
NCTEACT BOOK

1984

National
Cancer
Program

U.S. DEPARTMENT
OF HEALTH AND
HUMAN SERVICES

Public Health
Service

National
Institutes of
Health

NCI FACT BOOK

National Cancer Program
1984

FOR ADMINISTRATIVE USE

U. S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service National Institutes of Health

PREFACE

The information set forth in this publication is compiled and amended annually by the Financial Management Staff of the National Cancer Institute and is intended primarily for use by members of the Institute staff, the principal advisory groups to the Institute and others involved in the administration and management of the National Cancer Program. Questions regarding any of the information contained herein may be directed to the Financial Manager, National Cancer Institute, 9000 Rockville Pike, Bethesda, Maryland 20205.

TABLE OF CONTENTS

| | PAGE |
|--|------|
| Preface | ii |
| GENERAL INFORMATION | |
| Directory of Personnel | iv |
| Historical Data: Legislative Highlights | 1 |
| Historical Events | 2 |
| Significant Initiatives in 1984 | 3 |
| Director NCP/NCI—President’s Cancer Panel | 4 |
| National Cancer Advisory Board | 5 |
| Division Boards of Scientific Counselors | 6 |
| National Cancer Institute Executive Committee Members | 7 |
| Organizational Tables: National Cancer Institute | 8 |
| Office of the Director | 9 |
| Division of Cancer Treatment | 10 |
| Division of Cancer Biology and Diagnosis | 12 |
| Division of Cancer Etiology | 13 |
| Division of Cancer Prevention and Control | 14 |
| Division of Extramural Activities | 15 |
| 5-Year Relative Survival Rates | 16 |
| Statistical Tables: Number of Deaths for the Five Leading Cancer Sites—1981 | 17 |
| Relationship of Cancer to Leading Causes of Death in the United States—1981 | 17 |
| Estimated New Cancer Cases and Deaths by Sex for all Sites—1984 | 18 |
| NCI Intramural Review Process | 19 |
| Research Positions at the National Cancer Institute | 20 |
| Building Location and Square Footage | 22 |
| BUDGET DATA | |
| Major Steps in the Budget Formulation Review Process | 23 |
| Estimated Total National Resources for Cancer Research and Cancer Control—Fiscal Year 1984 | 24 |
| NCI Program Structure—Fiscal Year 1984 | 25 |
| NCI Research Programs—Fiscal Year 1984 | 26 |
| NCI Extramural Funds—Fiscal Year 1984 | 27 |
| Total NCI Dollars by Mechanisms—Fiscal Year 1984 | 28 |
| Cancer Control Obligations by Mechanism—Fiscal Years 1975-1984 | 29 |
| Reimbursement to NIH Management Fund—Fiscal Year 1984 | 30 |
| GRANTS AND CONTRACTS | |
| NCI Grant Process | 31 |
| NCI Contract Award Process | 32 |
| State Distribution of Grants and Contracts—Fiscal Year 1984 | 33 |
| Distribution of Cancer Control Grants and Contracts—Fiscal Year 1984 | 34 |
| National Cancer Network | 35 |
| Institutions Receiving More Than \$2,000,000 from the NCI—Fiscal Year 1984 | 36 |
| Distribution of NCI Contracts—Fiscal Year 1984 | 38 |
| Distribution of the Grant Dollar—Fiscal Year 1984 | 39 |
| Foreign Research Grants and Contracts—Fiscal Year 1984 | 40 |
| HISTORY TABLES | |
| Appropriations of the NCI 1938-1985 | 41 |
| Comparison of Dollars, Positions and Space | 42 |
| NCI Obligations and Outlays | 43 |
| NCI Total Research Projects—1979-1984 | 44 |
| The Comprehensive Minority Biomedical Program (CMBP) | 45 |

DIRECTORY OF PERSONNEL

NATIONAL CANCER INSTITUTE
NATIONAL INSTITUTES OF HEALTH
BETHESDA, MARYLAND 20205

NIH Operator
496-4000
Area Code 301

| | | DIRECT-IN DIALING |
|---|--------------------------|----------------------|
| DIRECTOR | BUILDING 31 | |
| Dr. Vincent T. DeVita, Jr.* | 11-A-52 | 496-5615 |
| DIRECTOR, STAFF OPERATIONS | BUILDING 31 | |
| Ms. Iris Schneider | 11-A-46 | 496-5534 |
| MANAGER, EQUAL EMPLOYMENT OPPORTUNITY | BUILDING 31 | |
| Ms. Maxine I. Richardson | 10-A-33 | 496-6266 |
| DEPUTY DIRECTOR | BUILDING 31 | |
| Dr. Jane Henney* | 11-A-52 | 496-3505 |
| ASSOCIATE DIRECTOR | BUILDING 31 | |
| Dr. Peter Fischinger* | 11-A-19 | 496-1927 |
| ASSISTANT DIRECTOR | BUILDING 31 | |
| Dr. Elliott Stonehill | 11-A-23 | 496-1148 |
| ASSOCIATE DIRECTOR FOR PROGRAM PLANNING AND ANALYSIS | BUILDING 31 | |
| Mr. Louis M. Carrese | 10-A-52 | 496-6445 |
| CHIEF, MANAGEMENT INFORMATION SYSTEMS BRANCH | BUILDING 31 | |
| Ms. Betty Ann Sullivan | 10-A-48 | 496-1038 |
| CHIEF, SYSTEMS PLANNING BRANCH | BUILDING 31 | |
| Ms. Barbara Murray | 10-A-49 | 496-5515 |
| LEGISLATIVE ANALYST/CONGRESSIONAL LIAISON | BUILDING 31 | |
| Dr. Mary Knipmeyer | 10-A-52 | 496-5217 |
| ASSOCIATE DIRECTOR FOR CANCER COMMUNICATIONS | BUILDING 31 | |
| Mr. J. Paul Van Nevel | 10-A-29 | 496-6631 |
| CHIEF, INFORMATION RESOURCES BRANCH | BUILDING 31 | |
| Mr. Joseph Bangiolo | 10-A-18 | 496-6756 |
| CHIEF, REPORTS AND INQUIRIES BRANCH | BUILDING 31 | |
| Dr. Robert M. Hadsell | 10-A-29 | 496-6631 |
| CHIEF, INFORMATION PROJECTS BRANCH | BUILDING 31 | |
| Ms. Rose Mary Romano | 4-B-39 | 496-6793 |
| ASSOCIATE DIRECTOR FOR INTERNATIONAL AFFAIRS | BUILDING 31 | |
| Dr. Ihor J. Masnyk, Acting | 4-A-49 | 496-4761 |
| DIRECTOR, INTERNATIONAL CANCER INFORMATION CENTER | BUILDING 82 | |
| Ms. Susan P. Hubbard | 102 | 496-9096 |
| ASSOCIATE DIRECTOR FOR ADMINISTRATIVE MANAGEMENT | BUILDING 31 | |
| Mr. Philip Amoruso* | 11-A-49 | 496-5737 |
| Mr. Stephen Ficca, Deputy | 11-A-51 | 496-5737 |
| CHIEF, ADMINISTRATIVE SERVICES BRANCH | BUILDING 31 | |
| Mr. James Prather | 11-A-29 | 496-5801 |
| CHIEF, FINANCIAL MANAGEMENT BRANCH | BUILDING 31 | |
| Mr. John P. Hartinger | 11-A-18 | 496-5803 |
| CHIEF, PERSONNEL MANAGEMENT BRANCH | BUILDING 31 | |
| Ms. Marianne Wagner | 3-A-19 | 496-3337 |
| CHIEF, RESEARCH CONTRACTS BRANCH | BLAIR BUILDING | |
| Mr. John Campbell | 332 | 427-8810 |
| CHIEF, MANAGEMENT POLICY BRANCH | BUILDING 31 | |
| Mr. Thomas L. Kearns | 4-B-55 | 496-6985 |
| CHIEF, GRANTS ADMINISTRATION BRANCH | WESTWOOD BUILDING | |
| Mr. Leo F. Buscher, Jr. | 8-A-18 | 496-7753 |
| CHIEF, EXTRAMURAL FINANCIAL DATA BRANCH | WESTWOOD BUILDING | |
| Mr. Robert E. Spallone | 8-A-03 | 496-7660 |

*NCI Executive Committee Members

**DIRECT-IN
DIALING**

| | | |
|---|----------------------------|----------------|
| FREDERICK CANCER RESEARCH FACILITY | FREDERICK, MARYLAND | |
| GENERAL MANAGER/PROJECT OFFICER | BUILDING | |
| Dr. Berge Hampar | 427 | FTS-8-935-1108 |
| DEPUTY GENERAL MANAGER | BUILDING | |
| Mr. Richard Carter | 427 | FTS-8-935-1106 |

| | | |
|--|--------------------|----------|
| DIRECTOR, DIVISION OF CANCER ETIOLOGY | BUILDING 31 | |
| Dr. Richard Adamson* | 11-A-03 | 496-6618 |
| ADMINISTRATIVE OFFICER | BUILDING 31 | |
| Mr. Mark Kochevar | 11-A-11 | 496-6556 |

| | | |
|---|--------------------|----------|
| DIRECTOR, DIVISION OF CANCER BIOLOGY AND DIAGNOSIS | BUILDING 31 | |
| Dr. Alan S. Rabson* | 3-A-03 | 496-4345 |
| ADMINISTRATIVE OFFICER | BUILDING 31 | |
| Mr. Larry D. Willhite | 3-A-05 | 496-3381 |

| | | |
|---|--------------------|----------|
| DIRECTOR, DIVISION OF CANCER TREATMENT | BUILDING 31 | |
| Dr. Bruce Chabner* | 3-A-52 | 496-4291 |
| ADMINISTRATIVE OFFICER | BUILDING 31 | |
| Mr. Donald Christoferson | 3-A-50 | 496-2775 |

| | | |
|--|--------------------|----------|
| DIRECTOR, DIVISION OF EXTRAMURAL ACTIVITIES | BUILDING 31 | |
| Mrs. Barbara Bynum* | 10-A-03 | 496-5147 |
| ADMINISTRATIVE OFFICER | BUILDING 31 | |
| Ms. Jean Stein | 10-A-10 | 496-5915 |

| | | |
|--|--------------------|----------|
| DIRECTOR, DIVISION OF CANCER PREVENTION AND CONTROL | BUILDING 31 | |
| Dr. Peter Greenwald* | 4-A-32 | 496-6616 |
| ADMINISTRATIVE OFFICER | BUILDING 31 | |
| Mr. Nicholas Olimpio | 4-A-46 | 496-9606 |

*NCI Executive Committee Members

NATIONAL CANCER INSTITUTE HISTORICAL DATA

LEGISLATIVE HIGHLIGHTS

July 23, 1937—The National Cancer Institute Act, introduced by Congressman Warren G. Magnuson, was passed by Congress. An appropriation of \$700,000 for each fiscal year was authorized.

July 1, 1944—The Public Health Service Act, Public Law 410, 78th Congress provided that “The National Cancer Institute shall be a division in the National Institutes of Health.” The act also revised and consolidated many revisions into a single law. The limit of \$700,000 annual appropriation was removed.

January 22, 1971—In his State of the Union Message, President Nixon announced that he would ask for the appropriation of an additional \$100 million to launch an intensive effort to control cancer, and that he would ask later for whatever additional funds could be effectively used.

December 23, 1971—The President signed P. L. 92-218, The National Cancer Act of 1971, providing increased authorities and responsibilities for the NCI Director; initiating a National Cancer Program; establishing a three-member President’s Cancer Panel and a 23-member National Cancer Advisory Board; establishing cancer control programs as necessary for cooperation with State and other health agencies, and providing for the collection, analysis, and dissemination of all data useful in the diagnosis, prevention, and treatment of cancer, including the establishment of an international cancer research data bank.

July 23, 1974—The National Cancer Act Amendments of 1974, P.L. 93-352, was signed. The Amendments: encourage the NCP to explore

the role of nutrition in the treatment, rehabilitation, and causation of cancer; authorize the Director to include personnel needs in the budget estimate to OMB; remove the limit on the number of comprehensive cancer centers; increase the number of expert appointments to 100; and direct the NCI to provide and contract for a program to disseminate and interpret information respecting the cause, prevention, diagnosis and treatment of cancer.

August 1, 1977—The Biomedical Research Extension Act of 1977, P.L. 95-83, increased the number of expert appointments from 100 to 151.

November 9, 1978—The Biomedical Research and Training Amendments of 1978, P.L. 95-622, was signed into law, authorizing appropriations for fiscal years 1979 and 1980. The amendments redefined the National Cancer Program to highlight prevention activities; expanded the membership of the National Cancer Advisory Board to 29 members; added basic research to the cancer centers authority; authorized travel and moving expenses to and from duty station for experts; and emphasized education and information in all aspects of the National Cancer Program.

December 17, 1980—The Health Programs Extension Act of 1980, P.L. 96-538, was signed into law, authorizing expenditure of funds for fiscal years 1981 and 1982.

July 22, 1982—The Small Business Innovation Development Act of 1982, P.L. 97-219, was signed. This law requires the NIH to set aside a certain amount of its extramural R&D budget each year to fund R&D agreements with small businesses.

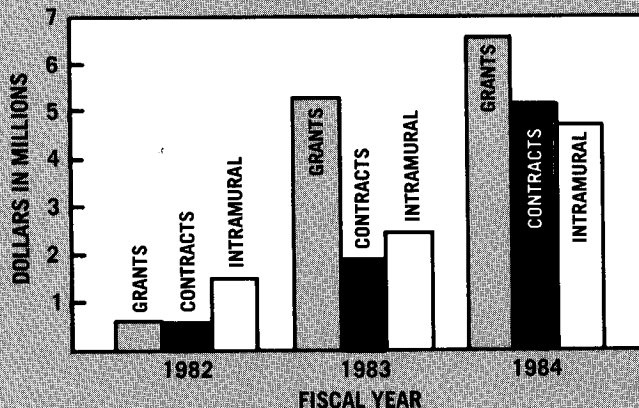
- August 5, 1937**—President Franklin D. Roosevelt signed the National Cancer Act.
- November 9, 1937**—The National Advisory Cancer Council held its first meeting.
- January 13, 1938**—Dr. Carl Voegtlin was appointed the first Director of the Institute.
- October 31, 1940**—President Franklin D. Roosevelt dedicated Building 6.
- July 1, 1947**—NCI reorganized to provide for expanded program; intramural cancer research, cancer research grants, and cancer control activities.
- July 2, 1953**—NCI inaugurated a full-scale clinical research program in the new Clinical Center.
- April 1955**—The Cancer Chemotherapy National Service Center was established in the Institute to coordinate the first national, voluntary, cooperative cancer chemotherapy program.
- January 11, 1966**—NCI reorganized to coordinate related activities. The areas of three Scientific Directors were established: Etiology; Chemotherapy; and a group of discipline-oriented laboratories and branches referred to as General Laboratories and Clinics.
- April 27, 1970**—At the request of Senator Ralph W. Yarborough, Chairman of the Committee on Labor and Public Welfare, the Senate approved the establishment of the National Panel of Consultants on the Conquest of Cancer.
- October 18, 1971**—President Nixon converted the Army's former biological warfare facilities at Fort Detrick, Md., to research on the causes, treatment and prevention of cancer.
- December 23, 1971**—President Nixon signed P.L. 92-218, The National Cancer Act of 1971.
- June 22, 1972**—The Institute awarded a contract for the operation and maintenance of the Frederick Cancer Research Center at Fort Detrick, Maryland. This constituted the largest research contract ever awarded by a research component of the National Institutes of Health.
- June 30, 1972**—A U. S.-U.S.S.R. agreement on the exchange of drugs, visiting scientists, and information was signed.
- July 27, 1972**—A Bureau-level organization was established for the National Cancer Institute, giving the Institute and its components organizational status commensurate with the responsibilities bestowed on it by The National Cancer Act of 1971. Under the reorganization, the Institute was composed of the Office of the Director and four Divisions.
- September 10, 1974**—NCI established the Division of Cancer Control and Rehabilitation.
- July 1975**—The Division of Cancer Treatment was expanded to include the NCI Surgery and Radiation Oncology Branches and the extramural program of Cancer Cooperative Clinical Trials.
- May 15, 1978**—The first phase of an extensive NCI reorganization was announced. Day-by-day administrative and funding responsibility for extramural research programs was consolidated in each of the four research divisions. Responsibility for grant and contract review committees and for other committee management activities was transferred to the Division of Cancer Research Resources and Centers.
- July 14, 1980**—The Division of Extramural Affairs replaced the Division of Cancer Research Resources and Centers. Also, the new Division of Resources, Centers and Community Activities replaced the Division of Cancer Control and Rehabilitation.
- July 14, 1981**—The NCI component of the National Toxicology Program was officially transferred to the National Institute of Environmental Health Sciences.
- September 26, 1982**—The single large contract for the operation of the Frederick Cancer Research Facility was recompeted as five separate contracts in FY 1982. A reorganization was implemented that centralized the management of Frederick under an Associate Director. The NCI Frederick Cancer Research Facility Advisory Committee was established to provide external peer review of the quality of the contractor-initiated research.
- October 2, 1983**—Official dedication of the R. A. Bloch International Cancer Information Center. This marked the integration of all components of NCI's information system, including the Institute's two journals, the International Cancer Research Data Bank, the Scientific Information Branch of the Division of Cancer Treatment, and the newly implemented PDQ system which provides the link to tie national clinical resources together and offers all cancer patients an equal opportunity for cure.
- November 30, 1983**—NCI retitled two Divisions to reflect more accurately their areas of emphasis following NCI reorganization. Division of Cancer Cause and Prevention became Division of Cancer Etiology; Division of Resources, Centers and Community Activities became Division of Cancer Prevention and Control.

SIGNIFICANT INITIATIVES IN 1984

Acquired Immune Deficiency Syndrome— HTLV-III Discovery

NCI scientists have strong evidence that variations of a human cancer virus are the primary cause of Acquired Immune Deficiency Syndrome (AIDS). An NCI scientist, Dr. Robert Gallo, Jr., reported the isolation of a new group of viruses which are variants of human T-cell leukemia/lymphoma virus (HTLV). The new viruses, named HTLV-III, were isolated from the helper T-cells of more than 50 patients with AIDS or pre-AIDS symptoms, as well as from healthy individuals at high-risk for developing AIDS. About 90 percent of AIDS patients tested so far have high levels of antibody to the virus. Similar results have been found in patients exhibiting pre-AIDS symptoms, such as the lymphadenopathy syndrome. Individuals who are not at high-risk for developing AIDS have very low or negative antibody levels. This discovery may make the control of AIDS feasible by enabling the development of a simple test for the detection of AIDS-infected blood by blood banks and diagnostic laboratories as well as the development of an AIDS vaccine. The NCI has contracted with five outside laboratories to develop testing procedures that can be used to screen large numbers of blood donors for antibodies to the virus. A vaccine against HTLV-III infection for people at high-risk for developing AIDS is also undergoing development.

NATIONAL CANCER INSTITUTE ACQUIRED IMMUNE DEFICIENCY SYNDROME OBLIGATIONS



Small Business Innovation Research Program

P.L. 97-219, the Small Business Innovation Development Act passed in July 1982, requires the NCI to reserve a specified amount of its extramural research and development (R&D) budget for the Small Business Innovation Research program

National Cancer Institute SMALL BUSINESS INNOVATION RESEARCH Program Set-Aside

(Dollars in Millions)

| | Percent of R&D | NIH | NCI |
|------------------|----------------------|---------|--------|
| FY 1983 Actual | 0.2% | \$ 6.55 | \$1.49 |
| FY 1984 Actual | 0.6 | 20.95 | 4.96 |
| FY 1985 Estimate | 1.0 | 39.93 | 9.11 |

(SBIR). The legislation is intended to stimulate technological innovation by small businesses to meet Federal research and development needs, to increase private sector commercialization of innovations derived from Federal research and development, and to foster and encourage participation by minority and disadvantaged persons in technological innovation. In FY 1984 the NCI SBIR program awarded 61 grants for a total of \$4.96 million.

