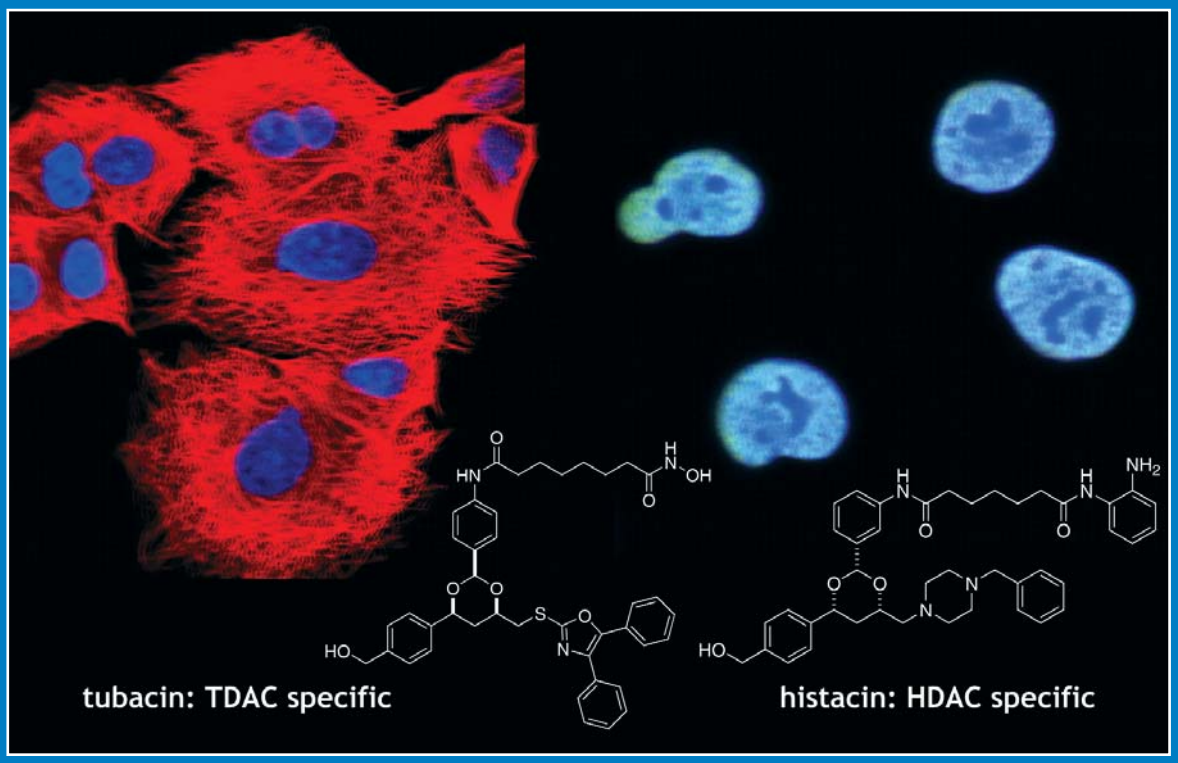
Division of Extramural Activities Annual Report 2003



National Institutes of Health
National Cancer Institute

Chemical Genetics and New Treatments for Cancer

The NCI has a long history of involvement and support for the discovery and development of new cancer therapies. Recently, the NCI initiated programs in chemical genetics to increase the availability of small molecules as probes of biological systems and to increase interactions between biologists and chemists. The term chemical genetics denotes the use of small molecules derived through modern synthetic organic chemistry, rather than gene mutations, to alter the functions of gene products. Protein functions that can be specifically targeted and activated or inactivated by small molecular probes could result in anti-tumor activity and provide new therapeutic approaches for cancer.

The NCI created the Initiative in Chemical Genetics (ICG) to accelerate the discovery of potential drug targets in academic laboratories. The ICG has promoted the development and application of diversity-oriented organic synthesis (DOS) as a means to create small cell-permeable molecules that can modulate the circuitry of cancer cells. DOS allows chemists to synthesize stereochemically and skeletally diverse small molecules that anticipate the need for followup chemistry after screening through the use of combinatorial synthesis. This endeavor also has led to the development of a high-throughput, miniaturized, whole-cell immunodetection assay, termed a cytoblot assay, for screening small-molecule libraries derived from DOS. The cytoblot assay is adaptable for screening numerous protein modifications because the only requirement is a specific primary antibody directed against the cellular molecule of interest.

The cover image depicts the results of screening small molecules in the cytoblot assay for their ability to cause hyperacetylation of tubulin (left) and histone (right) proteins in lung epithelial cells. Acetylation of these two proteins was measured by immunofluorescence using antibodies against acetyl-tubulin (red/left), which is detected in the cytoplasm and acetyl-histone (blue/right), which is detected in the nucleus. The image also depicts the structures of two powerful small-molecule probes of cancer that emerged from the screen: tubacin and histacin. Currently, clinical cancer trials are underway with nonselective histone deacetylase (HDAC) inhibitors. By contrast, tubacin and histacin are the first selective deacetylase inhibitors to be discovered. Indeed, tubacin, which is highly selective for the inhibition of HDAC6 (a tubulin deacetylase), has been demonstrated to induce p53-independent apoptosis in a mouse model of multiple myeloma (Ricky Johnstone, ICG, unpublished). In contrast to nonselective HDAC inhibitors, tubacin does not inhibit transcription or cell division in normal cells grown in culture. The ICG has made the results of small-molecule screens from many laboratories nationwide freely available to the public via ChemBank, a small-molecule and assay-data analysis environment (http://chembank.med.harvard.edu). These efforts provide illustrations of how chemical genetics and the ICG are having a direct effect on the development of new cancer strategies and therapies.

Cover Illustration:
Courtesy of S.J. Haggarty, Ph.D., and S.L. Schreiber, Ph.D., Director, ICG, Harvard University.

References:

S.J. Haggarty, K.M. Koeller, J.C. Wong, C.M. Grozinger, and S.L. Schreiber. Domain-selective small molecule inhibitor of HDAC6-mediated tubulin deacetylation. Proc Natl Acad Sci 2003;100:4389-4394.

R.L. Strausberg and S.L. Schreiber. From knowing to controlling: a path from genomics to drugs using small molecule probes. Science 2003;300:294-295.

S.J. Haggarty, K.M. Koeller, J.C. Wong, R.A. Butcher, and S.L. Schreiber. Multidimensional chemical genetic analysis of diversity-orientated synthesis-derived deacetylase inhibitors using cell-based assays. Chemistry & Biology 2003;10:383-396.

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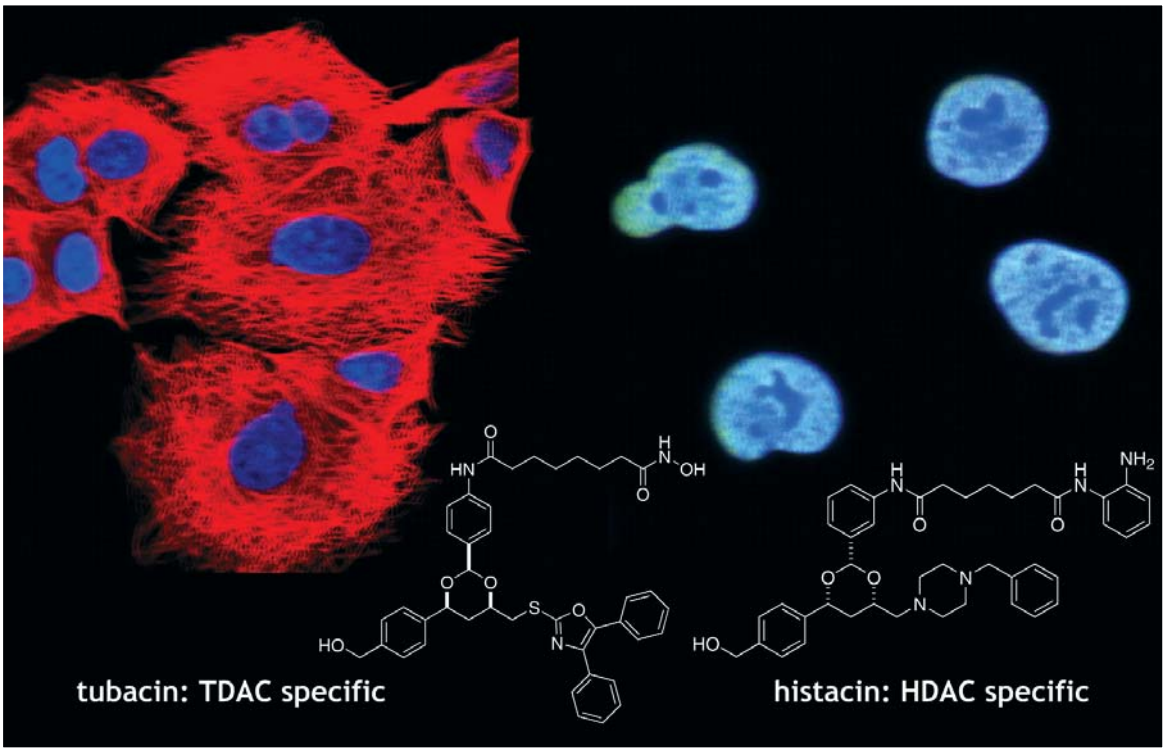

National Institutes of Health
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* Special Emphasis Panel.
† Research Program Grant.

Foreword

Since Congress passed the National Cancer Act in 1971, we have been experiencing exponential growth in our knowledge of cancer. That scientific knowledge base, which is a primary responsibility of the National Cancer Institute (NCI), is the first stage along a continuum of discovery, development, and delivery that will ultimately take us to the goal I have challenged myself and the entire cancer community to reach by the year 2015—the elimination of suffering and death from cancer. The knowledge that we discover, whether at the level of the gene, molecule, cell, tissue, organ, individual, or population, feeds development—the process of creating tools and interventions to reduce the cancer burden—with the end result being delivery, the process of disseminating, facilitating, and promoting evidence-based prevention, detection, diagnosis, and treatment practices and policies.

The NCI is committed to exploiting that discovery-development-delivery strategy to achieve the 2015 challenge goal. In large measure, this will be accomplished through the efforts of outstanding NCI extramural scientists who have and will continue to enhance the scientific knowledge base. The NCI Division of Extramural Activities (DEA), carries a major responsibility for strengthening the scientific knowledge base by conducting the scientific review of applications for support of extramural research; managing and coordinating the Institute's advisory activities, including the Presidentially appointed National Cancer Advisory Board and the Board of Scientific Advisors; formulating, coordinating, and disseminating operating policies pertaining to extramural programs; and analyzing and reporting on all extramural research programs funded by the NCI.

The DEA Annual Report provides a comprehensive look at each of the major areas of responsibility within the DEA, including program coordination, referral, review, advisory activities, information resources, portfolio tracking and analysis, management, and extramural policy.

I am pleased to present this annual report, which not only describes the DEA's activities and accomplishments and its work in the context of achieving the NCI's overall scientific goal of reducing the burden of cancer, but also gratefully acknowledges the hundreds of researchers who have contributed to the success of our peer-review and advisory activities.

