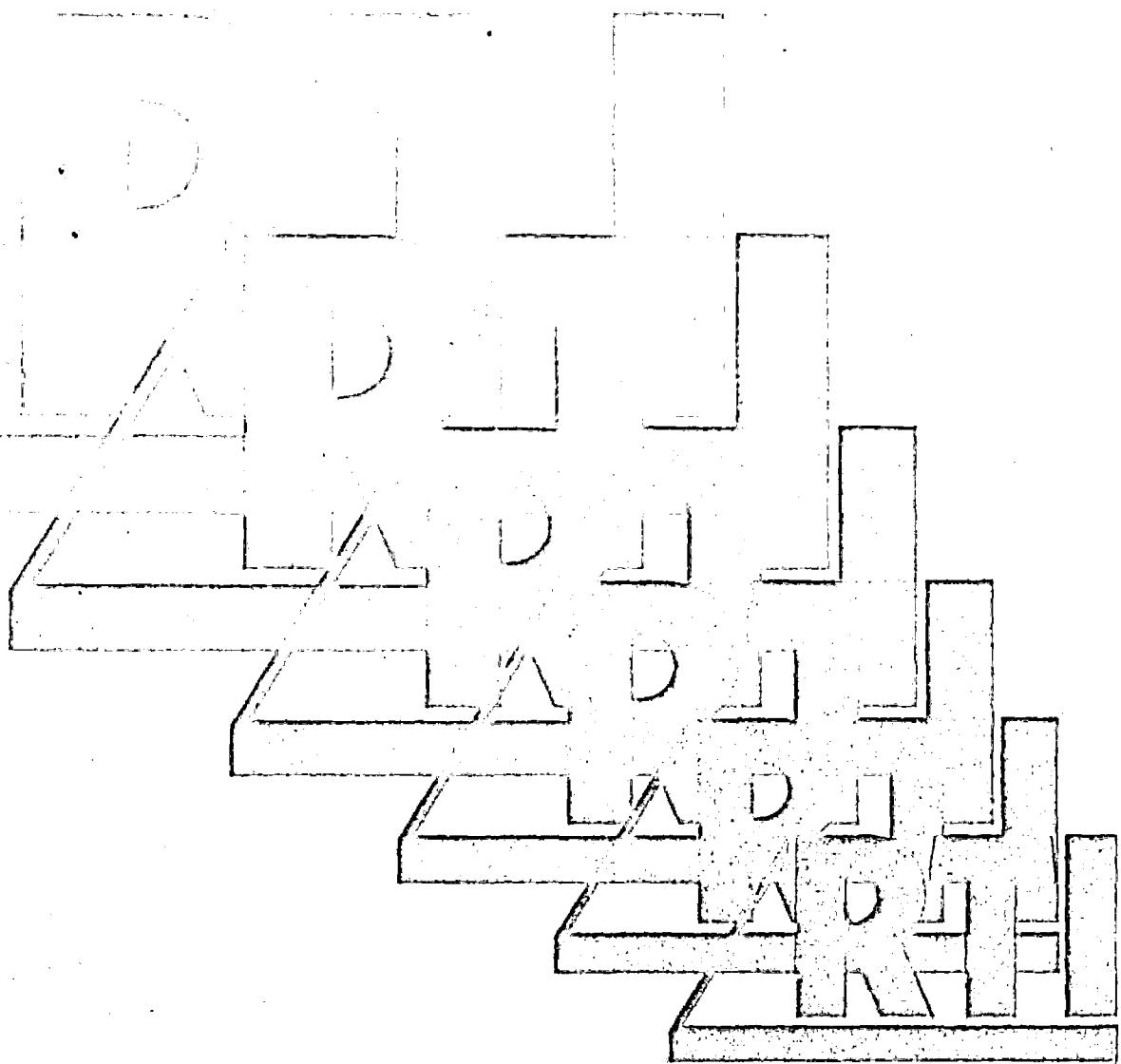


1985



RESEARCH TRIANGLE INSTITUTE

RESEARCH TRIANGLE INSTITUTE

1. RTI performs interdisciplinary research in many scientific fields under contract to clients in business, industry, and government.

2. RTI was established as a freestanding, not-for-profit corporate entity by joint action of the University of North Carolina at Chapel Hill, Duke University, and North Carolina State University.

3. RTI is entirely self-supporting from contract revenues generated by project charges. Start-up funding for RTI was provided through a \$500,000 grant from contributions made to the Research Triangle Foundation.

4. RTI's earnings are invested in Institute facilities and operations.

5. RTI management reports to a Board of Governors that includes university officials and scientists, and representatives of the business and professional communities.