SMALL BUSINESS INNOVATION RESEARCH PROGRAM

Phase I (R43 grant)

To establish technical merit and feasibility of proposed R & D effort
Not to exceed \$50,000 and 6 months

Phase II (R44 grant)

Continuation of R & D effort from Phase I
Only Phase I awardees are eligible to apply
Not to exceed \$500,000 and 2 years

Phase III

Small business competes for non-federal support

International Cancer Information Center

The Office of International Affairs (OIA), NCI coordinates the planning, management, and evaluation of the international research, control and information activities of the National Cancer Program as well as maintaining liaison with Federal and other international agencies involved in the National Cancer Program. In 1984, the OIA underwent a reorganization with the establishment of the International Cancer Information Center (ICIC). The ICIC coordinates and oversees the activities of the Computer Communications Branch, the Publications Branch, and the International Cancer Research Data Bank Branch, including the development and enhancement of online databases of the Physician Data Query system (PDQ).

**DIRECTOR
NATIONAL CANCER PROGRAM
NATIONAL CANCER INSTITUTE**

Vincent T. DeVita, Jr., M.D.

January 1, 1980 TO PRESENT

Dr. Vincent T. DeVita, Jr. received his B.S. degree from the College of William and Mary in 1957 and, in 1961, was awarded his M.D. degree with distinction from the George Washington University School of Medicine. He interned at the University of Michigan Medical Center and then completed a year of residency with the George Washington University medical service.

Dr. DeVita joined NCI in 1963 as a clinical associate and, after completing a senior residency at the Yale-New Haven Medical Center in 1966, returned to NCI as a senior investigator in the Solid Tumor Service. In 1971 he was appointed Chief of the Medicine Branch. In 1974 he was named Director of the Division of Cancer Treatment and, in 1975, Clinical Director of the Cancer Institute. In January 1980 he was named Director of the National Cancer Institute.

Dr. DeVita is a diplomate in the specialty of Internal Medicine and the subspecialties of Hematology and Medical Oncology. He serves on the editorial boards of many medical journals and maintains membership in many scientific and professional societies. He was President of the American Society of Clinical Oncology from 1977 to 1978. He has received many honors and awards for outstanding research and medical leadership: the 1972 Albert and Mary Lasker Medical Research Award, the Karnofsky Prize in 1979, the 1980 Griffuel Prize, the James Ewing Award in 1982. In addition he has received Honorary Doctor of Science degrees from the College of William and Mary in May 1982 and from Ohio State University in 1983, and Alumni Achievement Awards from the College of William and Mary in 1976 and the George Washington University in 1983.

PRESIDENT'S CANCER PANEL

| | EXPIRATION OF APPOINTMENT |
|---|--|
| Armand Hammer, M.D., <i>Chairman 1983</i> Occidental International Corporation Washington, D. C. | 1987 |
| William P. Longmire, Jr., M.D. Center for Health Sciences University of California Los Angeles, California | 1985 |
| John A. Montgomery, Ph.D. Southern Research Institute Birmingham, Alabama | 1986 |

EXECUTIVE SECRETARY

Elliott H. Stonehill, Ph.D.
National Cancer Institute
Bethesda, Maryland

NATIONAL CANCER ADVISORY BOARD

APPOINTEES

| | EXPIRATION OF APPOINTMENT | | EXPIRATION OF APPOINTMENT |
|---|---------------------------|---|---------------------------|
| Dr. David Korn, <i>Chairman</i> Stanford University Stanford, California | 1990 | Dr. Geza J. Jako Institute for Research in Laser Surgery Melrose, Massachusetts | 1988 |
| Mr. Richard A. Bloch Kansas City, Missouri | 1988 | Dr. Joseph G. Katterhagen Tacoma General Hospital Tacoma, Washington | 1986 |
| Dr. Roswell K. Boutwell University of Wisconsin Madison, Wisconsin | 1990 | Ms. Rose Kushner Breast Cancer Advisory Center Kensington, Maryland | 1986 |
| Mrs. Angel Bradley North Miami, Florida | 1988 | Ann Landers Field Newspaper Syndicate Chicago, Illinois | 1986 |
| Dr. Victor Braren Vanderbilt University School of Medicine Nashville, Tennessee | 1988 | Dr. LaSalle D. Leffall, Jr. Howard University Hospital Washington, DC | 1986 |
| Mrs. Helene G. Brown Jonsson Comprehensive Cancer Center Los Angeles, California | 1990 | Dr. Enrico Mihich Roswell Park Memorial Hospital Buffalo, New York | 1990 |
| Dr. Ed L. Calhoon Beaver, Oklahoma | 1988 | Dr. William E. Powers Harper Grace Hospital Detroit, Michigan | 1986 |
| Dr. Tim Lee Carter Carter Clinic Tompkinsville, Kentucky | 1988 | Dr. Louise C. Strong M.D. Anderson Hospital and Tumor Institute Houston, Texas | 1990 |
| Dr. Gertrude B. Elion Burroughs Wellcome Company Research Triangle Park, North Carolina | 1990 | | |
| Dr. Robert C. Hickey M.D. Anderson Hospital and Tumor Institute Houston, Texas | 1986 | | |

EX OFFICIO MEMBERS

| | |
|---|--|
| The Honorable Raymond J. Donovan Secretary of Labor Washington, DC | Dr. David P. Rall National Institute of Environmental Health Sciences Research Triangle Park, North Carolina |
| Dr. John Gronvall Veterans Administration Washington, DC | Mr. Lee Thomas Environmental Protection Agency Washington, DC |
| The Honorable Margaret M. Heckler Secretary for Health and Human Services Washington, DC | Ms. Nancy Harvey Steorts Consumer Product Safety Commission Washington, DC |
| Dr. George A. Keyworth Office of Science and Technology Policy Washington, DC | Dr. James B. Wyngaarden National Institutes of Health Bethesda, Maryland |
| The Honorable William E. Mayer Department of Defense Washington, DC | Dr. Frank E. Young Food and Drug Administration Rockville, Maryland |
| Dr. J. Donald Millar National Institute for Occupational Safety and Health Atlanta, Georgia | |

ALTERNATES TO EX OFFICIO MEMBERS

| | |
|--|--|
| Dr. Ralph E. Yodaiken Department of Labor Washington, DC | Dr. Elizabeth L. Anderson Environmental Protection Agency Washington, DC |
| Dr. Hollis Boren Veterans Administration Washington, DC | Dr. Allen Heim Food and Drug Administration Rockville, Maryland |
| Dr. Bernadine Healy Bulkley Office of Science and Technology Policy Washington, DC | |
| Vice Admiral Lewis H. Seaton Office of Chief of Naval Operations Washington, DC | |
| Dr. Elliott S. Harris National Institute for Occupational Safety and Health Atlanta, Georgia | |

EXECUTIVE SECRETARY

Mrs. Barbara S. Bynum
National Cancer Institute, NIH
Bethesda, Maryland

DIVISION BOARDS OF SCIENTIFIC COUNSELORS

DIVISION OF CANCER BIOLOGY AND DIAGNOSIS

| | | | |
|---------------------------------------|------|--------------------------------|------|
| Matthew D. Scharff, M.D., Chairperson | 1986 | | |
| D. Bernard Amos, M.D. | 1986 | Kenneth Olden, Ph.D. | 1985 |
| Nelson Fausto, M.D. | 1985 | Robert L. Perlman, M.D., Ph.D. | 1987 |
| Barbara A. Hamkalo, Ph.D. | 1987 | Sondra Schlesinger, Ph.D. | 1986 |
| Nancy E. Klecker, Ph.D. | 1987 | Stewart Sell, M.D. | 1985 |
| Peter C. Nowell, M.D. | 1986 | John D. Stobo, M.D. | 1986 |
| | | Harold E. Varmus, M.D. | 1986 |
| | | Ray J. Wu, Ph.D. | 1987 |
| | | Susan Zolla-Pazner, Ph.D. | 1986 |

DIVISION OF CANCER TREATMENT

| | | | |
|---|------|----------------------------|------|
| Samuel A. Wells, Jr., M.D., Chairperson | 1986 | | |
| Dani P. Bolognesi, M.D. | 1986 | James Goldie, M.D. | 1985 |
| David G. Bragg, M.D. | 1985 | Israel David Goldman, M.D. | 1986 |
| Paul Calabresi, M.D. | 1986 | Leon Goodman, Ph.D. | 1986 |
| Mortimer M. Elkind, Ph.D. | 1986 | Robert L. Goodman, M.D. | 1987 |
| Karen K. Fu, M.D. | 1985 | Susan B. Horwitz, Ph.D. | 1986 |
| | | John H. Kersey, M.D. | 1985 |
| | | Rodrigue Mortel, M.D. | 1985 |
| | | Carol S. Portlock, M.D. | 1985 |
| | | Efraim Racker, M.D. | 1986 |
| | | Alan S. Rosenthal, M.D. | 1986 |

DIVISION OF CANCER ETIOLOGY

| | | | |
|------------------------------------|------|-------------------------------|------|
| G. Barry Pierce, M.D., Chairperson | 1987 | | |
| Marcel A. Baluda, Ph.D. | 1985 | Renato Dulbecco, M.D. | 1986 |
| Edward Bresnick, Ph.D. | 1986 | Myron Essex, D.V.M., Ph.D. | 1986 |
| C. C. Cheng, Ph.D. | 1986 | Charlotte Friend, Ph.D. | 1985 |
| Allan H. Conney, Ph.D. | 1985 | William M. Haenszel, M.A. | 1986 |
| Pelayo Correa, M.D. | 1985 | Hilary Koprowski, M.D. | 1985 |
| Donald S. Davies, Ph.D. | 1986 | Gilbert S. Omenn, M.D., Ph.D. | 1985 |
| | | Nicholas L. Petrakis, M.D. | 1985 |
| | | Roy Shore, Ph.D. | 1988 |
| | | Carl M. Shy, M.D. | 1985 |
| | | Lee W. Wattenberg, M.D. | 1987 |

DIVISION OF CANCER PREVENTION AND CONTROL

| | | | |
|-------------------------------------|------|----------------------------------|------|
| Barbara S. Hulka, M.D., Chairperson | 1985 | | |
| Philip G. Archer, Sc.D. | 1986 | David Mark Hegsted, Ph.D. | 1986 |
| Erwin P. Bettinghaus, Ph.D. | 1987 | Loretta M. Itri, M.D. | 1985 |
| Robert A. Cooper, Jr., M.D. | 1987 | Mary Jane Jesse, M.D. | 1987 |
| Robert W. Day, M.D. | 1986 | Kaye H. Kilburn, M.D. | 1985 |
| Jerome J. DeCosse, M.D. | 1986 | Laurence N. Kolonel, M.D. | 1986 |
| Saxon Graham, Ph.D. | 1986 | Lewis Henry Kuller, M.D., M.P.H. | 1987 |
| | | William C. Levin, M.D. | 1988 |
| | | Virgil Loeb, Jr., M.D. | 1985 |
| | | David J. Sencer, M.D. | 1988 |
| | | Charles R. Smart, M.D. | 1987 |
| | | Louis W. Sullivan, M.D. | 1988 |
| | | John E. Ultmann, M.D. | 1988 |

NOTE: In all cases the year shown represents expiration of appointment.

NATIONAL CANCER INSTITUTE EXECUTIVE COMMITTEE MEMBERS

Dr. Vincent T. DeVita, Jr.
Director

Dr. Jane Henney
Deputy Director

Dr. Peter Fischinger
Associate Director

Mr. Philip Amoruso
Associate Director for Administrative Management

Dr. Richard Adamson
Director, Division of Cancer Etiology

Mrs. Barbara Bynum
Director, Division of Extramural Activities

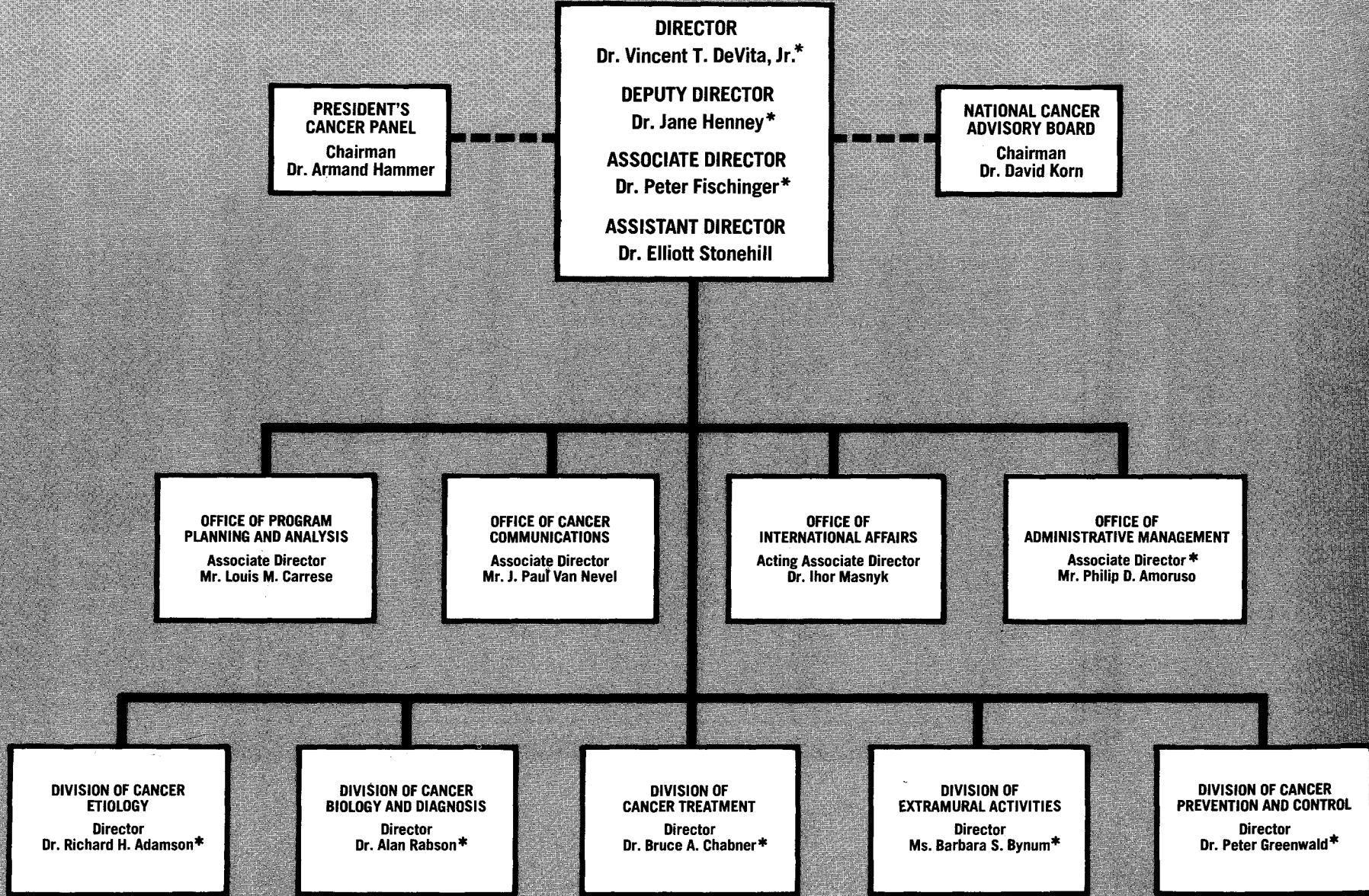
Dr. Bruce Chabner
Director, Division of Cancer Treatment

Dr. Peter Greenwald
Director, Division of Cancer Prevention and Control

Dr. Alan Rabson
Director, Division of Cancer Biology and Diagnosis

Ms. Iris Schneider
Executive Secretary

NATIONAL CANCER INSTITUTE

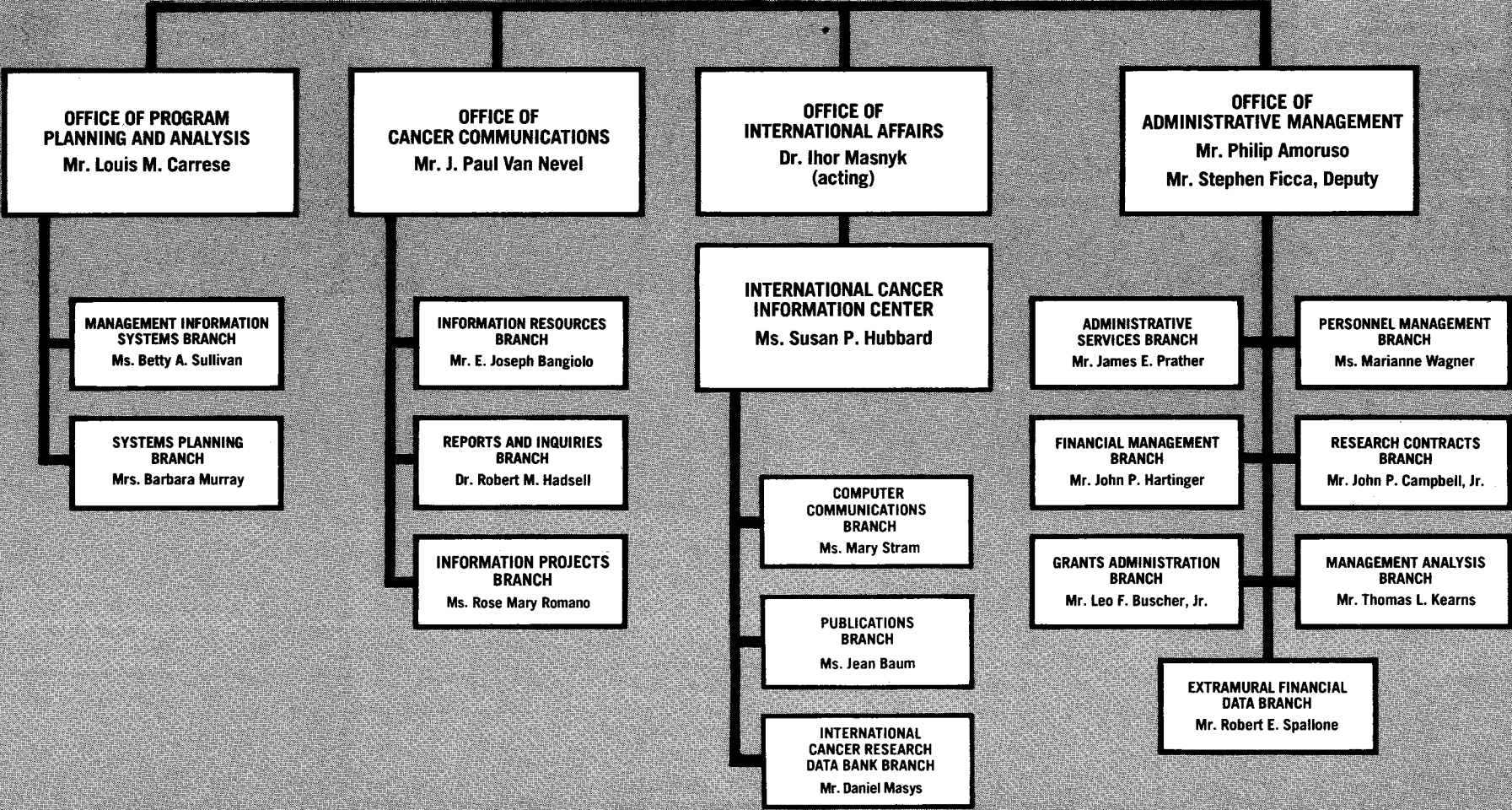


*NCI Executive Committee Members

OFFICE OF THE DIRECTOR
Dr. Vincent T. DeVita, Jr., Director
Dr. Jane Henney, Deputy Director

(1) Serves as the focal point for the National Cancer Program; (2) Develops a National Cancer plan and monitors implementation of the plan; (3) Directs and coordinates the Institute's programs and activities; and (4) Develops and provides policy guidance and staff direction to the Institute's programs in areas such as program coordination, program planning, clinical care and administrative management.