Andrew C. von Eschenbach, M.D.
Director, National Cancer Institute

Introduction

The mission and responsibilities of the NCI Division of Extramural Activities (DEA) affect, in some way, all extramural scientists receiving research or training support from the NCI. The DEA is centrally involved in all aspects of grant development and tracking, from original conception of research and training programs for introduction in the extramural community, to issuance of announcements of such programs, to receipt and referral of incoming applications, to review and final approval of the applications, to coding and tracking awards after disbursement of funds. In brief, the DEA was established to:

- Provide advice and guidance to potential applicants
- Coordinate and assist in the development of extramural research funding initiatives
- Refer incoming grant applications to appropriate programs within the NCI
- Provide the highest quality and most effective scientific peer review and oversight of extramural grant and contract research
- Coordinate and administer advisory committee activities, such as the National Cancer Advisory Board (NCAB) and Board of Scientific Advisors (BSA), as they relate to the various aspects of the NCI mission
- Establish and disseminate extramural policies and procedures, such as requirements for inclusion of certain populations in research, actions for ensuring research integrity, budgetary limitations for grant applications, policies to expedite funding and changes to the application and award process
- Track the NCI research portfolio (more than 6,670 research and training awards) using consistent, budget-linked scientific information to provide a basis for budget projections and to serve as an NCI resource for the dissemination of information about cancer.

In essence, the DEA is the organizational component of the NCI that coordinates the scientific review of extramural research before funding and provides systematic surveillance of that research after awards are made. In this latter role, the DEA assists the NCI in its goal of achieving a balanced portfolio of research in biology, behavior, epidemiology, and cancer control, prevention, detection, diagnosis, and treatment, as well as long-term survival/survivorship, rehabilitation, and end-of-life issues. In addition, the DEA serves as a focal point for information about the NCI's peer-review and grants policies. DEA maintains a comprehensive Web site providing detailed information and links to application procedures and to announcements regarding funding opportunities—**see http://deainfo.nci.nih.gov/funding.htm.**[*†]

* See **Appendix A** for a glossary of acronyms used in this report.

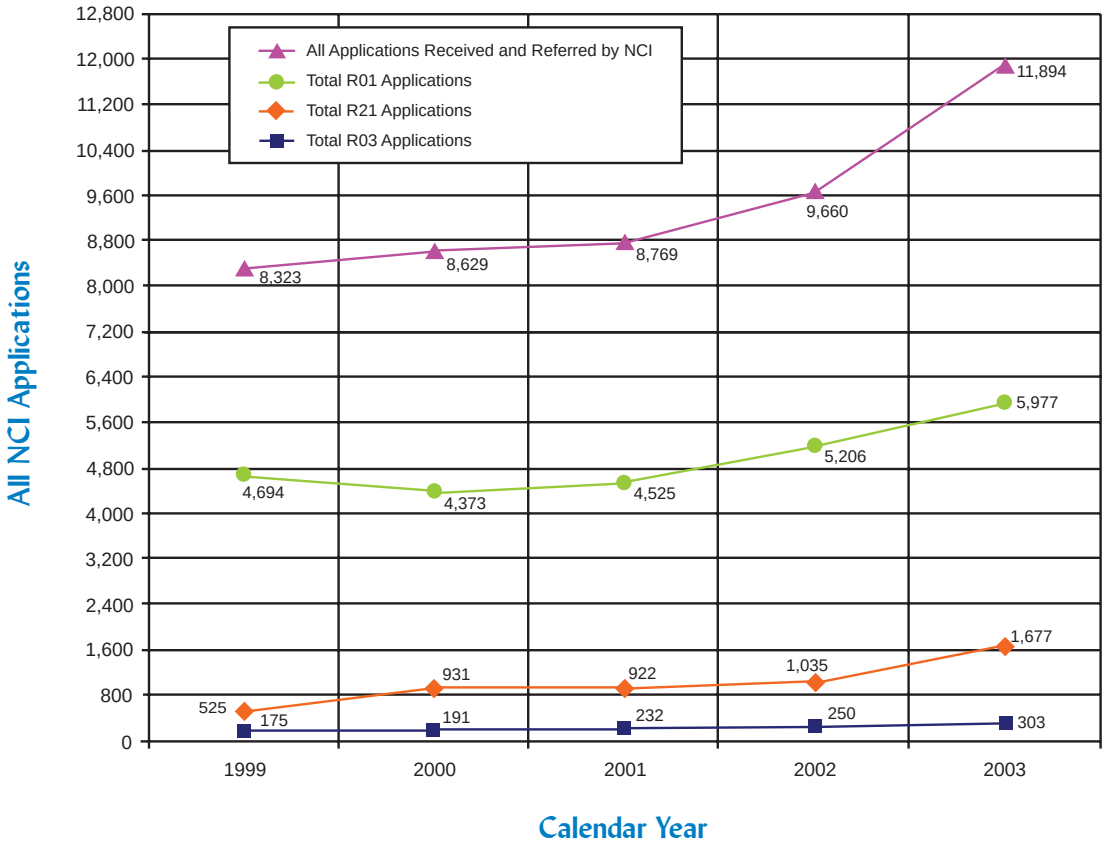
† A directory of Cancer Information Sources on the Internet, including selected DEA and NCI Web sites, is included in **Appendix G**.

Grant Referral: DEA as the First Point of Contact with the NCI

In Fiscal Year (FY) 2003, the NCI received more than 11,000 grant applications for referral (see **Table 1**). These included applications for 50 different types of funding award mechanisms (see **Appendix F**), including Career Development Awards (K awards), Research Program Projects (P01), Cancer Center Support Grants (CCSGs)-[P30], Research Projects (R01), and Small Business Innovation Research (SBIR) Grants (R43/44). During FY2003, the **Program Coordination and Referral Branch** (PCRB) in the DEA was responsible for receipt, referral, and assignment of applications, as well as other program development functions.

The past 5 years have seen a significant increase in grant applications coming to the NCI for referral. The increase in all applications has been 43 percent, while increases in R01, R21, and R03 have been 27 percent, 219 percent, and 73 percent, respectively (see **Figure 1**).

Figure 1. Receipt and Referral of NCI Applications



All applications submitted to the NIH are assigned to an Institute program and receive a review assignment. Upon receipt of a primary or secondary assignment to the NCI by the National Institutes of Health (NIH) Center for Scientific Review (CSR), the DEA Referral Officer (RO) assigns all incoming applications to one of the 45 NCI extramural research program areas. The RO

also must track, in real time, the review status of all applications assigned to the NCI. The RO distributes all of the applications directly reviewed by the DEA for the NCI. These applications include P01 Program Projects, P30 Centers, P20 Planning Grants, P50 Specialized Centers, R13 Conference Grants, R03 Small Grants, T32 Training Grants, certain R01 Research Project Grants, and U series Cooperative Agreement applications. This includes distribution of advance copies of applications from investigators submitting P01s or responding to Requests for Applications (RFAs) and certain Program Announcements (PAs). These applications are sent to one of the three DEA Review Branches for assignment to individual Scientific Review Administrators (SRAs) and to one of the eight subcommittees of the NCI Initial Review Group (IRG) or to a Special Emphasis Panel (SEP), as described later.

The DEA is often the first point of contact for applicants and the recipient of Letters of Intent from potential applicants for multiproject Program Grants (P01) and Conference Grants (R13). It is also the only point of receipt for distribution to program staff of Research Supplements for Underrepresented Minorities, Supplements to Promote Reentry Into Biomedical and Behavioral Research Careers, Research Supplements for Individuals with Disabilities, and Supplements for the Continuous Umbrella of Research Experience (CURE) program for underrepresented minorities (available for R25, K12, and P30 parent grants).

DEA ROs serve as primary NCI contact persons for members of the extramural scientific community in need of information on a broad range of subjects, including application information, new initiatives announced as RFAs or PAs, and the review process. The ROs also provide “one-stop shopping” for applicants who are uncertain about whom to contact and direct them to appropriate Program Directors or SRAs for information on the status of the review and award of their grants. In addition, the ROs assist members of the extramural community in navigating NIH and NCI Web pages to obtain current information, forms, and guidelines.

Peer Review—The Next Step

Once applications are referred to the NCI and the appropriate program, they must be reviewed. The high caliber of NCI-sponsored research is maintained through peer review and a quality control process in which experts in the field review and score proposals for research. The peer-review mechanism helps ensure that the NCI uses its resources wisely and funds research that has the potential to make a significant contribution to science and medicine. The NCI's extramural programs and activities are funded primarily through peer-reviewed grants and cooperative agreements. Programs that are funded through research contracts are also subject to peer review, including contract-supported projects conducted within the intramural research program.

The dual peer-review system of the NIH consists of two sequential levels of review mandated by statute. The first level of review is performed by either an NIH CSR study section, an NCI Initial Review Group (IRG) subcommittee, or Special Emphasis Panel (SEP) whose primary purpose is to review and evaluate the scientific merit of research grant and cooperative agreement applications. The second level of review for program relevance is conducted by the NCAB.

Most investigators are familiar with the NIH CSR study sections, which have primary responsibility for investigator-initiated Research Project (R01) grants and fellowships. It is less widely known, however, that applications representing more than 50 percent of the NCI's extramural budget are reviewed by groups that are directly formed and managed within the NCI by the DEA. Routing for review to either the CSR or the DEA is usually decided by the choice of award mechanism. In either case, the NCAB, also managed by the DEA, has statutory responsibility to perform the second level of review, which considers additional factors of NCI's mission and relevance.

The NCI has no direct input into the selection of reviewers who serve on CSR study sections. In contrast, members of the NCI IRG are selected by NCI review staff and approved by the Director, NCI, based on their knowledge of the various disciplines and fields related to cancer. The DEA-managed NCI IRG has eight specialized subcommittees for review of scientific areas. For example: Subcommittee A reviews Cancer Centers; Subcommittee D reviews Clinical Program Projects; and Subcommittee H reviews Clinical Cooperative Groups. (The current charter and membership of subcommittees may be found in **Appendix B** and at the following Internet address: **http://deainfo.nci.nih.gov/advisory/irg.htm**). IRG members are appointed for varying terms of service, which may be up to 4 years on specific subcommittees. SEPs may be formed by the DEA to review RFAs or unique applications. Members of such panels are selected on a one-time, as-needed basis to review specific applications, contract proposals, or proposed solicitations. (Additional information about the NCI SEPs can be accessed at the following Internet address: **http://deainfo.nci.nih.gov/advisory/sep.htm.**) In addition, applications for Cancer Center, Cooperative Group, or Program Project support may require a site visit to the applicant institution by members of the appropriate IRG subcommittee and ad hoc consultants.

Both the SEPs and the IRG advise the Director, NCI, on the scientific and technical merit of applications for grants for research and research training, as well as for research-related grants and cooperative agreements and contract proposals relating to scientific areas that are relevant to cancer. Government-employed SRAs within the DEA manage the scientific review of applications, including the selection of peer reviewers and the overall administration of the peer-review process.

In FY2003, the DEA organized, managed, and reported the review of a total of 2,164 grant and cooperative agreement applications (see **Table 2**) and 404 contract proposals (see **Table 17**). Twenty-two meetings of the NCI IRG subcommittees were convened to review and evaluate grant applications of various types (see **Table 3**). In addition, there were 78 SEP meetings for review of grants or contracts, and 186 site visits (43 SEP and 143 IRG).

In FY2003, 2,424 reviewers served on 286 occasions on either the parent IRG subcommittees or SEPs to review applications (see **Appendixes B and C**). Members are selected because they are authorities in relevant fields of biomedical research or because they represent informed consumer perspectives.