HISTORY

6. RTI's articles of incorporation were filed on December 29, 1958.

7. RTI was conceived as the initial organization and first step for growth in the new Research Triangle Park.

8. RTI research started on March 2, 1959, with a small, family health survey project.

FACILITIES

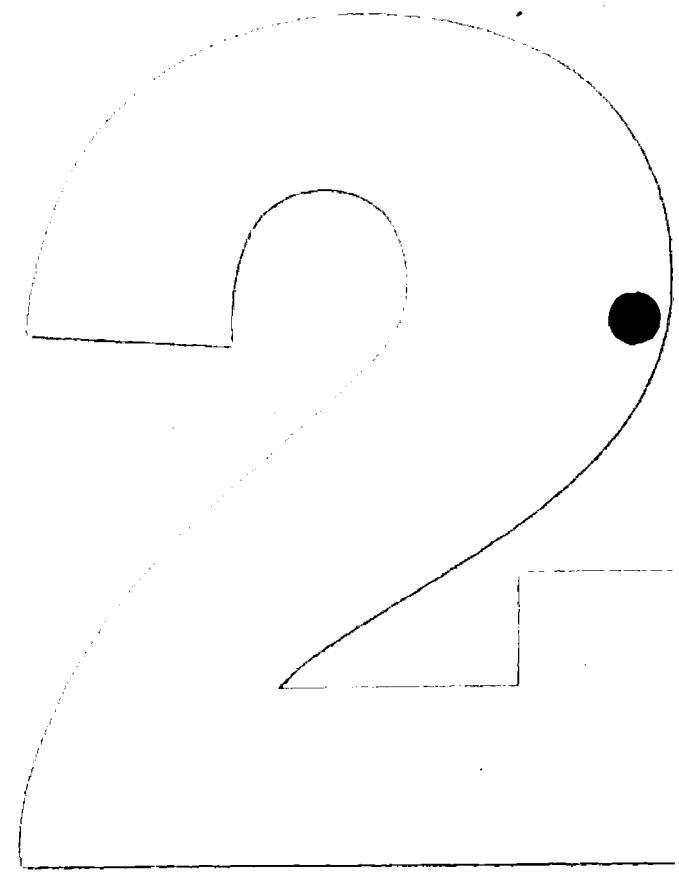
9. RTI is located in the 6,550-acre Research Triangle Park of North Carolina between the university cities of Raleigh, Durham, and Chapel Hill.

10. RTI's 180-acre campus was donated by the Research Triangle Foundation, a nonprofit trusteeship that has developed the Park surrounding RTI into the world's largest planned center for scientific research and development.

11. RTI occupies 339,000 square feet in 14 laboratory and office buildings on campus, owns a 13,000-square-foot chemical engineering annex in Durham, and leases 23,300 square feet in the Triangle Service Center.

12. RTI has completed arrangements for a new, 50,000-square-foot building on its campus in the Park. Occupancy is expected in mid-1987.

13. RTI has a full-time systems engineering staff in Newport News, Virginia, near the NASA Langley Research Center.



ans
about Research

14. RTI maintains project offices in Washington, D.C., Cocoa Beach, Florida, and in Morocco and Nepal. Research offices at other locations in the U.S. and abroad are established to meet project requirements.

UNIVERSITIES

15. RTI was designed to work closely with its three founding institutions: the University of North Carolina at Chapel Hill, Duke University, and North Carolina State University.

16. RTI and all other elements of North Carolina's Research Triangle Park venture are based on the combined educational and scientific research activities of the three universities.

17. RTI/University relationships have always been of paramount importance to the Institute's operations and growth. They include board governance, professional consulting agreements with faculty and medical center scientists, adjunct appointments for selected RTI senior staff members, library services, and access to the Triangle Universities Computation Center in the Research Triangle Park.

18. RTI/University collaboration is especially productive in the many research undertakings which call for a portion of the work to be performed within RTI and a portion at one or more of the universities.

19. RTI enjoys a role as one of six participating institutions in the unique, state-supported Microelectronics Center of North Carolina. Other MCNC founding participants are the three major Triangle Universities, the University of North Carolina at Charlotte, and North Carolina A&T State University in Greensboro. RTI also shares activities with neighboring North Carolina Central University in Durham.

ANNUAL
REPORT

20. RTI's financial, operating, and staff activities for the fiscal year that ended September 30, 1985, are highlighted in the following pages.

vers
triangle Institute



On a year-long World Bank assignment to the Kingdom of Nepal, Jim McCullough and Tom Steubner are helping local officials strengthen municipal financial management practices.

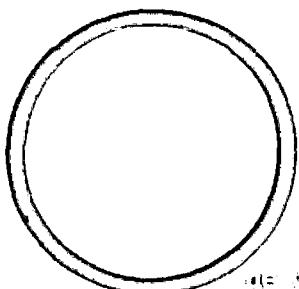
Interdisciplinary research in the social and engineering sciences is being sponsored by five federal agencies to reduce the hazards of wandering among elderly people who suffer from memory loss. RTI's research team includes physiologist Doris Rouse, who is director of technology applications, and sociologist Janet Griffith.

Herb Seltzman and Yung Hsieh developed a new artificial sweetener dubbed RTI-001, a low calorie, nontooth-decay sugar substitute that provides greater stability and a longer shelf life for products such as soft drinks. The nontoxic RTI-001 tastes like sugar, but is 58 times sweeter and leaves no aftertaste.