EEO MANAGER
Ms. Maxine I. Richardson



DIVISION OF CANCER TREATMENT
Dr. Bruce Chabner, Director
Dr. Gregory Curt, Deputy Director

(1) Plans, directs and coordinates an integrated program of intramural and extramural preclinical and clinical cancer treatment research as well as research conducted in cooperation with other federal agencies with the objective of curing or controlling cancer in man by utilizing treatment modalities singly or in combination; (2) Administers targeted research and development programs in areas of drug development, biological response modifiers and radiotherapy development; and (3) Serves as the national focal point for information and data on experimental and clinical studies related to cancer treatment and for the distribution of such information to appropriate scientists and physicians.

ADMINISTRATIVE MANAGEMENT AND PLANNING BRANCH
 Mr. Donald Christoferson

BOARD OF SCIENTIFIC COUNSELORS
 Dr. Samuel Hellman, Chairman

CLINICAL ONCOLOGY PROGRAM
 Dr. Samuel Broder

RADIATION RESEARCH PROGRAM
 Dr. Francis F. Ruzicka, Jr. (acting)

BIOLOGICAL RESPONSE MODIFIERS PROGRAM
 Dr. Ronald B. Herberman (acting)

CANCER THERAPY EVALUATION PROGRAM
 Dr. Robert E. Wittes

DEVELOPMENTAL THERAPEUTICS PROGRAM
 Dr. Michael R. Boyd

MEDICINE BRANCH
 Dr. Robert C. Young

PEDIATRIC BRANCH
 Dr. Philip A. Pizzo

NCI-NAVY MEDICAL ONCOLOGY BRANCH
 Dr. John D. Minna

RADIATION ONCOLOGY BRANCH
 Dr. Eli J. Glatstein

SURGERY BRANCH
 Dr. Steven A. Rosenberg

RADIOTHERAPY DEVELOPMENT BRANCH
 Dr. Alfred R. Smith (acting)

DIAGNOSTIC IMAGING RESEARCH BRANCH
 Dr. Francis F. Ruzicka, Jr.

BIOLOGICAL THERAPEUTICS BRANCH
 Dr. Ronald B. Herberman

LABORATORY OF MOLECULAR IMMUNOREGULATION
 Dr. Joost J. Oppenheim

BIOLOGICAL RESOURCES BRANCH
 Dr. Cedric W. Long (acting)

INVESTIGATIONAL DRUG BRANCH
 Dr. Daniel F. Hoth

CLINICAL INVESTIGATIONS BRANCH
 Dr. Michael A. Friedman

BIOMETRICS RESEARCH BRANCH
 Dr. Richard M. Simon

LABORATORY OF MEDICINAL CHEMISTRY AND BIOLOGY
 Dr. David G. Johns

LABORATORY OF MOLECULAR PHARMACOLOGY
 Dr. Kurt W. Kohn

LABORATORY OF CHEMICAL PHARMACOLOGY
 Dr. David G. Johns (acting)

LABORATORY OF TUMOR CELL BIOLOGY
 Dr. Robert C. Gallo

LABORATORY OF EXPERIMENTAL THERAPEUTICS AND METABOLISM
 Dr. Michael R. Boyd

**CLINICAL PHARMACOLOGY
BRANCH**
Dr. Charles E. Myers

**ANIMAL GENETICS AND
PRODUCTION BRANCH**
Dr. Joseph G. Mayo

**DRUG SYNTHESIS AND
CHEMISTRY BRANCH**
Dr. Ven Narayanan

**NATURAL PRODUCTS
BRANCH**
Dr. Matthew Suffness

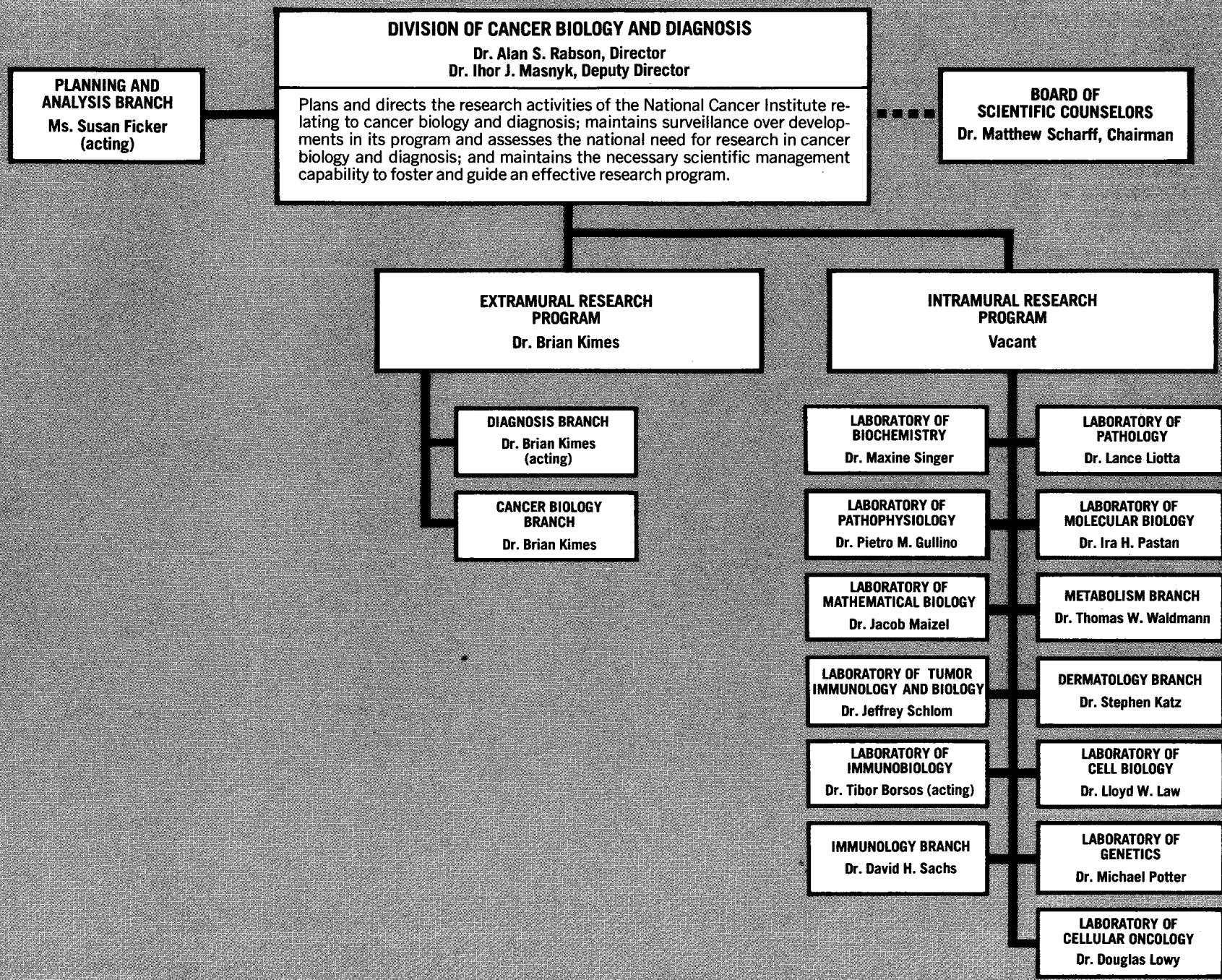
**DRUG EVALUATION
BRANCH**
Dr. John M. Venditti

**PHARMACEUTICAL
RESOURCES BRANCH**
Mr. J. Paul Davignon

TOXICOLOGY BRANCH
Dr. Charles K. Grieshaber

**INFORMATION TECHNOLOGY
BRANCH**
Dr. G.W.A. Milne

**EXTRAMURAL RESEARCH
& RESOURCES BRANCH**
Dr. Moreswar Nadkarni



DIVISION OF CANCER BIOLOGY AND DIAGNOSIS

Dr. Alan S. Rabson, Director
Dr. Ihor J. Masnyk, Deputy Director

Plans and directs the research activities of the National Cancer Institute relating to cancer biology and diagnosis; maintains surveillance over developments in its program and assesses the national need for research in cancer biology and diagnosis; and maintains the necessary scientific management capability to foster and guide an effective research program.

PLANNING AND ANALYSIS BRANCH
Ms. Susan Ficker (acting)

BOARD OF SCIENTIFIC COUNSELORS
Dr. Matthew Scharff, Chairman

EXTRAMURAL RESEARCH PROGRAM
Dr. Brian Kimes

INTRAMURAL RESEARCH PROGRAM
Vacant

DIAGNOSIS BRANCH
Dr. Brian Kimes (acting)

CANCER BIOLOGY BRANCH
Dr. Brian Kimes

LABORATORY OF BIOCHEMISTRY
Dr. Maxine Singer

LABORATORY OF PATHOLOGY
Dr. Lance Liotta

LABORATORY OF PATHOPHYSIOLOGY
Dr. Pietro M. Gullino

LABORATORY OF MOLECULAR BIOLOGY
Dr. Ira H. Pastan

LABORATORY OF MATHEMATICAL BIOLOGY
Dr. Jacob Maizel

METABOLISM BRANCH
Dr. Thomas W. Waldmann

LABORATORY OF TUMOR IMMUNOLOGY AND BIOLOGY
Dr. Jeffrey Schlom

DERMATOLOGY BRANCH
Dr. Stephen Katz

LABORATORY OF IMMUNOBIOLOGY
Dr. Tibor Borsos (acting)

LABORATORY OF CELL BIOLOGY
Dr. Lloyd W. Law

IMMUNOLOGY BRANCH
Dr. David H. Sachs

LABORATORY OF GENETICS
Dr. Michael Potter

LABORATORY OF CELLULAR ONCOLOGY
Dr. Douglas Lowy

DIVISION OF CANCER ETIOLOGY

Dr. Richard H. Adamson, Director
Dr. Susan M. Sieber, Deputy Director

Plans and directs a national program of basic research including laboratory, field and epidemiologic and biometric research on the cause and natural history of cancer and means for preventing cancer. This program is implemented by intramural research, research grants, cooperative agreements, and contracts; evaluates mechanisms of cancer induction and promotion by chemicals, viruses and environmental agents; serves as the focal point for the Federal government on the synthesis of clinical, epidemiological, and experimental data relating to cancer causation; and participates in the evaluation of and advises the Institute Director on program related aspects of other basic research activities as they relate to cancer cause and prevention.

**ADMINISTRATIVE
MANAGEMENT BRANCH**
Mr. Mark Kochevar

**BOARD OF
SCIENTIFIC COUNSELORS**
Dr. G. Barry Pierce, Chairman

BIOLOGICAL CARCINOGENESIS PROGRAM
Vacant

**LABORATORY OF CELLULAR
AND MOLECULAR BIOLOGY**
Dr. Stuart Aaronson

**LABORATORY OF
MOLECULAR ONCOLOGY**
Dr. Takis Papas
(acting)

**LABORATORY OF
MOLECULAR VIROLOGY**
Dr. George Khoury

**LABORATORY OF
TUMOR VIRUS
BIOLOGY**
Dr. Peter Howley

**LABORATORY OF VIRAL
CARCINOGENESIS**
Dr. Stephen O'Brien
(acting)

**BIOLOGICAL CARCINOGENESIS
BRANCH**
Dr. Jack Gruber

**CHEMICAL AND PHYSICAL
CARCINOGENESIS PROGRAM**
Vacant

LABORATORY OF BIOLOGY
Dr. Joseph DiPaolo

**LABORATORY OF CELLULAR
CARCINOGENESIS AND
TUMOR PROMOTION**
Dr. Stuart Yuspa

**LABORATORY OF
CHEMOPREVENTION**
Dr. Michael Sporn

**LABORATORY OF
COMPARATIVE
CARCINOGENESIS**
Dr. Jerry Rice

**LABORATORY OF
EXPERIMENTAL
CARCINOGENESIS**
Dr. Snorri Thorgeirsson

**LABORATORY OF
EXPERIMENTAL PATHOLOGY**
Dr. Umberto Saffiotti

**LABORATORY OF HUMAN
CARCINOGENESIS**
Dr. Curt Harris

**LABORATORY OF
MOLECULAR CARCINOGENESIS**
Dr. Harry Gelboin

**CHEMICAL AND PHYSICAL
CARCINOGENESIS BRANCH**
Dr. David Longfellow

**LOW LEVEL
RADIATION
EFFECTS BRANCH**
Dr. Bruce Wachholz

EPIDEMIOLOGY AND BIostatISTICS PROGRAM
Dr. Joseph Fraumeni, Jr.

BIostatISTICS BRANCH
Dr. William Blot

**CLINICAL
EPIDEMIOLOGY BRANCH**
Dr. Robert Miller

**ENVIRONMENTAL
EPIDEMIOLOGY BRANCH**
Dr. Robert Hoover

**RADIATION
EPIDEMIOLOGY
BRANCH**
Dr. John Boice

**EXTRAMURAL PROGRAMS
BRANCH**
Dr. John Cooper (acting)

DIVISION OF CANCER PREVENTION AND CONTROL
Dr. Peter Greenwald, Director
Dr. Joseph Cullen, Deputy Director

(1) Plans and conducts basic and applied research and development, technology transfer, demonstration, education and information dissemination programs to expedite the use of new information relevant to the prevention, detection, and diagnosis of cancer and the pretreatment evaluation, treatment, rehabilitation, and the continuing care of cancer patients throughout the country; (2) Plans, directs, and coordinates the support of research on cancer prevention and control at cancer centers, community hospitals, and through organ systems programs; (3) Coordinates a number of geographically based cancer reporting systems and applies statistical, analytic, and quantitative methods to monitor progress toward cancer control in the United States; (4) Supports cancer research training, clinical education, continuing education and career development in cancer prevention and control; (5) Administers programs for the support of construction, alteration, renovation, and equipping of extramural research facilities; and (6) Coordinates program activities with other divisions, institutes, or federal and state agencies and establishes liaison with professional and voluntary health agencies, cancer centers, labor organizations, cancer organizations and trade associations.

**ADMINISTRATIVE
MANAGEMENT AND
PLANNING
BRANCH**
Mr. Nicholas Olimpio

**BOARD OF
SCIENTIFIC COUNSELORS**
Dr. Lester Breslow,
Chairman

**OPERATIONS RESEARCH
BRANCH**
Dr. Edward Sondik

BIOMETRY BRANCH
Dr. David Byar

PREVENTION PROGRAM
Dr. William DeWys (acting)

**CENTERS AND COMMUNITY
ONCOLOGY PROGRAM**
Dr. Jerome Yates

**CANCER CONTROL
SCIENCE PROGRAM**
Dr. Donald Iverson (acting)

**CANCER PREVENTION
STUDIES BRANCH**
Dr. William DeWys
(acting)

**DIET AND CANCER
BRANCH**
Dr. Ritva Butrum
(acting)

**COMMUNITY ONCOLOGY
AND REHABILITATION
BRANCH**
Dr. Jerome Yates (acting)

**CANCER CENTERS
BRANCH**
Dr. Lucius Sinks

**CANCER TRAINING
BRANCH**
Dr. Barney C. Lepovetsky

**OCCUPATIONAL CANCER
BRANCH**
Dr. Veronica Conley
(acting)

**CANCER DETECTION
BRANCH**
Dr. Richard Costlow

**RESEARCH FACILITIES
BRANCH**
Dr. Donald Fox

**CANCER CONTROL
APPLICATIONS BRANCH**
Mr. Thomas Kean
(acting)

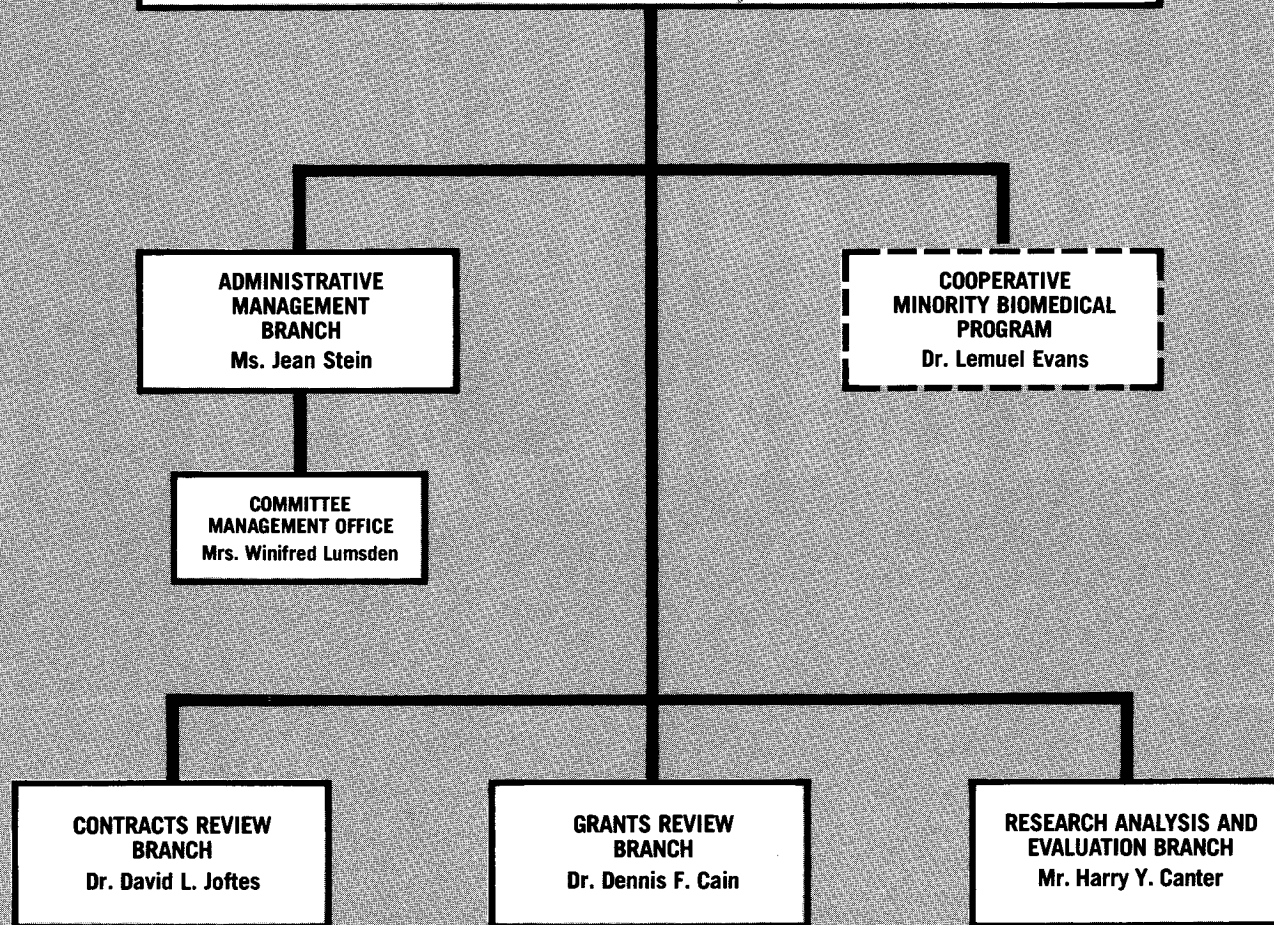
**CHEMOPREVENTION
BRANCH**
Dr. Winfred Malone