Bypass Budget Goals

Each year, the NCI identifies several broad priority areas that serve as the framework for strategic planning and budget development. **Extraordinary Opportunities for Investment** are areas of discovery that build upon the most important recent developments in knowledge and technology and hold promise for making significant progress against all cancers. **NCI Challenges** are areas of emphasis that focus investment on improving the resources and mechanisms that are available to support research, furthering the preparation of the people needed to conduct research, enhancing access to research information and technology, and maximizing the sharing of discovery and collaboration among researchers and clinicians. The **"opportunities" and "challenges"** are articulated in the NCI Bypass Budget that is sent to the President each year. **For the FY2003 Bypass Budget, the Institute identified the following:**

Six areas of **NCI extraordinary opportunities (o):**	**# of RFAs/PARs**
1. Genes and the Environment	2/0
2. Cancer Imaging	2/2
3. Defining the Signatures of Cancer Cells: Detection and Diagnosis	0/1
4. Molecular Targets of Prevention and Treatment	2/6
5. Research on Tobacco and Tobacco-Related Cancers	2/2
6. Cancer Communications	1/1

In addition, eight **NCI challenges (c)** also were highlighted:

1. Enhancing Investigator-Initiated Research	1/0
2. Centers, Networks, and Consortia	5/9
3. National Clinical Trials Program	4/1
4. Informatics and Information Flow	0/3
5. Studying Emerging Trends in Cancer	0/0
6. Cancer Research Training and Career Development	1/6
7. Quality of Cancer Care	0/0
8. Reducing Cancer-Related Health Disparities	0/0

As indicated above, in FY2003 these **"opportunities" and "challenges"** translated into a variety of specific RFA or PAR initiatives, not only for academic research centers, but also for the small business community. Depending on the scientific discipline, reviews of initiatives tied to **"opportunities" and "challenges"** are managed and conducted by SRAs in one of the three review branches

of DEA: RTRB, RPRB, and SRLB. These review functions are highlighted in the narrative for each branch that follows and shown in **Tables 10 and 11**.

Peer Review Functions

The review units in the DEA are responsible for organizing, managing, and reporting the scientific peer review of applications for a wide variety of grant mechanisms. Three branches within the DEA manage peer-review activities for NCI-reviewed applications. The **Resources and Training Review Branch** (RTRB) has primary responsibility for review of applications for cancer centers, cancer training and career development, and cancer clinical trials, as well as for managing the corresponding five subcommittees of the NCI Initial Review Group (IRG) (see **Table 3**). The **Research Programs Review Branch** (RPRB), with primary responsibility for review of unsolicited applications for program project grants (P01s), for applications for Special Programs of Research Excellence (SPOREs) in various organ sites, and for conference grant applications. The RPRB also manages the three subcommittees of the NCI IRG that are responsible for review of program project grant applications and the internal NCI R13 Review Committee. These branches are primarily responsible for the peer review of a variety of unsolicited multiproject and career development grant applications (see **Table 2**) and together manage the eight subcommittees of the NCI IRG (see **Appendix B**). The **Special Review and Logistics Branch** (SRLB) organizes and manages peer review primarily for grant applications in response to specific RFAs, Program Announcements with special receipt dates and Institute review (PARs), and contract proposals submitted in response to specific Requests for Proposals (RFPs); all of these reviews are conducted by the SEPs. The review units in the DEA prepare the summary reports of the evaluations and recommendations for each site visit or review committee meeting and distribute these reports to program officials, the NIH data management system, and NCI's Records Management Center. Details of the summary statements also are provided to the NCAB, as required. Each primary Principal Investigator applicant receives a report in the form of the summary statement.

Many of the reviews conducted by the RPRB and the RTRB involve complex, multidisciplinary applications. The review format for these applications usually involves a two-tier review. The first tier of the review is usually either a site visit to the applicants' institution, an applicant interview in the Washington, DC area, or a teleconference by an expert review panel; these provide an opportunity for the reviewers to question the applicants directly to clarify issues in the application, thereby enhancing the review process. The review panel members prepare a draft review report, which is then considered, along with the application, by the relevant subcommittee of the NCI IRG. Five of the eight NCI subcommittees of the NCI IRG serve as the "parent committees" for final scoring of applications after expert panel reviews: Subcommittee A is the "parent committee" for Cancer Center Support Grant (P30) applications; Subcommittees C, D, and E are the "parent committees" for Program Project (P01) grant applications; and Subcommittee H is the "parent committee" for review of Cooperative Clinical Trials (primarily U10) applications. The other three subcommittees, Subcommittees F, G, and I, review all of the career development, training, and education grant applications submitted to the NCI.

During FY2003, the eight subcommittees of the NCI IRG reviewed a total of 757 applications of various types with requests for a total of $511,104,255 in direct costs for the first year, and more than $2,732,860,191 billion for all years (see **Table 3**). The FY2003 workload of the subcommittees therefore represents an increase of approximately 13 percent in the number of applications reviewed

by the subcommittees, due mainly to the increased number of program project applications for Subcommittee C and career development applications for Subcommittees F, G, and I.

Research Programs Review Branch

A significant proportion of the effort of the **Research Programs Review Branch** during FY2003 was associated with the review of unsolicited P01 applications. The SRAs in the RPRB organized and managed the review of 135 new, recompeting, amended, and supplemental P01 applications (see **Table 4**). This represents a 15 percent increase over the number of P01 applications in FY2002, and continues the growth trend in P01 workload that NCI has seen since 1999 (see **Figure 2**). The 135 applications requested more than $280 million in direct costs for the first year (see **Table 6**), an 86 percent increase over the P01 budget requests in FY2002. There were 123 program project applications reviewed by IRG Subcommittees C, D, and E, the three P01 subcommittees of the NCI IRG, and 12 were reviewed by Special Emphasis Panels, due mainly to member conflicts with the IRG. Seventy-three of the reviews involved site visits for new and recompeting applications (see **Table 5**). In all, about 1,500 reviewers with expertise from the most basic cellular and molecular biology to the most clinical cancer research areas were required for all of the individual P01 review panels organized by RPRB SRAs.

During FY2003, the RPRB successfully continued several initiatives to improve review procedures for applications for program projects. The Deputy Chief of the Research Programs Review Branch, who is the P01 review coordinator for the DEA, and the SRAs for the IRG Subcommittees (C, D, and E) responsible for program project review, organized the third annual joint orientation session for new members of the committees in late July 2003. An orientation notebook, with policies, procedures, suggestions, and case studies, was provided for each new subcommittee member. This new member orientation was followed by a plenary session of all of the reviewers on these three subcommittees; this session featured several exercises, led by the subcommittee SRAs, which were designed to help the reviewers establish consistent scoring calibration standards that are applicable across the three committees, regardless of scientific discipline. The outcomes of this plenary session were more consistent review practices and scoring patterns across the three subcommittees and, therefore, better information for NCI program staff to base funding decisions for program project applications. This is important, because support of P01s accounted for approximately 11 percent of the entire NCI extramural budget in FY2003.

During FY2003, RPRB senior staff and SRAs also were key participants in the NCI P01 Working Group. As the P01 review workload reached record levels, this group was convened by DEA with representation from DEA and the four NCI extramural program Divisions, to consider review options for P01s for the future that would conserve reviewer time and effort, decrease the total number of reviewers required for the review panels, improve scoring consistency, decrease scoring compression, and reduce NCI costs associated with P01 review. RPRB staff first surveyed the members of the three P01 review subcommittees and NCI program directors with significant P01 grant portfolios to identify the most important factors in peer review of P01s. There was overwhelming consensus among both reviewers and program directors that the expertise of the reviewers, the ability of the reviewers to meet together face-to-face, and the ability to ask questions of the applicants, were the most important aspects of the P01 review process.

The P01 Working Group considered two options, streamlined site visits and clustered review of P01 applications, in depth. The streamlined site visit format included a set amount of time for presenta-

tions by applicants and questions by reviewers for each project and core proposed, and theoretically allowed many of the site visits to be concluded in a day and a half. RPRB staff developed a streamlined agenda for P01 site visits, and pilot tested it for all site visits for the May 2003 NCAB review cycle to prove feasibility.

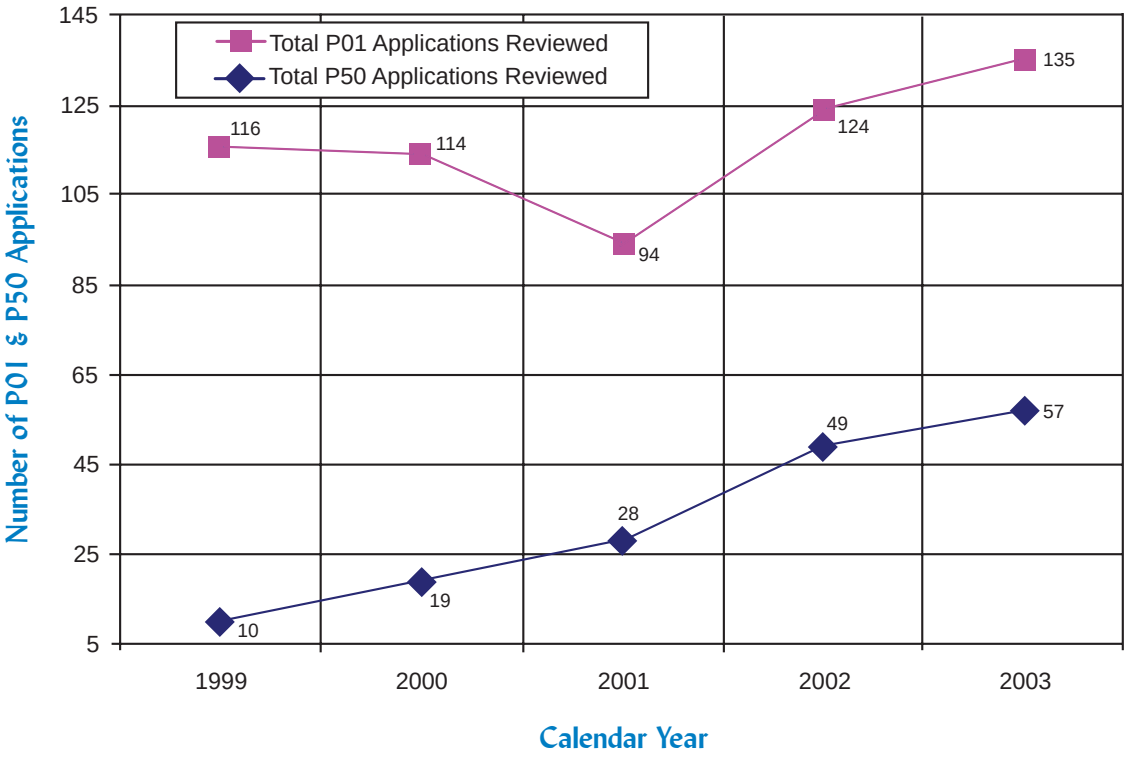
The cluster review option involves review of two to four P01 applications on closely related topics by one review panel constituted with appropriate expertise; the review panel meets together and contacts each applicant group by teleconference to ask questions, but site visits and formal presentations by applicants are discontinued. To address the feasibility of clustering applications, RPRB SRAs performed retrospective and prospective clustering exercises with P01 applications submitted for five consecutive NCAB review cycles. In addition, RPRB SRAs also conducted a pilot cluster review of three P01 applications proposing similar drug discovery research, and then surveyed the reviewers and program staff afterward to determine their satisfaction with the process. RPRB staff also modeled the impact of adopting each of these potential review options on the number of reviewers required and review costs.

