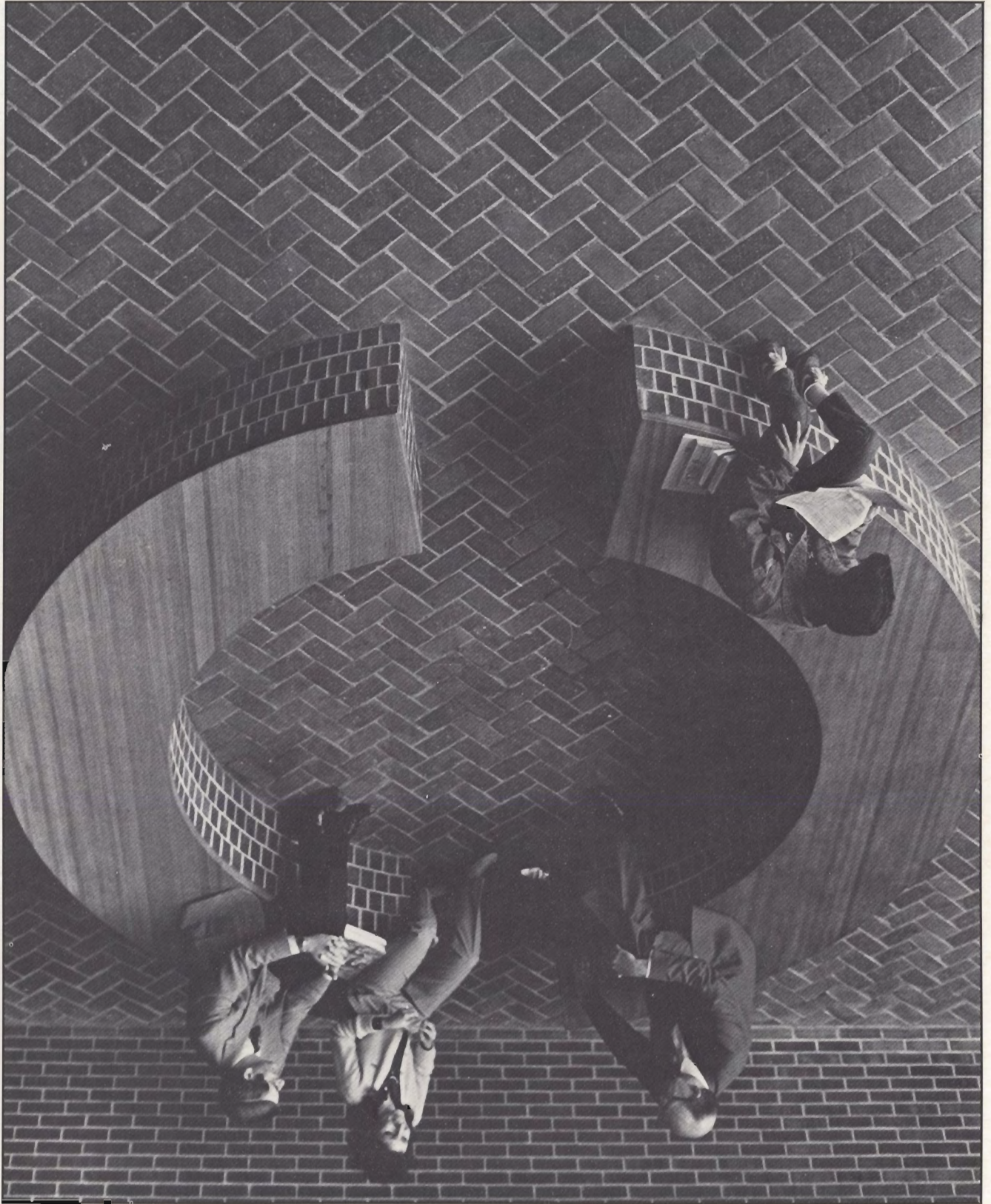
One of the keys to the campaign's success was the support of the University's faculty, staff, and alumni in the special "Family Campaign," which raised more than \$150,000 in gifts and pledges.

A payroll deduction program, the first of its kind in the nation, made news at UTM this year. Employees of Forcum-Lannom, a Dyersburg construction firm, instituted a payroll deduction program that allows its 18 UTM alumni/employees to have a portion of their monthly checks deducted and paid to UTM.

Emphasis on Academics

In another effort to recruit the state's top academic scholars, UTM will offer a new honors program this fall. Honors Seminar will enable small groups of students to meet in day-long seminars with distinguished campus visitors such as scholars, leaders, or artists, allowing for in-depth examination of issues and ideas. The program, which assures participants of at least a full-tuition scholarship for their freshman year, is open to high school students with ACT scores of 25 or higher and GPA's of 3.5 or over.

Other academic developments include the addition of a 40-station computer center in the Humanities Building and membership in the Cooperative Center for Study in Britain, a Kentucky-based consortium of eight colleges and universities that jointly offer their students the opportunity to study in Great Britain.



CHATTANOOGA

*Over \$1.3 million has been made available for
the Center of Excellence for Computer Applications.*

The University of Tennessee at Chattanooga has experienced a very exciting year as a result of the statewide emphasis on improving both the quality of education at all levels and the funds made available through the Better Schools Program. Unquestionably, a major impact of the Comprehensive Education Act of 1984 was significant compensation improvement for faculty and staff.

Center Focuses on Computers

Another major impact of the better schools program was the approval of the Center of Excellence for Computer Applications. With assistance from the state, the UC Foundation, and the Tonya Foundation, over \$1.3 million has been made available for this interdisciplinary center. The center focuses on computer applications of particular use to the Chattanooga region.

The center's emphasis on software development and applications, engineering design via computers, and support for K-12 use of microcomputers is unique in Tennessee and the Southeast.

Academic Programs Enhanced

The increased focus on education and the resultant increases in funding have helped retain accreditation of the business, engineering, and nursing programs.

The communications program in the College of Arts and Sciences has been elevated to departmental status and is working toward accreditation. A \$38,000 equipment grant from the UC Foundation has allowed the department to take an important first step toward accreditation through improvement of laboratory instruction.

