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*National
Cancer
Institute*

NATIONAL CANCER PROGRAM



1974 FACT BOOK

PREFACE

The information set forth in this publication is compiled and amended annually by 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 20014.

National Cancer Institute **FACT BOOK** **1974**

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DIRECTORY OF PERSONNEL

NATIONAL CANCER INSTITUTE
NATIONAL INSTITUTES OF HEALTH
BETHESDA, MARYLAND 20014
Area Code 301/656-4000

		EXTENSION
DIRECTOR Dr. Frank J. Rauscher, Jr.	BUILDING 31 11-A-52	65615
DEPUTY DIRECTOR Dr. Guy R. Newell	BUILDING 31 11-A-52	63505
ASSISTANT DIRECTOR Dr. Bayard H. Morrison III	BUILDING 31 11-A-51	63308
ASSISTANT DIRECTOR Dr. Richard A. Tjalma	BUILDING 31 11-A-46	65854
CLINICAL DIRECTOR Dr. Alfred S. Ketcham	BUILDING 10 10-N-116	64164
ASSOCIATE DIRECTOR FOR PROGRAM PLANNING AND ANALYSIS Mr. Louis M. Carrese	BUILDING 31 11-A-49	66445
ASSOCIATE DIRECTOR FOR CANCER COMMUNICATIONS Mr. Frank Karel III	BUILDING 31 11-A-31	61911
ASSOCIATE DIRECTOR FOR CANCER CONTROL Dr. Diane J. Fink	BLAIR BUILDING 732A	427-7997
ASSOCIATE DIRECTOR FOR INTERNATIONAL AFFAIRS Dr. Gregory T. O'Connor	BUILDING 31 11-A-19	61932
ASSOCIATE DIRECTOR FOR ADMINISTRATIVE MANAGEMENT Mr. Calvin B. Baldwin, Jr.	BUILDING 31 11-A-46	65737
CHIEF, ADMINISTRATIVE SERVICES BRANCH Mr. Thomas L. Kearns	BUILDING 31 11-A-29	65801
CHIEF, FINANCIAL MANAGEMENT BRANCH Mr. Earle L. Browning	BUILDING 31 11-A-18	65803
CHIEF, PERSONNEL MANAGEMENT BRANCH Mrs. Rosemary H. Williams	BUILDING 31 3-A-32	61771
CHIEF, RESEARCH CONTRACTS BRANCH Mr. Carl A. Fretts	BUILDING 31 10-A-20	63573
DIRECTOR, DIVISION OF CANCER CAUSE AND PREVENTION Dr. James A. Peters	BUILDING 31 11-A-03	66618
ADMINISTRATIVE OFFICER Mr. John M. Miller	BUILDING 31 11-A-11	66556
DIRECTOR, DIVISION OF CANCER BIOLOGY AND DIAGNOSIS Dr. Nathaniel I. Berlin	BUILDING 31 3-A-03	64346
ADMINISTRATIVE OFFICER Mr. H. Kenneth Painter	BUILDING 31 3-A-05	63381
DIRECTOR, DIVISION OF CANCER TREATMENT Dr. C. Gordon Zubrod	BUILDING 31 3-A-52	64291
ADMINISTRATIVE OFFICER Mr. Charles E. Leasure, Jr.	BUILDING 31 3-A-50	65964
DIRECTOR, DIVISION OF CANCER RESEARCH RESOURCES AND CENTERS Dr. J. Palmer Saunders	BUILDING 31 10-A-03	65147
CHIEF, GRANTS ADMINISTRATION BRANCH Mr. Leo F. Buscher, Jr.	WESTWOOD BUILDING 8-A-18	67753
ADMINISTRATIVE OFFICER Mrs. Edith F. Phillips	BUILDING 31 10-A-10	65915

NATIONAL CANCER INSTITUTE HISTORICAL DATA

LEGISLATIVE HIGHLIGHTS

- March 7, 1928** — Senator M.M. Neely introduced S. 3554, "To authorize the National Academy of Sciences to investigate the means and methods for affording Federal aid in discovering a cure for cancer and for other purposes."
- April 12, 1937** — Congressman Warren G. Magnuson of Washington introduced H.R. 6100, an identical bill to S. 2067.
- July 8, 1937** — A joint hearing of the Senate and House committees was conducted before a Subcommittee on Cancer Research, and a revised bill was written.
- July 23, 1937** — The National Cancer Institute Act was passed by Congress.
- August 5, 1937** — The National Cancer Institute Act, Public Law 244, 75th Congress, was signed by President Franklin D. Roosevelt, "To provide for, foster, and aid in coordinating research relating to cancer; to establish the National Cancer Institute; and for other purposes." 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.
- December 4, 1970.** Senator Ralph Yarborough, Texas, introduced S. 4564, "A bill which would establish a National Cancer Authority for the purpose of devising and implementing a national program for the conquest of the world's most dreaded disease — cancer."
- 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.
- March through November, 1971.** Hearings on proposed legislation relating to cancer research expansion were held by both House and Senate subcommittees.
- October 18, 1971.** The President announced that the Army's Biological Defense Research Center at Fort Detrick, Maryland would be converted into a leading center for cancer research as part of the major campaign to conquer cancer.
- December 7, 1971.** After three conference sessions that began on November 30, the Senate-House Conference Committee agreed on S. 1828.
- December 9, 1971.** The House passed the bill by voice vote.
- December 10, 1971.** The Senate passed the bill 85-0 and sent it to the President for signature.
- December 23, 1971** — President Nixon 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, the latter replacing the National Advisory Cancer Council; authorizing the establishment of 15 new research, training, and demonstration cancer centers; establishing cancer control programs as necessary for cooperation with State and other health agencies in the diagnosis, prevention, and treatment of cancer; 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.

HISTORICAL EVENTS

- 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.
- February 13, 1967** — A Cancer Research Center was established in Baltimore USPHS Hospital to conduct an integrated program of laboratory and clinical research on the therapy and management of cancer patients.
- 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.
- November 25, 1970** — The National Panel of Consultants submitted to the Senate Committee a report entitled "National Program for 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 team of five U.S. cancer scientists met with Russian scientists in Moscow to exchange information on cancer drugs. Dr. C. Gordon Zubrod, Scientific Director for Chemotherapy, NCI, on behalf of the United States, signed a U.S.-U.S.S.R. agreement for continued cooperation on the exchange of drugs, visiting scientists, and information.
- 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: the Division of Cancer Biology and Diagnosis; Division of Cancer Cause and Prevention; Division of Cancer Treatment; and Division of Cancer Grants.

BIOGRAPHICAL SKETCHES OF NCI DIRECTORS

JANUARY 13, 1938 TO JULY 31, 1943

Carl Voegtlin, Ph.D.

Dr. Carl Voegtlin, the Institute's first Director, was born in Zofingen, Switzerland, on July 28, 1879. He studied at the University of Basel, University of Munich, University of Geneva, and received a Ph.D. degree in 1904 from the University of Freiburg.

Upon arriving in the United States in 1905, he became a chemistry instructor at the University of Wisconsin, and the following year went to Johns Hopkins where he remained until 1913. As professor of pharmacology and Chief of the Division of Pharmacy at the Hygienic Laboratory, his cancer research was largely confined to the biochemical aspects.

During World War II and for several years thereaf-

ter he was lecturer in pharmacology at the University of Rochester, which conferred upon him an honorary degree of Doctor of Science for his contributions to war and other research efforts.

Dr. Voegtlin became Director of NCI on January 13, 1938, and held this post until his retirement from PHS on July 31, 1943. He retained an active interest in NCI until his death in 1960.

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AUGUST 1, 1943 TO JUNE 30, 1947

Roscoe Roy Spencer, M.D.

Dr. Roscoe Roy Spencer was born in King William County, Va., July 28, 1888, and received his M.D. degree from Johns Hopkins in 1913. Before becoming NCI's first Assistant Chief, he was noted for his contribution in the investigations of Rocky Mountain spotted fever.

Dr. Spencer became Director of NCI on August 1, 1943, and remained in this post until July 1, 1947. He had assignments with PHS until his retirement in 1952.

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JULY 1, 1947 TO APRIL 6, 1948

Leonard Andrew Scheele, M.D.

Dr. Leonard Andrew Scheele was born in Fort Wayne, Ind., July 25, 1907. He received an A.B. degree from University of Michigan and his M.D. degree from Wayne University.

Upon entering PHS, he served as assistant quarantine officer, health officer, special cancer fellow at Memorial Hospital in New York City, officer-in-charge of the National Cancer Control Program, and Chief of Medical Division of Civilian Defense before becoming Assistant Chief of NCI in 1946.

Dr. Scheele served as Director of NCI from July 1, 1947 to April 6, 1948, when he was appointed Surgeon General, PHS. Upon retirement from PHS in 1956, he became the president of Warner-Chilcott Laboratories, Warner-Lambert Pharmaceutical Co.

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MAY 15, 1948 TO JUNE 30, 1960

John Roderick Heller, M.D.

Dr. John Roderick Heller was born in Fair Play, S.C., on February 27, 1905, and received his M.D. degree from Emory University, Atlanta, Ga. He was commissioned in PHS in 1934, and became Chief of PHS's Venereal Disease Division before becoming Director of NCI on May 15, 1948, a post which he held until June 30, 1960. He then joined

the Memorial Sloan-Kettering Cancer Center in New York City as President and Chief Executive Officer, remaining in that position until February 1964.

Subsequently he served as Vice Chairman of the Board of Trustees of the Center and was special consultant on international, medical and scientific affairs to the American Cancer Society. On August 1, 1965, Dr. Heller returned to NCI as Special Consultant on International Activities.

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JULY 1, 1960 TO NOVEMBER 9, 1969

Kenneth Milo Endicott, M.D.

Dr. Kenneth Milo Endicott was born in Canon City, Colo., June 6, 1916, and received his M.D. degree from the University of Colorado in 1939.

He entered PHS in 1940, and served in the Division of Pathology and as Scientific Director, Division of Research Grants, NIH, before being appointed Chief of the Cancer Chemotherapy National Service Center in 1955. In 1958 he was appointed Associate Director, NIH, and served in this capacity until appointed Director of NCI on July 1, 1960.

On November 10, 1969, he became Director of the Bureau of Health Professions Education and Manpower Training.

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NOVEMBER 10, 1969 TO MAY 4, 1972

Carl Gwin Baker, M.D.

Dr. Carl Gwin Baker was born in Louisville, Ky., November 27, 1920, and received his M.D. degree from the University of Louisville in 1944 and his M.A. degree in biochemistry from the University of California at Berkeley in 1949. He served as a Medical Officer in the U.S. Navy, 1945-1946.

He entered the PHS in 1949 and served in the Laboratory of Biochemistry, the Research Grants Branch, and the Office of the Director, NCI, until 1958 when he was appointed Assistant Director, NCI. During 1957-1958 he was Assistant to the Associate Director for Intramural Research, NIH. He became Associate Director for Program, NCI, in 1961 after serving as Acting Scientific Director for Intramural Research. He was named Scientific Director for Etiology, NCI, in 1967. He became Acting Director of NCI November 10, 1969, and was appointed Director of NCI July 13, 1970.

On May 5, 1972 he was named Special Assistant to the Director, NIH, with responsibility to plan and establish a new Office of Technology Implementation. Following his retirement from the Public Health Service on September 1, 1972, he became President of Hazleton Laboratories, Inc., of Falls Church, Va.

**DIRECTOR
NATIONAL CANCER PROGRAM
NATIONAL CANCER INSTITUTE**

MAY 5, 1972 TO PRESENT

Frank Joseph Rauscher, Jr., Ph.D.

Dr. Frank Joseph Rauscher, Jr. was born in Hellertown, Pennsylvania, on May 24, 1931. He received his B.S. degree from Moravian College in 1953 and his Ph.D. degree from Rutgers in 1957.

Dr. Rauscher came to the National Cancer Institute in 1959 and served as a microbiologist in the Laboratory of Viral Oncology until 1964, when he was appointed Head, Viral Oncology Section. He served in this position until 1965, when he was

made Acting Chief, Viral Leukemia and Lymphoma Branch. During this period, he also served as Chairman, Special Virus Cancer Program. In 1966, he became Chief of the Viral Leukemia and Lymphoma Branch until 1967 when he was appointed Associate Scientific Director for Viral Oncology. Dr. Rauscher became Acting Scientific Director for Etiology in 1969, and was subsequently named Scientific Director in 1970.

On May 5, 1972, President Nixon named him Director of the National Cancer Institute and of the National Cancer Program.

**DEPUTY DIRECTOR
NATIONAL CANCER INSTITUTE**

AUGUST 1, 1973 TO PRESENT

Guy Rene Newell, M.D.

The new Deputy Director of the National Cancer Institute, Dr. Guy R. Newell, was born in Bogalusa, Louisiana, September 21, 1937. Dr. Newell received both his B.S. (1959) and M.D. (1962) Degrees from Tulane University and his M.S. in Hygiene from the Harvard School of Public Health in 1968. From July 1963 to June 1965 he served as a Research Planning Associate in the Office of the

Director, NCI. Between July 1965 and June 1968 he received training in internal medicine and oncology at the Johns Hopkins Hospital and the Peter Bent Brigham Hospital. He returned to the NCI in July 1968, where he was an Assistant for Program, Viral Oncology and served as Executive Secretary, Biometry & Epidemiology Contract Review Committee until June 1970. From July 1970 until his appointment as Deputy Director, NCI in August 1973, Dr. Newell held positions of Assistant and then Associate Professor of Epidemiology at Tulane University.

PRESIDENT'S CANCER PANEL

	EXPIRATION OF APPOINTMENT
Mr. Benno C. Schmidt, <i>Chairman</i> J. H. Whitney & Co. New York City, New York	2-16-75
Dr. R. Lee Clark University of Texas M.D. Anderson Tumor Clinic Houston, Texas	2-20-77
Dr. Ray D. Owen California Technological Institute Pasadena, California	2-20-76