Although the streamlined site visit option saved reviewer time at most site visits, and was actually adopted as the standard for site visits for the rest of FY2003, it would not reduce the number of reviewers required, improve scoring consistency across review panels, or address scoring compression. The cluster review model addressed all of these issues more effectively. The analysis was presented to the P01 Working Group members, and culminated in a recommendation by the Working Group to implement a 1-year trial of clustered review of P01s beginning with the February 1, 2004, P01 application receipt date. This recommendation was approved by the NCI Executive Committee in late July 2003, and was presented to the NCAB at its September 2003 meeting. As FY2003 came to a close, RPRB SRAs therefore were revising the NCI P01 Guidelines and all P01 review instructions in preparation for implementing the new cluster review format in FY2004.

During FY2003, RPRB also had responsibility for the peer review of the applications received for the NCI Special Programs of Research Excellence (SPORE) program. These large, complex multidisciplinary P50 research center applications focus on translational research directly applicable to human disease in various organ sites. The SPOREs address the **NCI Challenge for Centers, Networks, and Consortia** by supporting multipronged approaches to cancer research in various organ sites. During FY2003, the RPRB organized and managed Special Emphasis Panels for the review of a total of 57 SPORE applications for research in leukemia, myeloma, genitourinary, prostate, lung, pancreatic, skin, ovarian, and breast cancer. These 57 applications requested almost $138 million in direct costs for the first year of support. As shown in **Figure 2**, the number of SPORE applications reviewed by RPRB has grown by 470 percent since 1999 as awards in new organ sites were added, but is beginning to level off as the program has almost reached its target number of awards and the NCI prepares for smaller budget increases in the future. The SRAs who organize the SPORE reviews routinely conduct orientation conference calls with all of the reviewers before the applications are sent to the reviewers to explain the special features of the SPORE program and the special review criteria for SPORE applications. Two RPRB SRAs also were key participants, with SPORE program staff in the NCI Organ Systems Branch, in planning and facilitating the annual SPORE Investigators Workshop.

During FY2003, the RPRB also continued to conduct the reviews for R13 applications for support for a wide variety of scientific conferences. The Chief of the RPRB organized the review of 76 applications by the NCI R13 Review Committee, which is composed entirely of NCI extramural staff.

Figure 2. Number of P01 & P50 (SPORES) Applications Reviewed, 1999-2003



This committee uses an innovative "virtual review" format to accomplish an accelerated review of the conference grant applications four times a year, so that conference organizers can plan more effectively. The 18 percent reduction in the number of R13 applications that were submitted for review in FY2003 compared to FY2002 largely reflects the aggressive outreach efforts of the Chief, RPRB, to educate the applicant organizations supporting conferences that NIH policy had changed to allow multi-year requests for support of established annual and biennial conferences. Therefore, rather than submitting applications to support such conferences every year, the organization can save time and effort by submitting a request for support for 5 years.

DEA also maintained a leadership role in the design and implementation of the Peer Review Module of the new, central NIH extramural database, called IMPAC II, during FY2003. The Chief of the RPRB, an SRA from the SRLB, and a support staff member from the RPRB served on the IMPAC II Review Users' Group (RUG) to test new programming for uploading final summary statements into the database. An RPRB SRA served on the task force to design and test a new Internet-assisted review module that will be part of IMPAC II. This module allows reviewers to log in through the NIH eRA Commons and post their preliminary critiques and preliminary scores on a secure Web site prior to the review meeting. This system allows reviewers to preview the other critiques for their assigned applications and helps to focus the discussions during the review meeting more effectively. In addition, an RPRB support staff member continues to serve on the trans-NIH User Group for the Committee Management (CM) Module in the new NIH IMPAC II database system, and on the working group designing a Web-based upgrade to the CM module. The CM module is a critical element in preparing for and reporting on peer reviews, and the User Group has identified resolutions for problems and suggested several enhancements to the system.

Finally, RPRB staff contributed substantively to both NIH-wide and NCI DEA management studies and initiatives. During FY 2003, the NIH initiated its first two large competitive-sourcing studies, as required under OMB Circular A76: extramural support and facilities management. The Chief of the RPRB served on the small team of senior NIH staff that developed and wrote the functional requirements, quality and timeliness standards for the competitive-sourcing study of support for all extramural program, review, and grants management offices at the NIH. This study involved the work performed by more than 950 Full-Time-Equivalent government and contractor support staff and was completed in less than one-half of the usual time. The resulting performance work statement was included in the Request for Proposals, which was the basis for both the government staff's Most Efficient Organization proposal and for outside contractors to bid on the important support functions that allow all NIH Institutes to accomplish their missions.

Resources and Training Review Branch

The **Resources and Training Review Branch** (RTRB), which administers five NCI IRG subcommittees (A, F, G, H, and I), has the responsibility for multidisciplinary cancer centers, cooperative clinical trials, institutional training and education grants, and career development awards. Staff members from this branch also participate in the review of other funding mechanisms within the DEA.

The reviews conducted by the committees within RTRB are of two types. For the complex, multidisciplinary applications, such as cancer center support grants (P30s) and multi-institutional clinical trial cooperative group statistical center cooperative agreements (U10s), the review format generally involves a two-step initial review. The first step of the review has involved either a site visit to the applicant institution or a presentation to a committee in the Washington area. Each group of experts serves as a fact-finding body to update the application and to clarify issues in the application based on discussion with the applicants. This first committee prepares a draft report that is presented, together with the full application, for discussion, evaluation, and final scoring by the appropriate parent committee; NCI IRG Subcommittee A for cancer centers and Subcommittee H for clinical trials. The U10 applications for support of the operational aspects of the clinical trial cooperative groups are reviewed by applicant interview at the parent committee meeting, which eliminates a separate trip for reviewers and, thus, reduces the reviewer burden. Scoring by a parent committee provides for a more uniform evaluation of applications than scoring by individual review teams.

Shortly after his appointment as NCI Director, Dr. von Eschenbach established a P30/P50 Working Group composed of leaders of the cancer research community, who are sensitive to issues facing both peer reviewers and applicants. The purpose of the Group was to study the P30 Cancer Center Support Grant (CCSG) together with the P50 SPORE award to determine how to continue supporting these important methods of funding translational research in a more restricted funding environment. A final report was presented to the NCAB in February 2003, and included some recommendations for reducing the burden on applicants and reviewers by decreasing the number and duration of site visits for cancer centers. RTRB staff members who were involved in the review of P30 applications have discussed possible means of implementing these recommendations. In addition, the SRA for Subcommittee A made a presentation to the Cancer Centers Administrators' Forum to obtain further input on ways to streamline cancer center reviews. Implementation of any changes in response to the Working Group Report awaits the development of an implementation plan. RTRB review staff have instituted some modifications to the review process to reduce the burden on peer reviewers, including poster sessions for shared resource presentations, uniform time limit for individual program presentations, staff selection of protocols for review, and simplified review of core budgets. The SRAs

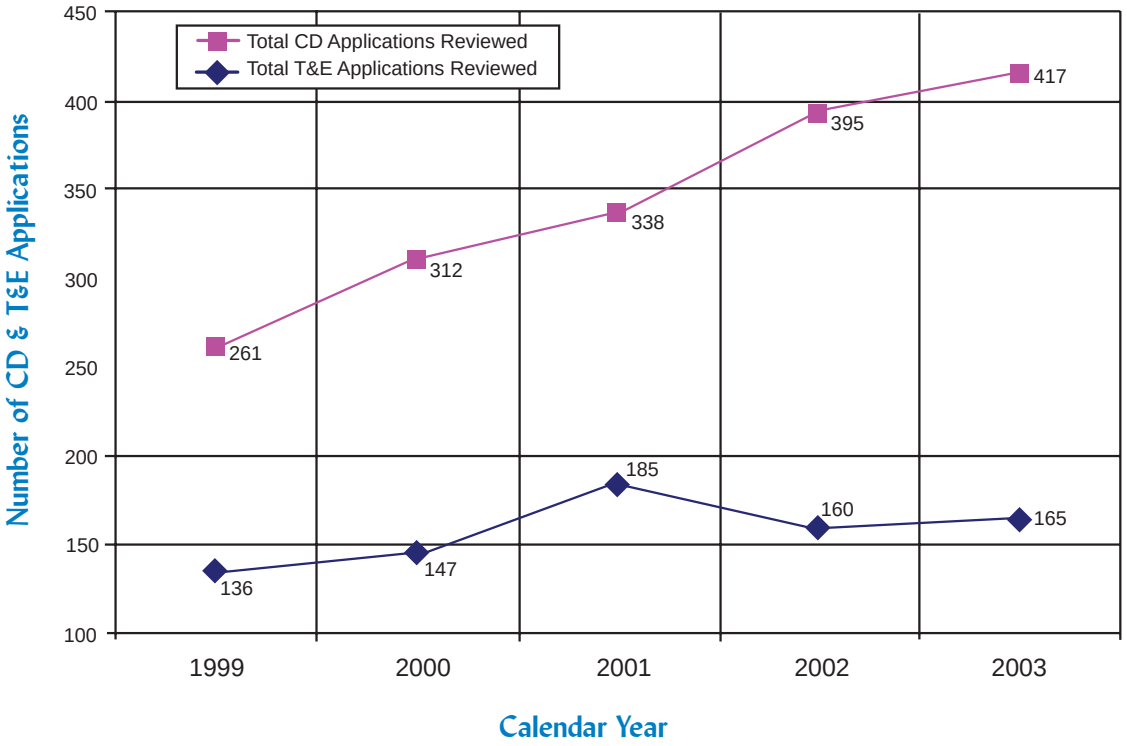
involved in CCSG review will continue to interact with staff of the Cancer Centers Branch and will be involved in the process for implementating the recommendations of the Working Group to help revise the Guidelines, and improve the review of CCSG applications, while maintaining the rigor needed for this important program. Review staff worked with staff of the Cancer Centers Branch on modifications of the existing Guidelines for the CCSG, issued in September 2003, to incorporate clarifications of language and changes in NIH policy.

During 2003, Subcommittee A reviewed 11 CCSG applications and 6 Cancer Center P20 Planning Grant applications that fall within the focus of the second **NCI Challenge for Centers, Networks, and Consortia.**

In September 2002, the NCI Office of Centers, Training, and Resources, Cancer Centers Branch, and the National Institute on Aging (NIA) Geriatrics Clinical Oncology Program, Geriatrics Branch, announced the availability of planning and development grants, through RFA CA-03-504, to develop and establish formal programs directed at the aging/cancer research interface within the NCI-designated Cancer Centers. The purpose of the research solicitation was to expand the capacity of the NCI-designated Cancer Centers to engage in research that concentrates on aging- and age-related aspects of human cancer in persons 65 years and older, which is the age group at highest risk for cancer as well as that in which the major tumors primarily occur. In response to the Request for Applications, Planning and Development (P20) Grants Integrating Aging and Cancer Research in NCI-Designated Cancer Centers, 24 applications were received. These applications were evaluated by a multidisciplinary Special Emphasis Panel review team, consisting of 33 members with clinical, basic science, and population-based research expertise in cancer and/or aging research. Subcommittees F and G had been reviewing all education, training, and career development grant applications within the DEA. These applications include a large number of different funding mechanisms divided between Subcommittee F (T32, K01, K08, K22) and Subcommittee G (R25, K05, K07, K22, K23, K24). Each of these sets of applications was reviewed in one meeting by the chartered committee supplemented by temporary reviewers with appropriate expertise to ensure that every application is evaluated by experts in its field.