The Advanced Microcomputer Laboratory, established by two grants from the UC Foundation, has seen a productive first year. As an instructional facility, the lab has been used for 173 class sessions in subjects varying from accounting and art to statistics. UC Foundation grants were used to acquire additional microcomputers and software.

Many curricula now require a computer course of some kind, and computer literacy is widespread among UTC students as a part of the effort begun eight years ago. The Center of Excellence provides resources for upper-division undergraduate and graduate students.

Other efforts to address quality instruction and excellence include upgraded admissions standards and unit requirements and continued emphasis on honors programs such as the Brock Scholars. Over the last four years, the Writing Across the Curriculum project has prepared teachers to infuse writing requirements into their courses. Along with this has been a restructuring of introductory English courses.

Physical Facilities Improved

Increases in operating and equipment funding have also been made possible by the Better Schools program. Improvements in physical facilities, such as refurbished classrooms and better grounds maintenance, have resulted.

In the area of capital funding, construction of phase two of the Oak Street Student Housing Project has begun. In addition plans are being completed for a \$5 million addition to the central energy facility. Other immediate capital needs include land acquisition funds, a physical plant services facility, and an engineering-business building.

Centennial Celebration Planned

UTC will celebrate its centennial in 1986-87, and a special committee is planning academic, cultural, and social events. Centennial activities will begin with a Founders Day program in the fall of 1986 and conclude with commencement in May 1987.

A University-wide strategic planning group has also been appointed to help chart the course of the campus for the next 10-15 years, and a new provost, Dr. Sandra Packard, has been appointed.





INSTITUTE OF AGRICULTURE

*UT's is one of a few state extension services
funded by a federal pilot program
to work with financially distressed farm families.*

The past year has been one of the best in the recent history of UT agriculture. Although all the ground lost during the budget constraints of the early 1980s has not been regained, progress was made. As a result, faculty and staff are optimistic about the immediate future of Institute of Agriculture programs.

Several highlights of the year were:

- More state funds for salaries and programs.
- Funding of a Center of Excellence in the College of Veterinary Medicine.
- Endowment of a Chair of Excellence, funded by a bequest by Ivan Racheff and matched by the state, in the College of Agriculture.
- Planning for a fund-raising campaign for the Institute of Agriculture.

Agriculture College Gets Chair

One of the three Chairs of Excellence designated for UT Knoxville was allocated to the College of Agriculture's Department of Ornamental Horticulture and Landscape Design. Half of the \$1 million that agriculture received from the Ivan Racheff estate was used to match the state's \$500,000 to endow the chair. The other half of the Racheff funds will endow scholarships and fellowships in ornamental horticulture.

A distinguished scientist with expertise in biotechnology—plant genetic engineering—will be selected to fill the Racheff Chair.

Examples of noteworthy faculty and student achievements follow:

- Dr. William Hammitt, associate professor in forestry, received a Senior Fulbright Award to teach and conduct research in Peru.
- The Department of Forestry received a \$66,250 contract to recruit minority undergraduate students.
- Two College of Agriculture undergraduate students were selected to head student branches of national professional societies.
- An agricultural education junior was the winning national FFA extemporaneous speaker.

Graduate student enrollment increased slightly, but enrollment of undergraduates continued to decline despite additional recruitment efforts. These enrollment difficulties, inadequate funds for equipment and oper-

ating expenses, and desperately needed space for all the plant sciences-related departments continue to be major concerns.

Martin School To Step Up Recruiting

Enrollment in the School of Agriculture and Home Economics was slightly less in 1984-85 than the previous year. Intensified recruitment and strategies to deal with low retention rates are planned.

The Home Economics Department's academic programs were granted provisional accreditation by the American Home Economics Association in the fall of 1984. The department is working toward full accreditation in two years.

More than 33,000 persons attended about 40 events last year in the new West Tennessee Agricultural Pavilion on the UTM campus, and numerous laboratory classes, primarily in the animal sciences, were held there.

Veterinary Research Support Grows

The faculty of the College of Veterinary Medicine continue to be competitive in receiving external support for research from agencies such as the National Institutes of Health, U.S. Department of Agriculture, and the National Science Foundation. External funds for the Center of Excellence in Livestock Diseases and Human Health are expected to exceed \$750,000 next year. Additional funding of approximately \$400,000 is pending, so the center has the potential to exceed \$1 million in external funding next year.

Sixty students have been admitted to the college from an applicant pool of nearly 400. Nineteen positions went to out-of-state students.

Experiment Station Fills Positions

Increased funding in the Agricultural Experiment Station has resulted in retaining more superior faculty than in previous years and filling many vacant positions.

Steps have been taken to strengthen the research resulting from establishment of the Racheff Chair of Excellence in the Department of Ornamental Horticulture and Landscape Design. Greenhouses have been renovated and a shade house added. In addition, land available for field experiments has been improved to



meet research needs.

New personnel have been added as part of the expanded research program in commercial production of fruits and vegetables.

Lack of adequate space for staff offices and research laboratories is becoming more critical. The two highest priorities are a West Tennessee Center for Agricultural Research, Extension, and Public Service at Jackson and an addition to the Ellington Plant Sciences Building on the agricultural campus at Knoxville.

Extension Emphasizes Farm Management

The salary increases of the past year permitted the employment of better-qualified individuals and rekindled the enthusiasm of other Agricultural Extension Service staff and faculty.

Top priority continues to be placed on farm management and marketing. The financial situation of farmers makes regaining farm profitability a major goal. During the first six months of the current year, 205 meetings were held throughout the state to teach management and marketing skills. UT's is one of a few state extension services funded by a federal pilot

program to work with financially distressed farm families. The pilot program is under way in 12 counties.

In the area of home economics, more than 90,000 individuals participated in educational activities relating to consumer education, housing, interior design, clothing, health, nutrition, family economics, and family relationships.

Since the inception of the federally funded Expanded Food and Nutrition Education Program, more than 89,000 homemakers and 186,000 youths have received training in nutrition and food-related areas. An accelerated teaching program has been initiated, and standardized nutrition curricula will be used.

The enrollment in 4-H Clubs continues to be larger than in any other state, and for the sixth consecutive year Tennessee produced more national winners (28) than any other state.