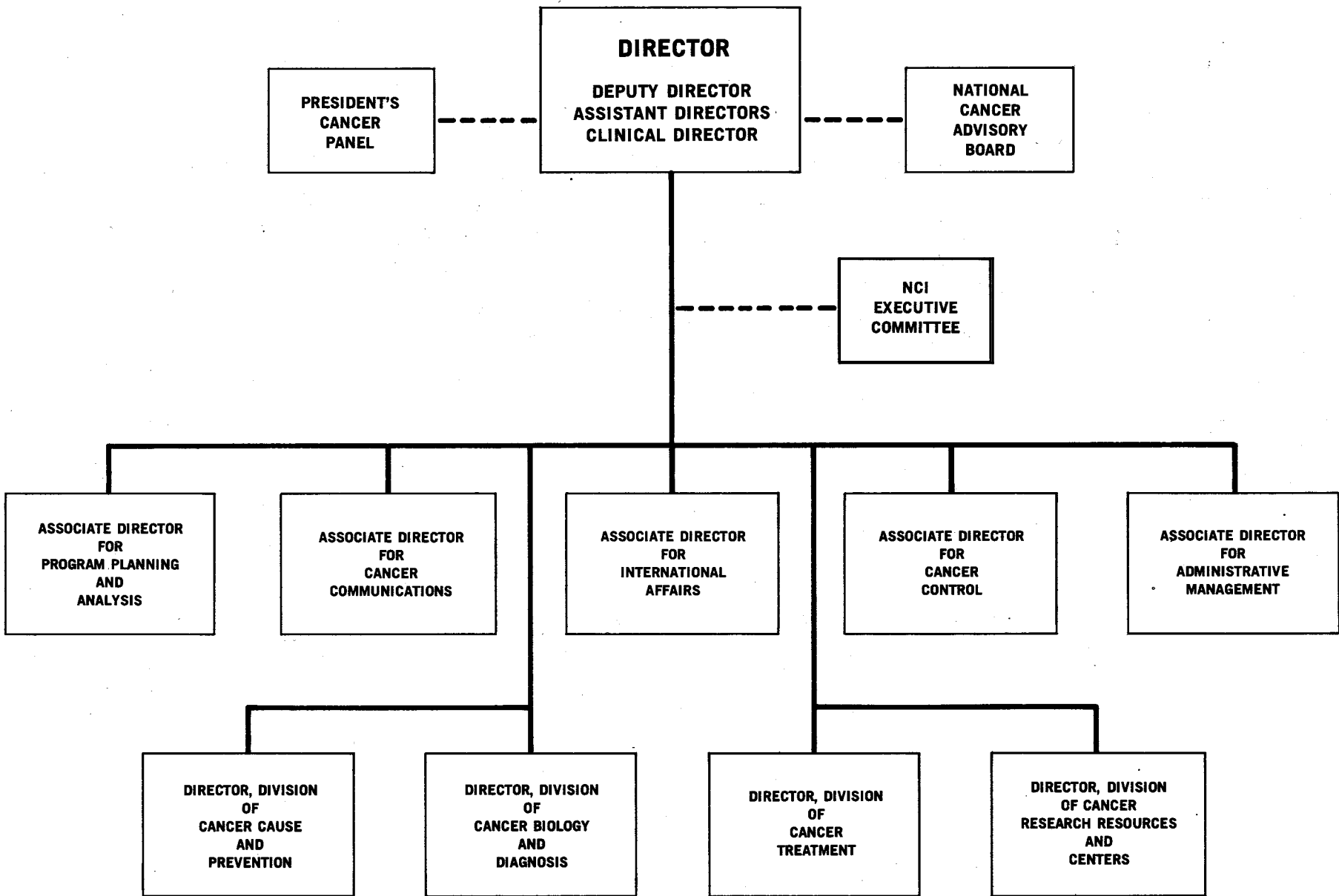
NATIONAL CANCER ADVISORY BOARD

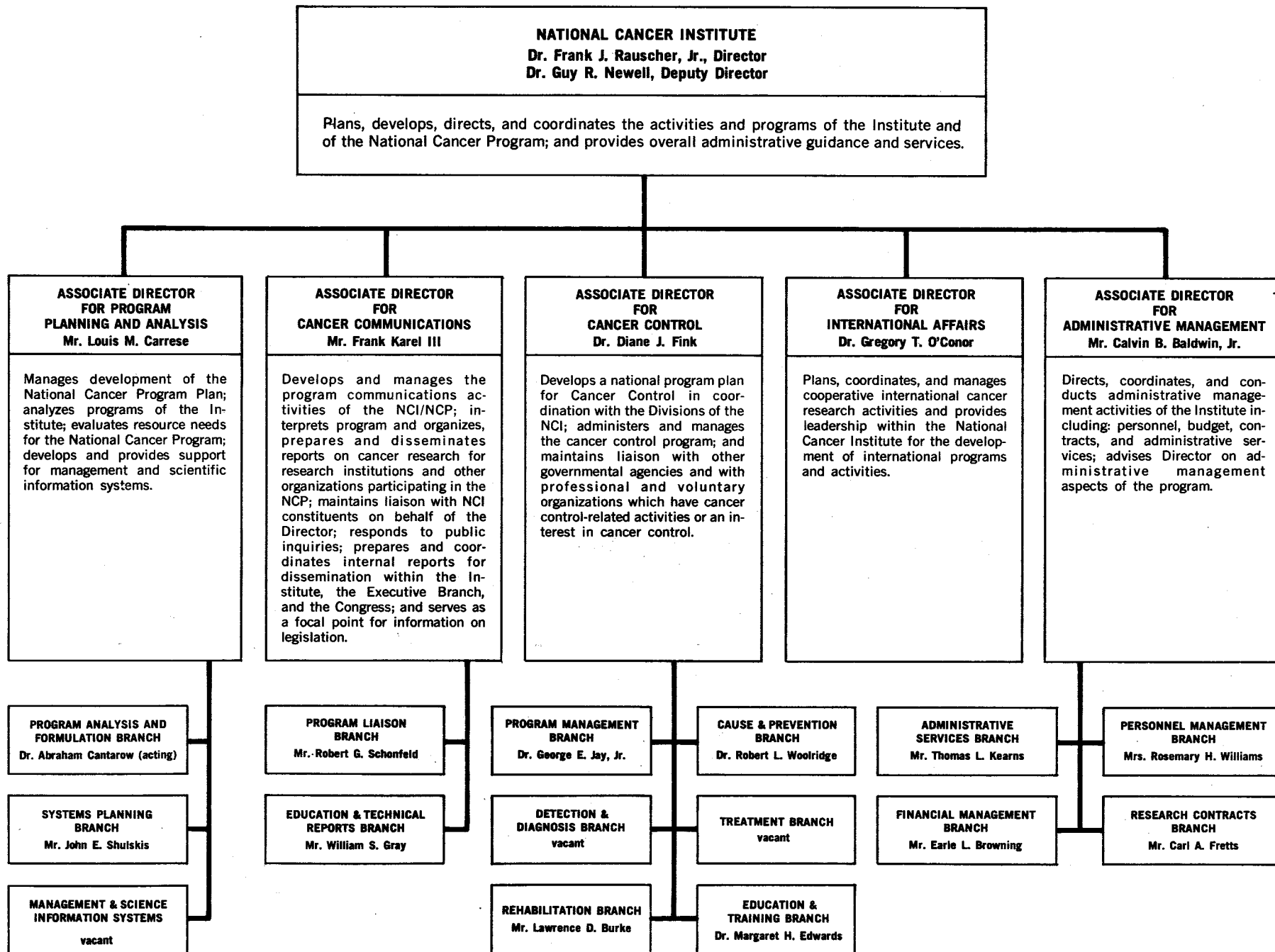
APPOINTEES	EXPIRATION OF APPOINTMENT		EXPIRATION OF APPOINTMENT
Dr. Jonathan E. Rhoads, <i>Chairman</i> University of Pennsylvania Philadelphia, Pennsylvania	3-31-78	Dr. Phillippe Shubik University of Nebraska Omaha, Nebraska	3-9-76
Dr. Harold Amos Harvard Medical School Boston, Massachusetts	3-31-76	Dr. Howard E. Skipper Southern Research Institute Birmingham, Alabama	3-31-78
Mr. Elmer H. Bobst Warner-Lambert Company New York, New York	3-31-76	Dr. Sol Spiegelman Columbia University New York, New York	3-31-74
Dr. Arnold L. Brown Mayo Clinic Rochester, Minnesota	9-30-74	Dr. James D. Watson Cold Spring Harbor Laboratory Cold Spring Harbor, New York	3-31-74
Dr. Frank J. Dixon Scripps Clinic and Research Foundation La Jolla, California	3-31-78	Dr. W. Clarke Wescoe Sterling Drug, Inc. New York, New York	3-31-78
Mr. James S. Gilmore, Jr. Gilmore Broadcasting Corporation Kalamazoo, Michigan	9-30-74		
Dr. John R. Hogness National Academy of Sciences Washington, D.C.	3-31-78	EX-OFFICIO MEMBERS	
Mr. Donald E. Johnson Advertisers Press, Inc. Flint, Michigan	3-31-76	Honorable Caspar W. Weinberger Secretary, Department of Health, Education, and Welfare Washington, D.C.	
Mrs. Mary Lasker Albert and Mary Lasker Foundation New York, New York	3-31-74	Dr. Marc J. Musser Veterans Administration Washington, D.C.	
Dr. Irving M. London Harvard-MIT Program in Health Sciences and Technology Cambridge, Massachusetts	3-31-76	Dr. H. Guyford Stever Director, National Science Foundation Washington, D.C.	
Dr. Gerald P. Murphy Roswell Park Memorial Institute Buffalo, New York	3-31-76	Dr. Robert S. Stone Director, National Institutes of Health Bethesda, Maryland	
Dr. Gerald H. Ogura Washington University St. Louis, Missouri	3-31-74	Dr. Richard S. Wilbur Department of Defense Washington, D.C.	
Mr. Laurance S. Rockefeller Rockefeller Brothers Foundation New York, New York	3-31-78	ALTERNATES	
Dr. Harold P. Rusch University of Wisconsin Medical Center Madison, Wisconsin	3-31-74	Dr. Lyndon E. Lee, Jr. Veterans Administration Washington, D.C.	
Dr. Frederick Seitz Rockefeller University New York, New York	3-31-74	Dr. D. Murray Angevine Armed Forces Institute of Pathology Washington, D.C.	

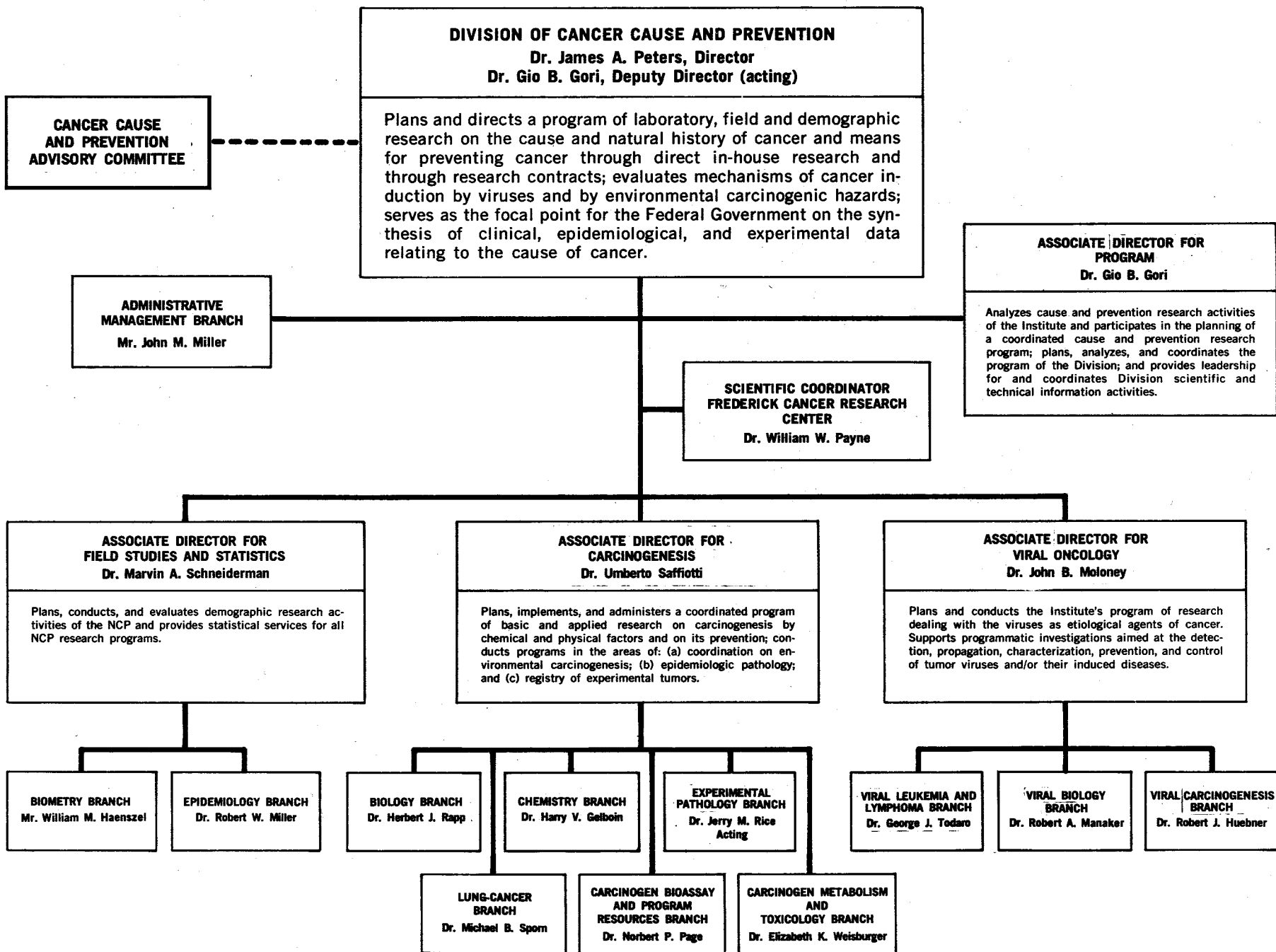
NATIONAL CANCER INSTITUTE EXECUTIVE COMMITTEE

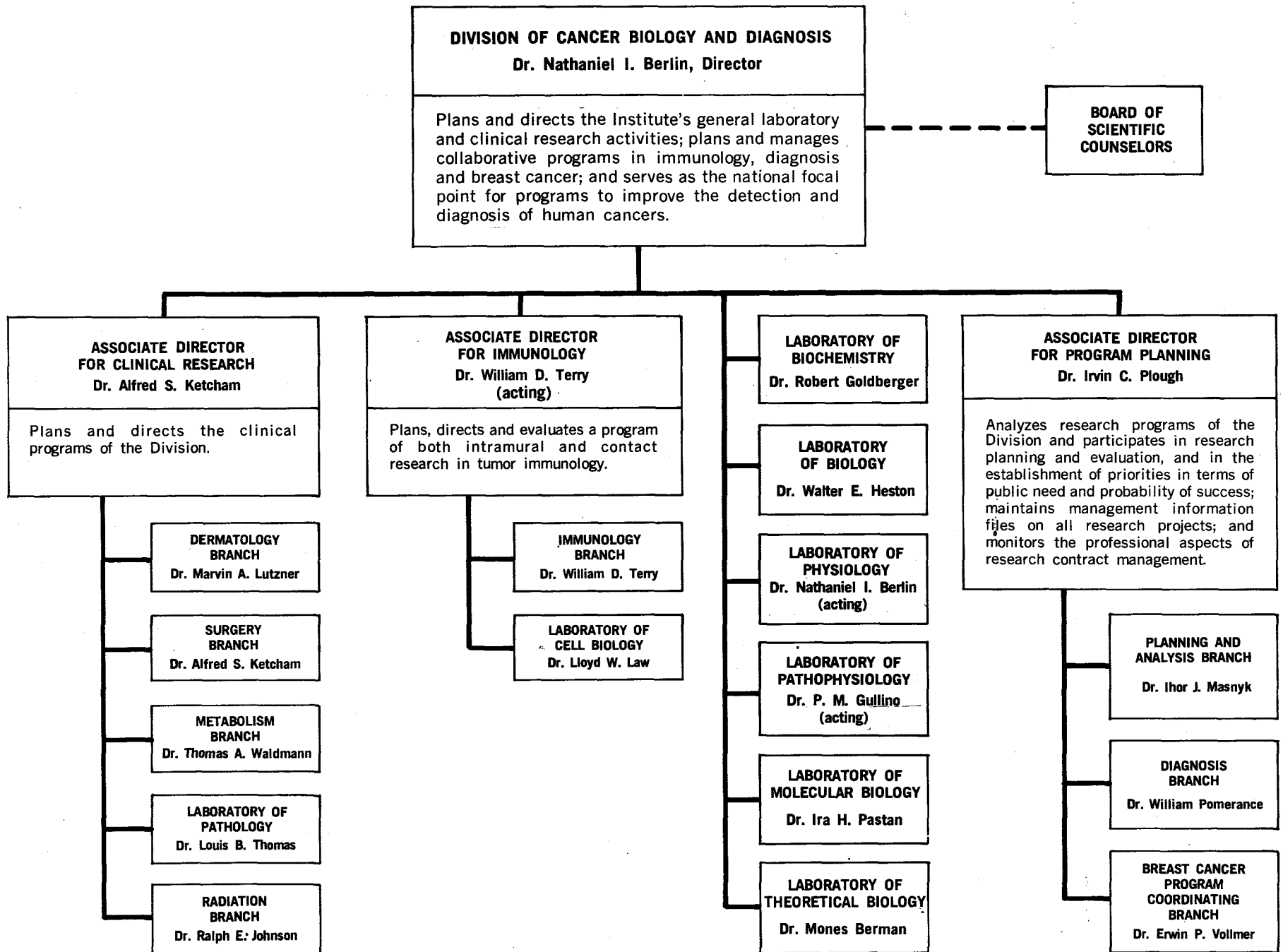
- Dr. Guy R. Newell, *Chairman*
Deputy Director, NCI
- Mr. Calvin B. Baldwin, Jr.
Associate Director for Administrative Management
- Dr. Nathaniel I. Berlin
Director, Division of Cancer Biology & Diagnosis
- Mr. Louis M. Carrese
Associate Director for Program Planning and Analysis
- Dr. Diane J. Fink
Associate Director for Cancer Control
- Mr. Frank Karel III
Associate Director for Cancer Communications
- Dr. Alfred M. Ketcham
Clinical Director, NCI
- Dr. Bayard H. Morrison III,
Assistant Director, NCI
- Dr. Gregory T. O'Connor
Associate Director for International Affairs
- Dr. James A. Peters
Director, Division of Cancer Cause and Prevention
- Dr. J. Palmer Saunders
Director, Division of Cancer Research Resources and Centers
- Dr. Richard A. Tjalma
Assistant Director, NCI
- Dr. Charles G. Zubrod
Director, Division of Cancer Treatment
- Dr. Frank J. Rauscher, Jr., *Ex Officio*
Director, National Cancer Program, National Cancer Institute