The number of institutional training grant and individual career development applications being reviewed continued to grow (see **Figure 3**). Between 1999 and 2003, the number of career development applications reviewed in DEA increased by 56 percent (261 to 417), while the number of training and education grant applications increased 20 percent (136 to 165). The first-year direct costs for these applications similarly increased from $23.9 million in 1999 to $48.4 million in 2003 for career development and from $26.1 million to $50.0 million in 2003 for training and education. This is due, in part, to the increased number of mechanisms available and to the increased information disseminated about them. To reduce the burden on the Subcommittee F reviewers, who had an extremely high number of applications at each review meeting, a third committee was formed. To provide for continuity in process and scoring, the membership of the existing Subcommittee F was split between the ongoing Subcommittee F and the newly formed Subcommittee I. Similarly, the review responsibilities were divided so that Subcommittee F now focuses on T32 and K01 applications and Subcommittee I focuses on K08 and K22 applications. The number of applications continues to grow demonstrating the wisdom of creating the new committee. In addition, the number of applications submitted to Subcommittee G has reached new highs increasing by 21 percent from FY2002 to FY2003, creating a severe review load for the members of the committee. RTRB staff are exploring ways to address this issue.

Figure 3. Number of Career Development (CD) and Training and Education (T&E) Applications Reviewed, 1999-2003



The many applications for training, education, and career development awards support the **NCI Challenge for Cancer Research Training and Career Development.** It is of particular interest to note that among the applications reviewed are those that were submitted in response to four ongoing initiatives for minority candidates, clearly within the **NCI Challenge for Reducing Cancer-Related Health Disparities.**

Another issue of concern with regard to the applications reviewed by Subcommittees F and G was the compression of scores. This made it more difficult for funding decisions to be made because many applications received scores that were very close to each other. In addition, it was misleading to applicants because scores that appeared numerically to be very favorable may in fact have been ranked in a low percentile of all the applications of its type. To address this concern, a new scoring paradigm was developed in which reviewers were asked to rate, across the full rating scale, each application on its merit relative to the full population of applications of its type. Reviewers also were encouraged to rate as unscored any application that they judged to be in the lower half of applications of its type. These unscored applications received the reviewers' comments, but the meeting duration was shortened by not discussing them at the meeting. Using these new procedures, the median score for the committees improved significantly, with a fuller range of scores used. Fewer applications were rated as better than 150, and a sufficient number were rated as unscored to reduce the meeting's length.

The SRA for Subcommittee H (Clinical Cooperative Groups) continues to work closely with the staff of the Clinical Investigations Branch of the NCI Clinical Trials Evaluation Program (CTEP) to update the Clinical Trials Cooperative Group Program Guidelines. All the activities of this subcommittee

support the **NCI Challenges for the National Clinical Trials Program and Improving the Quality of Cancer Care.**

To reduce the reviewer burden of the prior review format, the SRA has been actively involved in the pilot of a new review format for the Clinical Cooperative Groups. The pilot review format involves a direct presentation by the group under review to Subcommittee H, after an onsite review of their statistics and data management centers. The pilot was viewed as a success by all parties: reviewers, applicants and NCI program staff. Financial evaluation of the pilot project is underway.

During this year, four competitive Clinical Cooperative Groups were reviewed, and components/committees from two other Clinical Cooperative Groups that had received less than excellent evaluations at their initial review were evaluated.

Special Review and Logistics Branch

The **Special Review and Logistics Branch** (SRLB) has a prominent role in the outcome of NCI **opportunities and challenges,** because it organizes and manages peer review primarily for grant applications submitted in response to specific NCI RFAs and most special PARs, as well as for contract proposals submitted in response to specific Requests for Proposals (RFPs); most of these reviews are conducted by SEPs.

Following approval by the NCI Executive Committee and BSA (unlike RFAs, PAs are not approved by the BSA), program staff—assisted by the Program Coordination and Referral Branch—generate the initiatives that are published in the *NIH Guide for Grants and Contracts.** In an RFA, a specific, published dollar amount is set aside by the Institute, while in an Institute PAR (Institute Reviewed Program Announcement) there is no dollar set-aside and no requirement for BSA review. **Tables 7** through **12** summarize the NCI RFAs, PAs, and PARs published and the RFAs and PAs reviewed by DEA in FY2003. SRLB reviewed the RFAs identified in **Table 10. Tables 11 and 12** represent those applications submitted in response to PAs or PARs, the review of which is shared by SRLB, RPRB, and RTRB. In these tables, the title of the initiative is tied to one of the specific **opportunities (o) or challenges (c)** identified on page 6.

In February 2003, the NCAB concurred with the review results of 26 SRLB-reviewed initiatives, 22 of which were directly related to the Bypass Budget; in June 2003, 18 of 20 RFA/PAR initiatives were related to the Bypass Budget; and in September 2003, 29 of 36 RFA/PAR initiatives were related to the Bypass Budget. SRLB professional staff contacted 3,394 potential reviewers and had 1,120 of them accept.

Breadth of Peer Review

A general theme that has been applied to all recent NCI initiatives—PAs, RFAs, and Broad Agency Announcements (BAAs)—is that the widest possible net should be cast in the search for quality science. NCI IRG subcommittees increasingly serve as the locus for peer review of applications assigned to the NCI. In the past, most PAs for single-project research grant mechanisms (R01, R03, R21) were directed to the CSR for evaluation. Over the last several years, however, increasingly specialized requirements of NCI initiatives have led to the need for specific kinds of expertise not routinely found in depth on the standing CSR study sections. This has led to the issuance of more PARs,

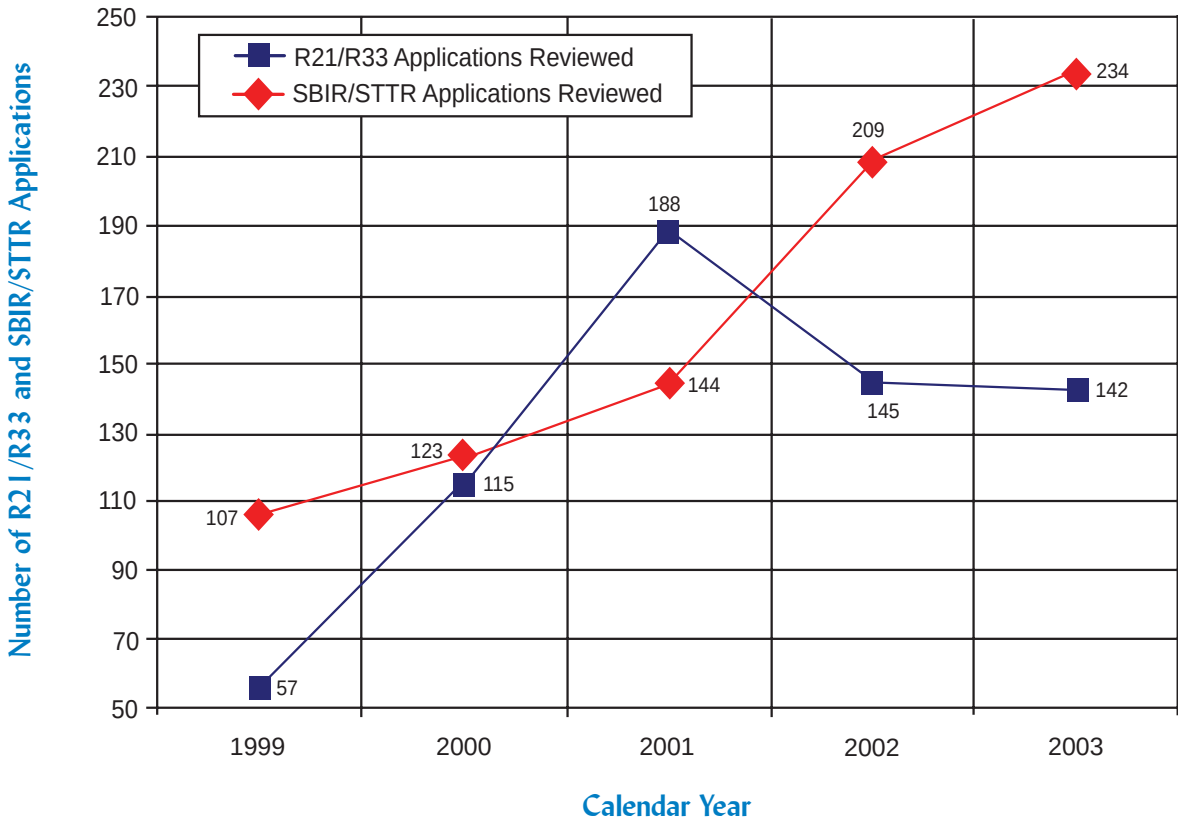
* Because of the importance of allowing adequate time for the applicant community to respond to NCI's initiatives, it is to be expected that the results of some initiatives may be funded (or reviewed by the NCAB) in subsequent fiscal years.

for which ad hoc peer-review groups with discipline-appropriate expertise (as provided by SEPs) are specifically recruited. Considerable effort is required to recruit a wide range of individuals with the expertise to cover all aspects of an initiative.

Many of the NCI extraordinary **opportunities and challenges** involve the development of **New Technologies for Cancer Imaging, and Initiatives for Informatics and Information Flow**. The NCI developed a new grant mechanism, the R21/R33 phased application awards, for the support of innovative exploratory/developmental studies, which can rapidly move to proof-of-principle research studies if the stated milestones are met. This grant mechanism is well suited for technology development, and the number of Program Announcements and grant submissions for these initiatives have greatly expanded in the past 5 years. In 2003, 234 R21/R33 grant applications were submitted under five Program Announcements, which was a growth rate of 119 percent as compared to 1999 when the grant mechanism was first started. In addition, SBIR/STTR Program Announcements in these same research areas saw an increase in the number of grant applications from 57 to 142, which was a growth rate of 149 percent (see **Figure 4**).

Additional highlights of SRLB reviews for FY2003 include two major initiatives. The first was the Loan Repayment Program (LRP), that generated 244 applications for the May 2003 NCAB (See **Table 17**). The LRP is a Congressionally mandated program whose intent is to forgive outstanding loan balances for clinician scientists who intend to pursue careers in general clinical or pediatric research. Applications are submitted electronically to the NIH Loan Repayment Office, which then

Figure 4. Technology Initiatives (Phased Innovation and SBIR/STTR) Applications Reviewed, 1999-2003



refers the proposals to the individual Institutes. This initiative is unique, in that all of the proposals are submitted electronically and are classified as contracts. Instead of conducting a face-to-face meeting to review these proposals, SRLB staff conducted a virtual meeting in which assigned reviewers submitted their evaluations and scores electronically. A total of 138 potential reviewers were contacted and 84 actually served. Of the 244 proposals reviewed, 92 clinical and 25 pediatric proposals were funded by the Institute.

The other significant project was the BAA (a contract initiative) for Novel Technologies. This initiative was modeled after the long-range research projects of the Defense Advanced Research Projects Agency (DARPA), one of which developed into the Internet. To elicit participation of technology-oriented firms, measures were applied in accordance with the Procurement Integrity Act regarding the confidentiality of the information submitted. This made the initiative a hybrid—part investigator-initiated research and part contract—which complicated the review process and necessitated the use of a waiver from the usual conflict-of-interest provisions.