**HEALTH PROMOTION
SCIENCES BRANCH**
Dr. Lillian Gigliotti
(acting)

DIVISION OF EXTRAMURAL ACTIVITIES

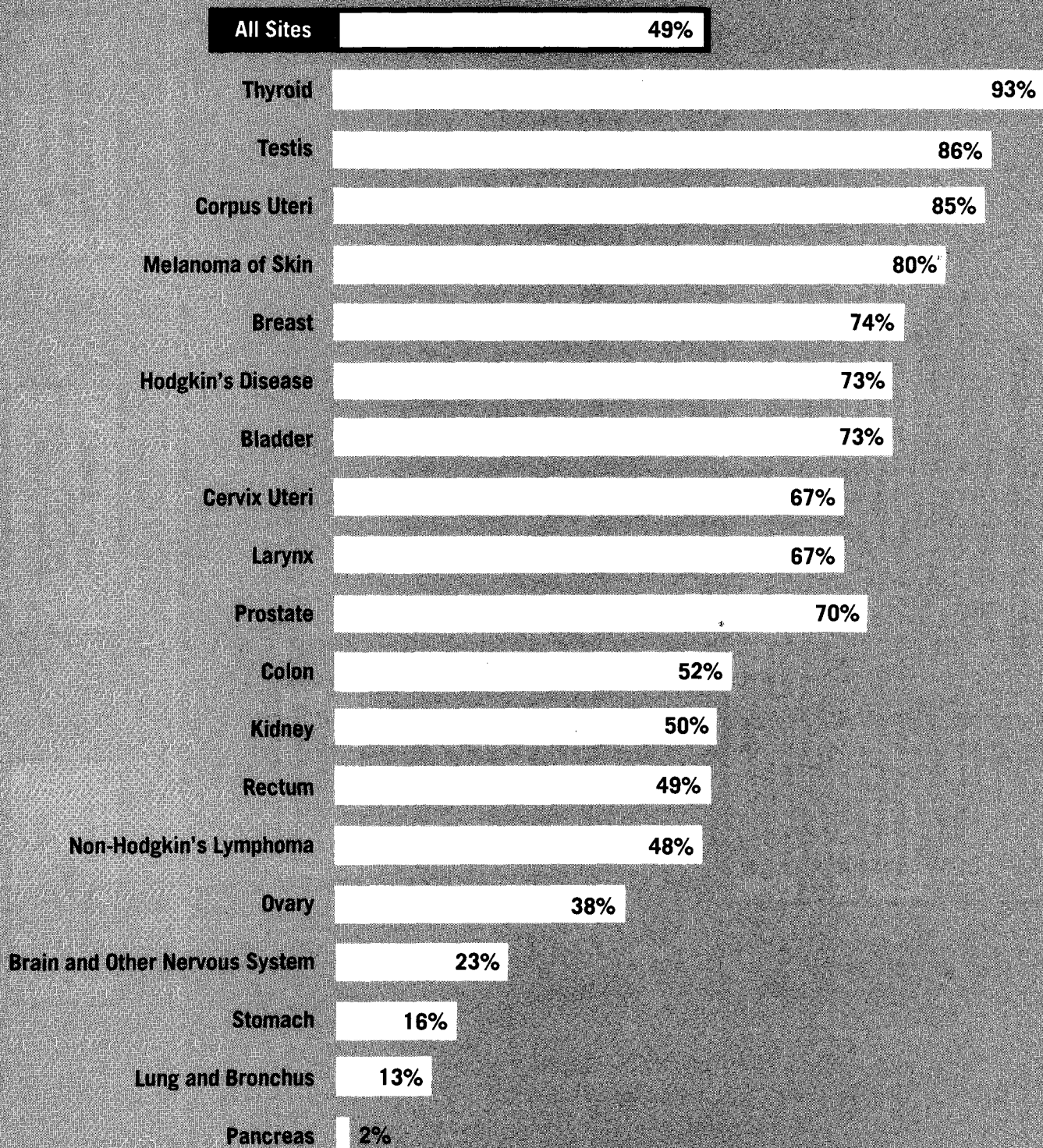
Mrs. Barbara S. Bynum, Director

Administers and directs the Institute's grant and contract review and processing activities; provides initial technical and scientific merit review of grants and contracts for the Institute; represents the Institute on over-all NIH extramural and collaborative program policy committees, coordinates such policy within NCI, and develops and recommends NCI policies and procedures as related to the review of grants and contracts; coordinates the Institute's review of research grant and training programs with the National Cancer Advisory Board; coordinates the implementation of committee management policies within the Institute and provides the Institute's staff support for the National Cancer Advisory Board; coordinates program planning and evaluation in the extramural area; provides scientific reports and analyses to the Institute's grant and contract programs; coordinates and administers the Institute's participation in minority research and training efforts.



5-YEAR RELATIVE SURVIVAL RATES

By Primary Site for Patients (all races, both sexes) Diagnosed 1976-1981,
National Cancer Institute SEER Program



Source: SEER Program, Biometry Branch, NCI

NUMBER OF DEATHS FOR THE FIVE LEADING CANCER SITES BY AGE GROUP AND SEX — 1981

| ALL AGES | | UNDER 15 | | 15-34 | | 35-54 | | 55-74 | | 75+ | |
|--------------------------|--------------------------|-------------------------------|-------------------------------|--------------------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------------|--------------------------|
| MALE | FEMALE | MALE | FEMALE | MALE | FEMALE | MALE | FEMALE | MALE | FEMALE | MALE | FEMALE |
| Lung 76,650 | Breast 36,479 | Leukemia 485 | Leukemia 345 | Leukemia 776 | Breast 665 | Lung 9,836 | Breast 7,947 | Lung 49,518 | Breast 18,645 | Lung 17,131 | Colon & Rectum 13,639 |
| Colon & Rectum 26,500 | Lung 29,739 | Brain & CNS 248 | Brain & CNS 209 | Brain & CNS 412 | Leukemia 509 | Colon & Rectum 2,245 | Lung 4,750 | Colon & Rectum 14,215 | Lung 18,527 | Prostate 13,373 | Breast 9,219 |
| Prostate 23,369 | Colon & Rectum 28,105 | Endocrine 130 | Endocrine 95 | Non-Hodgkin's Lymphomas 352 | Uterus 335 | Pancreas 1,245 | Colon & Rectum 2,057 | Prostate 9,651 | Colon & Rectum 12,253 | Colon & Rectum 9,804 | Lung 6,362 |
| Pancreas 11,189 | Ovary 10,855 | Non-Hodgkin's Lymphomas 98 | Connective Tissue 53 | Hodgkin's Disease 306 | Brain & CNS 308 | Brain & CNS 1,119 | Uterus 1,821 | Pancreas 6,588 | Ovary 6,062 | Pancreas 3,308 | Pancreas 4,482 |
| Leukemia 9,187 | Uterus 10,698 | Connective Tissue 55 | Non-Hodgkin's Lymphomas 48 | Testis 265 | Hodgkin's Disease 203 | Leukemia 1,039 | Ovary 1,776 | Stomach 4,635 | Uterus 5,389 | Bladder 3,245 | Uterus 3,149 |

Source: Vital Statistics of the United States, 1981.

RELATIONSHIP OF CANCER TO LEADING CAUSES OF DEATH IN THE UNITED STATES — 1981

| RANK | CAUSE OF DEATH | NUMBER OF DEATHS | DEATH RATE PER 100,000 POPULATION | PERCENT OF TOTAL DEATHS |
|------|--------------------------------|------------------|-----------------------------------|-------------------------|
| | ALL CAUSES | 1,977,981 | 862.4 | 100.0 |
| 1 | Diseases of Heart | 753,884 | 328.7 | 38.1 |
| 2 | CANCER | 422,094 | 184.0 | 21.3 |
| 3 | Stroke | 163,504 | 71.3 | 8.3 |
| 4 | Accidents | 100,704 | 43.9 | 5.1 |
| 5 | Bronchitis, Emphysema & Asthma | 58,832 | 25.7 | 3.0 |
| 6 | Pneumonia & Influenza | 53,731 | 23.4 | 2.7 |
| 7 | Diabetes Mellitus | 34,642 | 15.1 | 1.8 |
| 8 | Cirrhosis of Liver | 29,308 | 12.8 | 1.5 |
| 9 | Arteriosclerosis | 28,004 | 12.2 | 1.4 |
| 10 | Suicide | 27,596 | 12.0 | 1.4 |
| 11 | Homicide | 23,646 | 10.3 | 1.2 |
| 12 | Diseases of Infancy | 21,626 | 9.4 | 1.1 |
| 13 | Nephritis & Nephrosis | 17,277 | 7.5 | 0.9 |
| 14 | Congenital Abnormalities | 13,527 | 5.9 | 0.7 |
| 15 | Septicemia & Pyemia | 10,443 | 4.6 | 0.5 |
| | Other & Ill-defined | 219,163 | 95.6 | 11.0 |

Source: National Center for Health Statistics, 1981.

ESTIMATED NEW CANCER CASES AND DEATHS BY SEX FOR ALL SITES — 1984

| SITE | ESTIMATED NEW CASES | | | ESTIMATED DEATHS | | |
|-------------------------------------|----------------------|----------------------|----------------------|--------------------|---------|---------|
| | TOTAL | MALE | FEMALE | TOTAL | MALE | FEMALE |
| All Sites | 870,000 ¹ | 429,000 ¹ | 441,000 ¹ | 450,000 | 244,500 | 205,500 |
| Buccal Cavity & Pharynx (Oral) | 27,500 | 18,700 | 8,800 | 9,350 | 6,400 | 2,950 |
| Lip | 4,900 | 4,200 | 700 | 175 | 150 | 25 |
| Tongue | 4,900 | 3,200 | 1,700 | 2,050 | 1,400 | 650 |
| Salivary Gland | | | | 700 | 450 | 250 |
| Floor of Mouth | 9,800 | 5,800 | 4,000 | 525 | 400 | 125 |
| Other & Unspecified Mouth | | | | 1,600 | 1,000 | 600 |
| Pharynx | 7,900 | 5,500 | 2,400 | 4,300 | 3,000 | 1,300 |
| Digestive Organs | 207,000 | 105,100 | 101,900 | 117,300 | 61,450 | 55,850 |
| Esophagus | 9,100 | 6,500 | 2,600 | 8,600 | 6,300 | 2,300 |
| Stomach | 24,900 | 15,000 | 9,900 | 14,100 | 8,300 | 5,800 |
| Small Intestine | 2,100 | 1,100 | 1,000 | 700 | 350 | 350 |
| Large Intestine | 90,000 | 41,000 | 49,000 | 50,900 | 24,200 | 26,700 |
| Rectum | 40,000 | 21,000 | 19,000 | 8,500 | 4,600 | 3,900 |
| Liver & Biliary Passages | 13,300 | 6,300 | 7,000 | 10,100 | 5,000 | 5,100 |
| Pancreas | 25,100 | 13,000 | 12,100 | 23,000 | 12,000 | 11,000 |
| Other & Unspecified Digestive | 2,500 | 1,200 | 1,300 | 1,400 | 700 | 700 |
| Respiratory System | 153,400 | 107,500 | 45,900 | 126,150 | 89,000 | 37,150 |
| Larynx | 11,100 | 9,300 | 1,800 | 3,750 | 3,100 | 650 |
| Lung | 139,000 | 96,000 | 43,000 | 121,000 | 85,000 | 36,000 |
| Other & Unspecified Respiratory | 3,300 | 2,200 | 1,100 | 1,400 | 900 | 500 |
| Bone, Tissue and Skin | 24,500 | 12,500 | 12,000 | 11,150 | 6,400 | 4,750 |
| Bone | 1,900 | 1,100 | 800 | 1,350 | 800 | 550 |
| Connective Tissue | 4,900 | 2,700 | 2,200 | 2,400 | 1,200 | 1,200 |
| Skin | 17,700 ² | 8,700 ² | 9,000 ² | 7,400 ⁴ | 4,400 | 3,000 |
| Breast | 115,900 ³ | 900 ³ | 115,000 ³ | 37,600 | 300 | 37,300 |
| Genital Organs | 159,300 | 81,600 | 77,700 | 48,150 | 25,950 | 22,200 |
| Cervix Uteri | 16,000 ³ | — | 16,000 ³ | 6,800 | — | 6,800 |
| Corpus, Endometrium | 39,000 | — | 39,000 | 2,900 | — | 2,900 |
| Ovary | 18,300 | — | 18,300 | 11,500 | — | 11,500 |
| Prostate | 76,000 | 76,000 | — | 25,000 | 25,000 | — |
| Other & Unspecified Genital, Male | 5,600 | 5,600 | — | 950 | 950 | — |
| Other & Unspecified Genital, Female | 4,400 | — | 4,400 | 1,000 | — | 1,000 |
| Urinary Organs | 57,100 | 39,600 | 17,500 | 19,400 | 12,600 | 6,800 |
| Bladder | 38,700 | 28,000 | 10,700 | 10,700 | 7,300 | 3,400 |
| Kidney & Other Urinary | 18,400 | 11,600 | 6,800 | 8,700 | 5,300 | 3,400 |
| Eye | 1,900 | 1,000 | 900 | 400 | 200 | 200 |
| Brain & Central Nervous System | 12,800 | 7,100 | 5,700 | 10,400 | 5,700 | 4,700 |
| Endocrine Glands | 11,400 | 3,500 | 7,900 | 1,600 | 700 | 900 |
| Thyroid | 10,300 | 2,900 | 7,400 | 1,100 | 400 | 700 |
| Other Endocrine | 1,100 | 600 | 500 | 500 | 300 | 200 |
| Leukemia | 24,400 | 13,200 | 11,200 | 16,700 | 9,300 | 7,400 |
| Other Blood & Lymph Tissues | 40,600 | 21,100 | 19,500 | 21,600 | 11,300 | 10,300 |
| Hodgkin's Disease | 7,100 | 4,100 | 3,000 | 1,500 | 900 | 600 |
| Multiple Myeloma | 9,800 | 5,000 | 4,800 | 7,200 | 3,700 | 3,500 |
| Other Lymphomas | 23,700 | 12,000 | 11,700 | 12,900 | 6,700 | 6,200 |
| All Other & Unspecified Sites | 34,200 | 17,200 | 17,000 | 30,200 | 15,200 | 15,000 |

NOTE: The estimates of new cancer cases are offered as a rough guide and should not be regarded as definitive. Especially note that year-to-year changes may only represent improvements in the basic data.

¹Carcinoma in situ and non-melanoma skin cancers not included in totals. Carcinoma in situ of the uterine cervix accounts for over 45,000 new cases annually and carcinoma in situ of the female breast accounts for over 5,000 new cases annually. Non-melanoma skin cancer accounts for about 400,000 new cases annually.

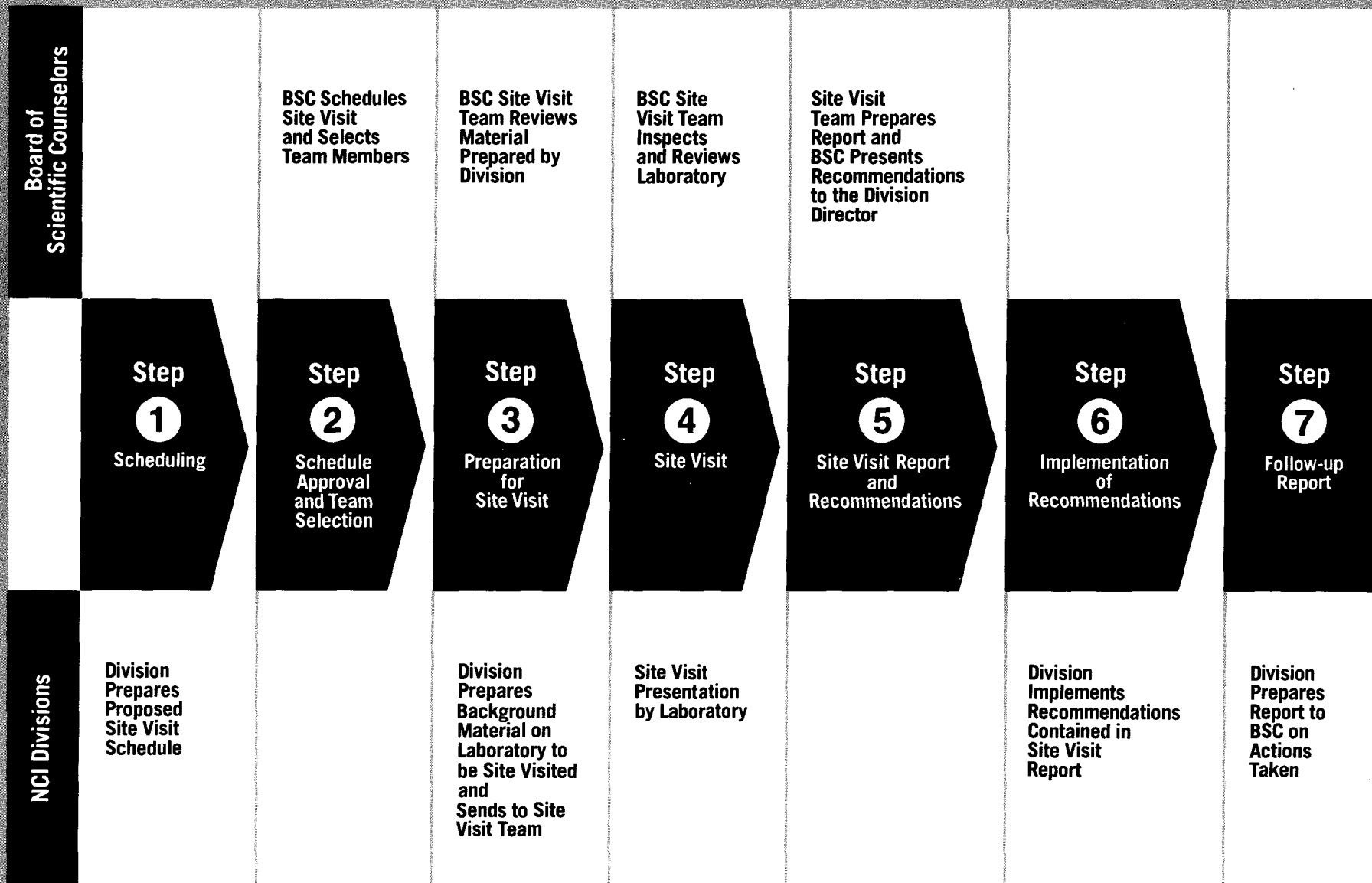
²Melanoma only.

³Invasive cancer only.

⁴Melanoma 5,500; other skin 1,900.

INCIDENCE ESTIMATES ARE BASED ON RATES FROM NCI SEER PROGRAM 1973-1979.

NCI INTRAMURAL REVIEW PROCESS



RESEARCH POSITIONS AT THE NATIONAL CANCER INSTITUTE¹

The National Cancer Institute recognizes that one of the most valuable resources to be drawn upon in the fight against cancer is the wealth of scientific talent available in the U. S. and around the world. In an effort to attract and maintain the highest quality scientific staff, two personnel systems are used: the U. S. Civil Service System and the PHS Commissioned Corps. In addition, the Staff Fellowship Program and the NIH Visiting Program have been designed to meet special needs. Special programs are also available for those who qualify.

| POSITION | ELIGIBILITY | ANNUAL SALARY | MECHANISM OF ENTRY |
|---|---|---|---|
| I. CIVIL SERVICE | | | |
| A. Civil Service (tenured) | Appropriate advanced education, experience and knowledge needed by NCI to conduct its programs. | Minimum starting: Ph.D. – \$36,327 Physicians – \$50,822 Maximum: \$66,400 | Office of Personnel Management, Contact Director or Laboratory Chief in area of interest or the NCI Personnel Office. |
| II. SPECIAL APPOINTMENT OF EXPERTS AND CONSULTANTS | | | |
| A. Special Appointment of Experts and Consultants (non-tenured appointment which can be extended up to 4 years). | Applicants shall possess outstanding experience and ability as to justify recognition as authorities in their particular fields of activity. | Equivalent to the salary range of GS-13 through GS-18. Maximum: \$66,400 | Recommendation by Division Directors. Final approval rests with the Director, NCI. |
| III. MEDICAL STAFF FELLOWS | | | |
| A. Medical Staff Fellows | Appointment for 2 or 3 years with an additional 1-year extension for an initial 2-year appointment. Graduate of accredited medical or osteopathic school and completion of internship. Completion of 2 or 3 years of clinical training beyond the M.D. degree and demonstrated outstanding ability to conduct successfully, preestablished programs in both clinical and laboratory research. | \$30,000-\$34,000 | Apply to the Clinical and Professional Education Section, Clinical Center, National Institutes of Health 20205. |
| B. Medical Staff Fellows in Pharmacology (PRAT Fellows). For physicians committed to research careers in pharmacological sciences, or clinical pharmacology. | Appointment for 2 or 3 years with an additional 1-year extension for an initial 2-year appointment. Graduate of accredited medical or osteopathic school and completion of internship. Completion of 2 or 3 years of clinical training beyond the M.D. degree and demonstrated outstanding ability to conduct successfully, preestablished programs in both clinical and laboratory research. | \$30,000-\$34,000 | Apply to the Clinical and Professional Education Section, Clinical Center, National Institutes of Health 20205. |
| IV. VISITING PROGRAM (limited tenure)² | | | |
| A. Visiting Fellow (maximum 3 years) | 1-3 years postdoctoral experience or training. | Entrance stipend \$16,000-\$18,000 | Contact Director or Laboratory Chief in area of interest. |
| B. Visiting Associates (1 year with renewals to end of project) | 3+ years postdoctoral experience or training with appropriate knowledge needed by NCI. | \$21,066-\$39,711 | Contact Director or Laboratory Chief in area of interest. |
| C. Visiting Scientist (duration of project) | 6+ years postdoctoral experience with appropriate unusual experience and knowledge needed. | \$30,549-\$66,400 | Contact Director or Laboratory Chief in area of interest. |

¹ Does not necessarily indicate that positions are currently available at the National Cancer Institute.