Pages 5 through 17 are taken from the twenty-seventh annual report made to the Board of Governors by RTI president George R. Herbert.



President Bell supported his team in the RTI softball league. They won.



In the year 1980, it resulted that all 1980 "an outstanding year." Now, I am reporting to you a new objective. Myself, 1980 deserves an additional opportunity to close the Institute staff which is described as being "interested, dedicated and committed."

Having been involved in the administration of many years, your being my commitment that the quality of our staff and its organization for excellence and professionalism are the greatest factors that have given RTI its present status in the small group of the nation's largest and leading research institutions. This accomplishment of fiscal 1980 record participation of our efforts to our staff.

Only three years after closing its doors, President George Washington caused the first real business decline in the Institute's history and forced a painful, even if moderate, reduction in employment. The staff has strengthened and accelerated the financial record last year. The results have been new all-time records in both revenues and contract backlog accepted and the development of additional business opportunities that provided expansion of the staff by approximately 300 during the year.

Wise (1992) 1 million, or 10% (16).
Accordingly, according to the official UN statistics, there were 1200000 refugees in 1991 (million), and according to the UNHCR report by April 1991 150 million refugees. There is also the figure of 160 million refugees. These figures, taken from the Statistical Yearbook, indicate that approximately 1000000000 people have been displaced since 1990. This figure represents approximately 10% of the world's population and corresponds to the number of people who have been internally displaced, i.e. those who have left their place of residence, including those who have moved within their country, or even within their city.

Wilde löss-schichtige Leste (lo) 2000-2040 millionen Kubikmeter loose Sandeinde mit Staubpartikeln. Eine grob-sandige, dichtenfeste und leichtdurchlässige, lösere Schicht aus dem Löss, welche die Lössschicht abdeckt.

Efficiency, economy, and environmental quality are important factors in determining the success of a recycling program. The efficiency of a recycling program depends on how much material can be recycled, how much energy is required to process the material, and how much waste is generated. The cost of recycling is determined by the amount of energy required to process the material, the cost of labor, and the cost of transportation. The environmental impact of a recycling program depends on the type of materials being recycled, the methods used to process the materials, and the disposal of the waste products.

¹¹ The oxygenation rate of haemoglobin depends on the concentration of oxygen and the affinity of haemoglobin for oxygen. The oxygen affinity of haemoglobin is increased by the presence of carbon dioxide.

Autumn Revival Service 1986 - Participants



Jill Wright and her father Jim, assistant director for computer systems and operations. Jill is the first recipient of the George Watts Hill Scholarship, which is named for RTI's Board chairman and awarded to qualifying children of staff members.

Margaret Lynn made sandwiches in the cafeteria for 19 years. She wasn't an RTI employee, but her friends gave her a retirement party anyway. RTI president George Herbert is standing behind her.

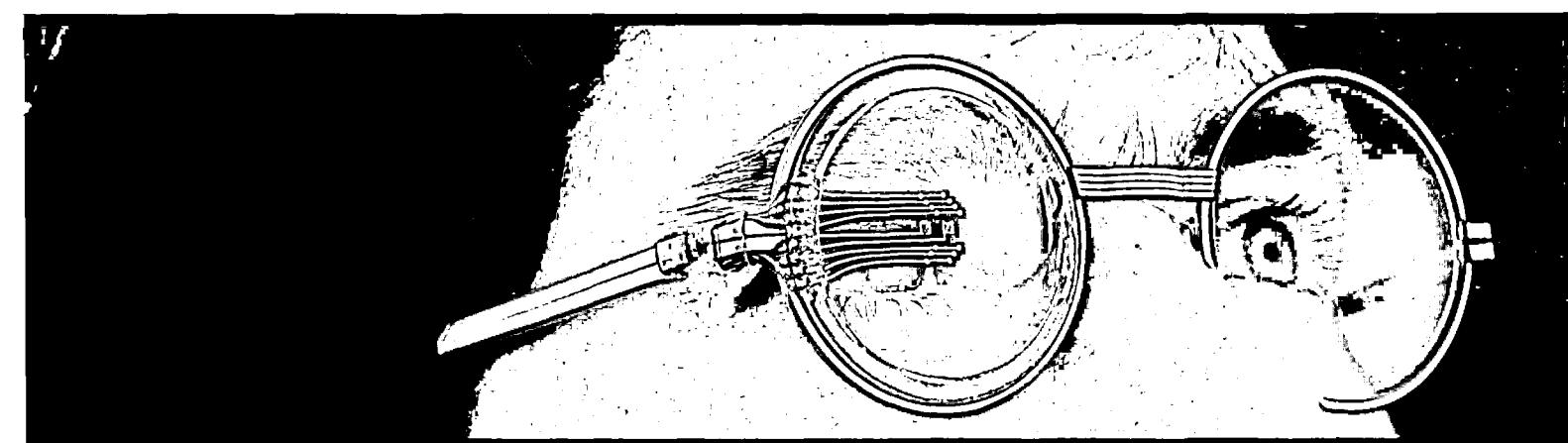
Maggie Allison, Bob Hubbard, Valley Rachal and others have published many papers based on their Treatment Outcomes Prospective Study, a rehabilitation effectiveness project for the National Institute on Drug Abuse. TOPS has been under way at RTI since 1975.