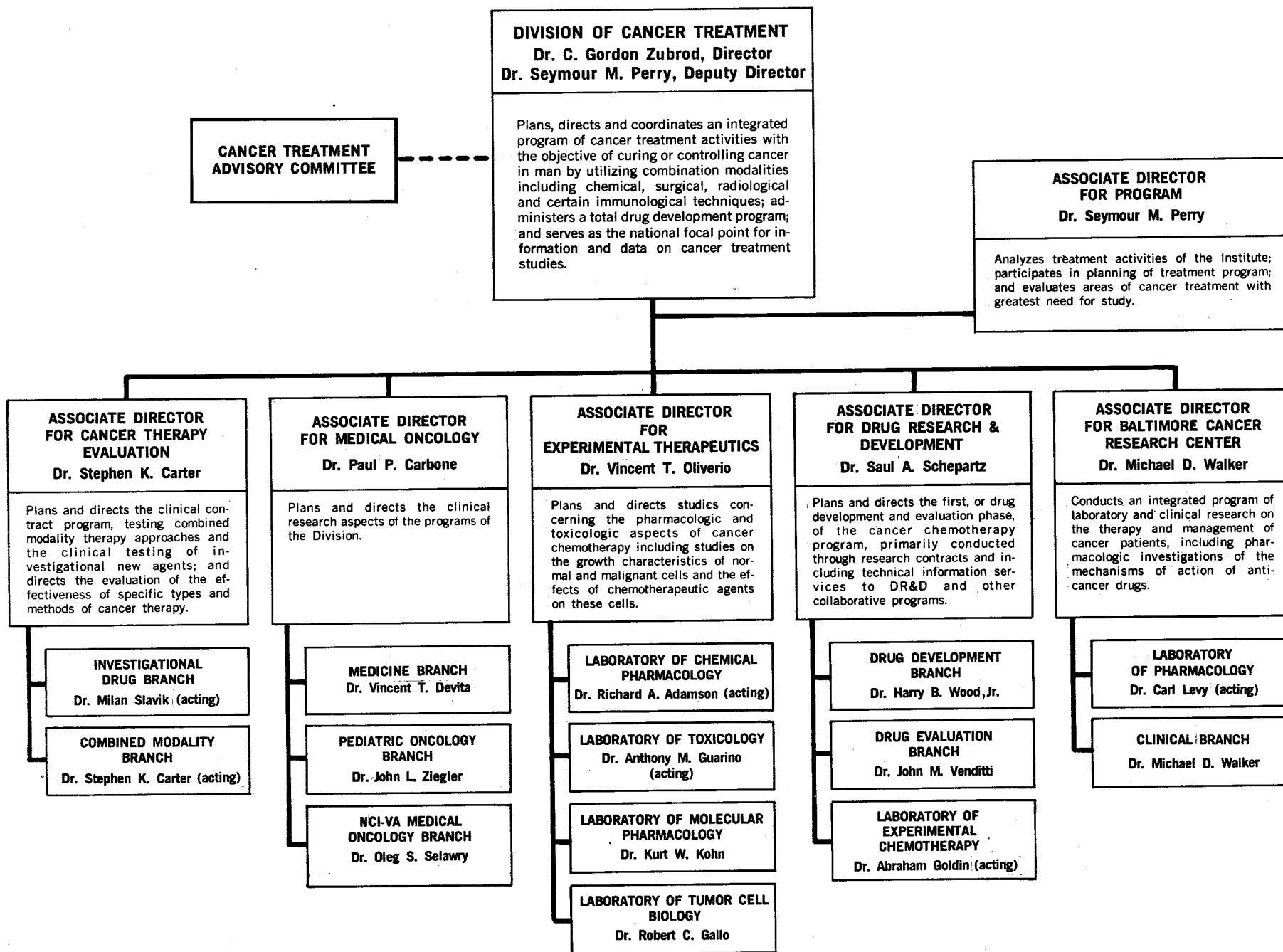
NATIONAL CANCER INSTITUTE ORGANIZATION

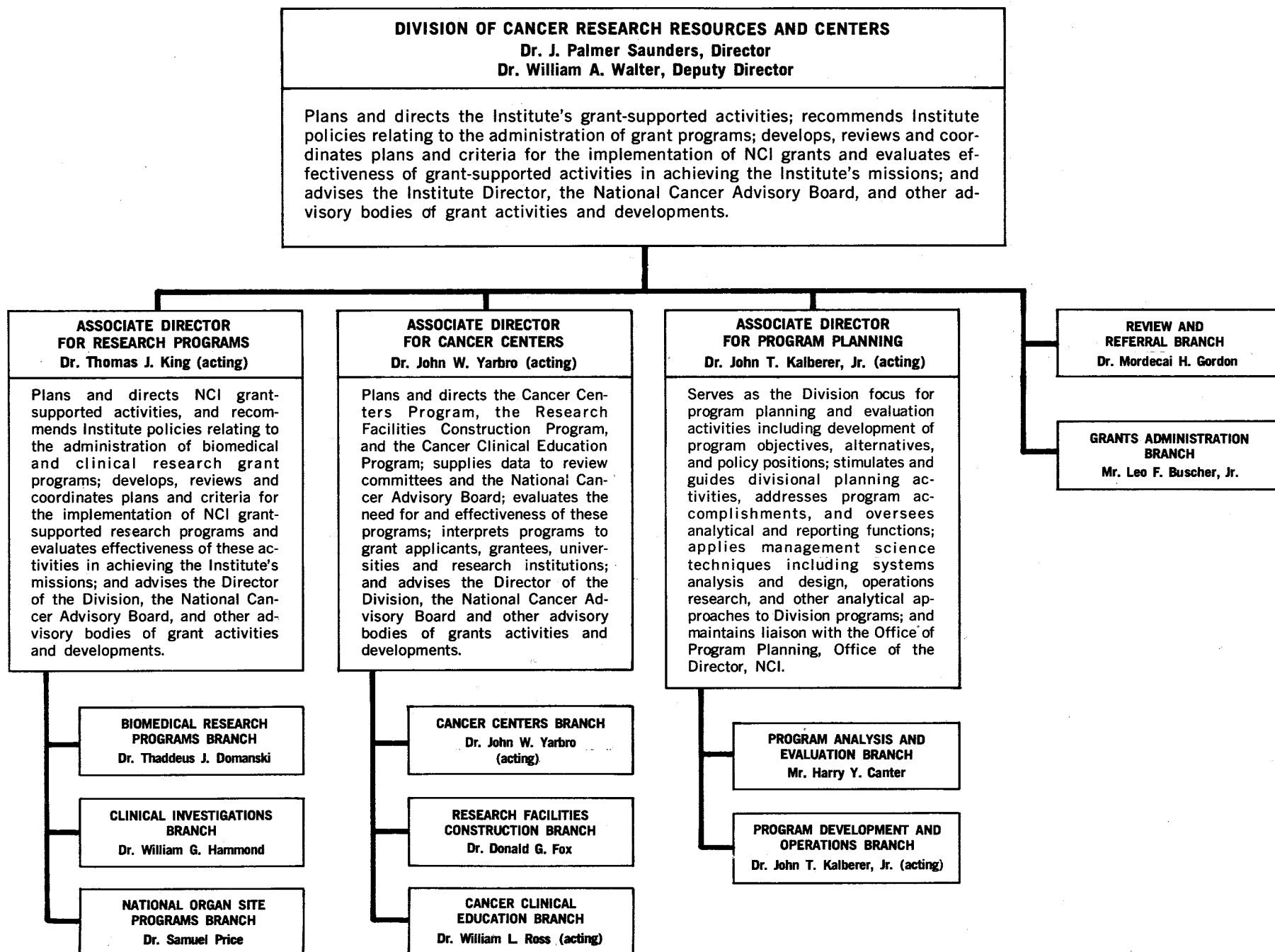


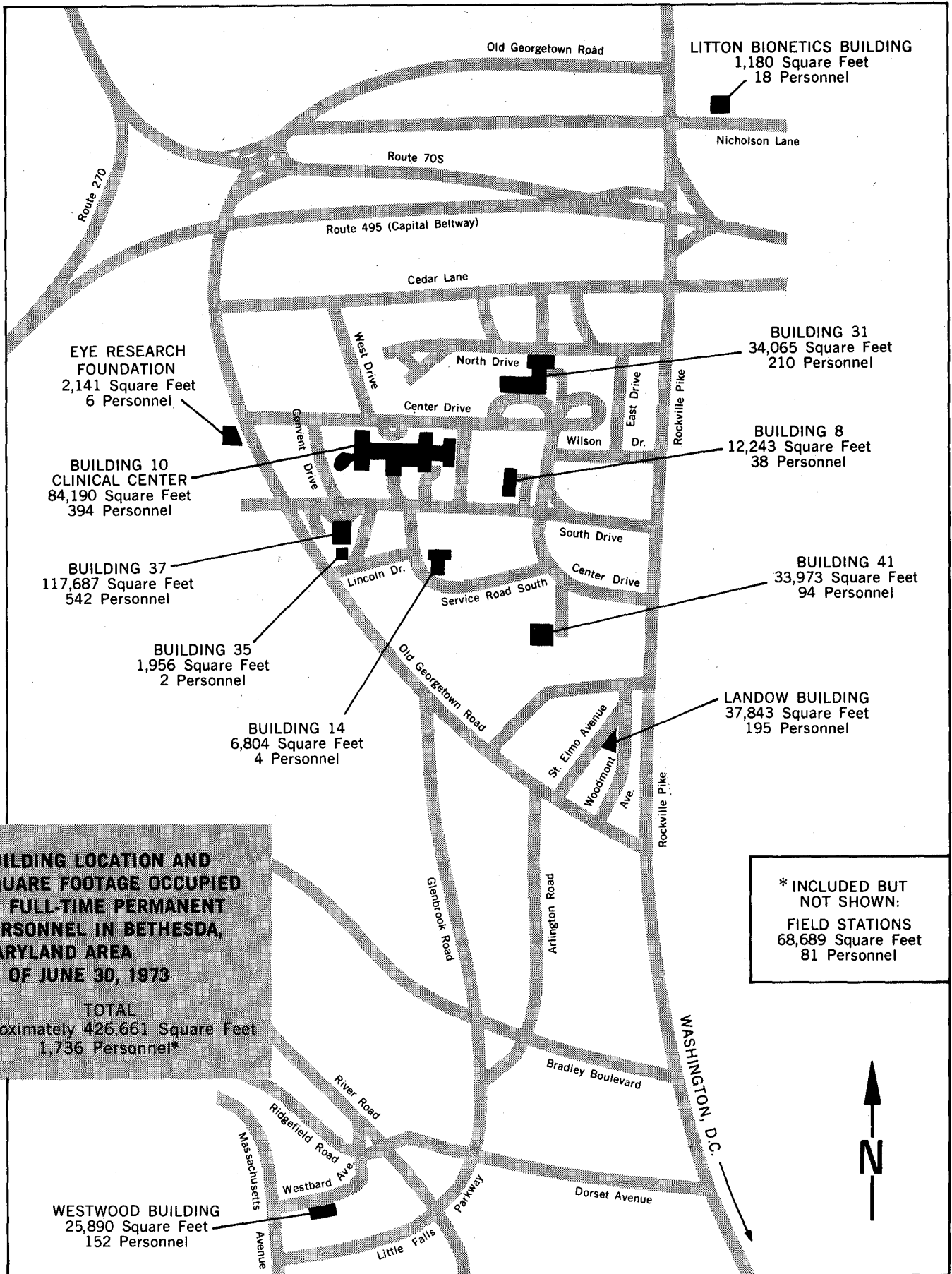












CANCER STATISTICS

Cancer Incidence

More than 53 million Americans now living will eventually have cancer — according to present rates — about one in four persons. Over the years, cancer will strike in 2 out of 3 American families. In 1974, there will be an estimated 655,000 new cancer cases diagnosed. (This does not include superficial skin cancer or carcinoma-in-situ of the uterine cervix, which have been included in prior year statistics.)

Changes in the Incidence of Cancer¹

The trend in cancer incidence based on the 1937, 1947, and 1969 surveys is depicted in the figures that follow. For the white population, comparison is made with trend data from the state of Connecticut, which has been collecting continuous data on the incidence of cancer since 1935². For both the white and black populations, the trend in cancer incidence is compared with the trend in cancer mortality as reported by the National Center for Health Statistics.

There is a marked difference in trend for males and females. Among males, incidence of and mortality from cancer has been increasingly continuously. The increase has been particularly large among blacks. In part, the reported increase among black men may reflect improvement in the delivery of medical care resulting in more complete diagnosis of the disease. However, it is likely that a substantial fraction of the reported increase reflects the impact of environmental factors, e.g., movement from rural to urban areas and concentration in inner cities, changes in occupation,

and changes in eating, drinking, and smoking practices.

For females of both races, the available data indicate that the incidence of cancer is either decreasing (survey data) or leveling off (Connecticut data). Among white women, mortality from cancer has been decreasing; among black women the mortality rate has remained at the same level since 1950.

Third National Cancer Survey

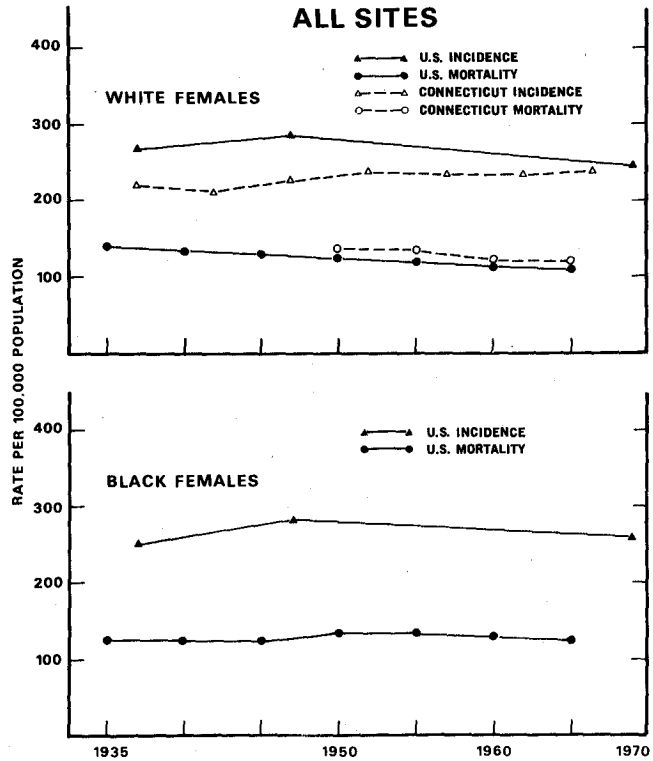
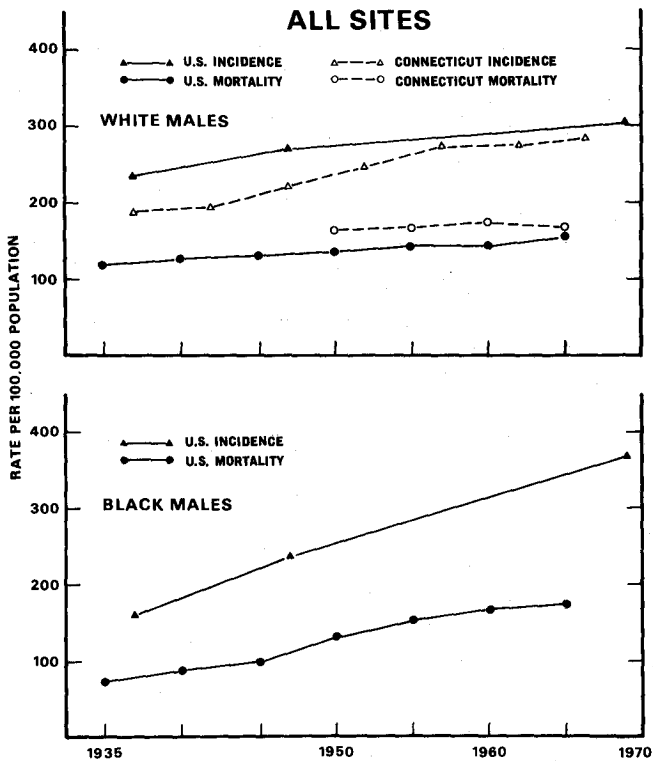
The National Cancer Institute is in the final process of completing the Third National Cancer Survey, a project designed to provide incidence and prevalence data for the three-year period 1969-1971 for seven metropolitan areas and two states. Cancer is not a reportable disease in most of the United States and it has been over twenty years since a previous incidence study was undertaken. Two earlier studies on cancer incidence, in 1937 and 1947-48 covered ten large metropolitan areas. A survey in Iowa in 1950 helped provide knowledge of cancer incidence in rural areas. The field work of the current study is completed and the analysis is in process.

Information was gathered from all hospitals, clinics, laboratories, vital statistics offices and physicians in each survey area concerning patients with active cancer during the years 1969, 1970 and 1971. A preliminary report on cancer incidence rates for 1969 was issued in 1971 and the report for all three years will be published during 1974. Data will be given by sites and histologic types of cancer by sex, race, age and geographic areas.

Supplementary information has been collected on a ten percent sample of patients, regarding extent of disease, treatment, cost of medical care and economic impact on the family. As the analysis proceeds, reports will be issued.

¹Source: "Report on the Third National Cancer Survey", *Seventh National Cancer Conference Proceedings*.

²*Cancer in Connecticut, 1935-62*; Connecticut State Department of Health; Hartford, Connecticut, 1966. More recent data have been provided by Dr. Barbara Christine, Director, Connecticut Tumor Registry.



*All sites: trend of cancer incidence and mortality rates, 1935-1969 (age-adjusted, 1950 standard population). Note: In order to make the current figures comparable with the earlier data, leukemia, Hodgkin's disease, skin cancer and carcinoma in situ of the uterine cervix were excluded.

MORTALITY FOR THE FIVE LEADING CANCER SITES BY AGE GROUP AND SEX — 1970

TOTAL		UNDER15		15 - 34		35 - 54		55 - 74		75 & OVER	
MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE
Lung	Breast	Leukemia	Leukemia	Leukemia	Breast	Lung	Breast	Lung	Breast	Prostate	Colon & Rectum
52,801	29,652	933	739	692	517	9,361	8,750	34,121	14,167	9,510	9,610
Colon & Rectum	Colon & Rectum	Brain*	Brain*	Hodgkin's Disease	Leukemia	Colon & Rectum	Lung	Colon & Rectum	Colon & Rectum	Lung	Breast
22,142	23,838	509	371	488	507	2,421	3,246	11,650	11,523	9,110	6,213
Prostate	Lung	Lympho-** sarcoma	Bone	Brain*	Uterus	Pancreas	Uterus	Prostate	Lung	Colon & Rectum	Stomach
17,252	12,367	138	91	386	346	1,416	3,120	7,423	6,617	7,576	2,744
Pancreas	Uterus	Bone	Kidney	Testis	Hodgkin's Disease	Brain*	Colon & Rectum	Pancreas	Uterus	Stomach	Pancreas
10,063	12,060	79	65	411	321	1,334	2,559	5,594	5,903	3,234	2,925
Stomach	Ovary	Kidney	Lympho-** sarcoma	Lympho-** sarcoma	Brain*	Stomach	Ovary	Stomach	Ovary	Pancreas	Uterus
9,805	9,958	71	55	247	286	1,221	2,538	5,288	5,398	2,709	2,687

*Includes Brain and Central Nervous System
 **Includes Lymphosarcoma and other Lymphomas

Source: National Center for Health Statistics, 1970

RELATIONSHIP OF CANCER TO LEADING CAUSES OF DEATH IN THE UNITED STATES — 1970

RANK	CAUSE OF DEATH	NUMBER OF DEATHS	DEATH RATE PER 100,000 POPULATION	PERCENT OF TOTAL DEATHS
	All Causes	1,921,031	945.3	100.0
1	Diseases of heart	735,542	362.0	38.3
2	Cancer	330,730	162.8	17.2
3	Cerebrovascular diseases	207,166	101.9	10.8
4	Accidents	114,638	56.4	5.9
	Motor vehicle accidents	(54,633)	(26.9)	(2.8)
	All other accidents	(60,005)	(29.5)	(3.1)
5	Influenza and pneumonia	62,739	30.9	3.3
6	Certain causes of mortality in early infancy	43,205	21.3	2.2
7	Diabetes mellitus	38,324	18.9	2.0
8	Arteriosclerosis	31,682	15.6	1.6
9	Cirrhosis of liver	31,399	15.5	1.6
10	Bronchitis, emphysema, and asthma	30,889	15.2	1.6
11	Suicide	23,480	11.6	1.2
12	Homicide	16,848	8.3	0.9
13	Congenital anomalies	16,824	8.3	0.9
14	Nephritis and nephrosis	8,877	4.4	0.5
15	Peptic ulcer	8,607	4.2	0.5
	All other cases	220,081	108.0	11.5

Source: National Center for Health Statistics, 1970
Cause of death classified by the Eighth Revision, *International Classification of Diseases*, Adapted, 1965

ESTIMATED CANCER DEATHS AND NEW CASES BY SEX AND SITE—1974

SITE	ESTIMATED DEATHS			ESTIMATED NEW CASES		
	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
All Sites*	355,000	193,000	162,000	655,000	326,000	329,000
Buccal Cavity & Pharynx (Oral)	7,900	5,700	2,200	23,700	16,700	7,000
Lip	225	200	25	3,700	3,300	400
Tongue	1,800	1,300	500	4,800	3,400	1,400
Salivary Gland	650	400	250			
Floor of Mouth	525	400	125			
Other & Unspecified Mouth	1,250	800	450			
Pharynx	3,450	2,600	850	8,500	5,100	3,400
Digestive Organs	100,100	53,100	47,000	166,900	86,800	80,100
Esophagus	6,300	4,600	1,700	7,400	5,500	1,900
Stomach	14,300	8,400	5,900	23,100	14,000	9,100
Small Intestine	650	300	350	2,200	1,200	1,000
Large Intestine (Colon-Rectum)	37,300	17,300	20,000	68,000	31,000	37,000
Liver	10,700	6,000	4,700	31,000	17,000	14,000
Pancreas	9,800	4,800	5,000	11,400	5,600	5,800
Other & Unspecified Digestive	19,400	10,900	8,500	20,300	11,000	9,300
Other & Unspecified Digestive	1,650	800	850	3,500	1,500	2,000
Respiratory System	79,900	63,500	16,400	95,200	77,000	18,200
Larynx	3,200	2,800	400	9,500	8,300	1,200
Lung	75,400	59,900	15,500	83,000	67,000	16,000
Other & Unspecified Respiratory	1,300	800	500	2,700	1,700	1,000
Bone, Tissue and Skin	8,700	5,000	3,700	14,700	7,300	7,400
Bone	1,900	1,100	800	2,000	1,100	900
Connective Tissue	1,700	900	800	4,500	2,400	2,100
Skin (Melanoma)*	5,100	3,000	2,100	8,200	3,800	4,400
Breast	32,750	250	32,500	89,700	700	89,000
Genital Organs	41,800	19,000	22,800	125,800	58,100	67,700
Cervix, Invasive* } Uterus	7,800	—	7,800	19,000	—	19,000
Corpus Uteri	3,400	—	3,400	27,000	—	27,000
Ovary	10,700	—	10,700	17,000	—	17,000
Other Female Genital	900	—	900	4,700	—	4,700
Prostate	18,000	18,000	—	54,000	54,000	—
Other Male Genital	1,000	1,000	—	4,100	4,100	—
Urinary Organs	16,200	10,700	5,500	42,900	30,000	12,900
Bladder	9,200	6,300	2,900	28,400	21,000	7,400
Kidney & Other Urinary	7,000	4,400	2,600	14,500	9,000	5,500
Eye	350	150	200	1,700	800	900
Brain & Central Nervous System	8,100	4,700	3,400	10,700	5,900	4,800
Endocrine Glands	1,650	650	1,000	8,900	2,600	6,300
Thyroid	1,150	350	800	7,800	2,100	5,700
Other Endocrine	500	300	200	1,100	500	600
Leukemia	15,300	8,600	6,700	21,200	12,000	9,200
Lymphomas	20,400	11,200	9,200	27,600	15,100	12,500
Lymphosarcoma & Reticulosarcoma	7,700	4,100	3,600	9,900	5,400	4,500
Hodgkin's Disease	3,700	2,200	1,500	6,900	4,100	2,800
Multiple Myeloma	4,600	2,400	2,200	7,500	3,800	3,700
Other Lymphomas	4,400	2,500	1,900	3,300	1,800	1,500
All Other & Unspecified Sites	21,850	10,450	11,400	26,000	13,000	13,000