² Under most circumstances, the various visiting programs are limited to non-citizens.

V. STAFF FELLOWSHIPS

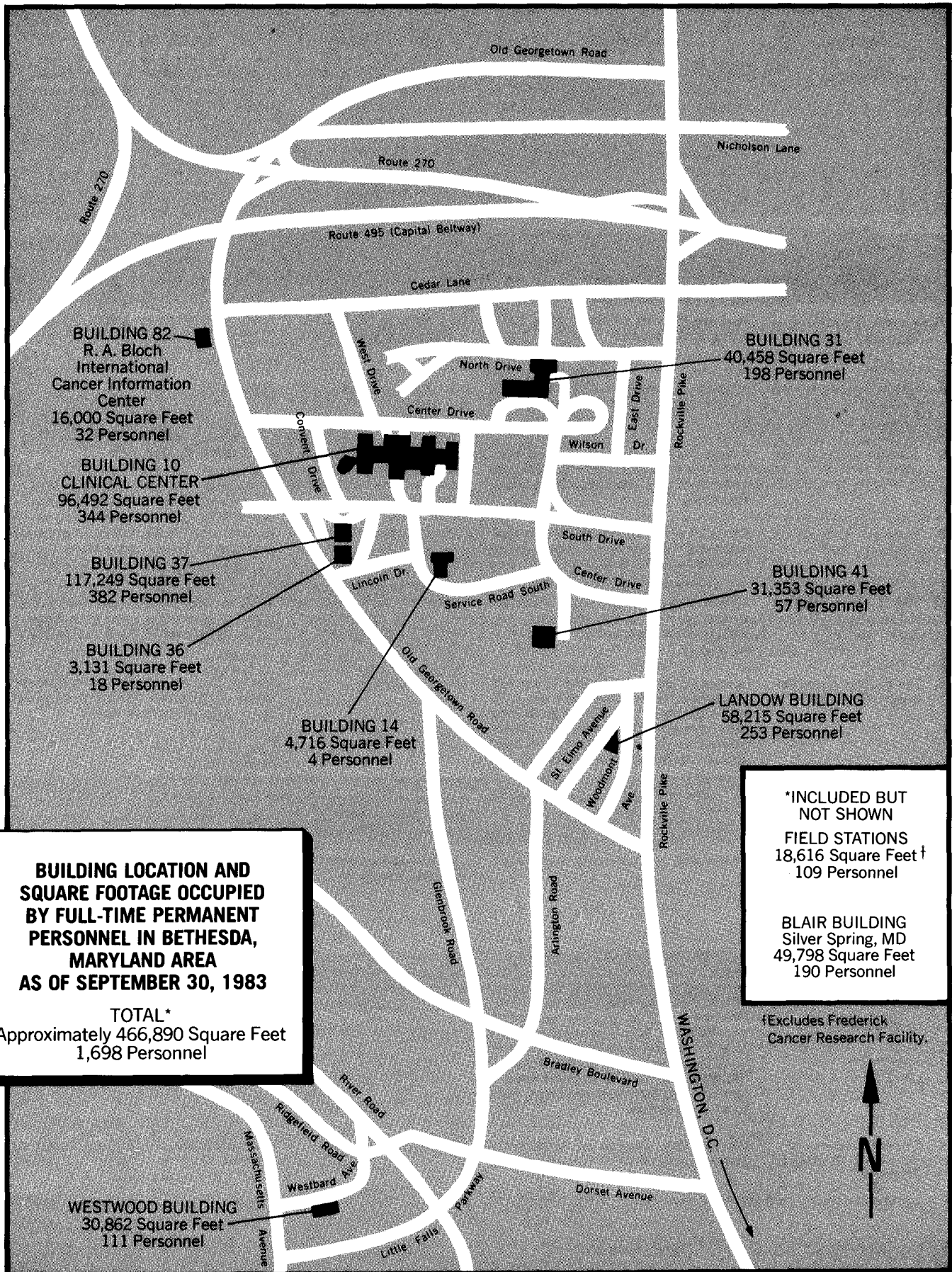
| POSITION | ELIGIBILITY | ANNUAL SALARY | MECHANISM OF ENTRY |
|----------------------------|---|---|---|
| A. Staff Fellowship | Physician or other doctoral degree equivalent awarded within last 5 years, U.S. citizen or non-citizen eligible for naturalization within 4 years. Maximum seven-year appointment. | Staff Fellows Physicians \$20,688-\$34,312 Other Doctorates \$17,000-\$35,639 Senior Staff Fellows Physicians \$23,439-\$46,570 Other Doctorates \$20,688-\$39,960 | Contact Director or Laboratory Chief in area of interest or the NCI Personnel Office. |

VI. CIVIL SERVICE SUMMER EMPLOYMENT PROGRAMS

| | | | |
|---|--|--|--|
| A. Summer Clerical Program | Must be 18 years of age or older (16 if high school graduate). | GS-1 through GS-4 Grade is based on education and/or experience. | Apply to NIH on or before March 15. |
| B. Summer Undergraduate Program | Students majoring in biological and/or physical sciences or related field, or applicants with appropriate experience. | GS-1 through GS-4 Grade is based on education and/or experience. | Apply to NIH by March 15. |
| C. Summer Graduate Program | College graduate, graduate student, planning to attend graduate school, faculty member, or equivalent experience and/or education. | GS-5 through GS-12 For some occupations superior scholastic work may qualify for a higher grade level. | Apply to NIH by March 15. |
| D. Summer Employment for Needy Youth | Educationally and economically disadvantaged youths in their formative years (must have reached 16th birthday). | Federal minimum wage. | Register with the local office of the State Employment service and apply to NIH. |
| E. Stay-in-School Program | Substantially full-time or full-time student at least 16 years of age who needs earnings from employment to continue in school. | Salary is commensurate with duties assigned and student's education and/or experience. | Apply to NIH. No deadline required for applying. However, no new appointments are made between May 1 to August 30. |
| F. The Federal Junior Fellowship Program | Graduating high school senior in a public or private school in the Metro. Wash., D. C. area. Must be in upper 10% of graduating class, have applied for admission to an accredited college or university and need financial assistance to attend school. | GS-1 through GS-4 | Nominations are submitted directly to the Office of Personnel Management by high school principals or counselors. |

VII. SPECIAL PROGRAMS

| | | | |
|--|---|--|--|
| A. Research Fellow sponsored by organization other than NIH, PHS. | Determined by sponsoring organization. | Established by sponsoring organization. | Contact Director or Laboratory Chief in area of interest; also apply to sponsoring agency, e.g., American Cancer Society, Eleanor Roosevelt Cancer Foundation, Leukemia Society of America, Inc., etc. |
| B. COSTEP Program (operates year-round) Maximum 120 days per 12-month period. | U.S. Citizen. Must have completed one year of study in a medical, dental or veterinary school; or a minimum of two years of baccalaureate program in a health-related field such as engineering, nursing, pharmacy, etc. May be enrolled in a master's or doctoral program in a health-related field (designated by the Assistant Secretary for Health). Physical requirements of PHS Commissioned Corps. Plans to return to college. | Pay and allowance of a Commissioned Officer, Junior Asst. Grade. | Apply to PHS Commissioned Corps, COSTEP SECTION, Parklawn Building, 5600 Fishers Lane, Rockville, Maryland 20852. |
| C. Fogarty International Scholars In Residence Program. | International reputation, productivity, demonstrated ability in biomedical field. | \$50,000 for 10 months. | Recommendation to Fogarty Center by Institute Director or Scientist. Contact Director in area of interest. |



MAJOR STEPS IN THE BUDGET FORMULATION REVIEW PROCESS

| | JANUARY | FEBRUARY | MARCH | APRIL | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER |
|-------------------------------|---|----------|--|-------|-----|--|------|--|--|--|--|----------|
| NCI STAFF ¹ | <p>NCI Director's Meeting – establish budget policy for upcoming fiscal year; review operating plans for current fiscal year</p> <p>Submit Congressional Justification for next fiscal year</p> | | <p>Formulation of Preliminary Budget for two years in the future for both the by-pass, and budget submitted within the Administration's guidelines</p> <p>Congressional Testimony by Director, NCI</p> | | | <p>NCI Director's Meeting – establish specific division levels for upcoming fiscal year</p> | | <p>Formulation of By-Pass Budget</p> <p>Formulation of Budget within Administration guidelines</p> | | <p>Formulation of President's Budget</p> | | |
| NCAB ² | | | | | | <p>Review and revise Preliminary Budget for two fiscal years in future</p> | | | <p>Review By-Pass (OMB) Budget submitted directly to the President</p> | | <p>Division presentations of program activities for fiscal year just completed</p> | |
| BSC ³ | <p>Review operating plans for current fiscal year and policies from NCI Director's Meeting</p> | | | | | <p>Review and advise on implementation of specific divisional programs current fiscal year</p> | | | | <p>Annual Division Budget Reviews current and future plans</p> | | |

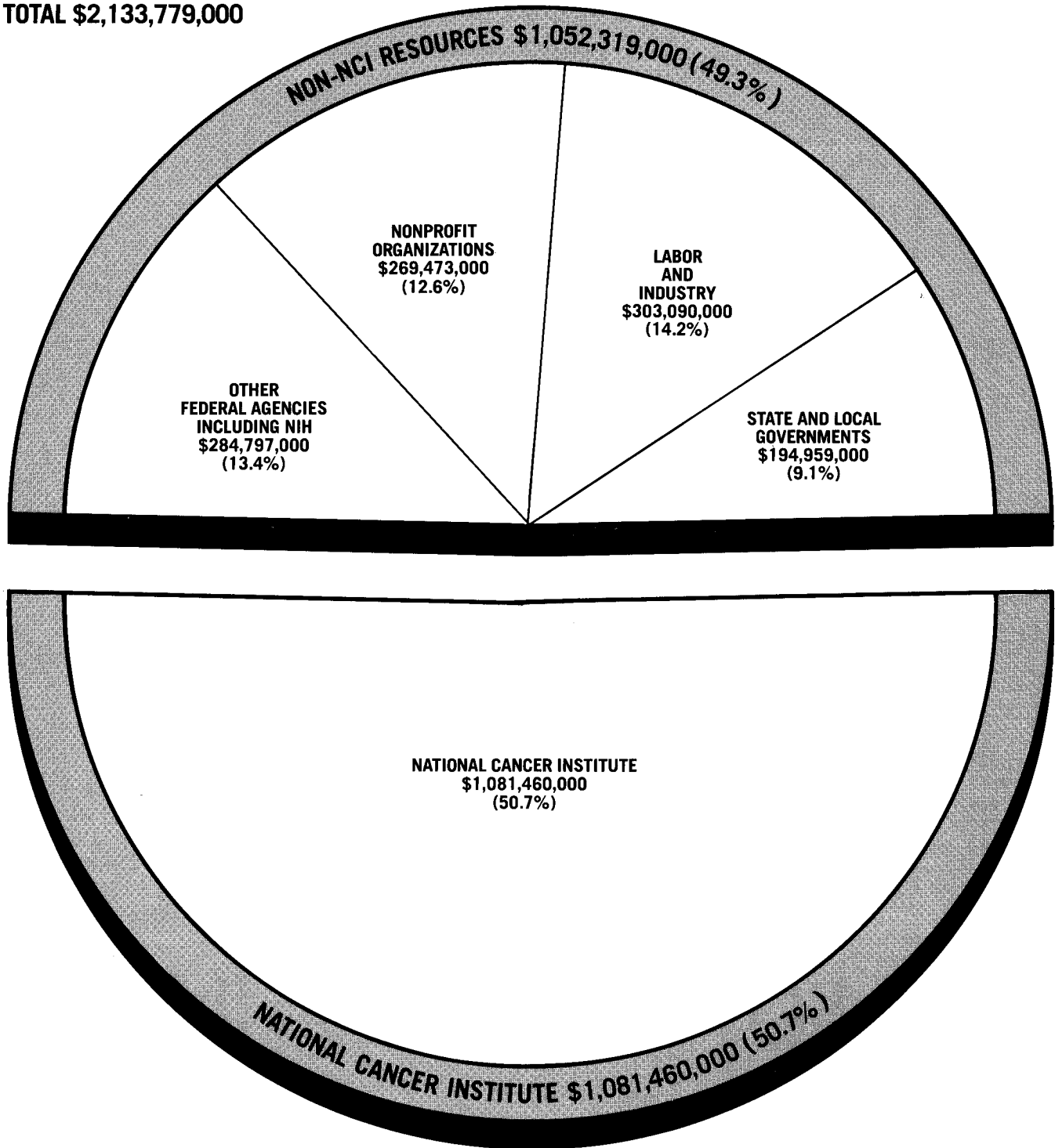
¹ Executive Committee and key administrative staff

² National Cancer Advisory Board – presidential appointees

³ Board of Scientific Counselors – outside NCI peer review bodies for each of four operating divisions

ESTIMATED TOTAL NATIONAL RESOURCES FOR CANCER RESEARCH AND CANCER CONTROL — FISCAL YEAR 1984

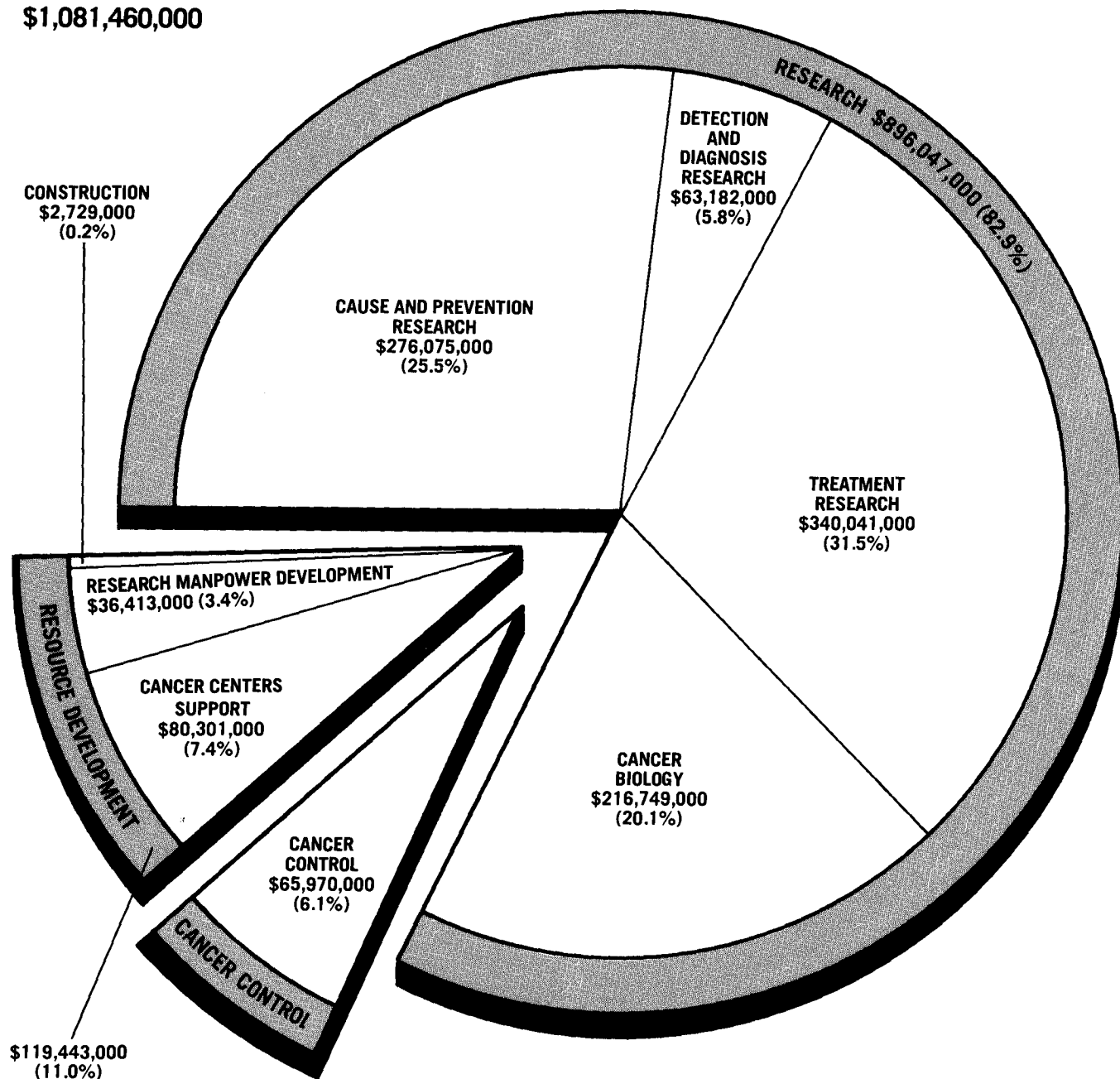
TOTAL \$2,133,779,000



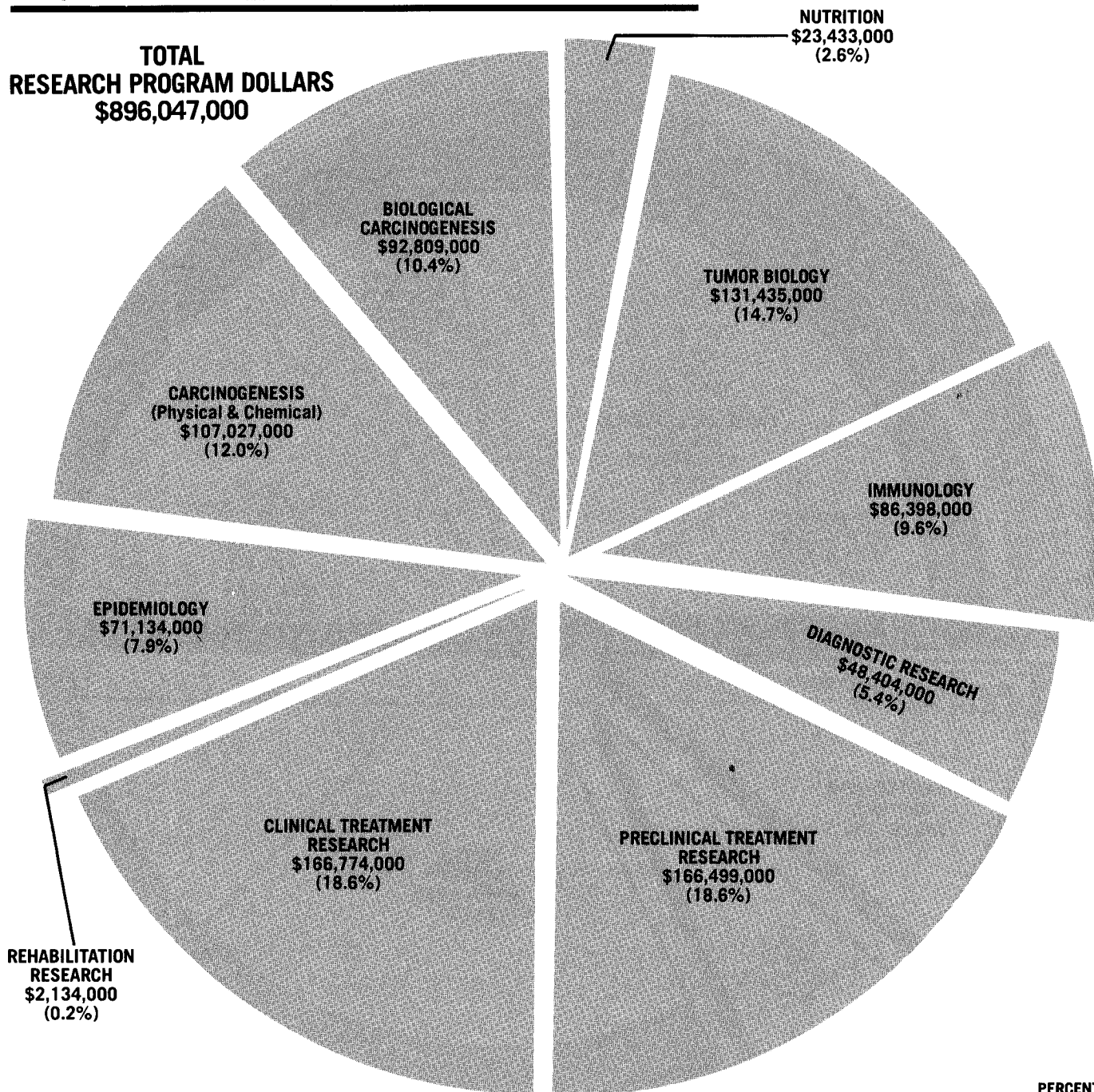
NOTE: Non-NCI resources data were provided by the Office of Program Planning and Analysis, NCI.