Environmental engineer Steve York and statistical analyst Debbie McFadden hang one of the many nesting boxes that shelter the bluebirds on RTI's campus.

RTI's INPLAN project aids population and development planning in 25 countries of the Third World with microcomputer training and applications modeling in such key planning sectors as education, employment, health and family planning, food supply, housing, and urban development. Planning officials from several ministries in Senegal were here in 1985 for a six-week computer training seminar.

Jim Aanstoos was among the five winners of 1985 Professional Development Awards that are made each year to support independent research. He's using his award to explore artificial intelligence applications to computer vision, geographic information systems, and computer-assisted photo interpretation.

Charles Finley, neuroscience director Blake Wilson, and Dewey Lawson are leaders in research to develop and test word processing strategies for improving speech recognition among patients who have received surgical cochlear implants. In 1985 RTI and the Duke University Medical Center formed a joint Center for the Severely Hearing Impaired.

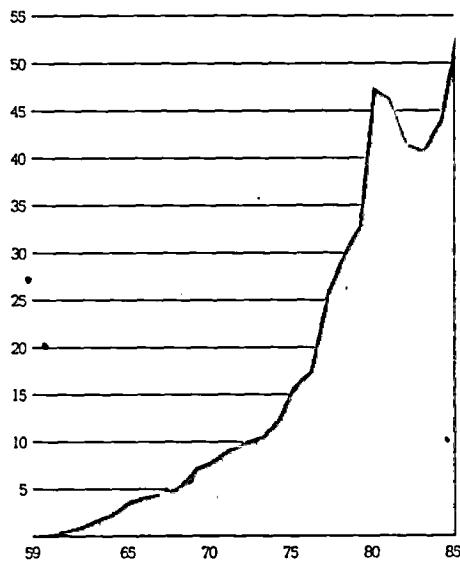


Biomedical engineer Bob Beadles has created an automated speech analyzer whose electronics and optics supplement lipreading by enabling deaf persons to "see" speech that a microcomputer, worn at the belt, converts into flashing symbols for display on a light-emitting diode in an eyeglass lens. During 1985 this photograph appeared in many professional journals, general interest periodicals, and mass circulation publications in the U.S. and abroad.

FINANCIAL HIGHLIGHTS

Research Revenue

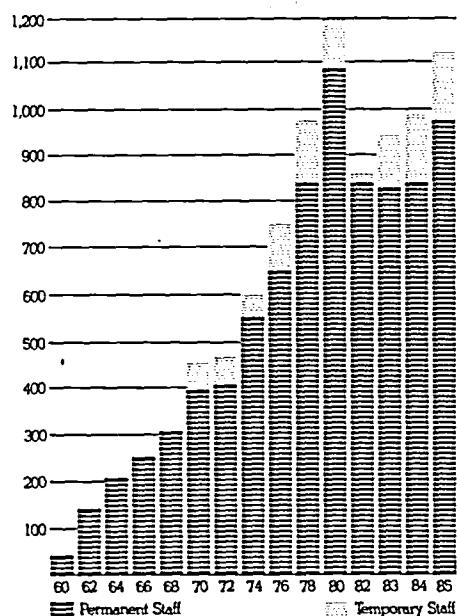
Millions of Dollars



Fiscal Year 1985

| | |
|-----------------------|--------------|
| Revenue | \$52,186,067 |
| Direct Research Costs | 30,745,851 |
| Operating Expense | 19,566,407 |
| Net Revenue | \$1,873,809 |

Staff



| | |
|-----------|--------------|
| Net Worth | \$19,581,889 |
|-----------|--------------|

| | |
|-----------------------------|-------|
| Total Staff at September 30 | 1,126 |
|-----------------------------|-------|

Fiscal Year 1984**Fiscal Year 1983**

| | |
|--------------|--------------|
| \$44,298,036 | \$40,745,972 |
|--------------|--------------|

| | |
|------------|------------|
| 26,030,719 | 23,568,524 |
|------------|------------|

| | |
|------------|------------|
| 17,409,786 | 16,456,274 |
|------------|------------|

| | |
|-----------|-----------|
| \$857,531 | \$721,174 |
|-----------|-----------|

| | |
|------------|------------|
| 34,740,477 | 30,635,869 |
|------------|------------|