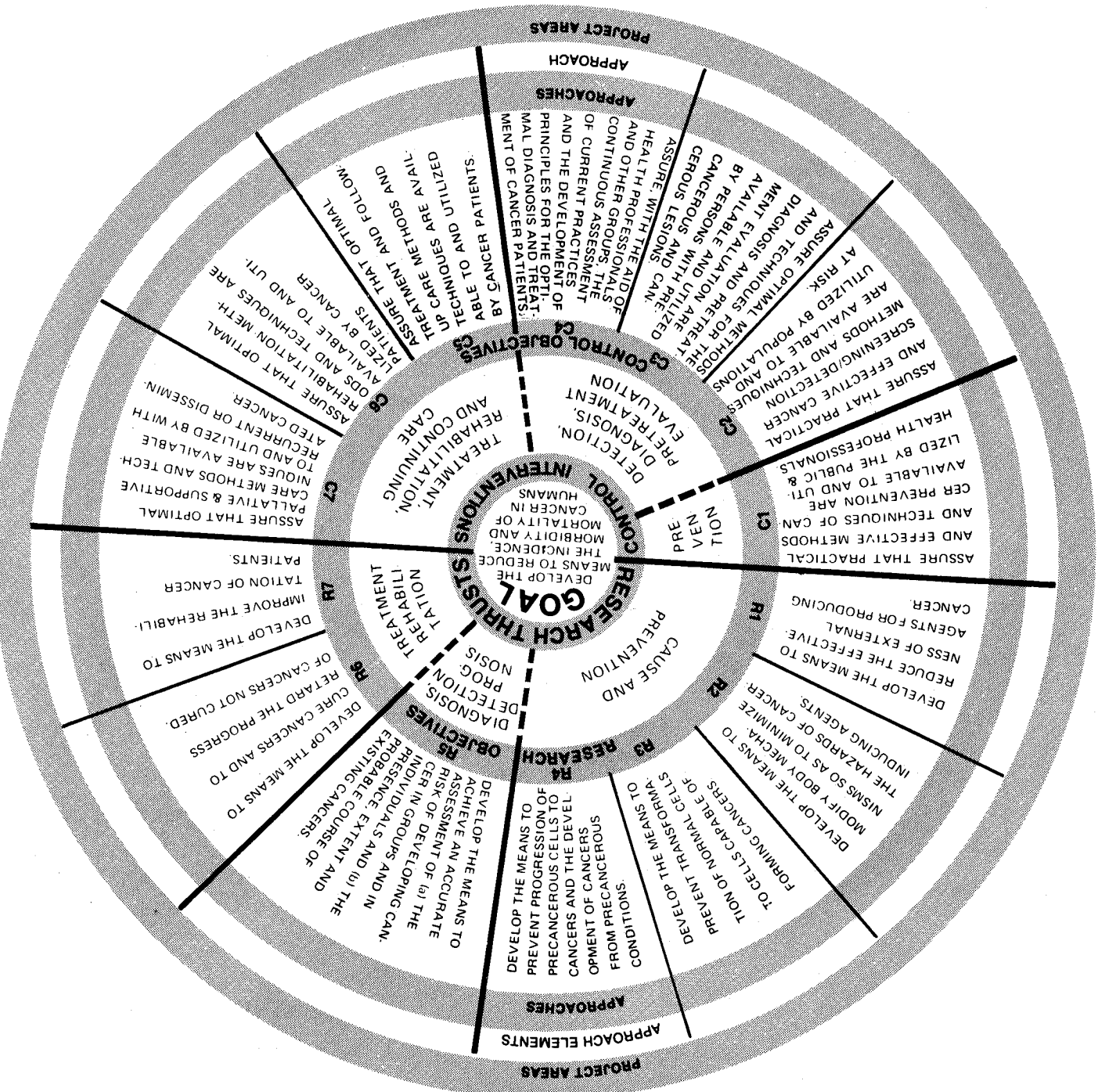
Note: The estimates of new cancer cases are offered as a rough guide and should not be regarded as definitive. Especially note that year to year changes may only represent improvements in the basic data.

*Carcinoma-in-situ of the uterine cervix and superficial skin cancers not included in totals.

(Reprinted with permission from *Cancer Facts and Figures*, American Cancer Society, 1974, from data supplied by the National Cancer Institute.)

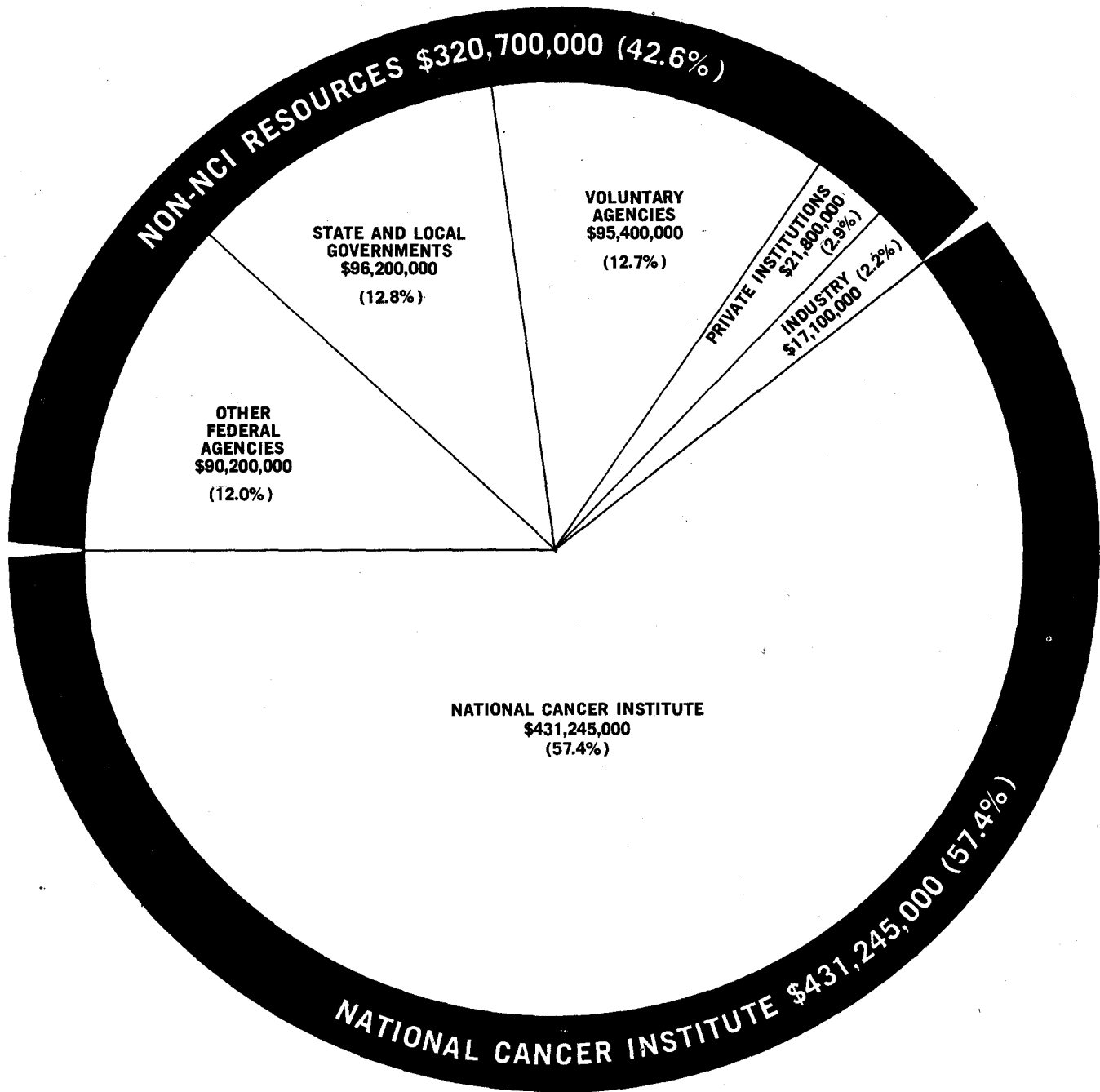
NATIONAL CANCER PROGRAM STRATEGY HIERARCHY

- THE NATIONAL CANCER PROGRAM (NCP) STRATEGY IS THE COMBINATION OF SELECTED LABORATORY, FIELD AND CLINICAL RESEARCH AND CONTROL COURSES OF ACTION NECESSARY TO ACHIEVE THE PROGRAM OBJECTIVES AND GOAL.
- TO FACILITATE PLANNING AND IMPLEMENTATION OF THE PROGRAM STRATEGY, IT HAS BEEN ORGANIZED IN A HIERARCHICAL FORMAT WITH THE FOLLOWING LEVELS:
 - NATIONAL CANCER PROGRAM GOAL
 - RESEARCH THRUSTS AND CONTROL INTERVENTIONS
 - RESEARCH AND CONTROL OBJECTIVES
 - RESEARCH AND CONTROL APPROACHES
 - RESEARCH AND CONTROL APPROACH ELEMENTS
 - RESEARCH AND CONTROL PROJECT AREAS
- THE HIERARCHICAL STRUCTURE PROVIDES CONTINUING FOCUS ON CONSTANT, DISEASE-ORIENTED OBJECTIVES.
- THE FIRST THREE LEVELS OF THE HIERARCHY ARE PRESENTED ON THE FIGURE.
 - THE TOP LEVEL (CENTER OF THE CIRCLE) IS THE NATIONAL PROGRAM GOAL.
 - THE SECOND LEVEL INCLUDES THE NCP RESEARCH THRUSTS AND CONTROL INTERVENTIONS.
 - THE THIRD LEVEL INCLUDES THE NCP RESEARCH AND CONTROL OBJECTIVES.
 - THE NEXT THREE LEVELS-APPROACHES, APPROACH ELEMENTS AND PROJECT AREAS-PROVIDE INCREASINGLY MORE DETAILED DEFINITION OF THE SCIENCE AND ACTIVITIES ENCOMPASSED WITHIN EACH RESEARCH AND CONTROL OBJECTIVE.



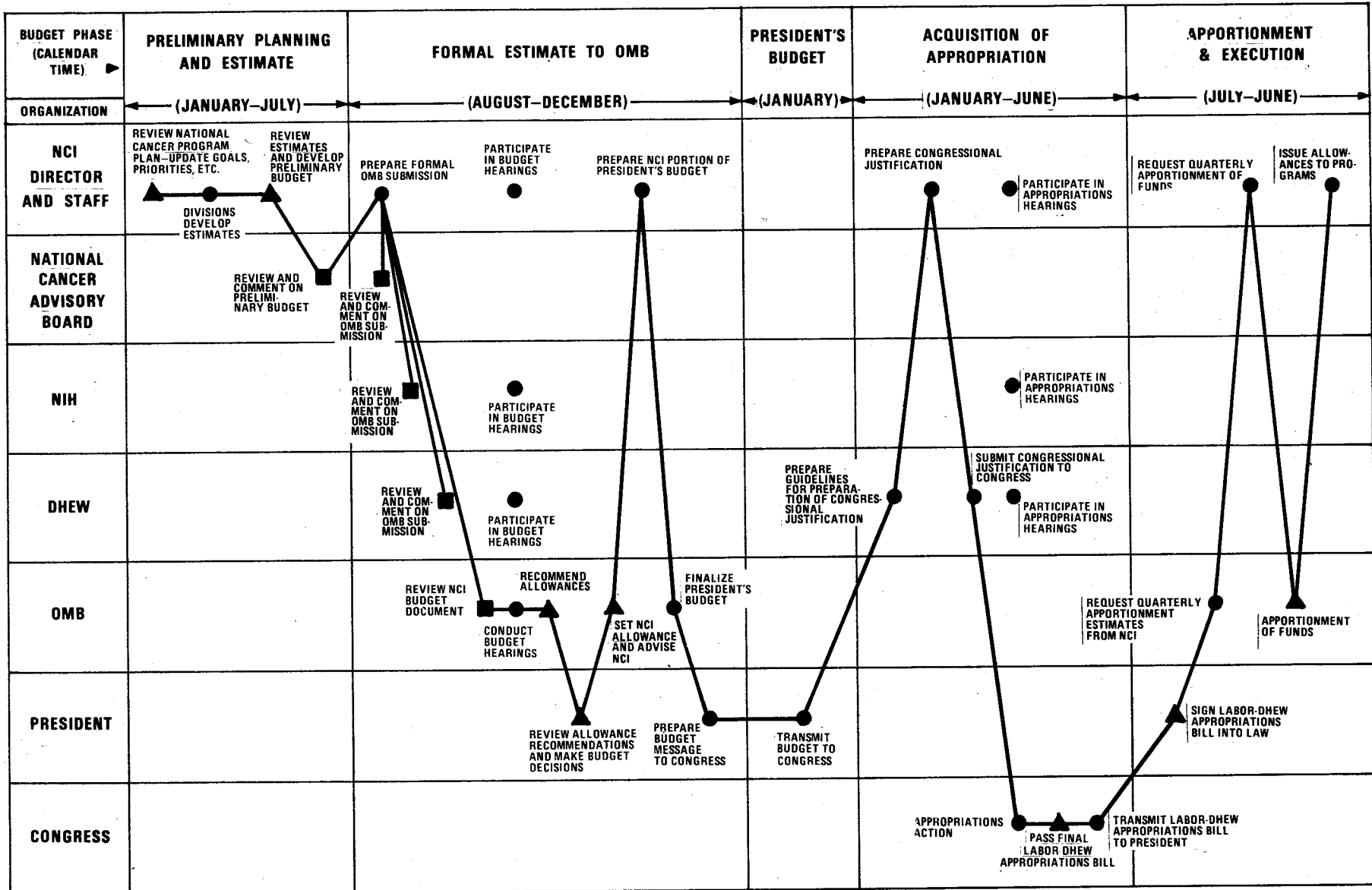
NATIONAL RESOURCES FOR CANCER RESEARCH — FISCAL YEAR 1973

TOTAL: \$751,945,000



SOURCE: Analysis of Mid-Range Resources Requirements for the National Cancer Program, March 1973, with adjustment for cost-of-living increases.

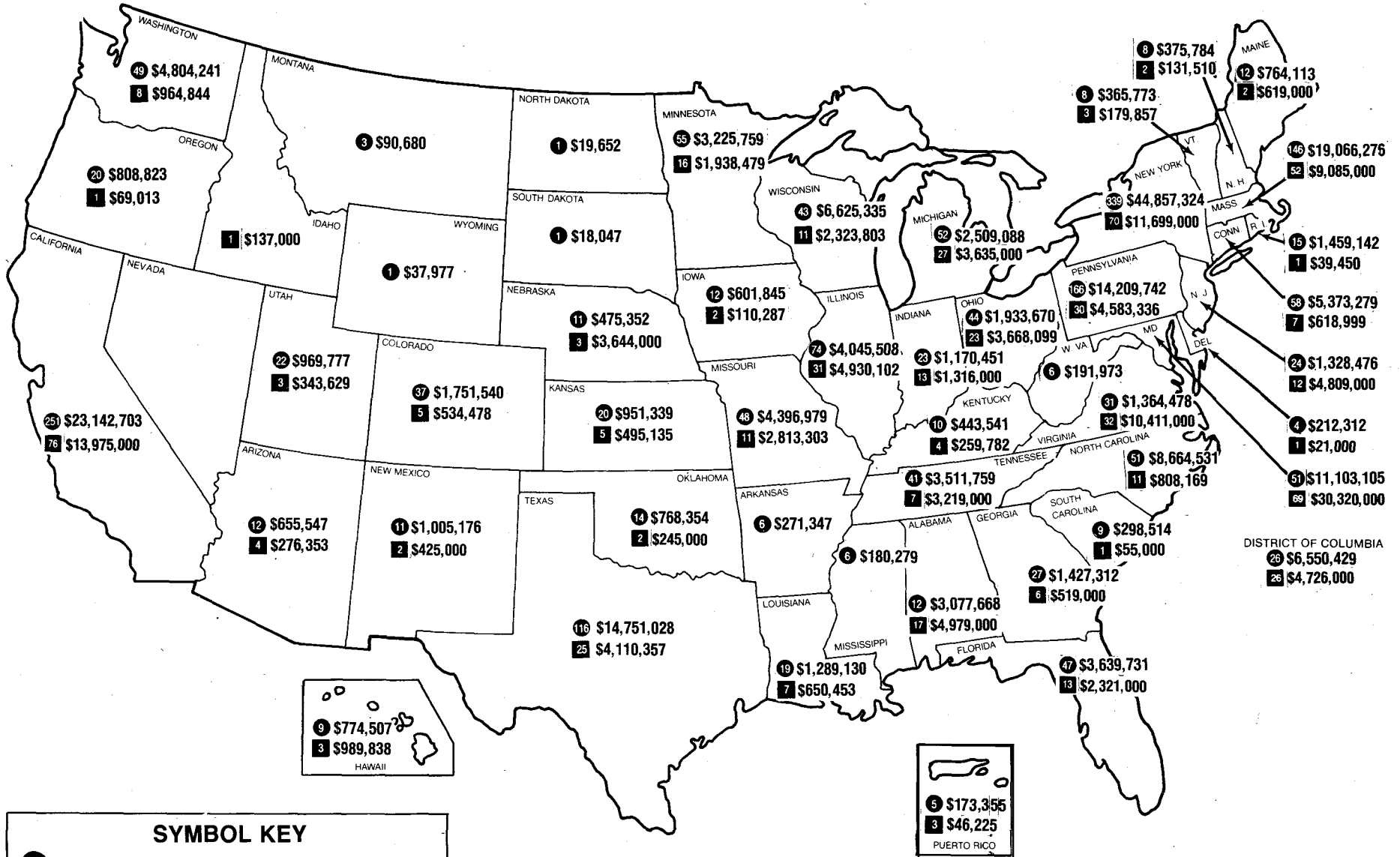
NCI BUDGET ADMINISTRATION PROCESS — UNDER CANCER ACT OF 1971



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

LEGEND: ● OPERATION ■ REVIEW ▲ DECISION

DISTRIBUTION OF GRANT AND CONTRACT DOLLARS — FISCAL YEAR 1973



SYMBOL KEY
00 TOTAL NO. OF GRANTS & DOLLARS PER STATE
0 TOTAL NO. OF CONTRACTS & DOLLARS PER STATE

**FOREIGN RESEARCH GRANTS AND
CONTRACTS — FISCAL YEAR 1973**

(THOUSANDS OF DOLLARS)

COUNTRY	NUMBER OF GRANTS	NUMBER OF CONTRACTS	TOTAL AMOUNT	PERCENT OF TOTAL AMOUNT AWARDED
Australia	1	2	\$ 291	6.3
Austria	—	1	22	.5
Belgium	1	1	40	.9
Canada	4	4	293	6.3
Colombia, S.A.	—	2	104	2.2
England	2	3	245	5.2
France	1	2	747	16.0
Germany	—	1	57	1.2
Israel	1	11	1,332	28.6
Italy	1	5	334	7.2
Japan	—	3	224	4.8
Netherlands	—	3	252	5.4
Portugal	1	—	35	.7
South Africa	—	1	36	.8
Sweden	2	7	469	10.0
Switzerland	2	—	77	1.7
Uganda	—	2	101	2.2
TOTALS	16	48	\$4,659*	100.0

*Excludes Foreign Working Agreements.