UT-AES has introduced an international dimension into the 4-H program through an exchange program with the Labo International Exchange Foundation. Forty Japanese youths spent a month in homes of Tennessee 4-H members in 1984, and 25 Tennessee 4-H members will go to Japan for one month in 1985.

CONTINUING EDUCATION

WUOT was among the top nine public radio stations in the country in ratings for markets the size of metropolitan Knoxville.

The Division of Continuing Education faces the challenge of meeting the educational and informational needs of the University statewide and the people of Tennessee through the utilization of new technology and the continual upgrading of services. Accomplishments made during 1984-85 are summarized below.

Computerized Grading Used

The Center for Extended Learning began developing a new six-part series of courses that will enable real estate agents to renew their licenses by successfully completing UT-arranged correspondence courses.

This marks the department's first use of computerized grading that also provides feedback to the student. The system involves: (1) using a scanner to grade the student multiple choice answer sheet; (2) feeding the responses into the computer; and (3) developing a computer program for each lesson that shows the student why an incorrect answer is wrong.

WUOT in Top Ratings

WUOT, the University's National Public Radio station in Knoxville, was among the top nine public radio stations in the country last spring in ratings for markets the size of metropolitan Knoxville. WUOT also was 46th in the top 50 public radio stations covering all markets in terms of audience size and share of the radio audience. This is the first time WUOT has been among the top 50.

Satellite Service Added

Through the efforts of UT's Development Office, the Department of Television Services received a satellite downlink with steerable dish that has been installed on the roof of the Communications and University Extension Building.

The dish enables TV Services to receive and distribute public affairs, information, sports, and entertainment programs to dormitories throughout the Knoxville campus. The satellite dish also permits TV Services to receive and distribute national teleconferences throughout the campus.

Tape Network Distributes Programming

An important component of the Division's outreach effort is the statewide Tape Network that distributes UT programming to radio stations throughout the state. Use of Tape Network programming has increased despite lifting of public affairs programming requirements by the FCC. The Tennessee Radio Network

operating out of Nashville now carries several UT program series. This increased distribution, combined with our own 12,380 quarter-hours of tape distribution, totals 20,730 quarter-hours of broadcast time over the state's commercial stations.

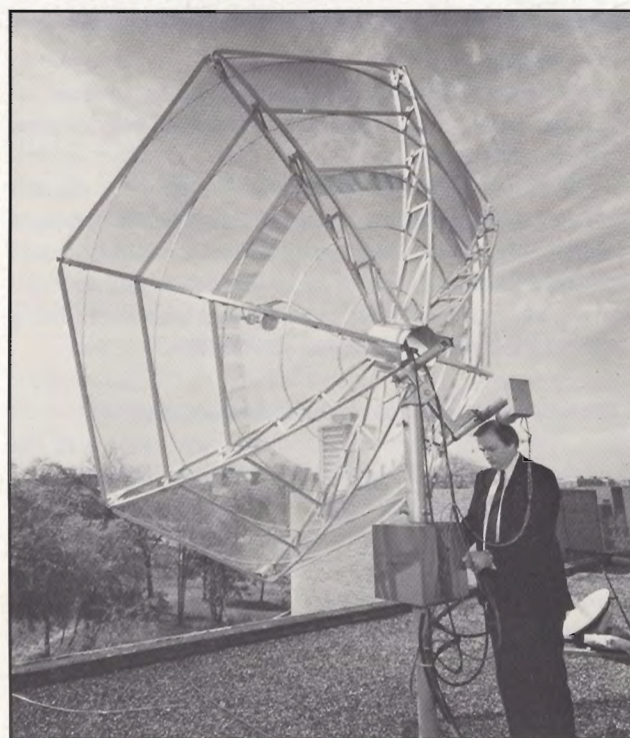
Training Tapes Produced

A video training tape produced by Television Services, "The Rules and Officiating for Volleyball," has been sold in 33 states and one foreign country. Orders are still being processed. The department also provided production support for the successful marketing of UT football and basketball coaches shows.

Two medical video training tapes were produced during the past year. One dealt with the I.M. Nailing procedure for bone restructure. The second, a training demonstration of a special table designed for treating bone fractures, has received international distribution.

Correspondence Instruction Is Popular

More than 3,900 students enrolled in CEL-offered courses during the year. The enrollments include 2,400 in UT college credit courses, 1,150 in the high school program, and 350 in non-credit programs. The students represent 91 of Tennessee's counties, 47 states other than Tennessee, and 19 foreign countries.



TV Services has added a new satellite dish.

INSTITUTE FOR PUBLIC SERVICE

Nearly 5,000 city and county employees attended one or more of the four IPS certificate training programs.

For more than 35 years, UT's full-time, non-agricultural public service agencies have responded to the needs of Tennessee's incorporated cities, counties, small industries, and hospitals.

The 1984-85 program year presented a set of new challenges that impacted service delivery provided by the five agencies of the Institute for Public Service. Some of the more substantive issues included:

- Potential fiscal crises among cities and counties ranging from the proposed elimination of federal revenue sharing funds to the Supreme Court's reversal of an earlier decision exempting local governments from overtime pay provisions of the Fair Labor Standards Act.
- Continuing erosion of America's industrial base as a result of foreign competition.
- Stringent cost containment programs implemented by hospitals as a result of markedly lower patient loads.

Officials Take Certificate Training

Effective management training is a proven method of helping prepare local government officials to address challenges. During 1984-85, the Institute's three local government service agencies further refined comprehensive certificate programs launched the previous year.

Nearly 5,000 city and county employees attended one or more of the four certificate training programs. The programs and total number of instructional hours are:

1. UT County Officials Certificate Training Program (115 hours);
2. UT Municipal Officials Certificate Training Program (108 hours);
3. UT Public Supervisor Certificate Training Program (36 hours); and
4. UT Public Secretary Certificate Training Program (18 hours).

A total of 237 county officials completed the initial level of the three-tiered COCTP curriculum; 200 persons earned the secretarial certificate; and 75 individuals completed the supervisory program. The training series are a joint effort of UT's Center for Government Training, County Technical Assistance Service, and Municipal Technical Advisory Service.

CTAS Helps with Chart of Accounts

During the past year, County Technical Assistance Service staff worked with personnel of the state comptroller's office to design and develop a uniform chart of

accounts for counties. Now that the system has been developed, CTAS staff will be involved in helping counties convert manual or computerized accounting systems to the new process.