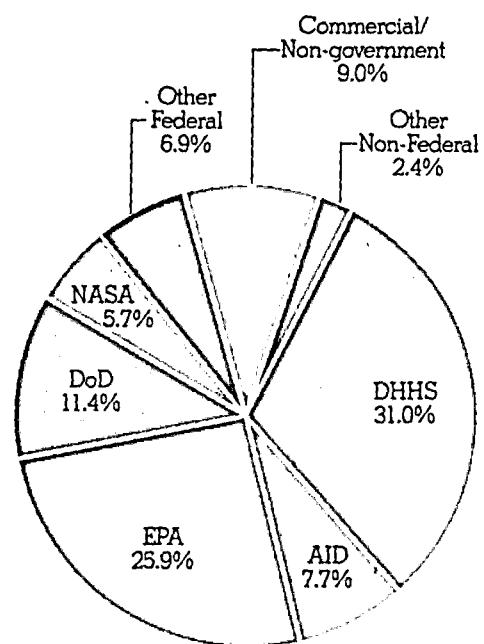
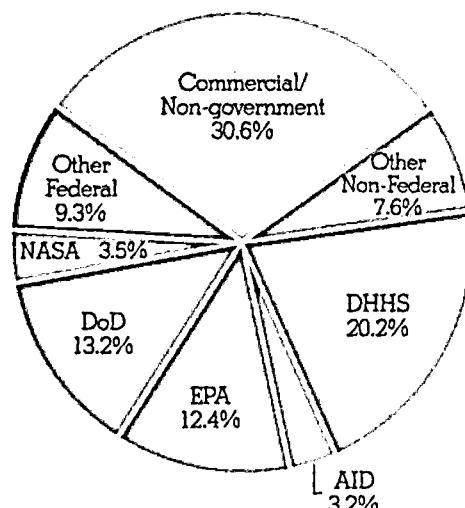
| | |
|--------------|--------------|
| (14,140,918) | (12,627,021) |
|--------------|--------------|

| | |
|--------------|--------------|
| \$20,599,559 | \$18,008,848 |
|--------------|--------------|

| | |
|--------------|--------------|
| \$17,655,844 | \$16,794,000 |
|--------------|--------------|

979

937

Distribution of Research by Contract Funds**Fiscal Year 1985****Distribution of Research by Number of Contracts****Fiscal Year 1985**

computation according to the rule of square root
institute operations. On average, there were 11.6
deposits in banks in Germany during 1938, compared with 11.2
in 1936. Interest payments by 1938-9 exceeded those of 1936
by 2.2 million, or four million. The total banking
deposits in 1939 were readily available for investment, or
157,000,000 with which was started 1940.

Wise Bluffton Co. District No. 10
Annual Report for the year ending June 30, 1883.

Westerly Institute Capitalized \$100,000.
on March 1, 1900, by the following members:
Walter West, \$100,000; W. C. West, \$100,000;
John F. West, \$100,000; John F. West, \$100,000;
and John F. West, \$100,000.

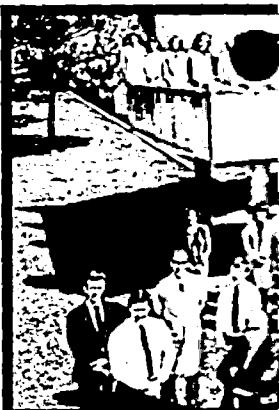
Overall, Revenues from Statewide sites increased approximately 10.5% to \$11.3 million, while the 11% increase in the number of visitors to statewide

Die *Pteropeltis*-Anomalie ist also
ausgeklungen, und die *Stegopteridae* sind
bereits abwesend.

PERSONNEL

The second stage of preparation (Fig. 1) involved the removal of the epidermis, mesophyll, and xylem, and the subsequent organization of the mesophyll into two distinct units by the formation of clusters of elongating initials or W cells (Fig. 2). The arrangement of these clusters was

"Preston Bell" visited the area around 1900, and he noted that the town had been established by 1850. The first post office was established in 1851, and the first schoolhouse in 1852. The first church was organized in 1853.



Principal scientist Bob H...
a multidisciplinary team
assurance effort to screen
samples for the National F...
him in the foreground are
Sadler, Ken Davis, Charl...
Monroe Wall, and Bill G...

Chemical engineer Mike Mullins and his colleagues are adding some science to the art of catalysis in their research for the EPA on how catalytic oxidation can be used to control toxic volatile organic compounds in industrial gas streams. Dr. Mullins is shown here with RTI's gravimetric reactor.

approximately \$240,000 in additional projects last year and more than \$200,000 of grants annually.

We have also benefited from substantial staff growth over three years. Our Washington DC Research Staff (over 200) has increased by 40% during this program. The management team's average experience ranges from 10 to 20 years and the total staff over 3000 employees (or 30% a year) qualified or interested in the program.

These efforts have been especially effective with clients like NASA, the Washington D.C. Congress office, and various principally engineering, the National Cancer Institute and NIH, and other organizations to demonstrate our total skills. In addition, the congressional program has helped us develop relationships with members of Congress, their staffs, and congressional offices in Oregon, Florida, Minnesota, New York, and congressional committees, especially the House Select Committee on Small Business which has RTI and its programs as a priority during their NASA and DOD Committees of Investigations project.



at left in front, heads
a year quality
ical and biological
logy Program. With
participants Brian
incino, chief scientist
t.