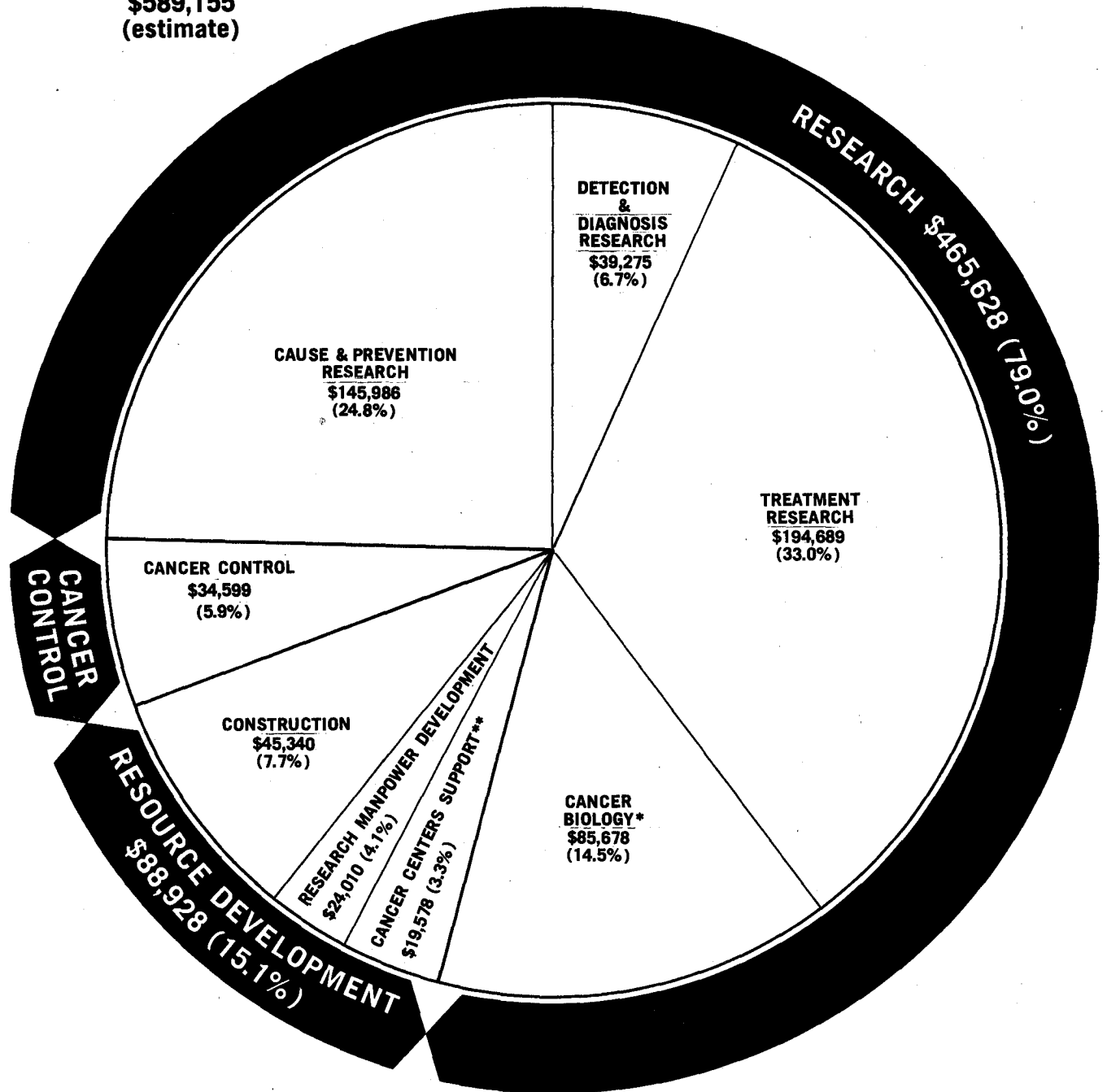
ANNUAL APPROPRIATIONS — 1938-1974

1938.....	\$ 400,000	
1939.....	400,000	
1940.....	570,000	
1941.....	570,000	
1942.....	565,000	
1943.....	534,870	
1944.....	530,000	
1945.....	561,000	
1946.....	548,700	
1947.....	1,820,900	
1948.....	14,500,000	
1949.....	22,000,000	15.5%
1950.....	24,900,000	
1951.....	20,086,000	\$574,841,220
1952.....	19,656,750	
1953.....	17,887,000	
1954.....	20,237,000	
1955.....	21,737,000	
1956.....	24,978,000	
1957.....	48,432,000	
1958.....	56,402,000	
1959.....	75,268,000	
1960.....	91,257,000	
1961.....	111,000,000	46.3%
1962.....	142,836,000	
1963.....	155,742,000	\$1,721,727,563
1964.....	144,340,000	
1965.....	150,011,000	
1966.....	163,768,000	
1967.....	175,656,000	
1968.....	183,356,000	
1969.....	185,149,500	
1970.....	190,486,063	
1971.....	230,383,000	
1972.....	378,794,000	38.2%
1973.....	492,205,000	
1974.....	551,191,500	\$1,422,190,500
TOTAL		\$3,718,759,283

NCI PROGRAM STRUCTURE — FISCAL YEAR 1974

(THOUSANDS OF DOLLARS)

TOTAL DOLLARS
\$589,155
 (estimate)



*Includes research that cannot reasonably be classified in any one of the other research thrusts, but where output has potential application to all thrusts.
 **Planning and core support of centers.

OBLIGATIONS BY BUDGET ACTIVITY**(THOUSANDS OF DOLLARS)**

BUDGET ACTIVITIES	1973 ACTUAL	1974 ESTIMATE	1975 ESTIMATE
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RESEARCH

Cause and Prevention	\$ 116,234	\$ 145,986	\$ 151,662
Detection and Diagnosis.....	27,135	39,275	41,744
Treatment.....	147,025	194,689	203,128
Cancer Biology*	66,216	85,678	89,321
Total Research	356,610	465,628	485,855

RESOURCE DEVELOPMENT

Cancer Center Support	15,840	19,578	23,484
Research Manpower Development.....	14,132	24,010	22,530
Construction.....	39,151	45,340	22,317
Total Resource Development	69,123	88,928	68,331

CANCER CONTROL

Cancer Control	5,512	34,599	45,814
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Total NCI	\$ 431,245	\$ 589,155	\$ 600,000
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*Includes research that cannot reasonably be classified in any one of the other research thrusts, but where output has potential application to all thrusts.

NOTE: These distributions include a proportionate share of NCI Management and NIH Management Fund.

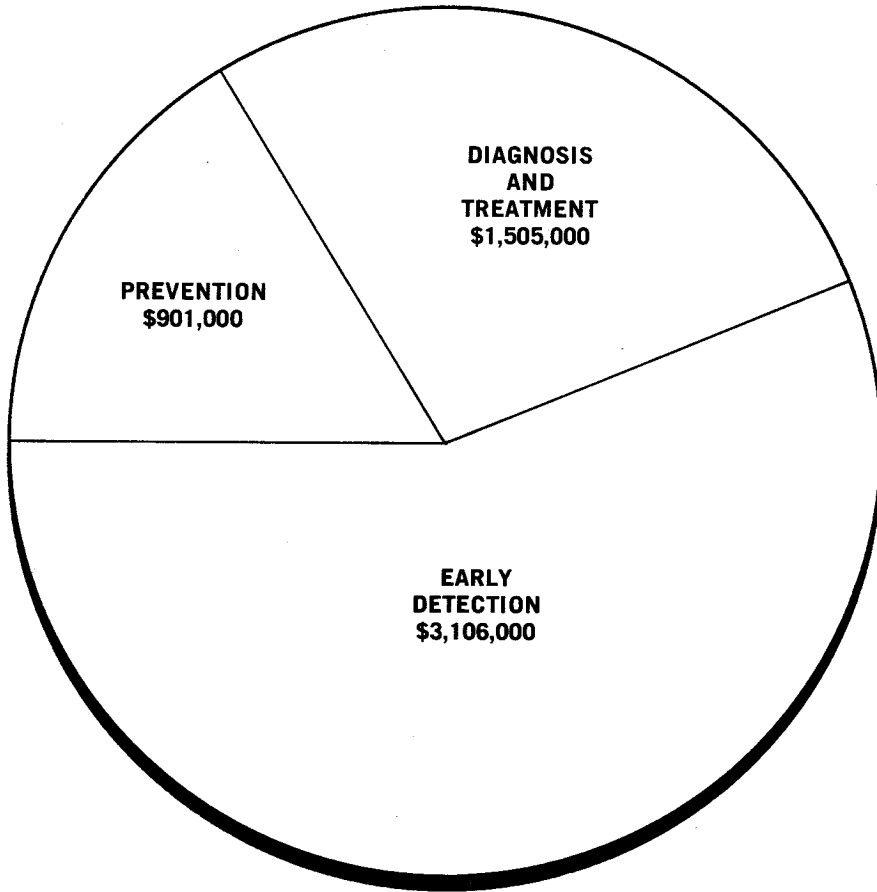
NATIONAL CANCER INSTITUTE 1974 BUDGET BY ORGANIZATION

(THOUSANDS OF DOLLARS)

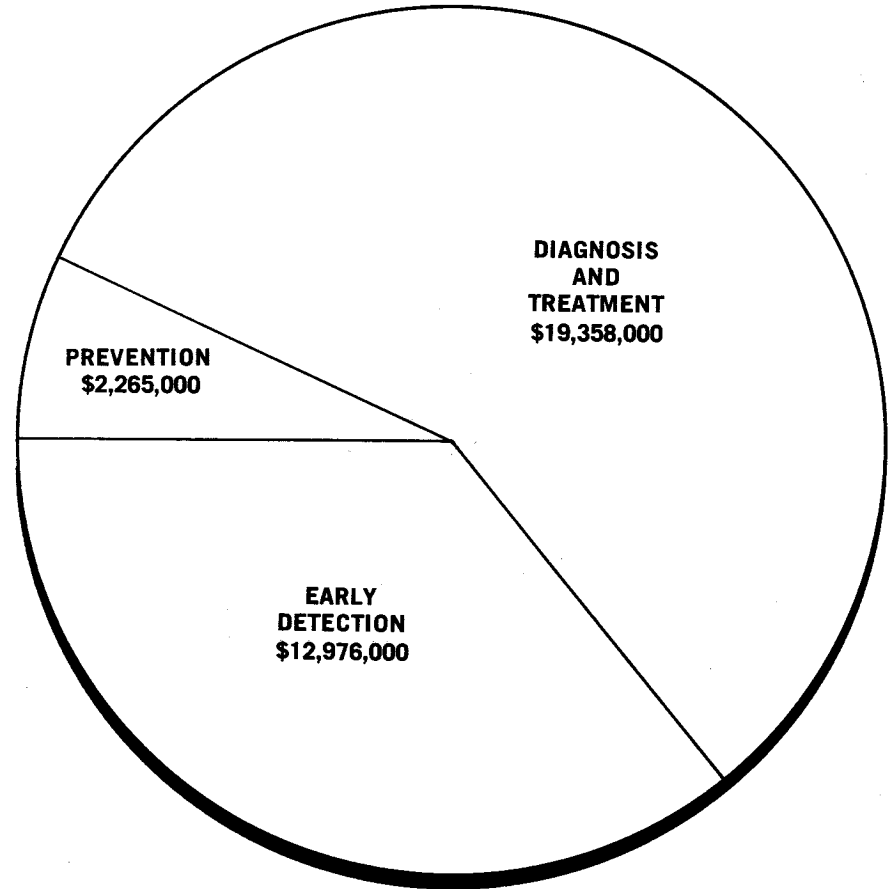
	AMOUNT	ACTIVITY	PERCENT OF TOTAL	
DIVISION OF CANCER RESEARCH RESOURCES AND CENTERS				
\$283,558	\$115,153	Regular Program	19.5	48.1%
	776	General Research Support	.1	
	91,155	Cancer Research Centers	15.5	
	10,503	Task Forces	1.8	
	23,643	Fellowship and Training	4.0	
	2,099	Research Career Programs	.4	
	35,900	Construction	6.1	
4,329	Review and Approval	.7		
DIVISION OF CANCER BIOLOGY AND DIAGNOSIS				
\$40,524	\$ 32,153	Laboratory and Clinical Research	5.5	6.9%
	8,371	Task Forces	1.4	
DIVISION OF CANCER TREATMENT				
\$75,779	\$ 75,079	Cancer Therapy	12.8	12.9%
	700	Task Forces	.1	
DIVISION OF CANCER CAUSE AND PREVENTION				
\$111,980	\$ 60,493	Virus Cancer Program	10.3	19.0%
	35,850	Carcinogenesis	6.1	
	10,722	Demography	1.8	
	4,915	Task Forces	.8	
OFFICE OF THE DIRECTOR				
\$77,314	\$ 1,536	Supporting Services	.3	13.1%
	15,650	Program Direction	2.6	
	16,940	Management Fund	2.9	
	9,133	Direct Construction	1.5	
	34,055	Cancer Control	5.8	
	\$589,155*	TOTAL	100.0	

*Includes \$2,990,000 carry forward of Fiscal Year 1973/1974 funds.

CANCER CONTROL OBLIGATIONS

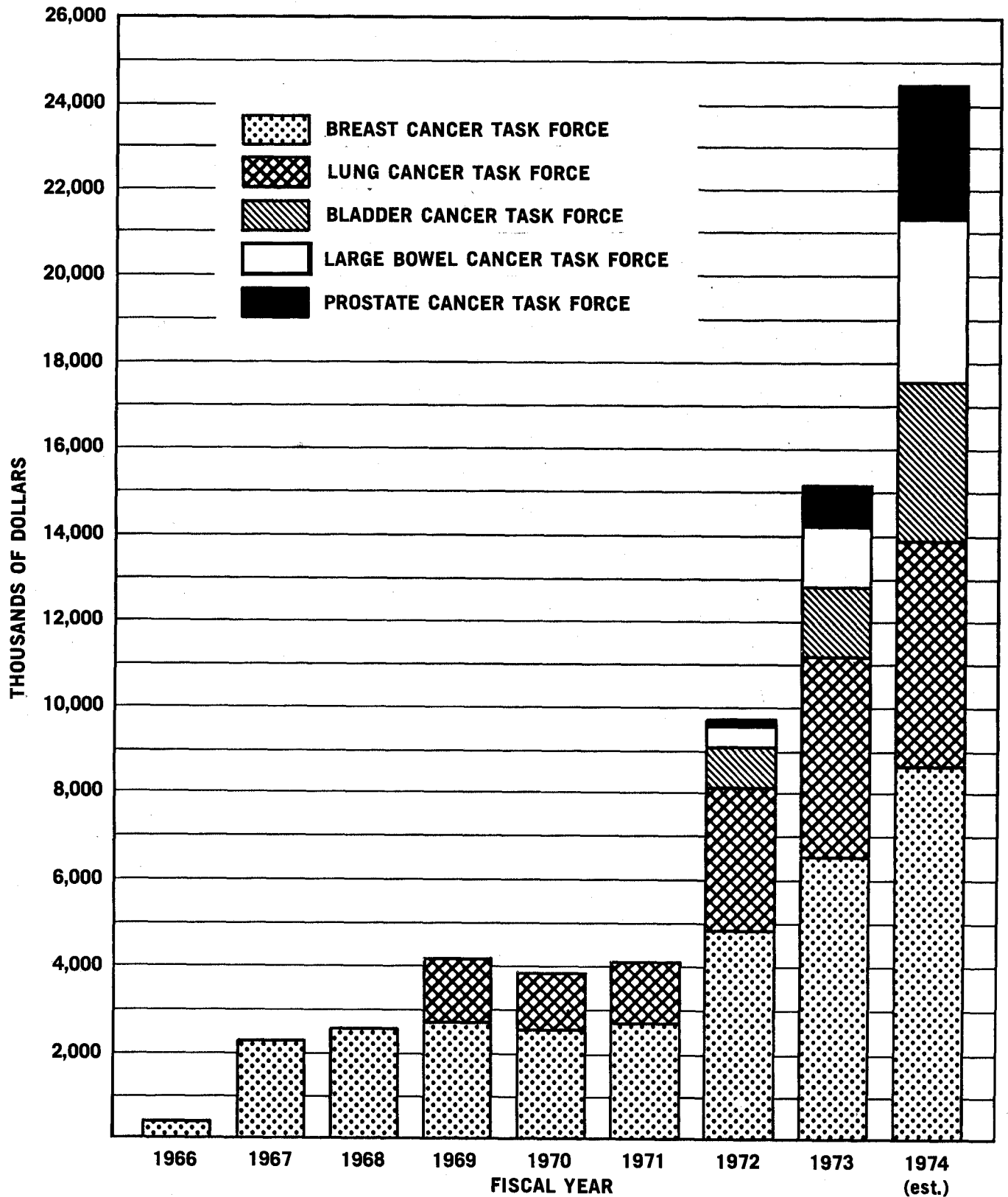


Fiscal Year 1973
\$5,512,000



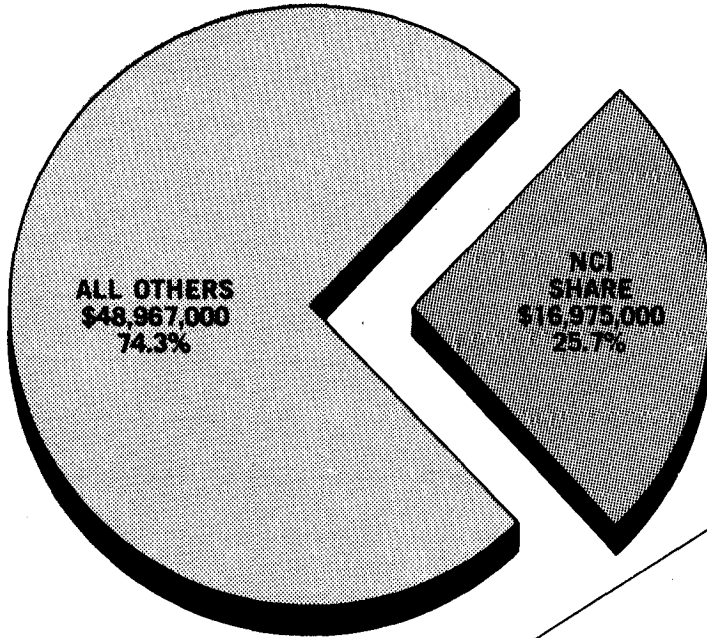
Fiscal Year 1974
\$34,599,000
(estimate)