Computer Assistance Offered

The microcomputer revolution continued to impact cities, counties, and industries that routinely rely on the agencies of IPS. Initiatives launched several years ago to upgrade the capability of the agencies to respond to data processing needs produced a number of tangible results including:

- The Center for Industrial Services expanded its ability to respond to information requests by joining the Southern Technology Applications Center at the University of Florida. Through the STAC network, CIS can access more than 400 computerized data bases.
- CTAS worked with the Washington County sheriff's department to establish a prototype crime reporting system for medium-sized and smaller counties.
- MTAS is modifying a generic microcomputer workshop to include (a) instruction in computer literacy; (b) "hands on" experience; and (c) "elective" study of computer applications in areas of municipal government such as public works, police, or general management.

Water and Wastewater Issues

During the past 12 months, MTAS launched a major effort to help selected Tennessee municipalities cope with an estimated \$1.8 billion wastewater construction requirement.

The MTAS technical assistance activity, funded by Governor Alexander's \$14 million initiative passed by the 1984 General Assembly, is intended to help cities: (a) increase their awareness of effective utility management practices; (b) establish reasonable rate structures; and (c) plan for construction or expansion.

Publications Help Government

UT public service provides publications that address specific topical concerns of government. New or revised reports issued during 1984-85 included *Tennessee Notary Public Handbook*, *Salary and Fringe Benefits Survey of Tennessee Municipalities 1984*, *Water and Sewer Rate Manual for Tennessee Municipalities*, *Purchasing Guide for Tennessee Municipalities*, and a series of reports on issues such as the proposed Internal Revenue Service guidelines on taxing fringe benefits.

UNIVERSITY-WIDE DEVELOPMENTS

University-wide enrollment leveled off during 1984-85 to 40,881 students. A comparison of the year's enrollment with that for 1983 shows:

Campus	1983	1984
Chattanooga	7,839	7,474
Center for the Health Sciences	1,988	1,883
Martin	5,670	5,366
Knoxville	27,018	26,158
TOTAL	42,515	40,881

Fees increased 12 to 20 percent, and state appropriations increased to some \$204 million, not including the special allocations for Centers and Chairs of Excellence. The state appropriation included \$33 million allocated to meet the University's share of Social Security and retirement costs, which for the past several years had been allocated to the State Treasurer's Office. Faculty and staff received salary raises averaging 12 to 14 percent.

Major Projects Under Way

The University administration has awarded construction contracts totaling more than \$33 million since July 1984. The largest project is the UT Knoxville Library, with a cost of nearly \$22 million. Other significant projects begun this year are the Oak Street single student housing at UT Chattanooga and the Pathology Building renovation at the Center for the Health Sciences.

Projects totaling more than \$49 million have been completed during the past year, including the \$38 million East Pavilion at Memorial Research Center and Hospital in Knoxville and the Library/Nursing Building at the Center for the Health Sciences.

The University will receive more than \$16 million in state capital outlay appropriations in 1985-86. Major projects planned are the Consolidated Animal Facility at UTCHS and the Dabney Hall renovation at UTK.

Admission Standards Tightened

Pursuant to Board of Trustees action, a more rigorous high school curriculum will be required for admission to UT Knoxville, UT Chattanooga, and UT Martin. Beginning in the fall term of 1989, more math, history, science, and foreign language will be required. Students who are now eighth graders will be the first full class to be affected by these new requirements, and several projects have been undertaken to disseminate the information about the new requirements throughout the state.

Semester System Adopted

Effective in the fall of 1988, the Knoxville and Martin campuses will change their academic calendars from the quarter to the early semester system. The change was studied for several years by the campuses and during the past year by a special committee of the Board of Trustees. The committee recommended the change to the full Board, which adopted the recommendation in April.

Committees at the two campuses are at work planning the conversion, which should result in a 20-30 percent reduction in total number of courses offered.

Venture Capital Center Established

UT has expanded its role in helping the state with economic development through the creation of the UT Venture Capital Center contract with the UT Research Corp. The center will help bring together individuals and firms needing venture capital with sources of funds for investment.

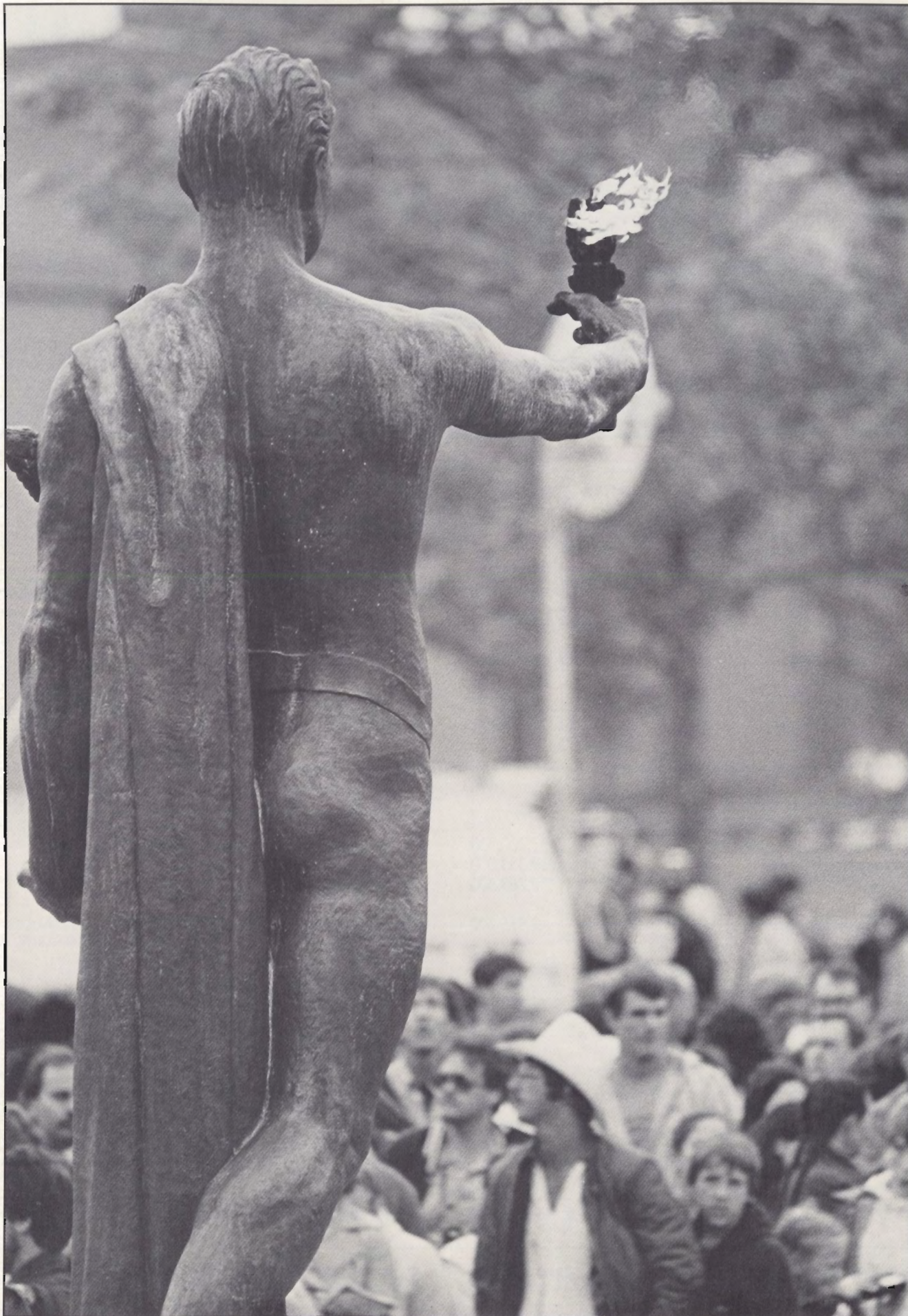
Some of the center's activities include orientation seminars on the UT campuses, workshops on venture capital and business opportunities in selected cities, marketing counseling for selected small start-up companies, and information on patent law.