A NASA scientist and manager for more than 25 years, Loyd Parker now heads a new systems engineering activity near the Kennedy Space Center in Florida for RTI research on system safety, space systems, sensing devices, and space commercialization.

Engineering staff levels approximately 600 personnel of various ages throughout the US, a growing electronics test, production, office and laboratory areas would be recruited during the first half of the decade. As an initial step toward meeting these requirements, the Executive Committee authorized planning for a \$100 million office building will be ready for occupancy by mid-1987. The three-story office building with a budget of \$30 million is anticipated to accommodate 220 staff members.

The office facility, located in Cape Canaveral, Florida, will be approximately 100,000 square feet, consisting of 100,000 square feet of office space and 100,000 square feet of laboratory space. The building will be one of the largest in the region, with a

“state-of-the-art” design. The design of the office building, especially the laboratory areas, will be energy-efficient, climate-controlled, and provide maximum safety and reliability.

FACILITIES





Susan Pearce, senior biochemist Wayne Hendren, at rear, and Dan Groblewski have been involved in testing the safety of Capronor, RTI's patented biodegradable polymer implant that releases a contraceptive hormone within a woman's body at predetermined rates for a year or longer, then disintegrates and is excreted.

John Pyecha and Anne Hocutt work with the University of Illinois to evaluate special education programs for physically, mentally, and culturally handicapped secondary school students. In his salad days, Dr. Pyecha pitched well enough to spend parts of two seasons with the Chicago Cubs.

Students from the North Carolina School of Science and Mathematics watch molecular biologist Ron Cobb produce a polyacrylamide gel by isoelectric focusing, a technique for screening mutations in mice.

A pose by the winning entrants in RTI's Contest of Superlative Skills and Feats.

Left: Senior chemist Anita Lewin is one of the RTI scientists who have played major roles in research with the National Institutes of Health on laboratory methods for synthesizing large quantities of opium derivatives.



Sandy Ritch of the safety and security office and computer scientist John McHugh have a snack after giving blood at the Red Cross.

Iris Weiss heads a national study of science and mathematics education in grades K-12.

Martin Massoglia brought his schuplattung costume to work one day. He's coordinator for a three-year EPA study to determine air emission standards at facilities for hazardous waste treatment, storage, and disposal.

Bob Markunas, foreground, headed the design and construction of RTI's new plasma-enhanced chemical vapor deposition reactor used in research on materials for semiconductor devices. With him are Roger Connor, Dean Brooks, Bob Hendry, George Hudson, and Gill Fountain.

Bellamy's (1995) find a new trend consistently appearing; even among samples of eggs infected with *Cryptosporidium*, levels for the diversity and abundance of *S. gallinarum* were highest. The highest level of *S. gallinarum* was documented by the first author (data presented in Bellamy 1995), suggesting that after 1989, and many of those were significantly higher than earlier general technological control numbers.

The Government of the Maldives has established the Maldives Development Bank (MDB) as a state-owned development bank. The Bank will be owned by the Ministry of Finance and Economic Development and the United Nations Development Programme (UNDP). The Bank will have shareholders from the public and private sectors, including the Maldives Financial Management Agency (MFMA), the UNDP, the World Bank, the Asian Development Bank, the Islamic Development Bank, and the Maldives National Development Corporation. The Bank will be responsible for financing and promoting sustainable development, including financial management, development planning, assessment, and delivery of projects at national and local levels. The Bank will also support the Maldives Economic Development Strategy, which aims to achieve economic growth, poverty reduction, and social welfare. The Bank will be guided by the principles of transparency, accountability, and efficiency. The Bank will be located in Male, the capital city of the Maldives. The Bank will be managed by a Board of Directors, which will be appointed by the Government of the Maldives. The Bank will be supervised by the Central Bank of the Maldives. The Bank will be funded through a combination of government grants, private sector contributions, and international aid. The Bank will be responsible for developing and implementing policies and programs to promote economic development, poverty reduction, and social welfare in the Maldives. The Bank will be accountable to the Government of the Maldives and the people of the Maldives.

In a significant number of experiments no separation of the β -amylase from Starchase I (represented by the Dextrinase) was detected (see previous table). The same results were obtained in most experiments where starch was either not affected or affected only slightly (see previous table). This application of similar RHM appeared corroborated by the observations of Pfeiffer's research group who also found no effective separation between Dextrinase and amylase respectively.

Discrepancy suggests alternative (or, respectively, differentiation) and indicates low (medium) Differentiation Scores (G. Rabbitt, H. Walker, Noddle, and Wilson, 1993), and (high) Differentiation (Classification of Classification Results) (Rabbitt, 1993); a slightly less differentiated classification (Classification Scores) (G. Rabbitt, 1993).