NCI PROGRAM STRUCTURE — FISCAL YEAR 1984

TOTAL DOLLARS
\$1,081,460,000



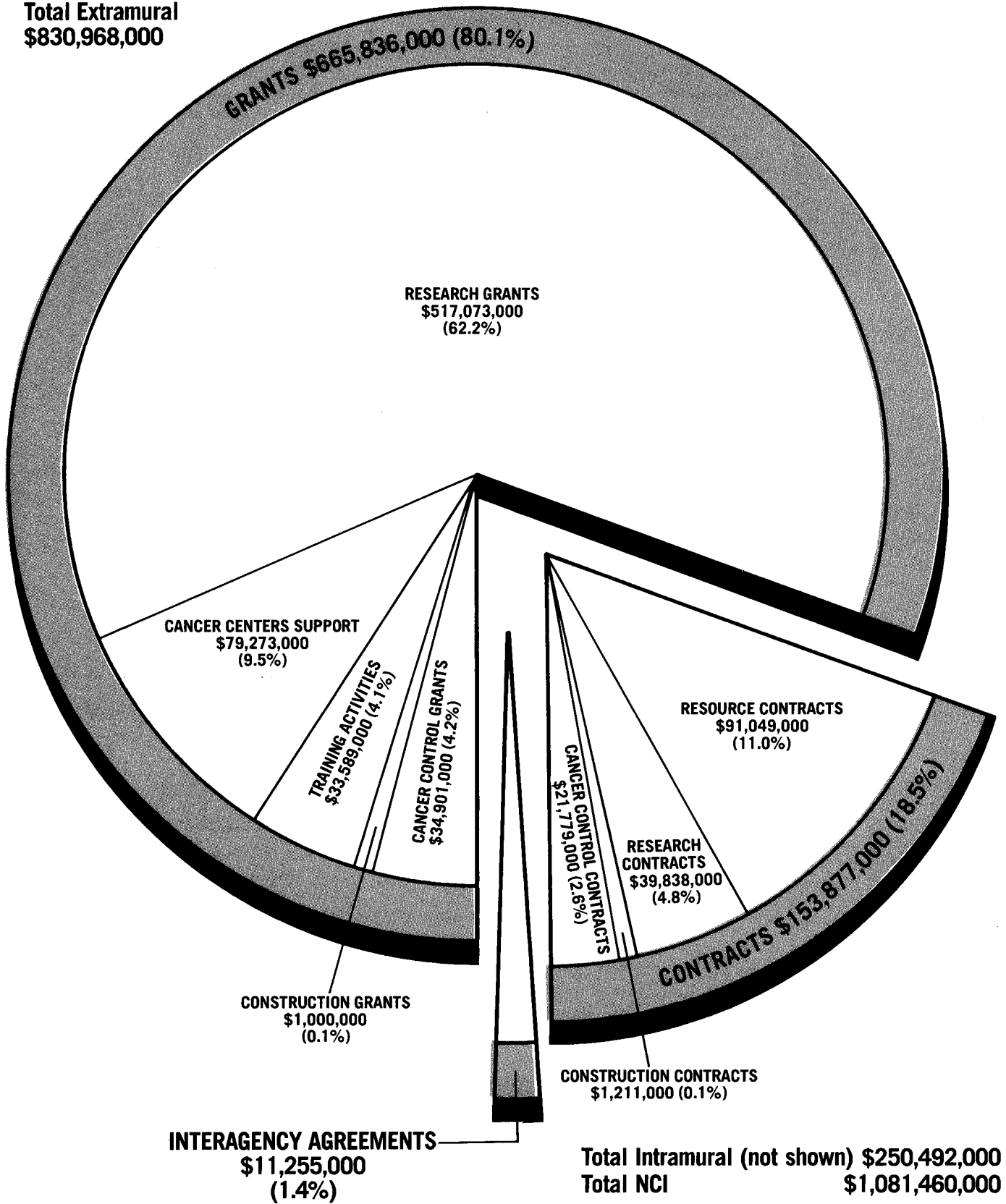
NCI RESEARCH PROGRAMS — FISCAL YEAR 1984



| Research Programs | Amount | PERCENT OF TOTAL |
|-------------------------------|------------------------|------------------|
| Research Programs | \$896,047,000 | 82.9 |
| Resource Development | | |
| Cancer Centers Support | 80,301,000 | 7.4 |
| Research Manpower Development | 36,413,000 | 3.4 |
| Construction | 2,729,000 | 0.2 |
| Cancer Control | 65,970,000 | 6.1 |
| Total NCI | \$1,081,460,000 | 100.0 |

NCI EXTRAMURAL FUNDS — FISCAL YEAR 1984

Total Extramural
\$830,968,000

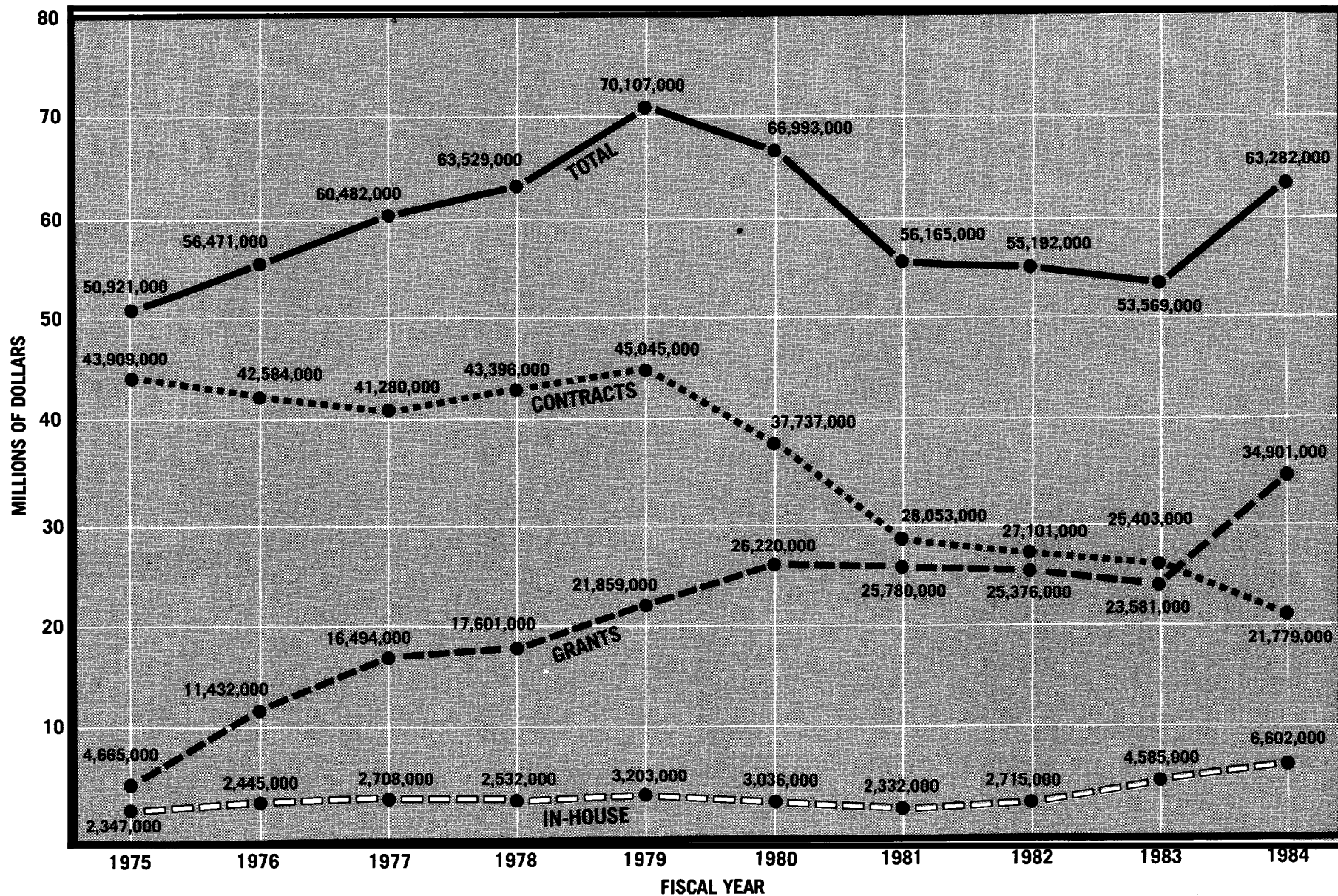


TOTAL NCI DOLLARS BY MECHANISMS — FISCAL YEAR 1984

(DOLLARS IN THOUSANDS)

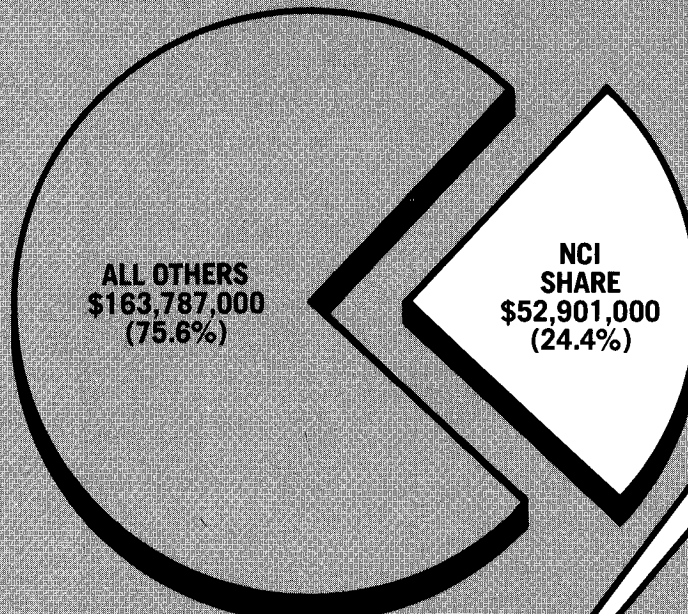
| | AMOUNT | MECHANISM | PERCENT OF TOTAL | |
|-----------|--|---|------------------|-------|
| | RESEARCH PROJECT GRANTS | | | |
| \$461,247 | \$306,526 | Traditional (RO1) | 28.3 | 42.7% |
| | 5,888 | Young Investigators | 0.6 | |
| | 11,858 | Cancer Research Emphasis Grants/RFA's | 1.1 | |
| | 124,695 | Program Projects | 11.5 | |
| | 7,317 | Cooperative Agreements | 0.7 | |
| | 4,963 | Small Business Innovative Research | 0.5 | |
| | RESEARCH CENTERS GRANTS | | | |
| \$79,273 | 62 | Other Centers | 0.0 | 7.3% |
| | 79,211 | Center Core Grants | 7.3 | |
| | OTHER RESEARCH GRANTS | | | |
| \$65,570 | 2,500 | Scientific Evaluation | 0.2 | 6.0% |
| | 420 | Conference Grants | 0.05 | |
| | 5,300 | Research Career Programs | 0.5 | |
| | 4,444 | Clinical Education Programs | 0.4 | |
| | 47,986 | Clinical Cooperative Groups | 4.4 | |
| | 1,273 | National Organ Systems Program | 0.1 | |
| | 3,148 | Minority Biomedical Research Support | 0.3 | |
| | 499 | Surgical Oncology | 0.05 | |
| | TRAINING PROGRAM | | | |
| \$23,845 | 3,160 | National Research Service Awards— Individual | 0.3 | 2.2% |
| | 20,685 | National Research Service Awards— Institutional | 1.9 | |
| | RESEARCH AND RESOURCE CONTRACTS | | | |
| \$142,142 | 142,142 | Research and Resource Contracts | 13.1 | 13.1% |
| | CANCER CONTROL | | | |
| \$63,282 | 63,282 | Cancer Control | 5.9 | 5.9% |
| | CONSTRUCTION | | | |
| \$2,211 | 2,211 | Construction | 0.2 | 0.2% |
| | IN-HOUSE | | | |
| \$243,890 | 185,767 | Intramural Research | 17.2 | 22.6% |
| | 43,835 | Direct Operations | 4.1 | |
| | 14,288 | Program Management | 1.3 | |
| | \$1,081,460 | TOTAL NCI | 100.0 | |

CANCER CONTROL OBLIGATIONS BY MECHANISM — FISCAL YEARS 1975-1984



REIMBURSEMENT TO NIH MANAGEMENT FUND — FISCAL YEAR 1984

TOTAL NIH SERVICES
\$216,688,000



- CLINICAL CENTER**
- Employee Health Services
 - Service Functions
 - Social Work
 - Professional Services
 - Consultative Services
 - Admissions and Follow-up
 - Anesthesiology
 - Diagnostic X-Ray
 - Clinical Pathology
 - Blood Bank
 - Rehabilitation Service
 - Pharmacy Service
 - Medical Records
 - TV Engineering
 - Nursing Service
 - Patient Nutrition Service
 - Environmental Sanitation Control
 - Laundry
 - Radiation Safety

- STANDARD LEVEL USER CHARGES (SLUC)**
- Building usage including utilities
 - Major renovations
 - Guard services for rental buildings

DISTRIBUTION OF NCI SERVICES
\$52,901,000



DIVISION OF COMPUTER RESEARCH AND TECHNOLOGY

\$2,657,000

Research & Development Program in Which Concepts & Methods of Computer Science Are Applied to Bio-medical Problems (In addition, services are rendered to the NIH Communities on a fee-for-service basis.)

DIVISION OF RESEARCH GRANTS

\$3,254,000

Initial Scientific Review of Applications
Assignment of Research Grant Applications Among Institutes

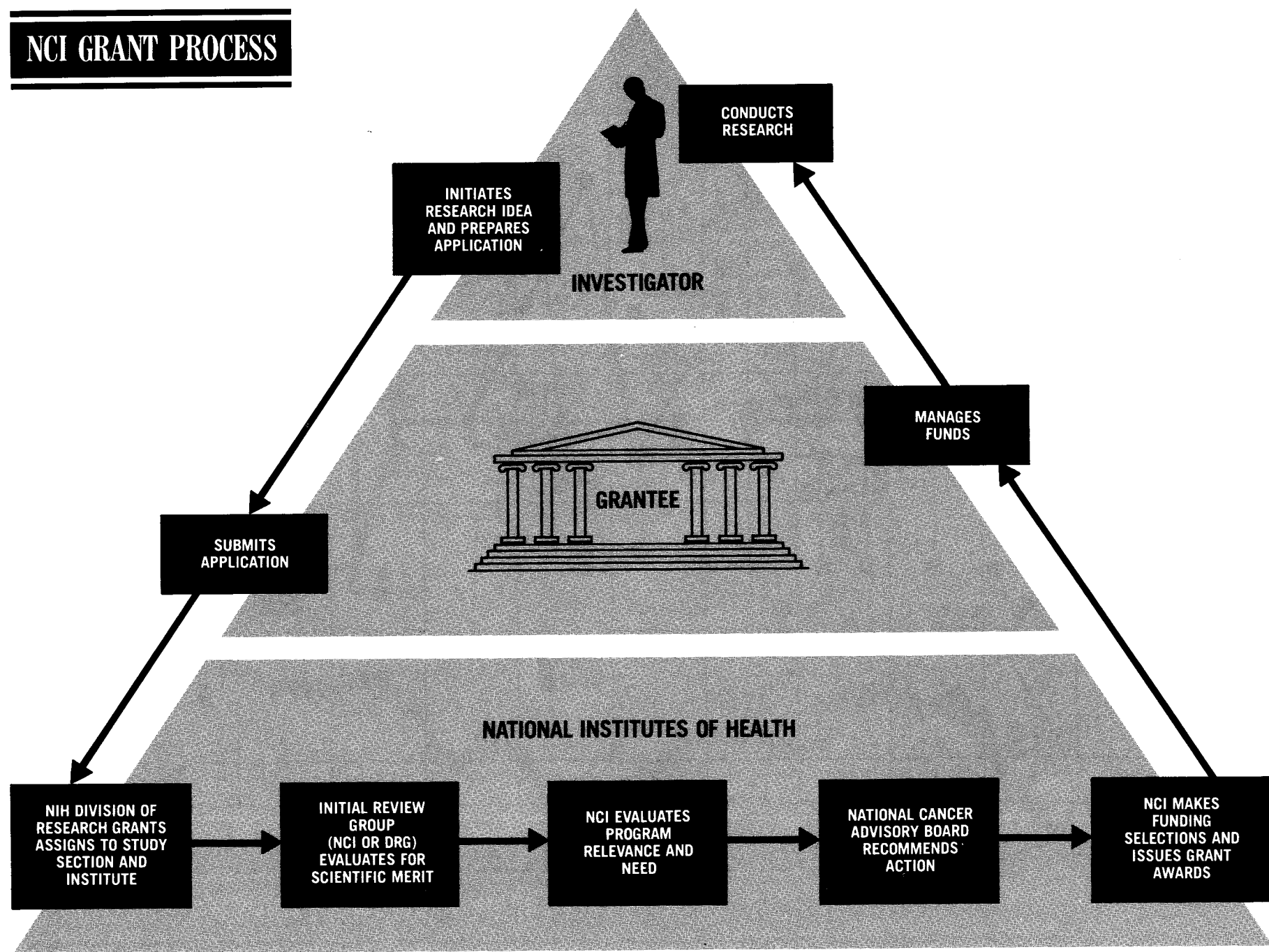
OTHER RESEARCH SERVICES

\$21,607,000

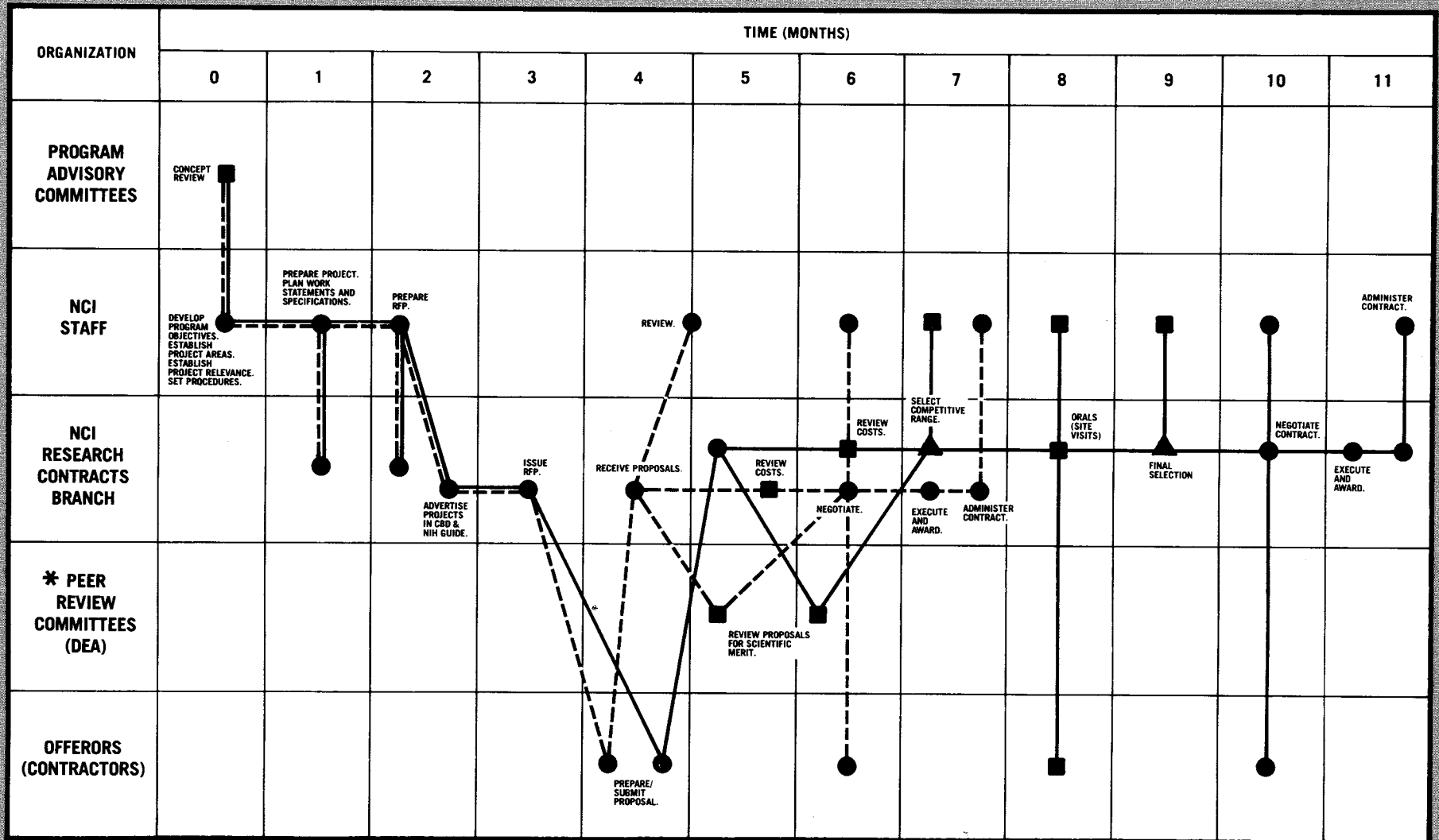
Division of Administrative Services
Division of Engineering Services
Division of Safety
Division of Research Services