In addition to the BAA and LRP described above, the SRLB reviewed 19 RFPs (contract initiatives). Eleven of those 19 RFPs were part of the Omnibus Solicitation for Small Business Innovation Research (SBIR). RFPs are proposals in which several elements of each proposal are individually evaluated and scored, with the combined score indicating the overall merit. After negotiations, contract awards result from the RFP solicitation. The list of RFPs reviewed in FY2003 is shown in **Table 17.**

Grant Funding Trends

In **Table 13**, a comparison is made of the average cost and number of NCI R01 and P01 grants awarded in FY1999 through FY2003 according to extramural division. **Table 14** presents a summary for FY2003 of total funding of NCI grant awards by mechanism. Trends in grant funding according to scientific discipline and organ site are described on page 27 and in **Tables 15 and 16.**

Supporting Peer-Review Consultants

Ensuring that highly qualified individuals are available for expert review of grant applications and contract proposals requires an efficient administrative support system. The DEA's **Scientific Review and Evaluation Award** (SREA) Office, residing within the Committee Management Office (CMO), supports the NCI peer-review process by compensating consultants for their services on the NCI IRG subcommittees or SEPs and by reimbursing them for their travel and other expenses (see **Appendixes B and C**). The SREA Office also approves and processes payments for other activities related to review, including contract-supported ticketing services. During FY2003, the SREA Office authorized 4,308 consultant reimbursement vouchers and 739 nonconsultant vouchers for travel ticketing, meeting room rental, and teleconferences.

During FY2003, the SREA Office continued to work with a contractor to further develop the program that allowed retrieval of Financial Operating Plan (FOP) data from IMPAC II (an NIH-wide committee management database). The IMPAC II Committee Management Voucher Module is now fully operational, and the SREA Office utilizes IMPAC II for the generation of all consultant and nonconsultant voucher reimbursements, FOPs, and Internal Revenue Service Form 1099 reports. Also, during FY2003, the SREA Office worked with the contractor to develop a program that will allow retrieval of financial and consultant reimbursement information from IMPAC II, established the new checkwriting process for NCI, and streamline the reconciliation process.

The SREA Office took over checkwriting activities and began processing checks with the new 2003 Fiscal Year, anticipating processing checks two times per week, to allow quicker voucher reimbursement to consultants.

The SREA Coordinator continues to join other NIH Institute SREA Offices to participate in the ongoing NIH SREA Coordinating Committee. This group meets bimonthly to discuss SREA procedures and has finished working on the first Standard Operating Procedure (SOP) for the NIH SREA community to standardize procedures and provide guidance and consistency within the SREA offices and among all of the Institutes. Also, the committee revised and published an update to the NIH Manual Issuance 4705, which is the first update in 20 years.

In addition, the SREA Office advises consultants, NCI staff, and the SREA trustee on policies and procedures; performs the administrative tasks related to setting up, managing, monitoring, and closing out accounts; and prepares expenditure reports, including those required by the NIH Office of Financial Management for 1099 tax forms and those requested by the CMO for the NCI FOP, consultant services, and financial management reports for IRG, SEP, and SREA.

This little-known administrative function is critical to the success of the peer-review system because any error, inconvenience, or delay in reimbursement that reviewers experience is likely to discourage their future service. Excellent customer service remains a constant goal of the NCI SREA staff, whose Vision Statement is: "We take ordinary requests and provide extraordinary results."

DEA's Role in Advisory Activities

Beyond its central role in coordinating the peer review and referral of grants, perhaps the most far-reaching role the DEA plays across the NCI is the coordination and administration of NCI's eight chartered Federal advisory committees (see **Appendix B**). The activities of these advisory bodies are coordinated by the **Office of the Director,** DEA, and the **Committee Management Office**, DEA. A primary responsibility of the DEA is coordination of the activities of the NCAB, whose members are appointed by the President and whose responsibilities include conducting the second-level review of grants and cooperative agreements, as well as advising the NCI Director on policy for the conduct of the National Cancer Program. The DEA also coordinates administration of the BSA, the body responsible for the oversight and concept review of the extramural programs and initiatives of the NCI. As such, the DEA plays a major role in the development and issuance of PAs, PARs, and RFAs, the major extramural program initiatives used by the NCI. The DEA Director serves as Executive Secretary to the NCAB, and the Deputy Director, DEA, serves as Executive Secretary to the BSA. (See **Appendixes D and E** for highlights of the activities of these Boards in FY2003.)

Each year, the NCI relies on thousands of individuals with special expertise to advise and support staff in its mission to win the war against cancer. These individuals provide advice and guidance to NCI staff on countless research projects, scientific concepts, and programmatic and administrative issues relating to its research initiatives and priorities. During FY2003, a total of 2,553 consultants were asked to serve as standing, temporary, and ad hoc members on NCI's chartered advisory committees, panels, site visits, and work groups. Under the various chartered committees, working groups were formed to address several important areas of cancer research related to diverse populations, and cancer advocacy, treatment, prevention, communication, and education. (See **Appendix B** for a list of chartered committee members and **Appendix C** for a list of consultants.)

Major NCI Advisory Bodies Administered by the DEA

National Cancer Advisory Board. NCI's principal advisory body is the Presidentially appointed NCAB. The Board advises the DHHS Secretary and the NCI Director on issues related to the entire National Cancer Program and provides a second level of review for grant applications referred to the NCI.

Board of Scientific Advisors. The BSA represents the scientific community's voice in NCI-supported extramural science. The Board, composed of distinguished scientists from outside the NCI and representatives from the advocacy community, advises the NCI leadership on the progress and future direction of the Institute's Extramural Research Program. The Board evaluates NCI extramural programs and policies and reviews ideas for new research opportunities and solicitations, to ensure that a concept is meritorious and consistent with the Institute's mission.

The BSA believes it is important to interact with and receive feedback from the clinical, population science, and laboratory research communities that are affected by NCI policies. To this end, the NCI has established BSA-sponsored "NCI Listens" sessions at national association meetings (see **Appendix B,** page 51). BSA members and NCI staff invite conference participants to join them for these sessions. A brief presentation is given by NCI staff emphasizing the status of grant funding, the Bypass Budget, and the status of several new initiatives. The brief presentation is followed by an open question-and-answer period. The NCI is committed to providing a written response to the scientific society hosting the meeting concerning issues raised during the session. The BSA hopes that conference participants will take advantage of this opportunity to raise their concerns.

Board of Scientific Counselors. The BSC, managed through the Office of the Director (OD), NCI, advises the Institute leadership on the progress and future direction of NCI's Intramural Research Program residing in the Center for Cancer Research (CCR) and the Division of Cancer Epidemiology and Genetics (DCEG). This group of scientific experts from outside the NCI evaluates the performance and productivity of NCI staff scientists through periodic site visits to intramural laboratories and provides evaluation and advice on the course of research for each Laboratory and Branch.

NCI Initial Review Group. The IRG, composed of eight subcommittees, reviews grant and cooperative agreement applications for centers, research projects, and research training activities in the areas of cancer cause, diagnosis, treatment, and prevention, as well as contract proposals relating to all facets of cancer. Members may be appointed as standing committee members with overlapping terms of up to 4 years, or as "temporary" members with all the rights and obligations of committee membership, including the right to vote on recommendations in which the individual fully participated as a reviewer for a specific meeting. Consultants also may be invited to serve as special experts or ad hoc members, to provide information or advice. These individuals generally serve in site visit groups, providing critical information to the chartered advisory subcommittees responsible for initial peer review.

NCI Special Emphasis Panels. The SEPs advise the Director, NCI, and the Director, DEA, regarding research grant and cooperative agreement applications, contract proposals and concept review relating to basic and clinical sciences, and applied research and development programs of special relevance to the NCI. Membership of an SEP is fluid, with individuals designated to serve for individual meetings rather than for fixed terms. These individuals have all of the rights and obligations of committee membership, including the right to vote on recommendations.

Program Review Groups. As part of an ongoing process of review and revitalization, the NCI instituted a series of external reviews to guide it in strengthening major research support programs. Program Review Groups, coordinated by the DEA as an activity of the BSA, examine the NCI extramural programs and their infrastructures to evaluate whether changes are necessary for the Institute to be in a position to effectively guide and administer the needs of the science in the foreseeable future. (See **http://deainfo.nci.nih.gov/advisory/bsa/bsa_program/bsaprgr.htm.**)

Progress Review Groups. As part of its overall responsibilities for committee management functions and coordination of advisory groups, the DEA assists other NCI offices with additional types of oversight activities. Progress Review Groups, managed by the Office of Science Planning and Assessment within the OD, NCI, are created to provide their expertise, biomedical research information, and assistance to NCI chartered advisory committees in defining and prioritizing the national research agenda for particular cancers—including breast, prostate, colorectal, brain, pancreatic, leukemia, lymphoma, myeloma, and lung—by: (1) identifying new or unmet scientific opportunities; (2) reviewing an NCI analysis of its current research program; and (3) using the ongoing activities as a baseline, providing expert opinions on how to address the research opportunities and hasten progress against the disease. These groups report to the NCI through a chartered Federal advisory committee. (See **http://deainfo.nci.nih.gov/advisory/pog/progress/index.htm.**)

Committee Management Activities

The Committee Management Office (CMO) is the DEA administrative unit that coordinates the general administration of the NCI's chartered Federal advisory committees. The CMO provides advice related to the provisions of the Federal Advisory Committee Act (FACA) and other Federal, Department of Health and Human Services (DHHS), and NIH regulations governing the actions of NCI staff who manage advisory committees. It coordinates the activities of advisory committees across the NCI and ensures that NCI staff comply with Federal advisory committee policy. Additionally, the Office of the Director (OD), DEA, and the CMO provide guidance and information to staff and external groups on specific NIH policies related to the operation of working groups and ad hoc consultants operating under the direction of some of NCI's chartered Federal advisory committees. NCI working groups provide scientific expertise through chartered committees to the NCI Director and Division Directors on a range of matters related to the National Cancer Program. The Office works closely with the other DEA offices to coordinate activities with NCI advisory committees; implements policies and procedures designed to avoid conflicts in the nomination and selection of board members; implements policies and procedures to ensure compliance with DHHS and NIH regulations governing the operation of chartered advisory bodies; advises on issues related to conflicts of interest, selection and recruitment of viable committee members, and management of committee records; provides logistical support for NCAB and BSA meetings; and facilitates committee-related travel.

CMO staff continue to participate in various NIH-wide Information for Management, Planning, Analysis, and Coordination (IMPAC II) software application user group meetings and pilots, including participation on the NIH Committee Management-Joint Application and Development Group (CMJAD) slated to provide advice on the redesign of the Committee Management Module. The IMPAC II Module is being redesigned as a Web-based application and will be a more user-friendly and intuitive system. In FY2003, the CMO continued to develop in-house IMPAC II training information, developed new guidelines geared towards assisting NCI staff in efficiently using the IMPAC II system, and conducted training for users of the system. Additionally, CMO and SREA staff gave presentations to NCI staff on management of Federal Advisory Committees and the Scientific Review and Evaluation Award and they participated in the revision of NIH Manual Policy 1810-1, Procedures for Avoiding Conflict of Interest for NIH Special Government Employee (SGE) Advisory Committee Members. The CMO also became a Committee Management Service Center and is providing committee management services to the Office of Biotechnology Activities (NIH Office of the Director) for the Secretary's Advisory Committee on Genetics, Health and Society. This committee reports to the DHHS Secretary. CMO staff also participated in a stringent review of committee management support staff functions for an A-76 review.

In concert with the automation of the NIH-wide committee management functions, the CMO continued to work closely with other DEA staff to streamline general committee management and review procedures related to member travel, vouchering, mail review, and teleconference reimbursements. The same procedures were used to facilitate more effective management of all other NCI chartered advisory committees.

In addition, the DEA CMO continued to conduct briefings with the NCI Divisions, the Offices of Liaison Activities, and NCI management on the use of working groups associated with chartered committees. The CMO was actively involved in the guidance and support of various NCI working

groups and NIH employee working groups related to the IMPAC II Module, the Data Quality and Control Initiative, and the SREA Coordinating Committee. Additionally, CMO staff participated in NIH Committee Management work groups and the Committee Management Users Group charged with redesigning the IMPAC II Module.