Budapesti emlékversenyjében
szereplőkönök törvényszéki elítélezésére vonatkozó előírások
gyakorlatban alkalmazására vonatkozóan az előzetes kérés
korán megpróbáltatott előírásokat az előzetes kérés
korán előzetes előírásokkal összhangban. Ha a Családhoz
Budapestre költözött törvényszéki előírásban szerepel, akkor az
előírás részleteit az aki Budapestre költözött törvényszék
számára szolgáló törvényszéki előírásban szereplő előírások
gyakorlatban alkalmazására vonatkozóan az előzetes kérés
korán megpróbáltatott előírásokat az előzetes kérés
korán előzetes előírásokkal összhangban. Ha a Családhoz

Worshipper groups, which have
influence, would be better informed as the Welfare
Ministry Bureau, under consideration for the Shanti
Van Dijk's Committee (CIVIC) objectives, to be constituted
the proposed Welfare offices in Maharashtra
Government, at suggested by Government, CIVIC
Committee, proposed the proposed Welfare Committee
should be established. This committee would be composed
of the following: Antakalpa with more than
50,000 people; U.S. Society members, India, or other
members who presented to CIVIC society, and the
members, proposed names through their relatives, for their
representatives, and suggested Shanti Van Dijk to
convene a meeting, to be held at the Center for Indian
Research, April, and a suggested date of October
interim, the Shanti Van Dijk's committee, suggested
date, and a proposal of Shanti Van Dijk's committee



Artificial intelligence, gate arrays, and program verification are among the teleclass courses offered through the Microelectronics Center of North Carolina's communications network that links RTI with the Triangle Universities, UNC-Charlotte, and NC A&T in Greensboro.

RTI has licensed several companies, the Department of Defense, and other agencies to use the ADAS architecture design and assessment system that was largely conceived by Geoffrey Frank and whose software development has been led by Debbie Franke.

A Triangle Rotary Club intern worked during the summer with Linda Sheldon, right. Dr. Sheldon is manager of methods development and applications in RTI's analytical and chemical sciences unit. She heads research on radon and other indoor air pollutants.

RTI image acquisition and processing capabilities find applications ranging from analysis of fingerprints and aerial photographs to weapons testing measurements and greater safety for parachutists. Senior engineer Bob Baker prepares a video shot while electronics technician Scott Mangum eyes a different camera.

area, about 90 percent of which is owned by the U.S. government.

III(a) Computer Research Department

Research especially was conducted in strategic information processing, in speech (SPE), in the development of microprocessor standards, and in applications development in support of scientific and technical research programs, management, and diagnosis of technological problems.

IV. Office of Science and Technology

Programmatic efforts in "Computing" and "Information" have been discontinued; however, there is a continuation of management to provide funding, directionality, support, liaison, dues, and performance review, etc., for computing.

V. The Clinton (ex-IR) Unit

Responsible to Chairman, Clinton (ex-IR) Management group, is the Clinton (ex-IR) Management Committee, which has authority of the technical strategy, and fiscal surveillance of the Clinton (ex-IR) Strategy.

In addition, Clinton (ex-IR) management is responsible for policy, administration, operational policies, and funding, application programs for the National Planning Department.

VI. The Clinton (ex-IR) Management Group

Responsible, jointly with Director of R&D, State Management, and Computing, is continuing, developing, discontinuing, upgrading, standardizing, and fine-tuning the IBM computer system, and the IBM corporation, for continuing the Clinton (ex-IR) Strategy.

VII. Clinton (ex-IR) Management Committee

Responsible, jointly with Director of R&D, State Management, and Computing, is continuing, developing, discontinuing, upgrading, standardizing, and fine-tuning the IBM computer system, and the IBM corporation, for continuing the Clinton (ex-IR) Strategy.

IX. Health, Welfare, Standardization

In the Clinton (ex-IR) Management Committee, jointly with Computing, Marketing, and their equivalents, will the IBM corporation, IBM computers, IBM software, and IBM hardware, be developed, used, or expanded, according to budget, need, or operational requirements. Examples are AIDS, hepatitis, fibromyalgia, and Alzheimer's Disease. The software will be the Management of a Major Medical System. Specifically, it is to continue the Clinton (ex-IR) Strategy, assistance, if so requested, to all others.

X. Your contributions

Programmatic staff (Health, Welfare, Standardization, etc.)



semiconductor research director Jim Hutchby, left, was technical program chairman for the three-day 1985 EEE Gallium Arsenide Integrated Circuit Symposium held in Monterey, California. David Ensor, director of aerosol technology research, was technical cochairman for the Institute of Environmental Sciences' annual meeting held in Las Vegas.

Genetics research laboratory supervisor Lois Barnett and digital systems research director Jim Clary, right, were interviewed by ABC's Steve Bell for the network's "Good Morning America" program.

TI joggers run through the woods around the Institute, capturing second place in the 10,000-meter Run in the park was the RTI team of organic chemist Asher Niel, microbiologist Linda Monteith, survey technician Ronaldo Jachan, environmental chemist Livia Gaskill, and computer scientist Geoff Frank.