Student Aid Threatened

During 1984-85, students at the four UT campuses received \$12,162,435 from the Pell Grant, Supplemental Education Opportunity Grant, College Work-Study, and National Direct Student Loan programs. Another \$22,590,151 was borrowed from private lenders with a federal guarantee and, in most cases, with federal subsidy of the interest. Proposals in the 1986 budget would have reduced these amounts by almost one-third.

President Boling and the chancellors of each of the campuses met with the Tennessee congressional delegation in April to discuss ideas for improving the program while protecting the interests of students and their families. The UT officials received almost unanimous support from the delegation for protecting a strong student aid program.

A proposal this year by the Treasury Department would have had major consequences for the deductibility of charitable contributions. Because of its large private giving program and because of the prominent roles played by Rep. John Duncan and Rep. Harold Ford on the House Ways and Means Committee, UT continues to be involved in protecting charitable deductions.





ANALYSIS OF STATE OPERATING APPROPRIATIONS

	Actual Appropriations FY 1984-85	THEC Recommendations FY 1985-86	Appropriated by Legislature	
			Operating FY 1985-86	Centers of Excellence FY 1985-86
A. Formula Units				
UT Chattanooga	\$ 18,094,500	\$ 20,933,000	\$ 19,528,000	\$ 675,000
UT Knoxville	86,688,500	101,867,000	94,185,000	4,996,823
UT Martin	14,494,800	16,761,000	15,663,000	243,704
Sub-Total	\$119,277,800	\$139,561,000	\$129,376,000	\$ 5,915,527
B. Non-Formula Units				
UT Center for the Health Sciences				
UTCHS Units	\$ 27,200,300	\$ 32,029,000	\$ 29,438,000	\$ 915,516
College of Medicine	19,333,000	22,105,000	20,366,000	
Family Medicine Units	2,289,300	2,463,000	2,391,000	
UT Space Institute	2,515,700	2,949,000	2,690,000	1,099,838
Agriculture				
Agricultural Experiment Station	9,113,300	11,118,000	10,201,000	
Agricultural Extension Service	11,619,200	13,708,000	12,983,000	
Veterinary Medicine	6,462,300	7,345,000	6,732,000	291,789
Public Service				
Institute for Public Service	1,587,200	1,800,000	1,739,000	
Municipal Technical Adv. Svc.	711,200	828,000	775,000	
County Technical Asst. Svc.	530,600	612,000	572,000	
Continuing Education	1,051,000	1,613,000	1,467,000	
University-wide Administration	2,795,500	3,216,000	2,998,000	
Sub-Total	\$ 85,208,600	\$ 99,786,000	\$ 92,352,000	\$ 2,307,143
GRAND TOTAL	\$204,486,400	\$239,347,000	\$221,728,000	\$ 8,222,670

THE UNIVERSITY OF TENNESSEE

BUDGET SUMMARY 1984-85 and 1985-86

UNRESTRICTED CURRENT FUNDS*

(1985-86 Budget Adopted at Board Meeting, June 20, 1985)

	Actual Expenditures and Transfers 1984-85	Proposed Budget 1985-86
Chattanooga	\$33,077,293	\$ 36,406,238
Knoxville (including Knoxville Campus, Evening School, School of Social Work and Testing Bureau)	175,716,799	184,034,992
Martin	28,904,196	30,444,971
Space Institute	5,435,740	5,930,500
Center for the Health Sciences (including Memphis Campus, College of Medicine, Memorial Research Center at Knoxville, Clinical Centers at Knoxville and Chattanooga, Family Medicine Units at Memphis, Jackson, Knoxville, and Chattanooga)	68,728,484	72,400,758
Agricultural Experiment Station	16,830,043	17,928,199
Agricultural Extension Service	18,985,508	20,780,496
Veterinary Medicine	8,348,560	8,602,568
Municipal Technical Advisory Service	1,380,341	1,434,673
County Technical Assistance Service	1,081,363	1,312,686
State-wide Programs (including Continuing Education, Institute for Public Service and University-wide Administration and Services)	17,139,463	16,449,425
TOTAL	<u>\$375,627,790</u>	<u>\$395,725,506</u>