Extramural Policy and Program Development

An important part of the DEA's mission is to provide effective and timely coordination of program initiatives from the initial concept stage through publication of RFAs, PAs, and RFPs, and finally, through the peer review of grant applications and contract proposals. The NCI's activity in this arena has grown, in proportion to the generous budget increases received by the Institute, to the point where a central unit, the **Office of Referral, Review, and Program Coordination** (ORRPC), was established within DEA for coordination of NCI program development, issuance, and review activities. ORRPC is responsible for: (1) coordination and management of review activities for grants, cooperative agreements, and contracts for the Institute; (2) development of NCI policies and procedures as related to review of grants and contracts; (3) coordination of the second level of review with the National Cancer Advisory Board; (4) development of referral guidelines and grant referral to NCI programs; and (5) coordination of the development, preparation, clearance, and issuance of special NCI initiatives, including program announcements, requests for applications, and extramural policy statements through the *NIH Guide to Grants and Contracts.* ORRPC coordinates the activities of the Program Coordination and Referral Branch and the three review branches, Special Review and Logistics Branch, Resources and Training and Review Branch, and Research Programs Review Branch. At each stage of the development of new initiatives, DEA's ORRPC facilitates this coordination across the NCI's extramural Divisions, other NIH Institutes, and other relevant agencies of the Federal Government.

The DEA manages and coordinates the BSA, which is charged with the concept review of all new and reissued RFAs and RFPs (see **Appendix E**). In addition, the DEA tracks new initiatives proposed by other Institutes and agencies to consider possible NCI participation. The success of this operation is dependent on the development of clear Institute referral guidelines, also a DEA responsibility. Before the publication of an initiative, the DEA negotiates with the CSR, DEA review units, and other offices to coordinate scheduling, timelines, and workloads. Concepts for PAs do not require BSA approval, but are considered instead by the NCI Extramural Division Directors Committee.

Through the OD, the DEA conducts continual evaluation of program initiatives and coordinates policies and procedures to ensure that all aspects are as clear and accessible as possible to staff, advisory groups, and applicants. To facilitate this evaluation, the ORRPC, with the technical assistance of **Applied Information Systems Branch** (AISB), manages Web-based information systems to provide key information on new initiatives. This Web-based information system includes early notice of approved concepts, listings of active PAs and recently published RFAs, and policies related to the clearance of new program initiatives. This information is provided in both public Internet and NCI limited-access Intranet versions (**http://deainfo.nci.nih.gov/funding.htm**).

Tracking and Coordinating Program Activities

The program coordination responsibilities of the DEA, in cooperation with NCI Extramural Program Divisions, extend to the development of all new extramural program guidelines. The DEA manages this activity in communication with the originating NCI program and the NIH Office of Extramural Research. To maintain consistency and completeness, all new NCI guidelines are centrally edited and cleared through the DEA before being forwarded for NIH approval and publication in the *NIH Guide for Grants and Contracts.* Because most program staff have limited experience in crafting an initiative in the precise format required by the Public Health Service (PHS) rules and regulations, the

services provided by the DEA in preparing such announcements materially speeds their release, often shortening the process by a month or more. Another program coordination activity is the development of referral guidelines for assignment of grant applications to the NCI. These guidelines, included in the *Referral Guidelines for Funding Components of PHS*, are critical to the development of program initiatives across the NIH, as well as to the prompt referral of unsolicited grant applications to the NCI. These guidelines differ from the internal referral guidelines, which also are coordinated by the ORRPC. The internal referral guidelines are vital to the prompt referral of grant applications to the appropriate NCI program areas.

In addition to program coordination, the DEA has developed and maintained a Web-based information tracking system to provide NCI staff with all essential information on program initiatives, from concept through publication of the full text, with the ultimate goal of tracking outcomes. In addition to the Intranet version for NCI staff, extramural scientists have access to an Internet version of published initiatives.

Information Resources Management

The **Applied Information Systems Branch** (AISB) provides integrated computer support, applications, and information systems development to the DEA. The AISB monitors the DEA Web Site, supports the Division's Intranet server, designs and maintains Division-specific software applications, provides oversight of hardware and connectivity, and serves as liaison with the Center for Information Technology (CIT) and NCI central units. Its mission is critical to the future of the Division in communicating both internally and externally current information technology activities and new developments with all components of the NCI, NIH, and reviewer and applicant communities.

All of the Division's Information Technology and Information Systems contracts are consolidated under the AISB. The AISB has a computer support team to track staff requests, manage the Division's computer equipment inventory, and provide computer-related training, as needed. Specific projects utilizing the technologies and services provided by the AISB are described under the appropriate functions of the DEA throughout this report. For FY2003, the following specific accomplishments are highlighted:

- Implemented a new search engine for the DEA Internet Web Site. This search engine is provided by FirstGov.gov. Enhanced the existing search engine for the DEA Intranet Web Site.

- Developed a prototype version of the A-Z Extramural Policies Web Site. This Web site provides a comprehensive alphabetized list of links and references to various sources of extramural policies and procedures.

- Developed a prototype version of the Glossary and Definitions Web Site. This Web Site provides cross-reference among terms, definitions, and acronyms used in the NIH/NCI extramural activities arena.

- Enhanced and upgraded the Fiscal-Linked Analysis of Research Emphasis (FLARE) by adding new features. Started consolidation and reorganization of about 125 reports generated by the FLARE application.

- Completed the production version of a Web-based software application for DEA review staff to enable the merging of IMPAC II data into MS Word or Corel WordPerfect documents and labels.

- Consolidated and reconfigured database and Web servers and DEA Web Sites, and reorganized the DEA server room to improve access and maintainability.

- Performed enhancements, upgrades, and maintenance on the following production systems: Extramural Science Administrator Training Tracking System (ESATTS); Reviewer CDs; BSA (Board of Scientific Advisors) Reports; DEA Annual Reports Web Site; Program Coding System; IRG (Initial Review Group) Books Reports; NCAB (National Cancer Advisory Board) Early Concurrence Web Site; and the DEA Computer Inventory and Tracking System.

- Started development of an enhanced concept-tracking system for the NCI that will combine the functionality of the existing RFA/PA Tracking System and the BSA Concept Reporting System.

- Began conversion of batch data transfer programs and DEA staff reports to the Java programming language. This will result in more reliable and maintainable programs.

AISB staff are involved with many NCI and NIH information systems and information technology groups and organizations, including:

- NCI Office of Information Systems and Computer Services
- NCI Information Systems Advisory Group
- NCI Change Management Group
- NIH Electronic Council Book Steering Committee
- IMPAC II Joint Applications Development and Critical Design Review Groups
- NIH Architecture Review Board
- NIH Automatic Data Processing Extramural Coordination Committee.

Portfolio Tracking and Analysis

The DEA's **Research Analysis and Evaluation Branch** (RAEB) serves as the officially designated locus and contact for scientific information that is associated with NCI-supported research. The NCI needs consistent budget-linked scientific information across all of its scientific programs to facilitate analysis of the Institute's portfolio, provide a basis for budget projections, and serve as a resource for the NCI to disseminate information about cancer. The DEA conducts analyses to project future NCI research expenditures and to provide budget justifications to Congress. The work of the RAEB allows the DEA to respond immediately to daily requests for information from NCI staff, the broader NIH community, and requesters nationally and even sometimes worldwide. The Branch also performs specialized custom searches on request.

These capabilities are based on a sophisticated system of indexing, in which Research Documentation staff analyze grant applications to classify each project for its degree of relevance to Special Interest Category (SIC) and Organ Site Codes. The number of categories assigned to an individual grant varies from fewer than 10 to more than 50. SIC Codes are meant to describe in a consistent way the major scientific disciplines that are of stated or growing interest to the NIH, DHHS, Congress, and the public. SIC Codes are added throughout the year to retain currency with these interests.

In FY2003, RAEB added new SIC Codes for Tissue Engineering and Physical Activity. The Branch assumed responsibility for indexing all AIDS projects with AIDS Mason Codes, Special Interest Categories, and Strategic Planning Codes. In FY2003, RAEB indexers profiled more than 2,900 unfunded applications. The process of indexing unfunded applications, begun in FY1999, has greatly expanded the potential for analysis of the major categories found in these applications. RAEB Research Documentation staff profiled more than 2,200 funded grants and contracts in FY2003. A critical characteristic of these data is comparability from one fiscal year to the next. Changes in funding between FY2002 and FY2003 for selected SIC Codes and organ sites are presented in **Tables 15 and 16**.

In FY2003, RAEB Technical Operations staff continued to work with contractors and AISB to refine the FLARE computer application, and managed the FLARE module for computerized calculation of indexing for Clinical Cooperative groups, Community Clinical Oncology Program, P30 Centers grants, and U01 Clinical Trials. The staff oversaw the elimination of paper grant handling and now almost exclusively use E-Grants online documentation. Staff also managed the integration of GENIUS mainframe files from '62-'89 into the FLARE database and the upgrade of microfiched archive files to CDs.

Highlights of FY2003 include:

- RAEB indexers profiled more than 2,900 unfunded applications.
- RAEB staff indexed more than 2,200 funded grants and contracts.
- RAEB added new Special Interest Categories for Tissue Engineering and Physical Activity.
- RAEB assumed responsibility for indexing AIDS Mason Codes, Special Interest Categories, and Strategic Planning Codes.

- RAEB eliminated use of paper grant applications, and now index from electronic files available on E-Grants.
- RAEB managed the integration of GENIUS mainframe files dating from ’62-’89 into the FLARE database.

Special Activities in the Office of the Director, DEA

In addition to managing and coordinating the various activities described in this report, the DEA's **Office of the Director** (OD) has specific additional responsibilities to the NCI. First, the OD serves as a focal point and repository of information related to various funding mechanisms for grants, staff and awardee responsibilities, eligibility requirements, receipt dates for all granting mechanisms, and special programs. The DEA serves as the coordinating center for submission of applications for special NIH-wide awards, such as the James A. Shannon Director's Award, the Academic Research Enhancement Awards (AREAs), the Institutional Development Awards (IDeAs), and the Research Enhancement Awards Program (REAP).

Second, the DEA OD plays a critical role in the NCI's efforts to promote increased participation of women, children, and members of minority and medically underserved populations in the research areas of cancer cause, prevention, control, diagnosis, and treatment. The NCI Revitalization Act of 1993 mandates that women and members of minority groups be included as subjects in each research project, unless there are clear scientific or ethical reasons that inclusion is inappropriate with respect to the health of the subject or the purpose of the research. Administrative procedures allow NCI staff to resolve inclusion problems after initial review of applications that are otherwise highly meritorious. In the event a grantee believes the proposed study does not warrant or require inclusion of women or minority groups, he or she can apply for a waiver of this requirement. The Director of the DEA has the authority to grant this waiver. In FY2003, 65 applications with preliminary bars to award were received by the DEA. Through corrective action, all were brought into compliance before award decisions were made.

Third, the DEA Director serves as the locus for implementation and oversight of NCI policies concerning extramural research integrity and serves as a resource to all NCI staff with questions in this area. In this role, the DEA OD works to address concerns about extramural scientific misconduct, misuse of human and animal research subjects, financial mismanagement, and financial conflict of interest involving NCI-supported research. Thus, the DEA Director functions as the NCI Research Integrity Officer and receives from the appropriate sources all documents related to misconduct for transmittal and reporting to relevant sources. In FY2003, five cases of alleged scientific misconduct were opened by the Office of Research Integrity and referred to the Director, DEA. Five cases were closed, and one was found to involve misconduct.