TASK FORCE OBLIGATIONS — 1966 -1974



**REIMBURSEMENT TO NIH MANAGEMENT FUND
FISCAL YEAR 1974**

**\$65,942,000
TOTAL NIH SERVICES**



CLINICAL CENTER
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

OFFICE OF ENGINEERING SERVICES
Research Facilities Planning
Plant Engineering Services
Liaison & Inspection of Projects

DIVISION OF RESEARCH GRANTS
Initial Scientific Review of Applications
Assignment of Research Grant Applications Among Institutes

DIVISION OF RESEARCH SERVICES
Laboratory Aids
Animal Hospital
Media Preparation
Glassware Preparation
Comparative Pathology
Germ-free Animal Production
Biomedical Engineering and Instrumentation
Library Services
Medical Arts
Environmental Services

\$7,404,000
\$3,568,000



**DISTRIBUTION OF NCI SERVICES
\$16,975,000**

\$1,594,000

\$778,000

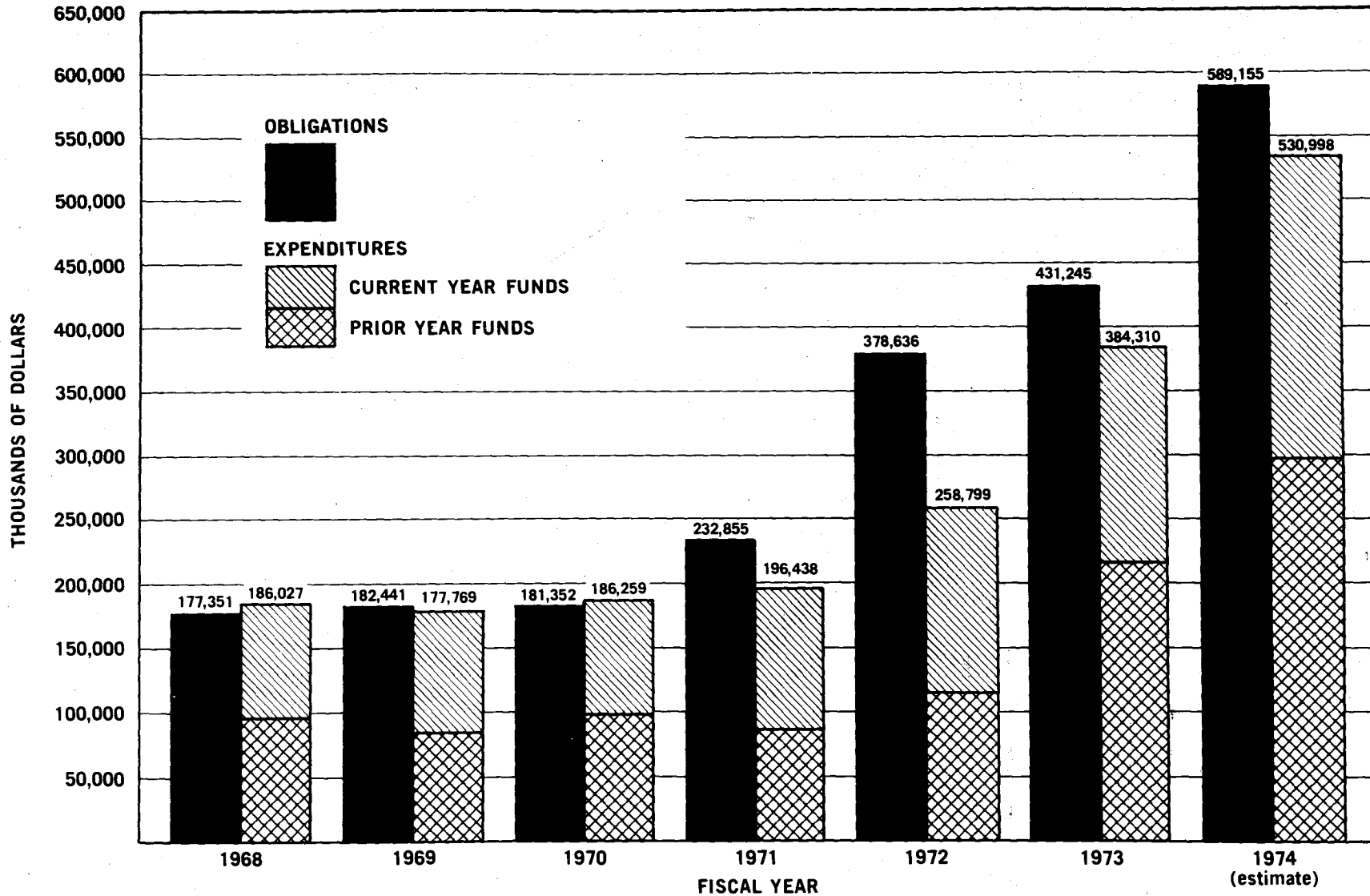
\$2,509,000

\$1,122,000

DIVISION OF COMPUTER RESEARCH & TECHNOLOGY
Research & Development Program in Which Concepts & Methods of Computer Science Are Applied to Biomedical Problems (Services Are Rendered to the NIH Communities on a Fee-For-Service Basis).

OFFICE OF ADMINISTRATIVE SERVICES
Office Services
Plant Safety
Supply Management
Financial Management
Personnel Management
Management Policy
Management Survey and Review

NATIONAL CANCER INSTITUTE OBLIGATIONS AND EXPENDITURES

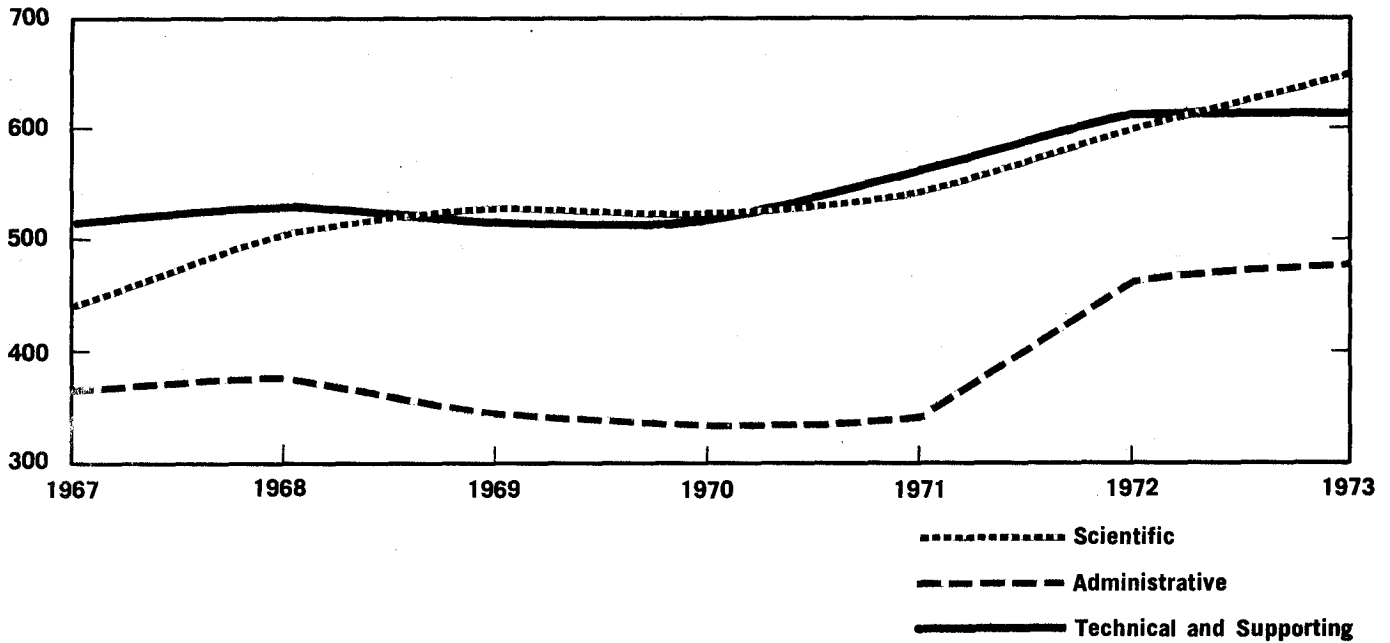


OBLIGATIONS: Orders placed, grants and contracts awarded, salaries earned and similar financial transactions which legally utilize or reserve an appropriation for expenditure.

EXPENDITURES: Payments (cash or checks) made from current or prior year appropriations.

DISTRIBUTION OF PERSONNEL BY FUNCTION

Percent of Actual Employment							
	Fiscal Year						
	1967	1968	1969	1970	1971	1972	1973
Scientific	33.9%	37.5%	37.8%	38.3%	37.5%	36.2%	37.3%
Administrative	27.5%	25.5%	24.4%	24.0%	23.9%	27.3%	27.6%
Technical and Supporting	38.6%	37.0%	37.8%	37.7%	38.6%	36.5%	35.1%
Total Actual Employment	1329	1453	1411	1355	1426	1665	1736

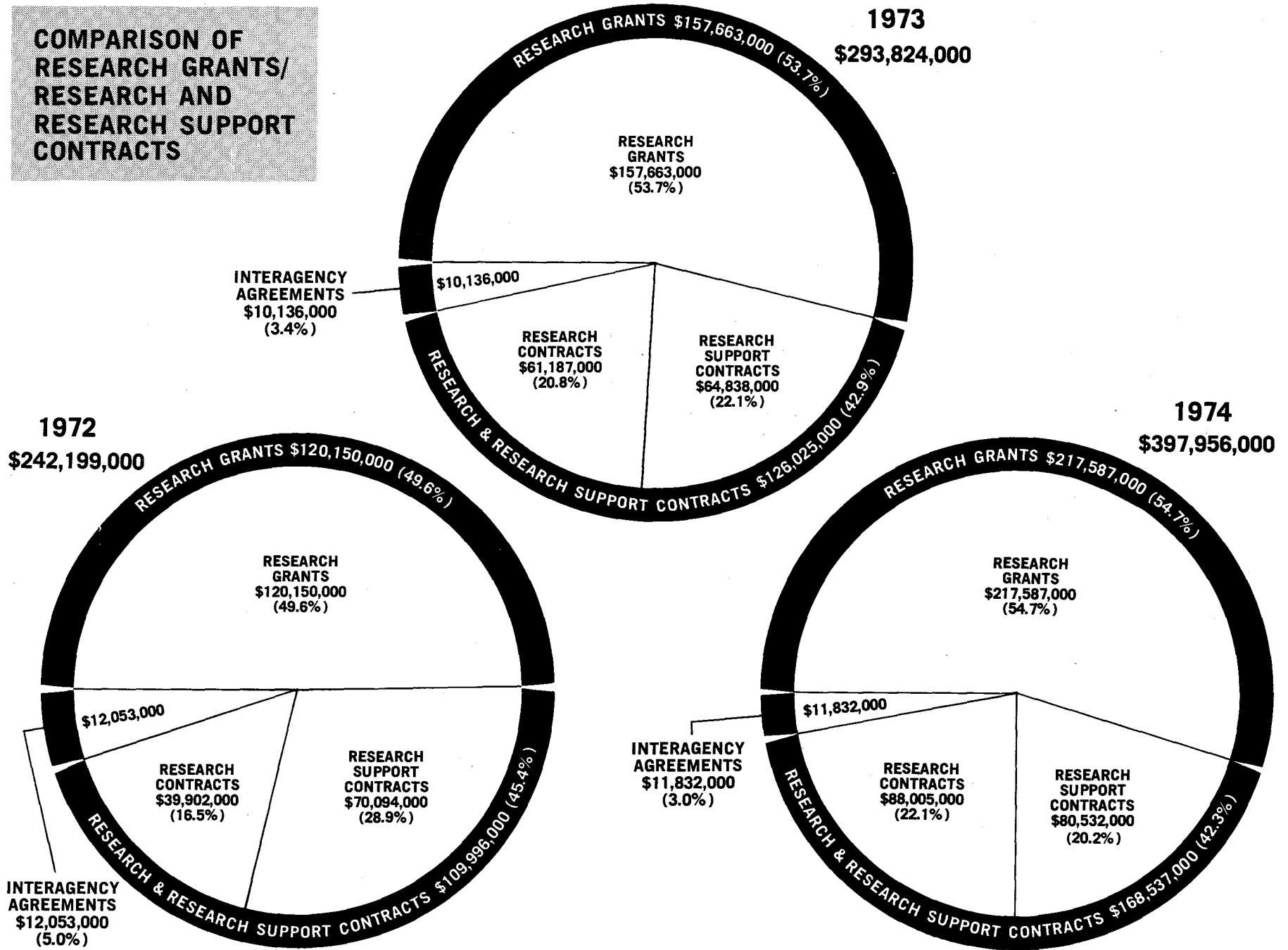


COMPARISON OF DOLLARS, POSITIONS AND SPACE

	DOLLARS			POSITIONS			SPACE		
	OBLIGATIONS (\$000's)	PERCENT OF INCREASE OVER BASE YEAR	PERCENT OF INCREASE OVER PRIOR YEAR	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 (estimate)	589,155	153.0	36.6	1820	27.6	4.8	384,972	19.8	7.5
1975 (estimate)	600,000	157.7	1.8	1855	30.1	1.9	390,272	21.5	1.4

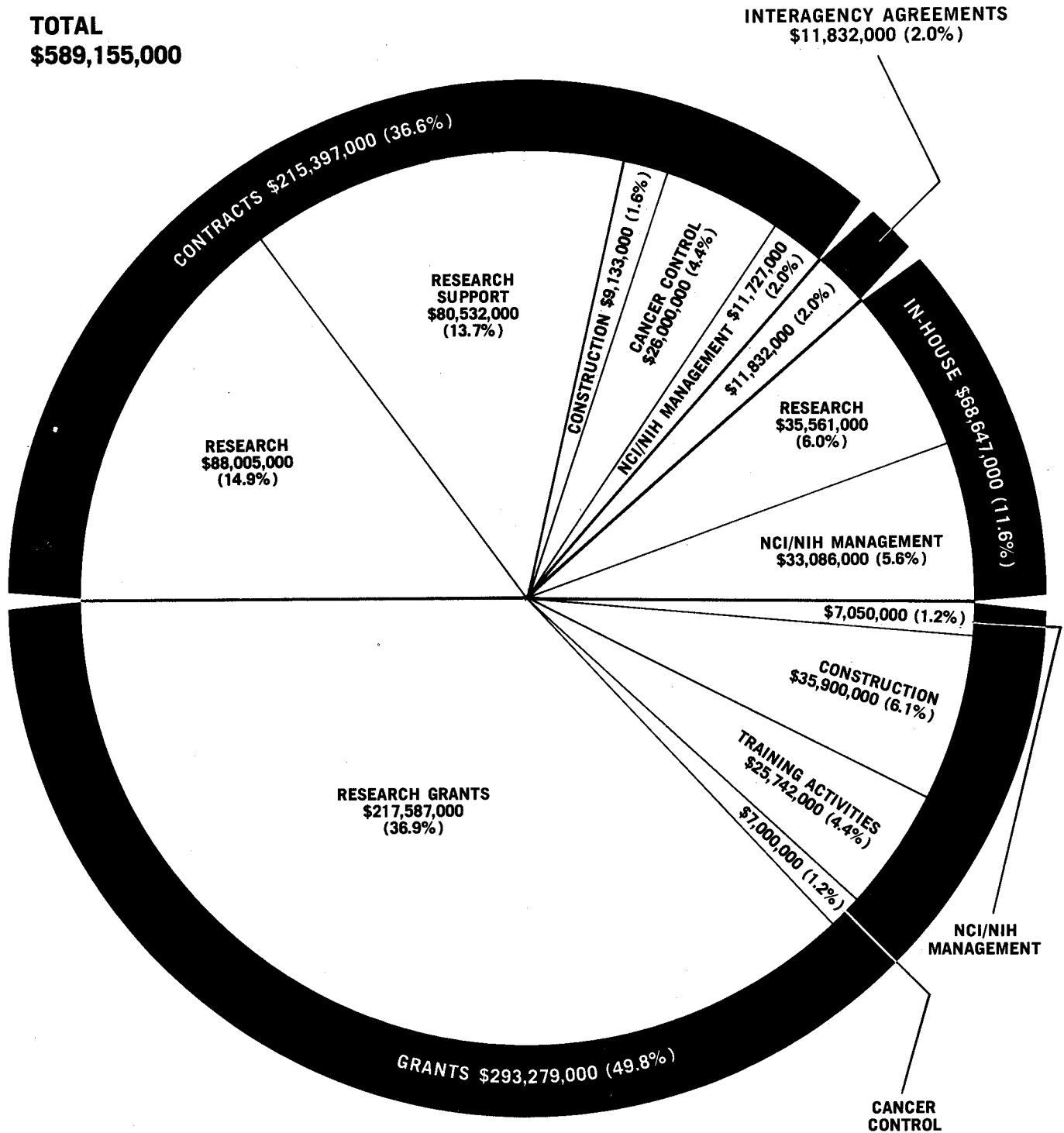
*Does not include field station-assigned space.