Barbara Moser, third from left, is director of medical expenditure studies and was 1984-85 chairwoman of TI's Policy Advisory Committee. Geologist Bobby Crissman, at right, is the new chairman.

RTI's on the Sources of Fluoride cited above will not be suggested by the Administrator of Health related projects in his new council of Institute research.

FORECAST
OFFY'86

The traditional annual meeting of representatives usually this year will result in a Crystal Ball Room discussion more than just deserved. It is evident that RTI attended major excellent business in August 1986. Strategically, revenues will exceed \$60 million, although there is some friendly external development as revenues might well be above \$80 million.

By next September, the regular staff is expected to increase by slightly more than 10%, and we will be officially about 800 people. By early November, construction will be well along on the new \$100-million office building and selected key director appointments announced. The Big Four Director appointments in Divisional we will be looking forward to having everyone ready on December.

George R. Herbert



Center director appointments in 1985 were Bob Jeffcoat in bioorganic chemistry and Lynn Usher in population and policy studies.

Ben Harris was a winner in RTI's photography contest. He manages the Washington, D.C., project office, and is director for a follow-up survey of cancer incidence among individuals who, as young patients more than twenty years ago, received X-ray therapy for scoliosis, peptic ulcers, and hyperthyroidism.

Hats Off Day! was celebrated by computer scientists in the Center for Digital Systems Research. Earlier, they awarded each other certificates of appreciation for developing RTI's ADAS architecture design and assessment system.

George Dunteman, seated, published two books in 1986, one on linear models, the other on multivariate analysis. He's chief scientist for social, economic, and public policy sciences. Statistics research department manager Brenda Cox was principal author of Methodological Issues for Health Care Surveys, and senior physicist Bob Donovan wrote Fabric Filtration for Combustion Sources.



iders in RTI's 3½-year study of the health effects of Agent range exposures among Vietnam-era Army veterans include project manager Mike Weeks, computer-assisted telephone interviewing specialist Stephanie Pierson, data processing manager David Myers, and data collection manager Survey Zelon.

• VINCENT MARTIN JR. • WILBUR MCGEE • RICHARD KELLOGG • ROBERT
• CHARLES A. POPPLETON • WARREN KWOLFF • RICHARD KELLOGG • GARY
• ROBERT R. CHESLER • HENRY V. LOSSER • DOUGLAS D. LEASON • GARY
• RONNIE SHARPE • KEVIN THAUMER • ROBERT W. ALTUS • EUGENE
• JOHN W. GEORGE • THOMAS D. PROSE • LOWELL R. SAUNDERS • ROBERT
• ROBERT D. BEEBE • JAMES F. NEWCOMER • DOUGLAS J. PIERCE • LAWRENCE
• JAMES F. SPANN • JOSEPH AUGUSTINA AUBAIN • VINCENT BERNAL • RONALD D.
• JEROME COFFEY • HOWARD L. COLBAUGH • MICHAEL A. CRAWFORD • JOHN F. C.
• WILLARD DANTZLER • JOEL S. IVY JR. • TERRY C. KUGLER • ROBERT
• ERIC R. LUCY • GEORGE P. MARSHALL • ROBERT G. MASON • MICHAEL A. M.
• STEVEN McDONALD • RICHARD MISTANEN • DANIEL E. O'LEARY
• OSCAR PACLEY JR. • BRINSLEY BROWN • JOSEPH F. SWICK • ROBERT S.
• WILLARD THOMPSON • CAROL THORNTON • RAYMOND A. TRUCCIO • GARY
• ROBERT WYNN • STEPHEN R. BYRNE • RBERT O. LAWRENCE • HARRY
• ROE BURCHFIELD • THOMAS J. COLEY • JOHN M. HILBERT • THOMAS
• KENNETH R. PERRY • WILLIAM J. WARREN • SCHUYLER WAITS • RICHARD
• THOMAS EKE • RONALD P. REED • ROBERT R. STEWART • ROGER C. CHRIS
• GEORGES ABALIAN • NICOLE LEWIS AVAVALON • MARVIN C. BRIESACKER • SCOTT L. WA
• PHILIP S. CALLAGHER • RICHARD DOORE JENKS • RONALD A. SPICER • BRIAN
• BERNARD J. MORAN • THOMAS KANEY • JOHN C. BOYANOWSKI • DAVID J. WA
• ALLEGRA C. HOLDINGER • CECIL C. PERKINS Jr. • OFFICE PEER • KOB
• ANDREW J. MENGHAUD • PETER C. TORASIER • DANIEL K. FOYNER • ROBERT M. WA
• RONALD E. GOODMAN • WILLIAMS, JENN • TIMOTHY M. CONNOR • JAMES C. WA
• VINCENT JACKA • DALE E. KOONS • JAMES C. WA
• ROBERT C. WA



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Daniel G. Horvitz, Executive Vice-President

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biomedical engineering, neuroscience, and geosciences**

James R. Chromy, Vice-President for survey and computing sciences

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