The Management Fund provides for the financing of certain common research supporting services and administrative activities which are required in the operating of NIH.

NCI GRANT PROCESS



NCI CONTRACT AWARD PROCESS — UNDER CANCER ACT OF 1971



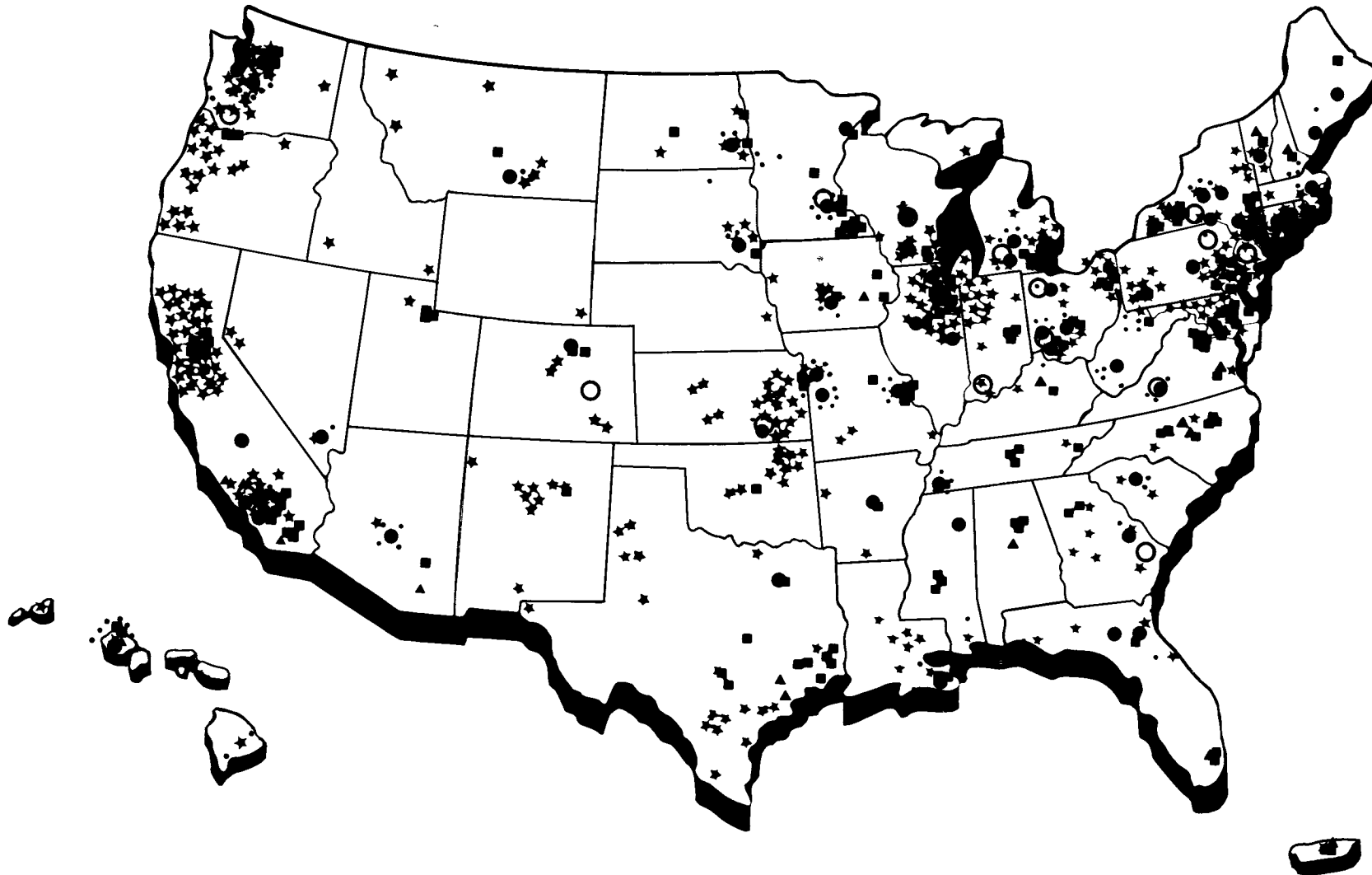
NOTE: SIMULTANEOUS ACTIVITIES BY MORE THAN ONE ORGANIZATION INDICATE COOPERATIVE EFFORTS.

LEGEND:

- OPERATION
- REVIEW
- ▲ DECISION

- NORMAL COMPETITIVE FLOW
- - - NON-COMPETITIVE CONTRACTS
- * AD HOC COMMITTEES MAY BE USED — INCLUDES NON-GOVERNMENT EMPLOYEES.

NATIONAL CANCER NETWORK



- CCOPs and Hospital Components
- ▲ Clinical and Comprehensive Cancer Centers
- Cooperative Group Members
- ★ Cooperative Group Cancer Control Outreach Program
- Community Hospital Oncology Program

INSTITUTIONS RECEIVING MORE THAN \$2,000,000 FROM THE NATIONAL CANCER INSTITUTE IN FISCAL YEAR 1984

(DOLLARS IN THOUSANDS)

| NAME OF INSTITUTION | GRANTS | CONTRACTS | CONSTRUCTION | TOTAL | STATE |
|--|--------|-----------|--------------|--------|---------------|
| University of Alabama System | 7,295 | 252 | 0 | 7,547 | ALABAMA |
| Southern Research Institute | 3,446 | 2,768 | 0 | 6,214 | ALABAMA |
| University of Arizona | 6,672 | 914 | 200 | 7,786 | ARIZONA |
| University of California | 44,690 | 2,810 | 0 | 47,500 | CALIFORNIA |
| Stanford University | 12,841 | 149 | 0 | 12,990 | CALIFORNIA |
| University of Southern California | 11,529 | 606 | 0 | 12,135 | CALIFORNIA |
| Scripps Clinic and Research Foundation | 5,303 | 659 | 0 | 5,962 | CALIFORNIA |
| Northern California Cancer Program, Inc. | 2,573 | 3,088 | 0 | 5,661 | CALIFORNIA |
| Salk Institute for Biological Studies | 4,888 | 0 | 0 | 4,888 | CALIFORNIA |
| La Jolla Cancer Research Foundation | 3,336 | 0 | 300 | 3,636 | CALIFORNIA |
| SRI International | 1,693 | 1,711 | 0 | 3,404 | CALIFORNIA |
| University of Colorado System | 3,181 | 0 | 0 | 3,181 | COLORADO |
| Yale University | 14,402 | 285 | 0 | 14,687 | CONNECTICUT |
| Georgetown University | 2,147 | 250 | 0 | 2,397 | DIST OF COL |
| University of Miami | 3,438 | 0 | 0 | 3,438 | FLORIDA |
| Florida Agricultural and Mechanical University | 3,288 | 70 | 0 | 3,358 | FLORIDA |
| Emory University | 1,969 | 1,415 | 0 | 3,384 | GEORGIA |
| University of Hawaii System | 1,877 | 545 | 0 | 2,422 | HAWAII |
| University of Chicago | 9,410 | 104 | 0 | 9,514 | ILLINOIS |
| University of Illinois | 3,711 | 249 | 0 | 3,960 | ILLINOIS |
| Northwestern University | 3,433 | 118 | 0 | 3,551 | ILLINOIS |
| U.S. Department of Energy — Argonne | 0 | 2,714 | 0 | 2,714 | ILLINOIS |
| IIT Research Institute | 171 | 2,339 | 0 | 2,510 | ILLINOIS |
| American College of Radiology | 2,214 | 0 | 0 | 2,214 | ILLINOIS |
| Illinois Cancer Council | 1,553 | 483 | 0 | 2,036 | ILLINOIS |
| Indiana Univ-Purdue Univ at Indianapolis | 2,623 | 0 | 0 | 2,623 | INDIANA |
| University of Iowa | 2,373 | 1,775 | 0 | 4,148 | IOWA |
| University of Kansas Col Hlth Sci & Hosp | 1,788 | 306 | 0 | 2,094 | KANSAS |
| Program Resources, Inc. | 0 | 21,598 | 0 | 21,598 | MARYLAND |
| Johns Hopkins University | 16,854 | 275 | 0 | 17,129 | MARYLAND |
| Litton Bionetics | 0 | 11,657 | 0 | 11,657 | MARYLAND |
| Westat, Inc. | 0 | 6,720 | 0 | 6,720 | MARYLAND |
| U.S. Army Fort Detrick | 129 | 4,727 | 0 | 4,856 | MARYLAND |
| Information Management Services | 0 | 4,668 | 0 | 4,668 | MARYLAND |
| University of Maryland System | 1,406 | 802 | 0 | 2,208 | MARYLAND |
| U.S. Alcohol, Drug Abuse & Mtl Hlth Adm | 220 | 1,882 | 0 | 2,102 | MARYLAND |
| Capital Systems Group | 0 | 2,011 | 0 | 2,011 | MARYLAND |
| Dana-Farber Cancer Institute | 16,884 | 0 | 0 | 16,884 | MASSACHUSETTS |
| Harvard University | 12,657 | 526 | 0 | 13,183 | MASSACHUSETTS |
| Massachusetts Institute of Technology | 8,537 | 151 | 0 | 8,688 | MASSACHUSETTS |
| Massachusetts General Hospital | 5,591 | 158 | 0 | 5,749 | MASSACHUSETTS |
| Tufts University | 3,115 | 0 | 0 | 3,115 | MASSACHUSETTS |
| Boston University | 3,091 | 0 | 0 | 3,091 | MASSACHUSETTS |
| Mason Research Institute | 0 | 2,083 | 0 | 2,083 | MASSACHUSETTS |
| University of Michigan | 5,846 | 658 | 0 | 6,504 | MICHIGAN |
| Michigan Cancer Foundation | 1,877 | 1,839 | 0 | 3,716 | MICHIGAN |
| Wayne State University | 1,751 | 342 | 0 | 2,093 | MICHIGAN |
| University of Minnesota | 7,393 | 1,155 | 0 | 8,548 | MINNESOTA |
| Mayo Foundation | 6,197 | 1,186 | 0 | 7,383 | MINNESOTA |
| Washington University | 3,479 | 0 | 0 | 3,479 | MISSOURI |
| University of Nebraska | 3,708 | 0 | 0 | 3,708 | NEBRASKA |
| Dartmouth College | 5,343 | 0 | 0 | 5,343 | NEW HAMPSHIRE |
| University of Med & Dent — Rutgers Med Sch | 2,408 | 136 | 0 | 2,544 | NEW JERSEY |
| Memorial Hospital for CA/Allied Diseases | 29,863 | 377 | 0 | 30,240 | NEW YORK |

| NAME OF INSTITUTION | GRANTS | CONTRACTS | CONSTRUCTION | TOTAL | STATE |
|--|--------|-----------|--------------|--------|----------------|
| New York State Department of Health | 15,961 | 420 | 0 | 16,381 | NEW YORK |
| Columbia University | 11,350 | 0 | 0 | 11,350 | NEW YORK |
| New York University | 9,878 | 0 | 0 | 9,878 | NEW YORK |
| Yeshiva University | 9,084 | 452 | 0 | 9,536 | NEW YORK |
| University of Rochester | 8,906 | 0 | 500 | 9,406 | NEW YORK |
| American Health Foundation | 7,030 | 385 | 0 | 7,415 | NEW YORK |
| College at Old Westbury | 6,305 | 213 | 0 | 6,518 | NEW YORK |
| Cold Spring Harbor Laboratory | 5,082 | 0 | 0 | 5,082 | NEW YORK |
| Rockefeller University | 4,588 | 0 | 0 | 4,588 | NEW YORK |
| Cornell University | 3,372 | 420 | 0 | 3,792 | NEW YORK |
| Duke University | 10,511 | 366 | 0 | 10,877 | NORTH CAROLINA |
| North Carolina Central University | 6,555 | 0 | 0 | 6,555 | NORTH CAROLINA |
| Wake Forest University | 2,579 | 0 | 0 | 2,579 | NORTH CAROLINA |
| Ohio State University | 4,785 | 385 | 0 | 5,170 | OHIO |
| Battelle Memorial Institute | 461 | 3,161 | 0 | 3,622 | OHIO |
| Case Western Reserve University | 3,436 | 0 | 0 | 3,436 | OHIO |
| Institute for Cancer Research | 8,973 | 0 | 0 | 8,973 | PENNSYLVANIA |
| University of Pennsylvania | 8,382 | 173 | 0 | 8,555 | PENNSYLVANIA |
| Wistar Institute of Anatomy and Biology | 8,277 | 0 | 0 | 8,277 | PENNSYLVANIA |
| University of Pittsburgh | 5,080 | 786 | 0 | 5,866 | PENNSYLVANIA |
| Pennsylvania State Univ Hershey Med Ctr | 4,778 | 0 | 0 | 4,778 | PENNSYLVANIA |
| Fox Chase Cancer Center | 1,802 | 1,406 | 0 | 3,208 | PENNSYLVANIA |
| Temple University | 3,146 | 0 | 0 | 3,146 | PENNSYLVANIA |
| Hahnemann University | 2,702 | 0 | 0 | 2,702 | PENNSYLVANIA |
| Children's Hospital of Philadelphia | 2,214 | 0 | 0 | 2,214 | PENNSYLVANIA |
| St. Jude Children's Research Hospital | 6,596 | 0 | 0 | 6,596 | TENNESSEE |
| Vanderbilt University | 2,790 | 198 | 0 | 2,988 | TENNESSEE |
| University of Tennessee System | 2,203 | 0 | 0 | 2,203 | TENNESSEE |
| University of Texas System | 26,348 | 639 | 0 | 26,987 | TEXAS |
| Baylor College of Medicine | 5,766 | 10 | 0 | 5,776 | TEXAS |
| University of Utah | 4,706 | 1,655 | 0 | 6,361 | UTAH |
| University of Vermont & St Agric College | 3,326 | 157 | 0 | 3,483 | VERMONT |
| Fred Hutchinson Cancer Research Center | 13,895 | 3,125 | 0 | 17,020 | WASHINGTON |
| University of Washington | 5,268 | 979 | 0 | 6,247 | WASHINGTON |
| University of Wisconsin System | 13,941 | 682 | 0 | 14,623 | WISCONSIN |

| | | | | | |
|---|--------------------|------------------|----------------|------------------|--|
| TOTAL | \$ 538,269 | \$102,173 | \$1,000 | \$641,442 | |
| PERCENT OF TOTAL AWARDED ABOVE | 83.9 | 15.9 | 0.2 | 100.0 | |
| TOTAL NCI FISCAL YEAR 1984 OBLIGATIONS | \$1,081,460 | | | | |
| PERCENT OF NCI TOTAL OBLIGATIONS | 49.8 | 9.4 | 0.1 | 59.3 | |

DISTRIBUTION OF NCI CONTRACTS — FISCAL YEAR 1984

| PROGRAM DISTRIBUTION | | | | |
|--------------------------------------|---------------------|---|----------------------|--------------------------|
| PERCENT OF TOTAL NUMBER OF CONTRACTS | NUMBER OF CONTRACTS | NCI PROGRAM AREA | THOUSANDS OF DOLLARS | PERCENT OF TOTAL DOLLARS |
| 4.3 | 23 | Division of Cancer Biology and Diagnosis | \$4,894 | 3.0 |
| 44.3 | 238 | Division of Cancer Treatment | 52,718 | 32.2 |
| 30.7 | 165 | Division of Cancer Etiology | 36,598 | 22.3 |
| 19.8 | 106 | Division of Cancer Prevention and Control | 36,666 | 22.4 |
| 0.9 | 5 | Office of the Director | 33,045 | 20.1 |
| 537 | | TOTALS | \$163,921 | |