**COMPARISON OF
RESEARCH GRANTS/
RESEARCH AND
RESEARCH SUPPORT
CONTRACTS**



TOTAL NCI DOLLARS BY MECHANISMS — FISCAL YEAR 1974

TOTAL
\$589,155,000



NOTE: Management includes NCI Management as well as NIH Management Fund.

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
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I. CIVIL SERVICE

A. Civil Service (tenured)	Appropriate advanced education, experience and knowledge needed by NCI to conduct its programs	Minimum starting: Ph.D. — \$20,677 Physicians — \$26,189 Maximum: \$36,000	Civil Service Commission. Contact Director or Laboratory Chief in area of interest or the NCI Personnel Office.
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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 such as to justify recognition as authorities in their particular fields of activity.	Equivalent to the salary range of GS-16 through GS-18 Maximum: \$36,000	Recommendation by Division Directors. Final approval rests with the Director, NCI.
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III. USPHS COMMISSIONED CORPS

Associate Training Program including CORD residency deferment program (limited tenure, maximum 3 years) ²			
A. Clinical Associate	Graduates of Medical Schools including Internship	Pay and allowances of Senior Assistant Surgeon or Surgeon of PHS Commissioned Corps	Apply to Clinical and Professional Education Section, Clinical Center, National Institutes of Health
B. Research Associate	Graduates of Medical Schools including Internship	Pay and allowances of Senior Assistant Surgeon or Surgeon of PHS Commissioned Corps	Apply to Clinical and Professional Education Section, Clinical Center, National Institutes of Health
C. Staff Associate	Graduates of medical and dental schools, or other doctoral qualifications	Pay and allowances of Senior Assistant Surgeon of PHS Commissioned Corps.	Apply to Clinical and Professional Education Section, Clinical Center, National Institutes of Health
D. Senior COSTEP Program (Medical)	Senior Medical Students	Pay and Allowances of Junior Asst. Health Service Officer plus payment of tuition, fees and other necessary expenses. Candidates incur 2 year active duty obligation with PHS Commissioned Corps.	Apply to Clinical and Professional Education Section, Clinical Center, National Institutes of Health

IV. VISITING PROGRAM (limited tenure)³

POSITION	ELIGIBILITY	ANNUAL SALARY	MECHANISM OF ENTRY
A. Visiting Fellow (maximum 3 years)	1-3 years postdoctoral education	\$7,000-10,000 plus \$1,000 for each of first two dependents and \$500 for each additional dependent	Contact Director or Laboratory Chief in area of interest.
B. Visiting Associates (1 year with renewals to end of project)	3+ years postgraduate education with appropriate knowledge needed by NCI	\$12,000-17,500	Contact Director or Laboratory Chief in area of interest.
C. Visiting Scientist (duration of project)	6+ years postdoctoral education with appropriate unusual experience and knowledge needed	\$20,000-36,000	Contact Director or Laboratory Chief in area of interest.

V. STAFF FELLOWSHIPS

A. Staff Fellowships (maximum 6 years)	Physician or other doctoral degree equivalent awarded within last 5 years, U.S. citizen or non-citizen eligible for naturalization within 4 years.	Staff Fellows Physicians \$17,900-21,500 Other Doctorates \$13,700-20,000 Senior Staff Fellows Physicians \$20,200-28,200 Other Doctorates \$17,900-22,800	Contact Director or Laboratory Chief in area of interest or the NCI Personnel Office.
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VI. SPECIAL PROGRAMS

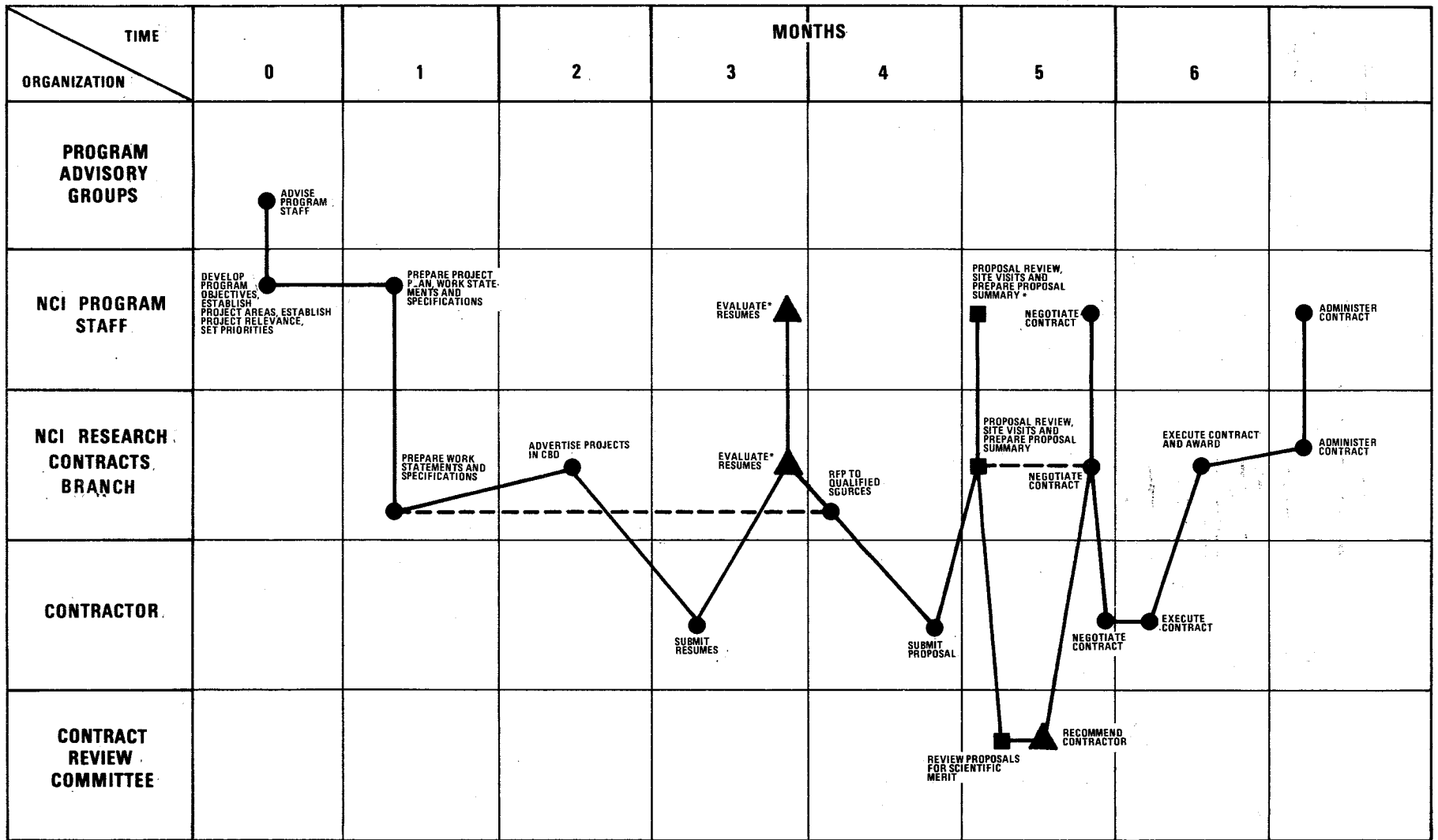
A. Research Fellow sponsored by organization other than NIH, PHS	Determined by sponsoring organization.	Established by sponsoring organization	Contact Director or Laboratory Chief in area of interest; also apply to sponsoring agency, e.g. American Cancer Society, Eleanor Roosevelt Cancer Foundation, Leukemia Society of America, Inc., etc.
B. COSTEP Program (operates year-round) Maximum 120 days per 12 month period	U.S. citizen with 2 years of baccalaureate program or more in health-related field. May be enrolled in doctoral program or professional school. 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. Civil Service Summer Employment Program	U.S. citizen, 18 years of age or older (16 if high school graduate)	Pay equivalent to GS-1 through GS-4 depending on education and experience	Civil Service Summer Employment Examination (waived for outstanding 3rd year college engineering or physical science students)
	College graduates, graduate students, faculty members, equivalent experience.	Pay equivalent to GS-5 through GS-12	Apply to NIH Personnel Staffing Branch.
D. Fogarty International Scholars	International reputation, productivity, demonstrated ability in biomedical field	\$30,000 per annum	Recommendation to Fogarty Center by Institute Director or Scientist. Contact Director in area of interest.

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

²Appointments are made upon intellectual attainment and demonstrated research interest and ability matched to NCI's needs.

³Under most circumstances, the various visiting programs are limited to non-citizens.

NCI CONTRACTS ADMINISTRATION PROCESS — UNDER CANCER ACT OF 1971



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

LEGEND

- — OPERATION
- — REVIEW
- ▲ — DECISION
- NORMAL FLOW
- - - - NON-COMPETITIVE CONTRACTS
- * AD HOC COMMITTEES MAY BE USED — INCLUDES OUTSIDE SCIENTISTS

CONTRACTORS RECEIVING MORE THAN \$750,000 IN NCI RESEARCH CONTRACT FUNDS — FISCAL YEAR 1973

(THOUSANDS OF DOLLARS)

PERCENT OF TOTAL DOLLARS	NUMBER OF CONTRACTS	AMOUNT	CONTRACTOR	STATE	
↑ 1st 41 CONTRACTORS 65%	↑ 1st 10 CONTRACTORS 35%	21	\$ 16,515	Litton Bionetics	Maryland
		12	6,311	Microbiological Associates	Maryland
		11	4,076	Southern Research Institute	Alabama
		14	3,950	Hazleton Laboratories	Virginia
		4	3,465	Flow Laboratories	Maryland
		1	3,446	University of Nebraska Medical Center	Nebraska
		11	3,435	Meloy Laboratories	Virginia
		6	3,109	Atomic Energy Commission	Tennessee
		5	3,023	University of Southern California	California
		4	2,862	American Health Foundation	New York
	↑ 1st 20 CONTRACTORS 50%	7	2,660	Arthur D. Little, Inc.	Massachusetts
		1	2,490	U.S. Public Health Service	Maryland
		9	2,275	Stanford Research Institute	California
		11	2,187	University of Texas M.D. Anderson Hosp.	Texas
		1	2,160	Veterans Administration	Dist. of Col.
		3	2,045	Pfizer, Inc.	New Jersey
		12	2,033	Mason Research Institute	Massachusetts
		7	2,027	Illinois Institute of Technology	Illinois
		5	1,718	California State Dept. of Public Health	California
		5	1,432	St. Louis University	Missouri
	↑ 1st 30 CONTRACTORS 59%	3	1,384	Life Sciences, Inc.	Florida
		4	1,370	Battelle Memorial Institute	Ohio
		5	1,245	Columbia University	New York
		4	1,199	Electro-Nucleonics Laboratories	Maryland
		7	1,104	University of Pennsylvania	Pennsylvania
		3	1,084	Charles River Breeding Laboratories	Massachusetts
		2	1,080	JRB Associates	Virginia
		8	1,044	Johns Hopkins University	Maryland
		8	1,042	Midwest Research Institute	Missouri
		10	1,010	Mayo Foundation	Minnesota
	↑ 1st 41 CONTRACTORS 65%	7	972	University of California Los Angeles	California
		5	959	A. R. Schmidt Company	Wisconsin
		9	928	University of Minnesota	Minnesota
		3	905	Upjohn Company	Michigan
		8	895	University of Chicago	Illinois
		2	871	Merck and Company	New Jersey
		7	840	New York University	New York
		4	793	Bristol Laboratories	New York
		6	789	Dow Chemical Company	Michigan
		4	788	University of Pittsburgh	Pennsylvania
	10	750	National Academy of Sciences	Dist. of Col.	
SUBTOTAL —		269¹	\$ 92,271²	41 Contractors receiving MORE than \$750,000 (listed above)	
SUBTOTAL —		427	48,859	214 Contractors receiving LESS than \$750,000 (not listed)	
		696	\$141,130		

¹269 represents 39% of the 696 contracts awarded.
²\$92,271,000 represents 65% of the \$141,130,000 awarded in FY 1973.

DISTRIBUTION OF CONTRACTS BY NCI PROGRAM AREA AND BY TYPE OF INSTITUTION — FISCAL YEAR 1973

PROGRAM

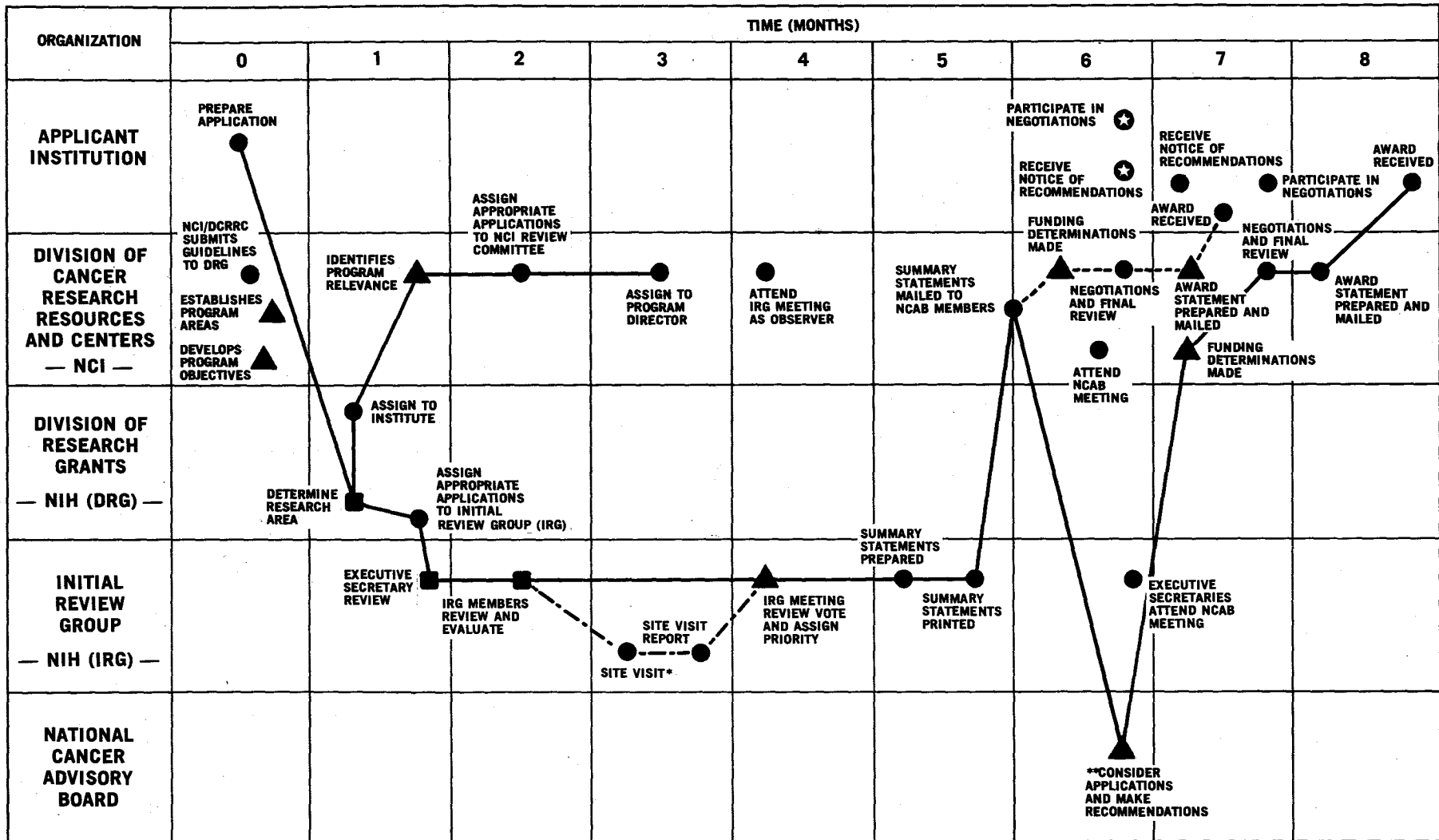
PERCENT OF TOTAL NUMBER OF CONTRACTS	NUMBER OF CONTRACTS	NCI PROGRAM AREA	THOUSANDS OF DOLLARS	PERCENT OF TOTAL DOLLARS
32.3	225	Division of Cancer Treatment	\$ 43,866	31.1
48.3	336	Division of Cancer Cause and Prevention	77,649	55.0
16.7	116	Division of Cancer Biology and Diagnosis	14,646	10.4
2.7	19	Cancer Control	4,969	3.5
	696	Total	\$141,130	

ORGANIZATION

PERCENT OF TOTAL NUMBER OF CONTRACTS	NUMBER OF CONTRACTS	TYPE OF INSTITUTION	THOUSANDS OF DOLLARS	PERCENT OF TOTAL DOLLARS
27.0	188	Profit-Making	\$ 57,090	40.5
38.8	270	Academic	39,939	28.3
20.7	144	Non-Profit	26,301	18.6
4.0	28	Federal Government	10,136	7.2
2.6	18	State and Local Government	3,578	2.5
6.9	48	Foreign	4,086	2.9
	696	Total	\$141,130	

Excludes construction contracts totalling \$4,067,000.