ESTIMATED REVENUE 1985-86

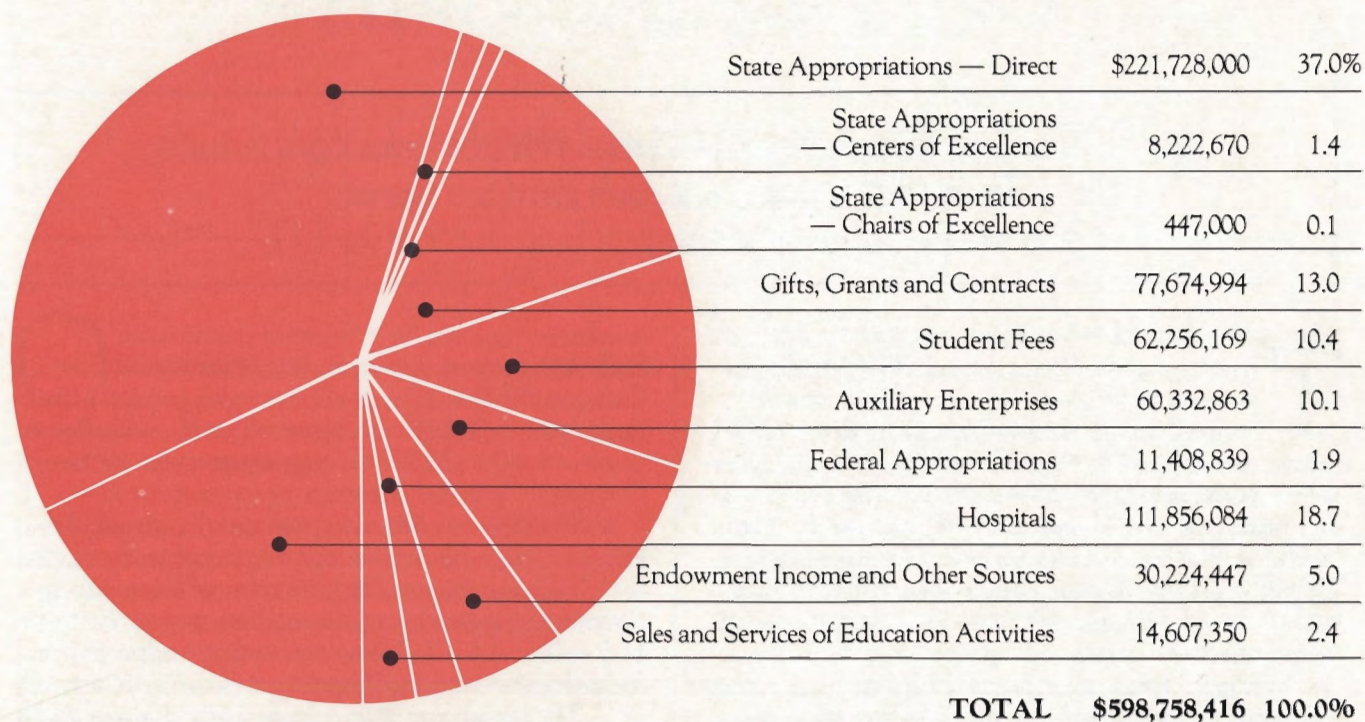
Student Fees	\$ 62,256,169
State Appropriations	221,728,000
Federal Appropriations	11,408,839
Gifts, Grants and Contracts	11,328,694
Sales of Educational Activities	14,607,350
Sales of Auxiliary Enterprises	60,290,810
Other Sources	14,105,644
TOTAL	<u>\$395,725,506</u>

★ Includes all entities except hospitals.



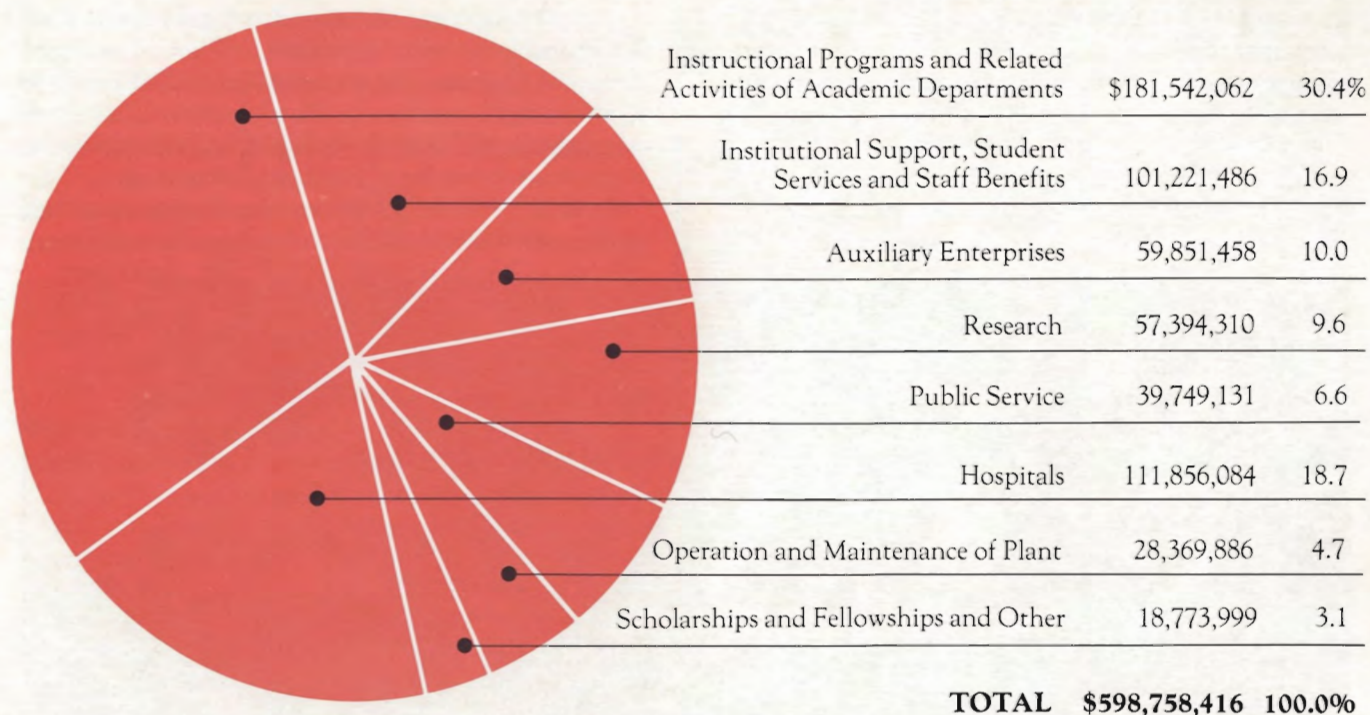
Where UT's Money Comes From . . .