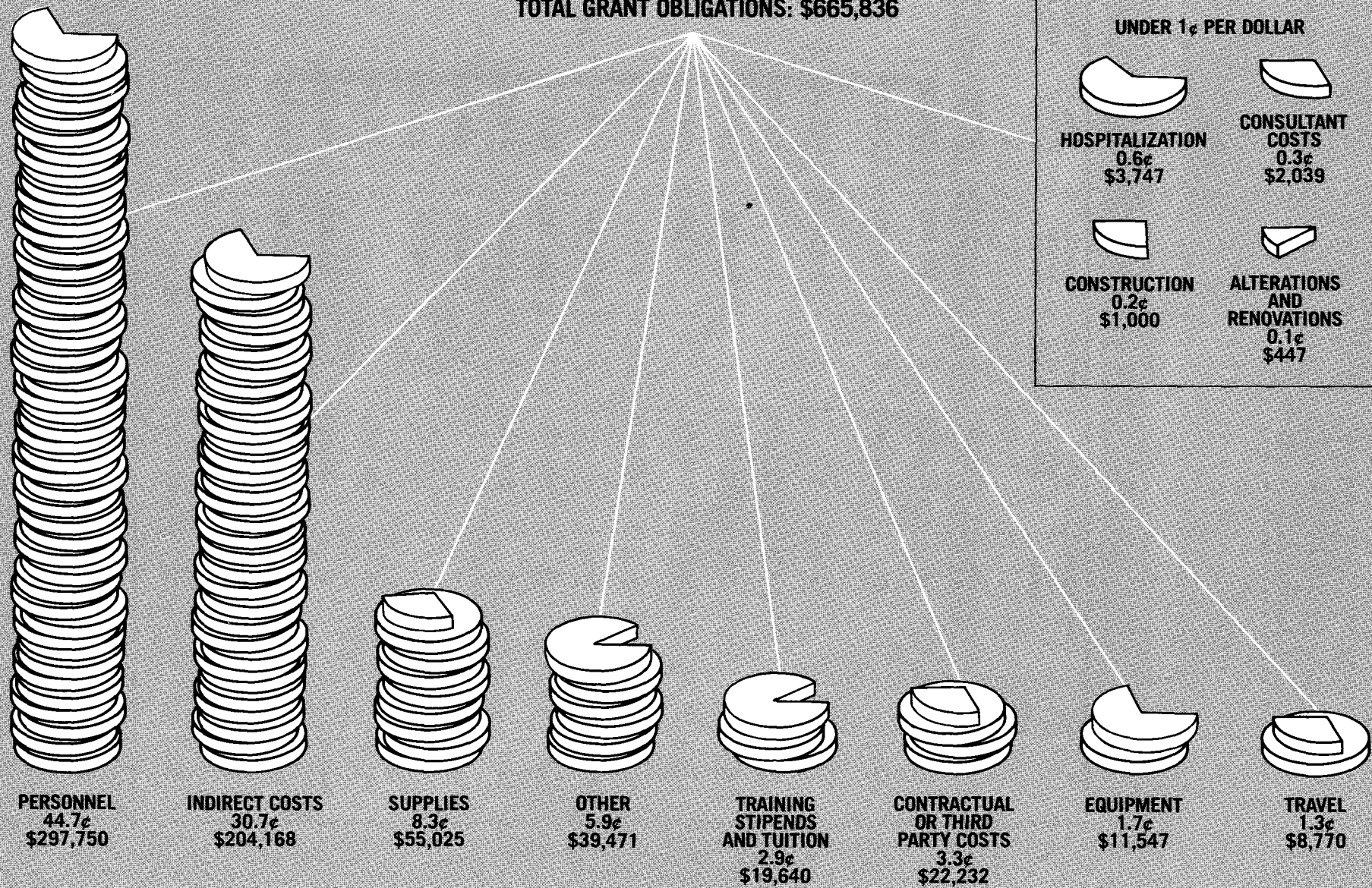
| INSTITUTIONAL DISTRIBUTION | | | | |
|--------------------------------------|---------------------|----------------------------|----------------------|--------------------------|
| PERCENT OF TOTAL NUMBER OF CONTRACTS | NUMBER OF CONTRACTS | TYPE OF INSTITUTION | THOUSANDS OF DOLLARS | PERCENT OF TOTAL DOLLARS |
| 34.3 | 184 | Profit-Making | \$77,846 | 47.5 |
| 25.9 | 139 | Academic | 25,672 | 15.7 |
| 25.2 | 135 | Non-Profit | 36,444 | 22.2 |
| 8.9 | 48 | Federal Government | 13,700 | 8.3 |
| 2.2 | 12 | State and Local Government | 2,066 | 1.3 |
| 3.5 | 19 | Foreign | 8,193 | 5.0 |
| 537 | | TOTALS | \$163,921 | |

NOTE: Excludes contracts that are not in direct support of research or control, such as Cancer Communications, Program Planning, and Construction contracts.

DISTRIBUTION OF THE GRANT DOLLAR — FISCAL YEAR 1984

(DOLLARS IN THOUSANDS)

TOTAL GRANT OBLIGATIONS: \$665,836



FOREIGN RESEARCH GRANTS AND CONTRACTS — FISCAL YEAR 1984

| | NUMBER OF GRANTS | GRANT DOLLARS AWARDED | NUMBER OF CONTRACTS | CONTRACT DOLLARS AWARDED | TOTAL DOLLARS AWARDED | PERCENT OF TOTAL AMOUNT AWARDED |
|-------------------------|------------------|-----------------------|---------------------|--------------------------|-----------------------|---------------------------------|
| Australia | 3 | \$ 171,802 | — | \$ — | 171,802 | 1.3 |
| Belgium | 1 | 231,708 | 1 | 199,286 | 430,994 | 3.3 |
| Canada | 24 | 1,889,368 | 4 | 358,896 | 2,248,264 | 17.4 |
| China, Peoples Republic | — | — | 2 | 758,088 | 758,088 | 5.9 |
| Denmark | 1 | 133,009 | — | — | 133,009 | 1.0 |
| Finland | 2 | 100,501 | 1 | 4,884,738 | 4,985,239 | 38.5 |
| France | 3 | 474,725 | 1 | 19,360 | 494,085 | 3.8 |
| Germany | 1 | 89,725 | — | — | 89,725 | 0.7 |
| Ghana | — | — | 1 | 20,000 | 20,000 | 0.2 |
| Israel | 5 | 368,780 | 1 | 137,510 | 506,290 | 3.9 |
| Italy | 2 | 306,000 | 1 | 136,089 | 442,089 | 3.4 |
| Jamaica | — | — | 1 | 298,854 | 298,854 | 2.3 |
| Japan | — | — | 2 | 278,500 | 278,500 | 2.2 |
| Sweden | 6 | 483,691 | — | — | 483,691 | 3.7 |
| Switzerland | 2 | 96,333 | 1 | 25,000 | 121,333 | 0.9 |
| Tanzania | — | — | 1 | 87,149 | 87,149 | 0.7 |
| United Kingdom | 5 | 413,383 | 2 | 989,736 | 1,403,119 | 10.8 |
| TOTAL | 55 | \$4,759,025 | 19 | \$8,193,206 | \$12,952,231 | 100.0 |

¹Excludes grants for resource manpower development: France — \$789; Israel — \$18,468; Sweden — \$3,695.

APPROPRIATIONS OF THE NCI 1938-1985

1938 THROUGH 1966 \$1,331,538,220

| | | |
|------------|-------------|---|
| 1967 | 175,656,000 | } 16.20% \$2,296,568,783 |
| 1968 | 183,356,000 | |
| 1969 | 185,149,500 | |
| 1970 | 190,486,063 | |
| 1971 | 230,383,000 | |

| | | |
|--|------------|----------------------------|
| } 83.80% \$11,882,002,500 | 1972 | \$ 378,794,000 |
| | 1973 | 492,205,000 |
| | 1974 | 551,191,500 |
| | 1975 | 691,666,000 ¹ |
| | 1976 | 761,727,000 |
| | "TQ" | 152,901,000 ² |
| | 1977 | 815,000,000 |
| | 1978 | 872,388,000 ³ |
| | 1979 | 937,129,000 |
| | 1980 | 1,000,000,000 ⁴ |
| | 1981 | 989,355,000 ⁵ |
| | 1982 | 986,617,000 ⁶ |
| | 1983 | 987,642,000 ⁷ |
| | 1984 | 1,081,581,000 ⁸ |
| | 1985 | 1,183,806,000 |

TOTAL (1938-1985) \$14,178,571,283

TRANSITION QUARTER ("TQ")— July 1, 1976 through September 30, 1976 —The Interim Period in the changing of the Federal Fiscal Year from July 1 through June 30, to October 1 through September 30.

¹ Includes \$18,163,000 for training funds provided by Continuing Resolution.

² Includes \$3,201,000 for training funds provided by Continuing Resolution.

³ Includes \$20,129,000 for training funds provided by Continuing Resolution.

⁴ 1980 appropriation authorized under a Continuing Resolution.

⁵ Reflects 1981 rescission of \$11,975,000.

⁶ Amount included in Continuing Resolution. Includes \$47,988,000 transferred to the National Institute of Environmental Health Sciences for the National Toxicology Program.

⁷ Appropriated under Continuing Resolution and Supplemental Appropriation Bill.

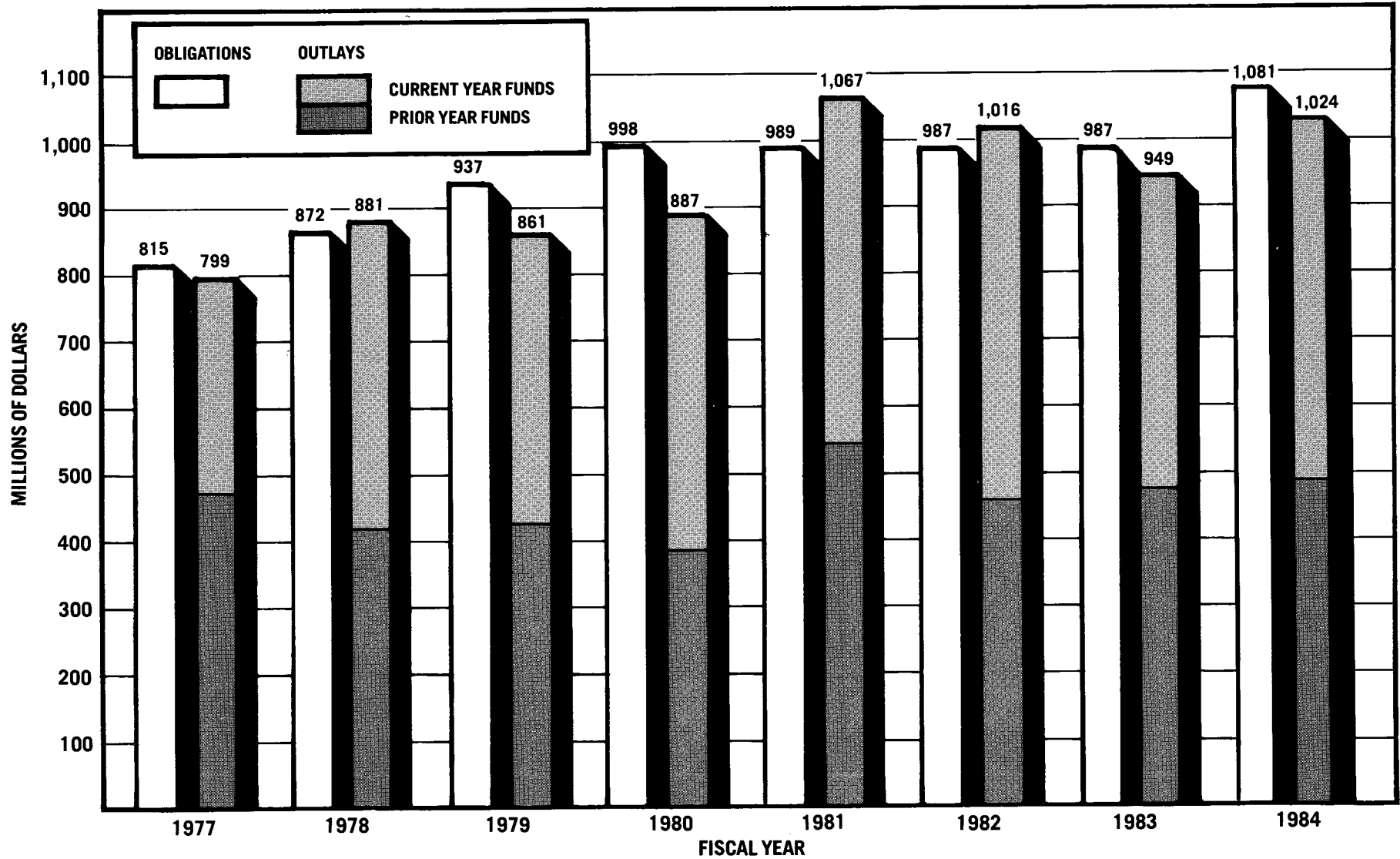
⁸ Includes \$23,861,000 for training funds provided by a Continuing Resolution and \$4,278,000 in a Supplemental Appropriation Bill.

COMPARISON OF DOLLARS, POSITIONS AND SPACE

| FISCAL YEAR | DOLLARS | | | POSITIONS | | | SPACE | | |
|-------------|-----------------------|------------------------------------|-------------------------------------|--------------------------------------|------------------------------------|-------------------------------------|--------------------------------|------------------------------------|-------------------------------------|
| | OBLIGATIONS (\$000's) | PERCENT OF INCREASE OVER BASE YEAR | PERCENT OF INCREASE OVER PRIOR YEAR | ACTUAL FULL-TIME PERMANENT EMPLOYEES | PERCENT OF INCREASE OVER BASE YEAR | PERCENT OF INCREASE OVER PRIOR YEAR | ALLOCATED SPACE (SQUARE FEET)* | PERCENT OF INCREASE OVER BASE YEAR | PERCENT OF INCREASE OVER PRIOR YEAR |
| 1971 | 232,855 | Base Year | — | 1426 | Base Year | — | 321,230 | Base Year | — |
| 1972 | 378,636 | 62.6 | 62.6 | 1665 | 16.8 | 16.8 | 329,587 | 2.6 | 2.6 |
| 1973 | 431,245 | 85.2 | 13.9 | 1736 | 21.7 | 4.3 | 357,972 | 11.4 | 8.6 |
| 1974 | 581,149 | 149.6 | 34.8 | 1805 | 26.6 | 4.0 | 381,436 | 18.7 | 6.6 |
| 1975 | 699,320 | 200.3 | 20.3 | 1849 | 29.7 | 2.4 | 382,485 | 19.1 | 0.2 |
| 1976 | 760,751 | 226.7 | 8.8 | 1955 | 37.1 | 5.7 | 387,324 | 20.6 | 1.3 |
| 1977 | 814,957 | 250.0 | 7.1 | 1986 | 39.3 | 1.6 | 428,285 | 33.3 | 10.6 |
| 1978 | 872,369 | 275.0 | 7.2 | 1969 | 38.1 | -0.9 | 491,725 | 53.1 | 14.8 |
| 1979 | 936,696 | 302.3 | 7.4 | 1973 | 38.4 | 0.2 | 493,156 | 53.5 | 0.3 |
| 1980 | 998,047 | 328.6 | 6.5 | 1837 | 28.8 | -6.7 | 467,730 | 45.6 | -5.2 |
| 1981 | 989,338 | 324.9 | -0.9 | 1815 | 27.3 | -1.2 | 472,633 | 47.1 | 1.0 |
| 1982 | 986,564 | 323.7 | -0.3 | 1703 | 19.4 | -6.2 | 477,782 | 48.7 | 1.1 |
| 1983 | 986,811 | 323.8 | 0.02 | 1731 | 21.9 | 1.6 | 484,093 | 50.7 | 1.3 |
| 1984 | 1,081,460 | 364.4 | 9.6 | 1698 | 19.1 | -1.9 | 466,890 | 45.3 | -3.6 |

*Does not include the Frederick Cancer Research Facility.

NATIONAL CANCER INSTITUTE OBLIGATIONS AND OUTLAYS



OBLIGATIONS: Orders placed, grants and contracts awarded, salaries earned and similar financial transactions which legally utilize or reserve an appropriation for expenditure.
OUTLAYS: Payments (cash or checks) made from current or prior year appropriations.

NCI TOTAL RESEARCH PROJECTS — 1979-1984¹

(DOLLARS IN THOUSANDS)

FISCAL YEAR

| TYPE AWARD | REQUESTED | | RECOMMENDED | | AWARDED | | PERCENT FUNDED ² |
|------------------------|-----------|-----------|-------------|-----------|--------------|------------------|-----------------------------|
| | NUMBER | AMOUNT | NUMBER | AMOUNT | NUMBER | AMOUNT | |
| 1979 | | | | | | | |
| Competing | | | | | | | |
| New | 1,979 | \$202,206 | 1,436 | \$108,264 | 565 | \$ 50,351 | 39.3 |
| Renewal | 613 | 121,689 | 556 | 78,166 | 314 | 56,651 | 56.5 |
| Board Supplement | 42 | 4,313 | 27 | 1,501 | 21 | 1,033 | 77.8 |
| Subtotal | 2,634 | \$328,208 | 2,019 | \$187,931 | 900 | \$108,035 | 44.6 |
| Noncompeting | | | | | 1,493 | 177,097 | |
| Total | | | | | 2,393 | \$285,132 | |
| 1980 | | | | | | | |
| Competing | | | | | | | |
| New | 1,913 | \$219,207 | 1,403 | \$117,167 | 461 | \$ 45,303 | 32.9 |
| Renewal | 593 | 115,053 | 550 | 73,680 | 293 | 45,802 | 53.3 |
| Board Supplement | 43 | 2,619 | 38 | 1,492 | 29 | 1,261 | 76.3 |
| Subtotal | 2,549 | \$336,879 | 1,991 | \$192,339 | 783 | \$ 92,366 | 39.3 |
| Noncompeting | | | | | 1,762 | 228,959 | |
| Total | | | | | 2,545 | \$321,325 | |
| 1981 | | | | | | | |
| Competing | | | | | | | |
| New | 2,017 | \$277,145 | 1,594 | \$156,704 | 483 | \$ 53,004 | 30.3 |
| Renewal | 687 | 131,355 | 653 | 91,034 | 311 | 48,122 | 47.6 |
| Board Supplement | 61 | 3,776 | 47 | 1,738 | 32 | 940 | 68.1 |
| Subtotal | 2,765 | \$412,276 | 2,294 | \$249,476 | 826 | \$102,066 | 36.0 |
| Noncompeting | | | | | 1,802 | 253,389 | |
| Total | | | | | 2,628 | \$355,455 | |
| 1982 | | | | | | | |
| Competing ³ | | | | | | | |
| New | 2,187 | \$308,153 | 1,784 | \$189,245 | 434 | \$ 47,224 | 24.3 |
| Renewal | 730 | 174,573 | 706 | 117,099 | 323 | 50,186 | 45.7 |
| Board Supplement | 28 | 2,266 | 24 | 1,289 | 4 | 86 | 16.7 |
| Subtotal | 2,945 | \$484,992 | 2,514 | \$307,633 | 761 | \$ 97,496 | 30.3 |
| Noncompeting | | | | | 1,797 | 260,853 | |
| Total | | | | | 2,558 | \$358,349 | |
| 1983 | | | | | | | |
| Competing ³ | | | | | | | |
| New | 2,229 | \$323,572 | 1,844 | \$215,945 | 529 | \$55,316 | 28.7 |
| Renewal | 783 | 160,881 | 763 | 113,664 | 358 | 56,698 | 46.9 |
| Board Supplement | 23 | 2,492 | 15 | 727 | 3 | 110 | 20.0 |
| Subtotal | 3,035 | \$486,945 | 2,622 | \$330,336 | 890 | \$112,124 | 33.9 |
| Noncompeting | | | | | 1,923 | 294,019 | |
| Total | | | | | 2,813 | \$406,143 | |
| 1984 | | | | | | | |
| Competing | | | | | | | |
| New | 2,113 | \$310,433 | 1,773 | \$207,996 | 558 | \$68,376 | 31.5 |
| Renewal | 774 | 179,764 | 745 | 135,253 | 416 | 90,140 | 55.8 |
| Board Supplement | 13 | 1,766 | 11 | 788 | 3 | 105 | 22.3 |
| Subtotal | 2,900 | \$491,963 | 2,529 | \$344,037 | 977 | 158,621 | 38.6 |
| Noncompeting | | | | | 1,869 | 302,626 | |
| Total | | | | | 2,846 | \$461,247 | |

¹Includes R01 traditional grants, P01 program projects, R23 new investigator research awards, R01 and U01 awards of RFA's, and R43/R44 Small Business Innovative Research awards.

²Percent Funded: Number Awarded ÷ Number Recommended.

³Because of fiscal restraints, grants were awarded below recommended levels.

THE COMPREHENSIVE MINORITY BIOMEDICAL PROGRAM (CMBP)

1. Promotes broadened participation by minorities in cancer-related research training.
2. Contributes to the support of NCI and clinical cooperative research groups to better enable NCI's research to reach and support minority populations that are particularly susceptible to cancer.
3. Provides additional funds to NCI-supported investigators who wish to engage minority investigators in their research.

National Cancer Institute Minority Biomedical Support (Dollars in Thousands)

| FY 1983 Actual | FY 1984 Actual |
|---------------------------|---------------------------|
| \$2,087 | \$3,148 |



National Cancer Institute