NCI GRANTS ADMINISTRATION — UNDER CANCER ACT OF 1971



LEGEND:

- OPERATIONS
- REVIEW
- ▲ DECISION

————— NORMAL ADMINISTRATIVE FLOW

⊕ APPLICATIONS LESS THAN \$35,000 TOTAL COSTS (TIME SAVING 3 TO 4 WEEKS)

- - - - - * SITE VISITS REQUIRED FOR ONLY ABOUT 10% OF APPLICATIONS

** NCAB MEETS NOT LESS THAN 4 TIMES PER YEAR

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

INSTITUTIONS RECEIVING MORE THAN \$750,000 IN NCI RESEARCH GRANT FUNDS — FISCAL YEAR 1973

(THOUSANDS OF DOLLARS)

PERCENT OF TOTAL DOLLARS	NUMBER OF GRANTS	AMOUNT	INSTITUTION	STATE	
1st 10 INSTITUTIONS 34%	4	\$8,852	Sloan Kettering Institute	New York	
	121	8,806	University of California System	California	
	73	7,056	University of Texas System	Texas	
	64	5,922	Roswell Park Memorial Institute	New York	
	41	5,677	University of Wisconsin	Wisconsin	
	37	4,028	Yale University	Connecticut	
	22	3,556	Institute for Cancer Research	Pennsylvania	
	24	3,243	Columbia University	New York	
	3	3,119	Memorial Hospital for Cancer/Allied Diseases	New York	
	13	3,049	University of Southern California	California	
	1st 20 INSTITUTIONS 50%	25	2,754	Stanford University	California
		25	2,658	Johns Hopkins University	Maryland
		28	2,563	Duke University	North Carolina
5		2,497	Children's Cancer Research Foundation	Massachusetts	
22		2,433	Washington University	Missouri	
25		2,419	Yeshiva University	New York	
18		2,371	Harvard University	Massachusetts	
14		2,317	Baylor College of Medicine	Texas	
25		2,243	Massachusetts General Hospital	Massachusetts	
38		2,207	State University of New York	New York	
1st 30 INSTITUTIONS 62%	44	2,182	New York University	New York	
	24	2,124	University of Washington	Washington	
	25	2,080	Temple University	Pennsylvania	
	18	2,040	University of Miami	Florida	
	25	1,967	University of Rochester	New York	
	9	1,871	University of Alabama	Alabama	
	37	1,869	University of Minnesota	Minnesota	
	15	1,748	Tufts University	Massachusetts	
	11	1,577	St. Jude Children's Research Hospital	Tennessee	
	17	1,539	Thomas Jefferson University	Pennsylvania	
	1st 40 INSTITUTIONS 69%	24	1,447	University of Chicago	Illinois
2		1,442	Cold Spring Harbor Laboratory	New York	
10		1,328	Massachusetts Institute of Technology	Massachusetts	
19		1,242	Mt. Sinai School of Medicine	New York	
21		1,203	University of Pennsylvania	Pennsylvania	
8		1,040	New England Medical Center Hospitals	Massachusetts	
16		981	Cornell University	New York	
9		958	University of New Mexico	New Mexico	
10		914	Mayo Foundation	Minnesota	
3		894	American Health Foundation	New York	
1st 48 INSTITUTIONS 74%	20	867	Ohio State University	Ohio	
	14	850	Emory University	Georgia	
	15	821	University of Pittsburgh	Pennsylvania	
	15	794	University of Tennessee	Tennessee	
	1	793	Montefiore Hospital and Medical Center	New York	
	6	792	Worcester Foundation for Experimental Biology	Massachusetts	
	7	770	Salk Institute for Biological Studies	California	
	8	764	Wistar Institute	Pennsylvania	

SUBTOTAL — 1,060¹ \$114,667² 48 Institutions receiving MORE than \$750,000 (listed above)
 SUBTOTAL — 632 41,311 234 Institutions receiving LESS than \$750,000 (not listed)
 TOTAL 1,692 \$155,978³

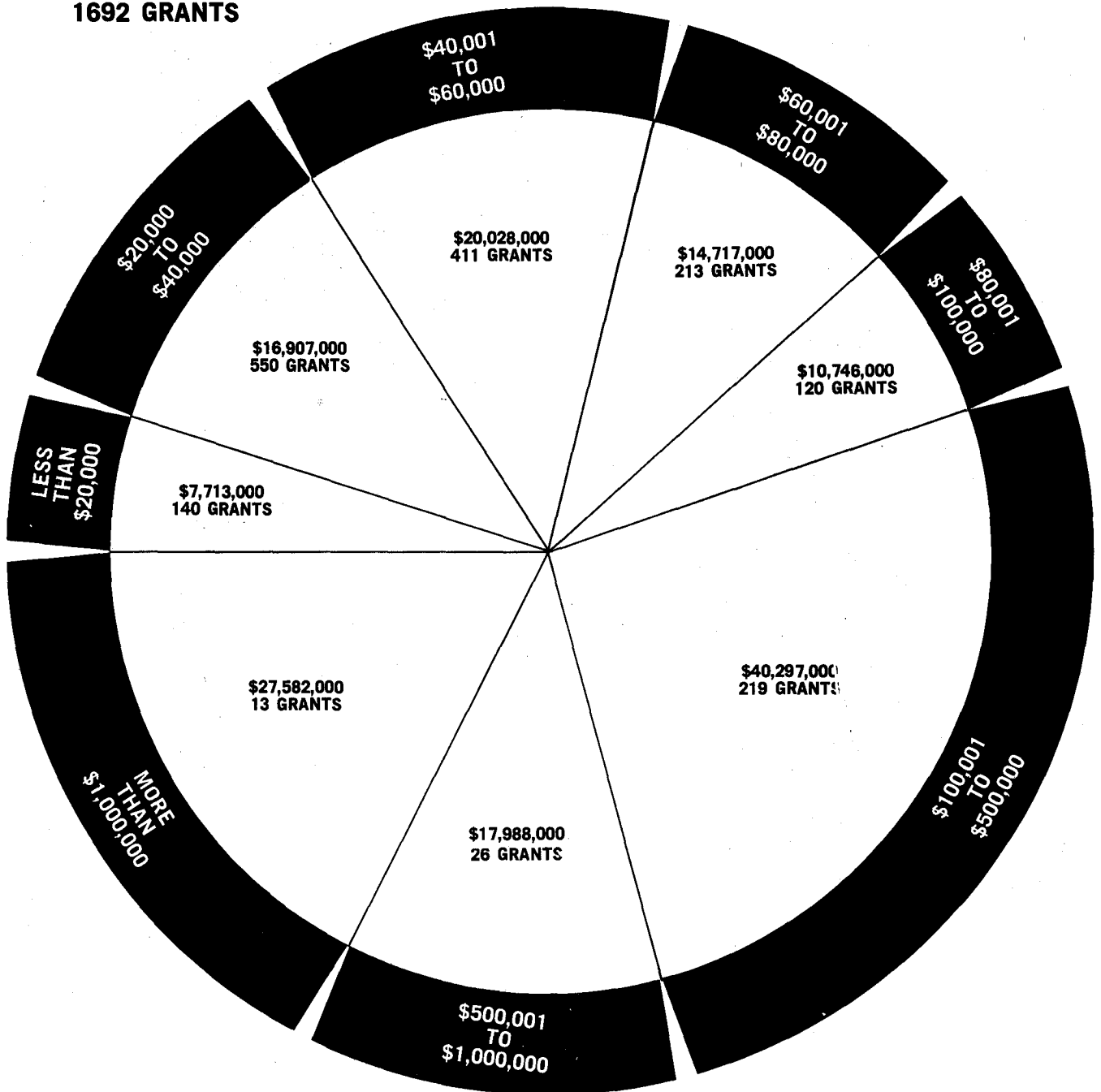
¹1,060 represents 63% of the 1,692 grants awarded in fiscal 1973.

²\$114,667,000 is 74% of the \$155,978,000 awarded in fiscal 1973.

³Excludes General Research Support Grants, Scientific Evaluation Grants and purchase of drugs.

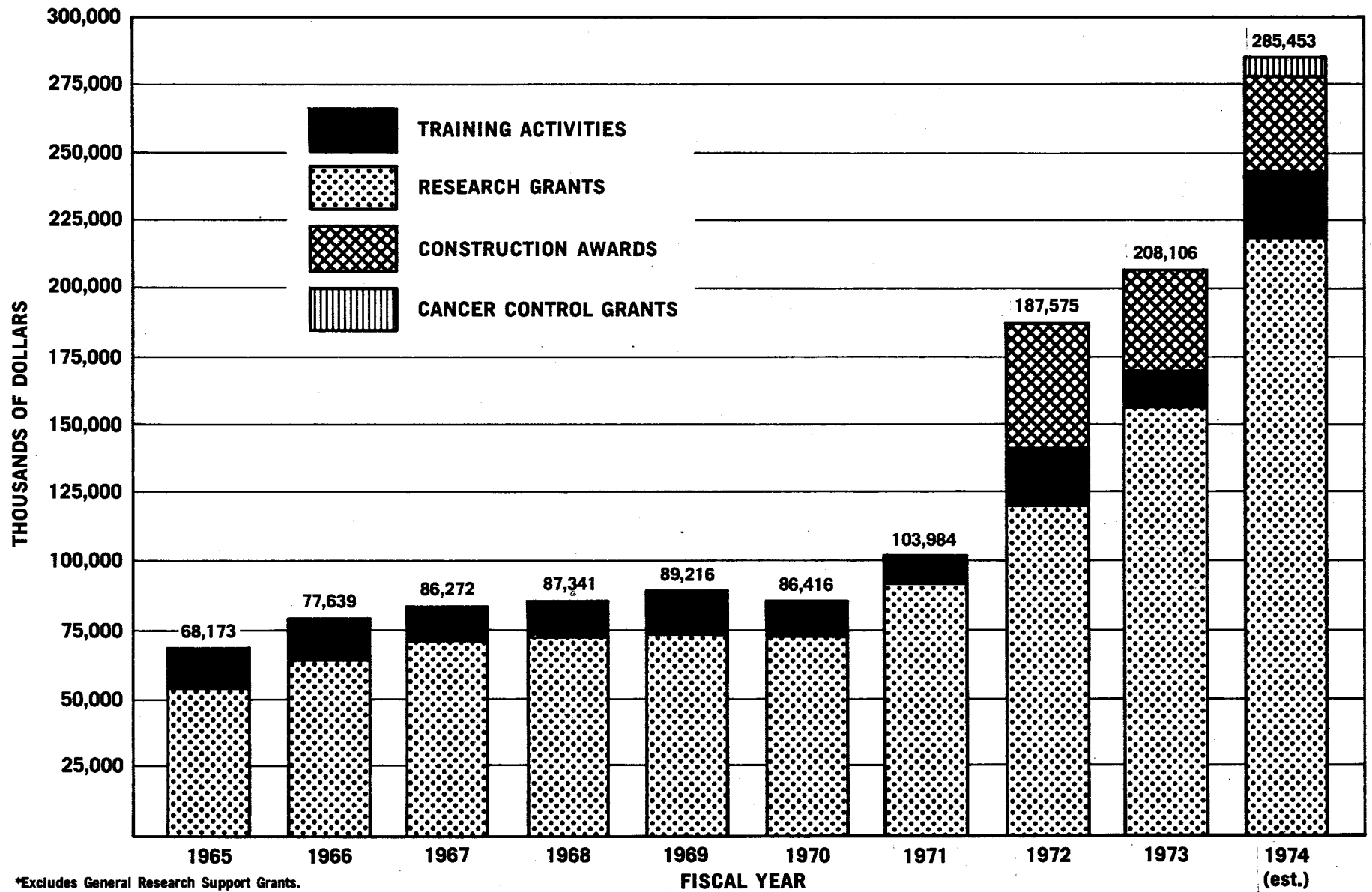
**DISTRIBUTION OF NCI RESEARCH GRANTS BY
VALUE OF GRANT AWARD — FISCAL YEAR 1973**

**TOTAL GRANT DOLLARS
\$155,978,000
1692 GRANTS**



Excludes General Research Support Grants, Scientific Evaluation Grants and purchase of drugs.

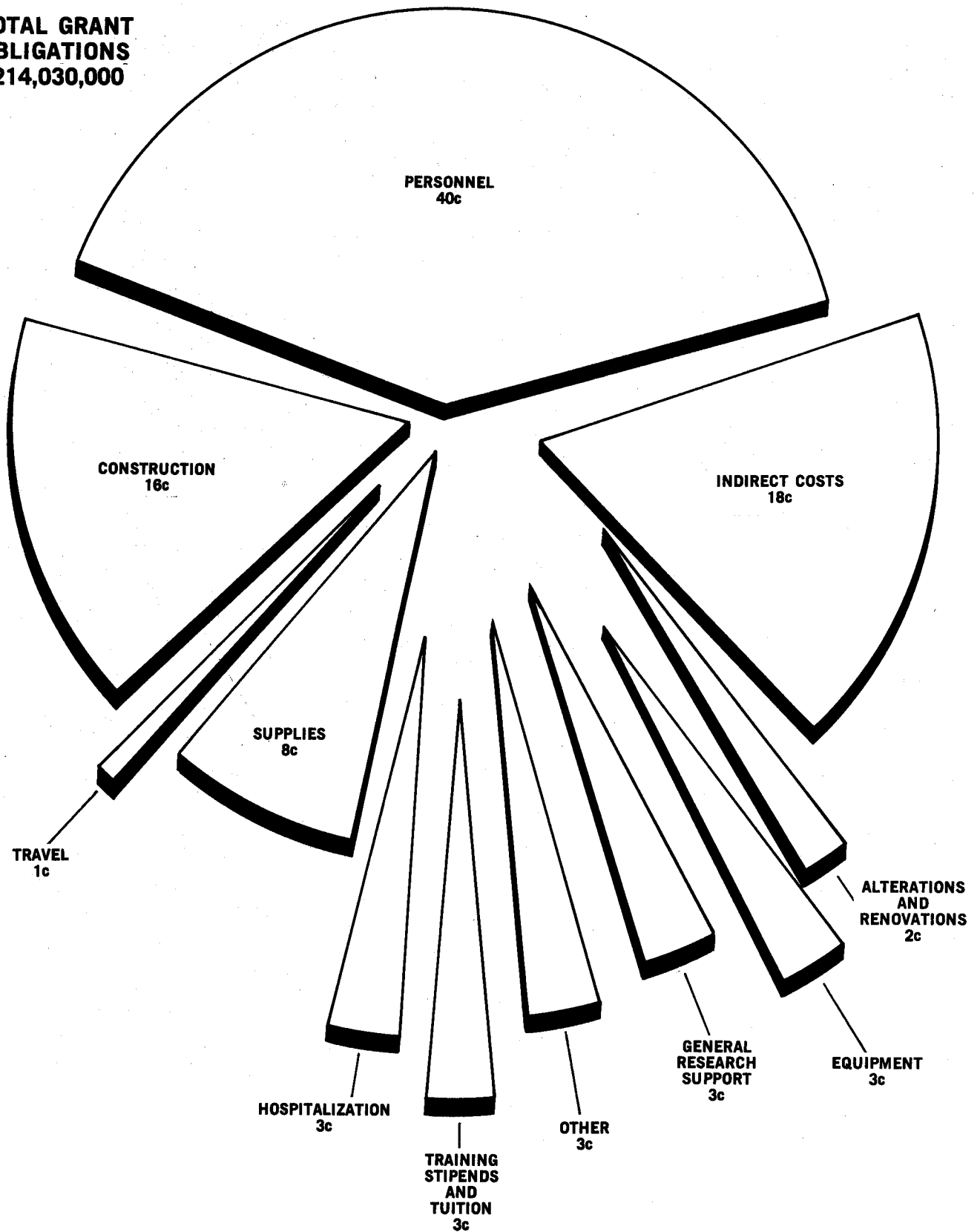
NCI GRANT AWARDS — 1965-1974*



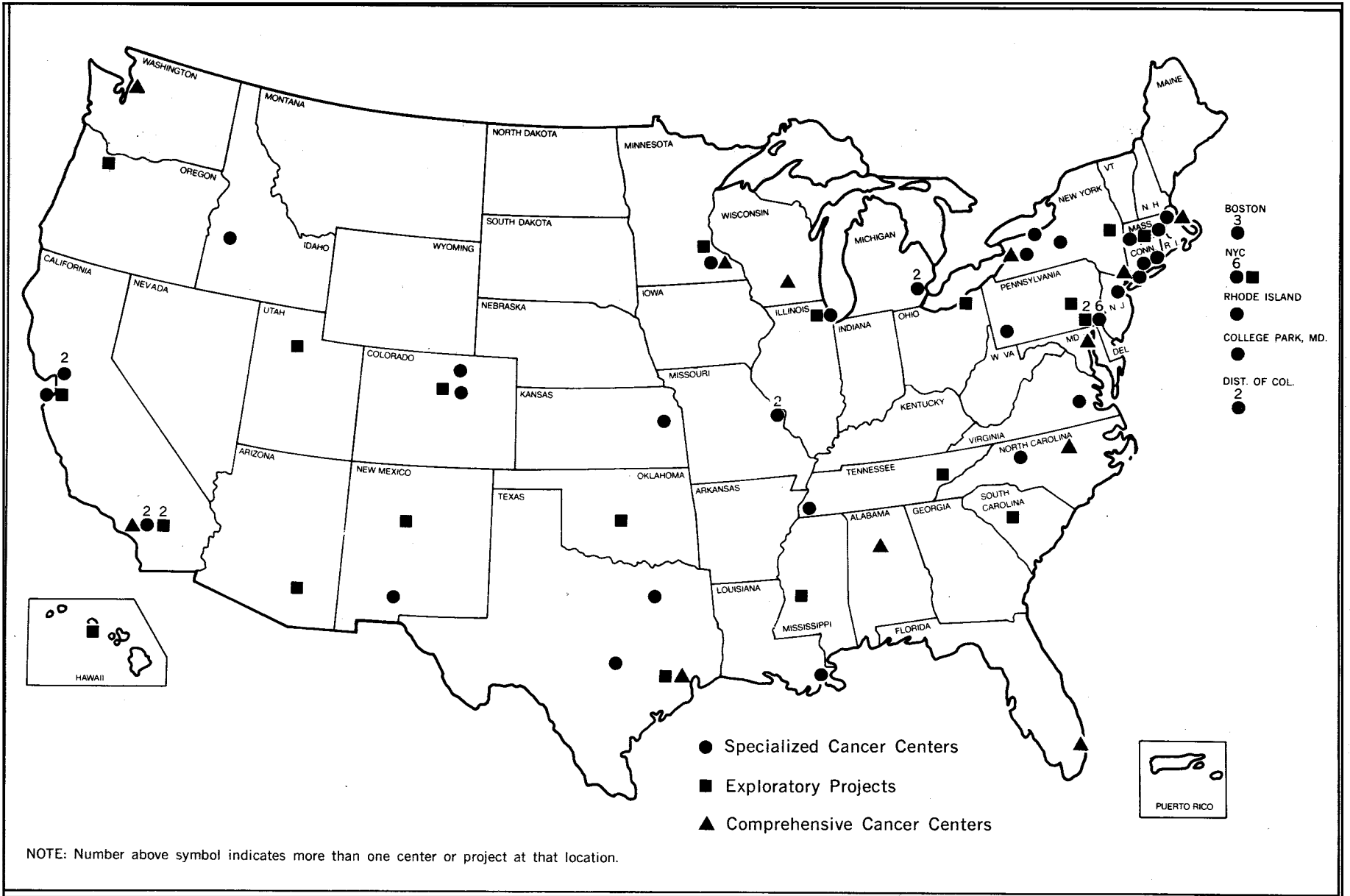
*Excludes General Research Support Grants.

**DISTRIBUTION OF THE "GRANT DOLLAR"
FISCAL YEAR 1973**

**TOTAL GRANT
OBLIGATIONS
\$214,030,000**



LOCATION OF SPECIALIZED AND COMPREHENSIVE CANCER CENTERS AND EXPLORATORY PROJECTS



U. S. Department of Health, Education, and Welfare
Public Health Service National Institutes of Health

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