Resources Budgeted FY 1985-86★



And Where It Goes . . .

Uses Of Budgeted Resources FY 1985-86★



NOTE: Hospitals are set out as a separate function.

★ Includes Unrestricted, Restricted and Hospital Funds.

DEVELOPMENT

The UT Development Council and the volunteer development groups at each campus spend a great deal of time generating private support for UT.

The University of Tennessee continues to enjoy an outstanding level of private support from alumni, friends, corporations, foundations, and others, as exhibited by the \$22.4 million in private gifts received during 1984-85. This is the University's largest ever private gift total and surpassed the previous year by \$4.5 million.

The UT Development Council, which celebrates its 30th anniversary this fall, and the volunteer development groups at each campus spend a great deal of time generating private support for UT. The increases reported in private giving this year are a result of the fund-raising efforts in progress at each campus and unit of the University and the commitment of the vice presidents, chancellors, and development staff.

Campus Activities Produce Results

UT Martin's Campaign for Quality exceeded its \$2 million goal almost one year ahead of schedule. This effort, chaired by Don Pennington, generated private support for scholarships, teaching awards, library improvements, and other special programs on the Martin campus. Among the significant supporters of the campaign were Goodyear Tire and Rubber Company, Tom Hendrix of Selmer, and UTM faculty and staff, who contributed more than \$150,000 to the campaign.

During the past year the Center for the Health Sciences announced the successful completion of one campaign and the initiation of a second. The College of Dentistry's Renewal Campaign exceeded its goal of \$1 million by \$200,000. A special project in orthodontics secured an additional \$250,000 for the college. The College of Medicine recently announced a \$5 million campaign to establish three endowed professorships, an alumni merit scholars endowment, and a medical student loan fund.

At UTK, several colleges and departments are engaged in special fund-raising efforts. In the College of Business Administration, the Transportation and Logistics Excellence Fund has received \$560,000 toward its goal of \$750,000. The Accounting Excellence Endowment Fund will soon exceed its goal of \$1.5 million. The College of Liberal Arts received \$250,000 from the Andrew W. Mellon Foundation and \$150,000 from the Lyndhurst Foundation to support the James R.

Stokely Institute for Liberal Arts Education. In the College of Engineering, plans are under way for a three-to five-year capital gifts campaign. The *Nashville Banner* plans to fund a \$20,000 scholarship program in the College of Communications.

The Alumni Annual Fund and the annual Athletic Campaign have generated significant private gifts for UT Chattanooga. The University of Chattanooga Foundation again this year earned income of nearly \$1.5 million for UTC programs such as endowed professorships and scholarships.

The Institute of Agriculture received several major gifts during the past year, including \$100,000 for a veterinary scholarship fund from the J. G. Salisbury Foundation. The Jack Daniels Distillery Company made a commitment to support animal science research and 4-H activities. The Institute is concluding plans and recruiting leadership for a major fund-raising campaign.

Chair Endowments Are Significant

Matching state funds to endow Chairs of Excellence was probably the most significant development-related activity of the year. The state provided \$500,000 each for 10 chairs, to be matched by the University. Chairs were established at UT Martin, UTCHS, UT Knoxville, the Institute of Agriculture, and UT Chattanooga.

At UT Martin, gifts from Tom Hendrix matched state funds to create the Tom Hendrix Chair of Excellence in Free Enterprise. At UTCHS, chairs were established in microbiology and immunology and in pharmacology as the result of the \$3 million bequest from the estate of Harriet Van Vleet. This was the largest bequest ever received by the University.

At UT Knoxville, a Chair of Excellence was established in English with the assistance of the John Hodges Better English Fund, the College of Liberal Arts Humanities Endowment, and other donors. In addition, part of the \$2.3 million bequest from the estate of Ivan Racheff will be used to establish a Chair of Excellence in the College of Engineering. Another portion of the Racheff estate bequest will be used to establish a Chair of Excellence in the Department of Ornamental Horticulture and Landscape Design in the College of Agriculture.

ALUMNI AFFAIRS AND ANNUAL GIVING

Founded October 6, 1836, the National Alumni Association has served the University for almost 150 years.

One common measure of all great universities is the strength of their alumni activities and fund raising programs. Since 1961, UT has enjoyed an especially strong reputation in alumni support, and 1984-85 is no exception.

Activities, projects, and programs that identify and highlight alumni interest and involvement have continued and expanded throughout the UT system.

Increased numbers of former students have attended campus homecomings, class reunions, and constituent meetings, as well as National Alumni Association chapter meetings, Women's Activities Committee seminars, and similar programs.

A tangible outgrowth of interest and involvement in activities is active participation in the annual alumni fund-raising campaign—the Annual Giving Program. The 1984-85 year was another record breaker, with 27,749 contributors giving more than \$2.95 million compared to last year when 27,022 contributors gave almost \$2.7 million.

Annual giving dollars are important to UT faculty and students, who benefit from the generosity of contributing alumni. The National Alumni Association Board of Governors distributes just under \$600,000 annually for approximately 550 scholarships. Eighteen faculty members are designated Alumni Distinguished Service Professors and receive \$3,000 salary supplements each year for as long as they remain at UT. Another 10 faculty members are recognized each year with \$1,000 awards for

excellence in classroom teaching and designated Alumni Outstanding Teachers.

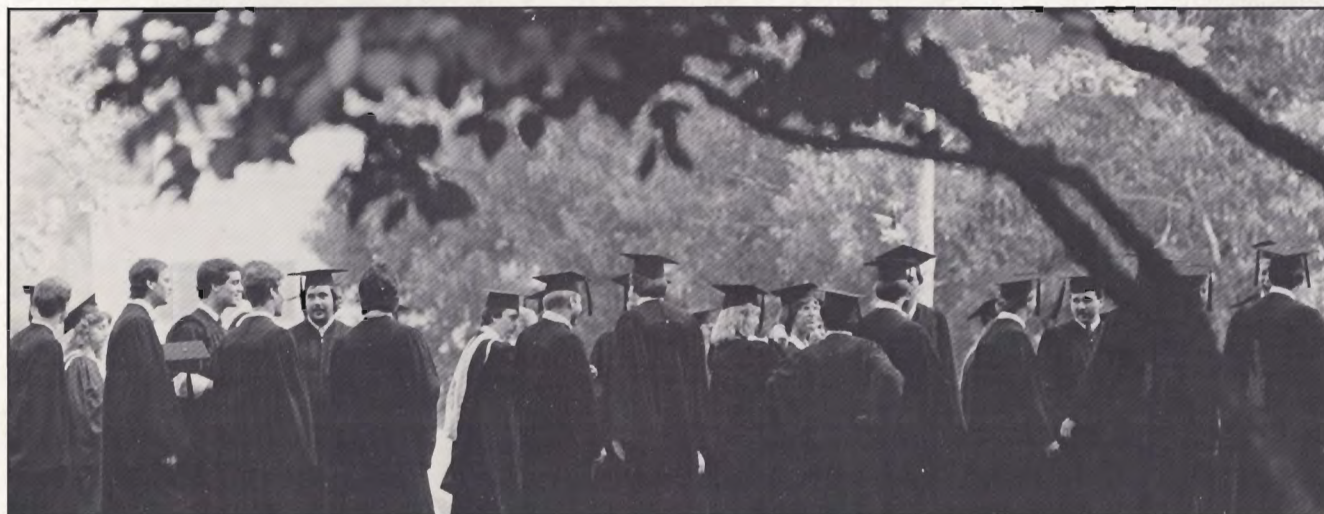
150th Anniversary Planned

The history of the National Alumni Association will be celebrated in a 15-month commemoration beginning in June 1986. Founded October 6, 1836, the National Alumni Association has served the University for almost 150 years and has made significant contributions at crucial times to its continued existence.

A 150th anniversary committee of staff and volunteers has been named to serve as a steering group. Executive Director of Alumni Programs Lofton Stuart chairs the committee, and members are Betty Gill of Knoxville, National Alumni Association President Alan Cates of Chattanooga, Past National Alumni Association President Dr. Lew Dougherty Jr. of Camden, and UTK Director of Alumni Affairs Martha Kirk.

Events are planned on all campuses, and a history of the National Alumni Association will be published.

	<u>1983-84</u>	<u>1984-85</u>	<u>Net Change</u>
Number of Contributors	27,022	27,749	+727
Dollar Total	\$2,674,786	\$2,950,067	+\$275,281
Average Gift	\$98.98	\$106.31	+\$7.33



A LOOK AHEAD

Just as the state's Better Schools Program seeks to provide the best in teachers, curriculum, and equipment for elementary and secondary school students, so does the University of Tennessee have goals of providing quality college-level teaching, equipment, and course choices. Along with such innovations as Centers and Chairs of Excellence, the University is planning changes in admission requirements and in length of academic sessions for the enhancement of quality in education.

These changes, although projected for the late 1980s, are already far along in the planning and implementing stages. Higher admission standards at the Knoxville, Martin, and Chattanooga campuses will become effective for freshmen entering in the fall of 1989. Our administrators are already working with high school superintendents, principals, and guidance counselors and informing the parents of 1989 freshmen of the changes. As a result, we fully expect to have students better prepared to do college-level work.

Work toward converting from the quarter to the semester system at two of our campuses began this spring. The change to the semester system at the Knoxville and Martin campuses by the fall of 1988 will place the entire University on a compatible study system. Aside from this advantage, there will be a general re-evaluation of course offerings at these campuses, with an expected reduction of from 20 to 30 percent in the number of courses offered. Greater in-depth study will be made possible in the semester term, while the opportunity for a broader study that was characteristic of the quarter system will be lost. Perhaps the greatest benefit to derive from this change in length of term will be the curricular overhaul needed to effect the conversion.

One of our chief concerns, of course, is that we make this change without delaying the progress toward graduation of any student.

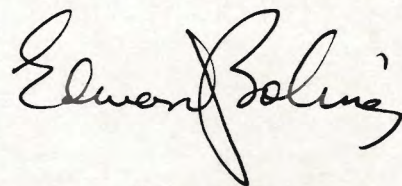
To anyone who might ask if these changes mean a turn toward "elitism," I would give an emphatic "no!" It is not possible for this University to become an elitist institution. We are a land-grant institution, and as such we are compelled by our charter and the federal land-grant act to carry out missions that preclude any aspirations toward elitism. We are committed to conduct

research and public service as well as to teach, and our first priority is to serve all of the people of Tennessee.

We simply want our share of the best students, and that will be one of our goals in the years ahead.

Many of our accomplishments of the current year and our expectations for the year ahead may be attributed to the leadership and the concern for education demonstrated by Governor Alexander, coupled with the support and progressive action of the General Assembly. Their willingness to provide more funds to establish Centers and Chairs of Excellence, to increase salaries, and to improve or replace facilities and equipment, is a challenge to us to teach better, to improve our research efforts, and to expand our services to the public.

In addition to Governor Alexander, I want to recognize others who have helped to make 1984-85 an especially good year for education in Tennessee. Once again Lieutenant Governor John Wilder and House Speaker Ned Ray McWherter have proved to be strong supporters of our schools. The Tennessee Higher Education Commission deserves great credit for its continued contributions to all of our public colleges and universities. Special thanks must go to State Representative John Bragg for his work on the legislation that established permanent endowments for Chairs of Excellence. The Board of Trustees, which has approved areas for Centers and Chairs of Excellence and has acted to upgrade admission standards and to achieve a compatible system-wide academic calendar, must be congratulated for a year of dedicated and progressive service. The work of UT support groups, the National Alumni Association, and the Development Council helped to make 1984-85 a banner year; and the faculty and students at all campuses have provided the spark needed to rekindle a sometimes dormant spirit of academic achievement and excellence.



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