Organizational Structure of the Division of Extramural Activities

Office of the Director

- Directs and administers the operations of the Division, including those activities relating to grant review and administration and contract review, as well as Advisory Committee and Board activities.
- Coordinates and manages the NCAB and the BSA.
- Initiates, coordinates, and implements Institute policies and procedures relating to grants and contracts review.
- Implements NCI policies regarding extramural research integrity.
- Represents the NCI on extramural policy issues to the NIH.
- Advises the Executive Committee, NCI, on extramural implementation strategies.
- Coordinates with the NIH for all NCI extramural staff training requirements.
- Represents the NCI on the NIH Institute-wide Extramural Program Management Committee (EPMC) with responsibility for development of extramural policy and procedures across all NIH Institutes and Centers.

Marvin Kalt, Ph.D.*	Director
Paulette Gray, Ph.D.	Acting Director Deputy Director and Associate Director, Extramural Applications
Diane Bronzert	Associate Director, Referral, Review, and Program Coordination
Cedric Long, Ph.D.	Assistant Director
Elise Kreiss	Senior Program Analyst
Patricia Marek	Program Analyst
Carlene Neil-Allman†	Program Analyst
Carolyn Craig	Program Analyst
Bernadette Monacelli	Secretary
Donyelle Parrish*	Secretary
Wendy Jones	Secretary
Lisa Verikios†	Secretary
Jasen Converse*	Receptionist
Joshua Rhoderick	Receptionist

* Left in 2003.
† Joined in 2003.

Office of Referral, Review, and Program Coordination, OD

- Coordinates program concept development; publication functions; and receipt, referral, and assignment of all applications.
- Coordinates activities of the SRLB, RTRB, RPRB, and PCRB.

Diane Bronzert . . . . . Associate Director
Catherine Battistone . . . . . Program Analyst
Alma Carter . . . . . Technical Assistant
Angela Collick . . . . . Secretary

Committee Management Office, OD

- Coordinates functionally related advisory activities across the Institute and manages a DHHS committee to ensure that appropriate policies and procedures are in place to conduct its mission and ensure the synthesis, integration, and documentation of these activities.

- Provides committee management services to the Office of Biotechnology Activities, Office of the Director, NIH, and established the Committee Management Office as an NCI Service Center.

- Provides consultation services to NCI staff on administrative and technical aspects of Federal Advisory Committees; coordinates activities with all other NCI advisory committees; implements policies and procedures designed to avoid conflicts in the nomination, selection, and recruitment of board members; implements CM IMPAC II guidelines and procedures to ensure that all committee-related data are correctly entered into the database for preparation and submission of required annual reports to the President of the United States, DHHS, and NIH; provides logistical support for NCAB and BSA meetings; and facilitates NCAB and BSA committee-related travel.

- Provides administrative support for the peer-review system by compensating consultants for their services on NCI IRG subcommittees and SEPs; reimburses consultants for travel and other expenses; and approves and processes payments for other activities related to review, such as meeting room rental and teleconferencing.

Claire Harris . . . . . Committee Management Officer
Andrea Collins . . . . . Deputy Committee Management Officer
David Alperin . . . . . Program Analyst
Linda Coleman . . . . . Committee Management Specialist
Earline Jackson . . . . . Committee Management Assistant
Hing Lee . . . . . Committee Management Specialist
April Mellinger . . . . . Committee Management Specialist
Kerry Peasland . . . . . Program Specialist
Lisa Rustin . . . . . Committee Management Specialist

Special Review and Logistics Branch

- Plans, manages, and assists in the scientific merit review of special grant and cooperative agreement applications (RFAs and PAs) and the technical merit review of contract proposals (RFPs).
- Arranges for and participates in onsite assessments of the research capabilities and facilities of selected applicants.
- Identifies and recommends appropriate review committee members and site visitors, as required for the review of assigned applications and proposals.
- Provides the SRA and other support staff to the technical review committees.
- Serves as the information and coordination center for all grant applications and contract proposals pending review by the Branch.
- Provides input and advice on grant and contract review policy and procedures, application and proposal patterns, and research trends and other related information, as required.
- Coordinates secondary-level review activities of the NCAB with staff of other NCI Divisions, other Branches of the Division, the Research Contracts Branch, and the Grants Administration Branch.
- Provides logistical support for primary- and secondary-level review activities in support of other Division and Institute units.

Kirt Vener, Ph.D. . . . . Chief

Special Review Unit

Thomas Vollberg, Ph.D. . . . . Deputy Chief
Kenneth Bielat, Ph.D. . . . . Scientific Review Administrator
Jennifer DeGroff . . . . . Program Support Assistant
Juana Diaz . . . . . Program Support Assistant
Paul Gallourakus . . . . . Program Support Assistant
Sherwood Githens, Ph.D. . . . . Scientific Review Administrator
Marcus Johnson‡ . . . . . Review Technical Assistant
C. Michael Kerwin, Ph.D., M.P.H. . . . . Scientific Review Administrator
Sarah King-Mitchell . . . . . Contracts Technical Assistant
Allonda Lord . . . . . Program Support Assistant
Gerald Lovinger, Ph.D. . . . . Scientific Review Administrator
Timothy Meeker, M.D. . . . . Scientific Review Administrator

‡ Contractor.

Laura Larson . . . . . Program Support Assistant
Thu Nguyen. . . . . Lead Program Support Assistant
Lalita Palekar, Ph.D. . . . . Scientific Review Administrator
Joyce Pegues, Ph.D. . . . . Scientific Review Administrator
Phuong Pham . . . . . Program Analyst
Mary Jane Slesinsky, Ph.D. . . . . Scientific Review Administrator
Denise Santeufemio‡. . . . . Review Technical Assistant

Review Processing and Distribution Unit

Adrian Bishop . . . . . Mail and File Clerk
Angela Gantt‡ . . . . . Mail and File Clerk
Marcus Johnson‡ . . . . . Mail and File Clerk
Greg Jones‡. . . . . Mail and File Clerk
Robert Kruth . . . . . Mail and File Clerk
Latasha Stevens‡ . . . . . Mail and File Clerk
Clara Murphy. . . . . Program Assistant
Michael Shatarsky. . . . . Grants Management Analyst

‡ Contractor.

Program Coordination and Referral Branch

- Serves as the information and coordinating point within the NCI for the clearance and tracking of all NCI extramural program initiatives.
- Coordinates the shared interests of all trans-NCI program initiatives through the CSR and other NIH Institutes and Centers.
- Coordinates clearance and publication of all RFAs, PAs, and Notices in the *NIH Guide for Grants and Contracts.*
- Coordinates the clearance of all NCI grant mechanism guidelines and policies through the NIH Office of Extramural Research.
- Serves as the NCI contact point for approval of the use of cooperative agreement mechanisms and for conversion of grants to cooperative agreements.
- Serves as liaison to the CSR, NIH, to ensure appropriate referral of applications to the Institute and their distribution and assignment to appropriate program units within the NCI.
- Coordinates development of referral guidelines within the NCI for internal and external use.
- Receives and distributes advance copies of applications for Program Project grants and applications submitted in response to RFAs and PAs, and coordinates this information with review and program staff.
- Receives Letters of Intent from principal investigators intending to submit large budget grants and from prospective R13 (conference grants applicants). Maintains a database of prospective large budget grants applicants.
- Processes ARAs (Awaiting Receipt of Application) through the NOW system to CSR.
- Automatically refers amended and competing continuation (Type 2) applications to the cancer activity that accepted the previously submitted application.
- Serves as the primary NCI information referral point for the extramural scientific community on a broad range of subjects, including grant guidelines, application information, new initiatives announced as RFAs or PAs, and the review process.
- Assists the extramural community in navigating the NIH and NCI Web pages, to help users obtain current information, forms, and guidelines.
- Directs applicants to the appropriate Program Directors and SRAs for information regarding the status of the review and award of their grant applications.
- Tracks and analyzes trends of CSR referral to study sections and resultant review outcomes.
- Works with NCI program staff to address unresolved review and referral issues with the CSR and other Institutes and Centers.
- Coordinates requests from program staff for application status changes and for acceptance of grant assignments.

Ray Bramhall, Ph.D.*	Chief
Christopher Hatch, Ph.D.†	Acting Chief, CSR Referral Liaison
David Contois	Referral Officer
Leota Hall	Referral Officer, RFA/PA Co-Coordinator
Florence Pedersen	Referral Officer (CSR Referral Liaison)
Natacha P. Lassègue	Program Analyst
Kimberly Morris†	Program Support Assistant
Deborah Bielat	Program Support Assistant
Sonya Roberson, Ph.D.†	RFA/PA Coordinator

* Left in 2003.
† Joined in 2003.

Research Analysis and Evaluation Branch

- Serves as the Institute's officially designated, centralized source of scientific information and science-based budget information on NCI-supported research projects.
- Analyzes and classifies the science content of all Institute-supported projects.
- Prepares analyses comparing the distribution of funds among research areas; these analyses serve as a basis for budget projections.
- Prepares special and routine reports and analyses and answers inquiries concerning the scientific and budgetary aspects of Institute-funded research, including research grants, center grants, and research contracts.
- Maintains liaisons with other organizations involved in related classification activities.
- Documents the need for proposed RFAs by comparing RFA concepts with existing NCI-supported research and with unsolicited applications.

Rosemary Cuddy* . . . . . Branch Chief
Marilyn Gaston . . . . . Acting Branch Chief

Inquiry and Reporting Team

- Responds to generalized data requests.
- Plans, coordinates, and evaluates dissemination of extramural and intramural research data.
- Conducts in-depth analyses of extramural research data.
- Answers inquiries from Congress, the public, the press, and others concerning any phase of Institute-supported work.
- Identifies emerging priority areas for data collection and analysis.
- Conducts economic analysis of funded research; establishes consensus-building processes with programs, financial data operations, and others, including the private sector; identifies priority data gaps on funded research activities; and recommends solutions to fill these gaps.
- Evaluates user needs, conducts formalized user surveys, as needed, and translates these needs into NCI research reports and dissemination plans.
- Provides specialized data querying, archiving, and reporting functions for the Division, the Financial Management Branch, and the Institute.
- Directs and conducts the grant, contract, and reporting data file release program, including data editing, review, and documentation.
- Provides consultation services and writes scientific search formulation instructions to customers' specifications to facilitate standardized data preparation.
- Coordinates the design, development, and implementation of automated systems for award data dissemination.

* Left in 2003.

Marilyn Gaston . . . . . Team Leader
Stacy Harper-Avilla . . . . . Technical Information Specialist

Research Documentation Team

- Analyzes and indexes grants and contracts for the Branch's computerized systems.
- Ensures that terms and categories for indexing are updated and reflect current trends in cancer research, and maintains a thesaurus of term definitions.
- Analyzes extramural projects for relevance to SICs and Anatomic Sites to determine the officially reported figures for Institute support and provide a basis for budget projections.
- Maintains liaison with other offices within the Institute to ensure consistent reporting of data.
- Monitors the results of Institute grant-supported research through the literature surveillance program.

Edward Kyle . . . . . Team Leader
Lisa Krueger . . . . . Biologist
Nancy Lohrey . . . . . Biologist
Tyrone Wilson . . . . . Biologist

Technical Operations Team

- Oversees Information Resource Management (IRM) for the Branch.
- Manages RAEB's FLARE grants documentation and indexing database, ensuring reliability and completeness of its contents.
- Performs computerized searches for ad hoc information requests to the Branch.
- Tracks documentation for grant applications, summary sheets, contract proposals, etc., in both physical and computerized formats.
- Prepares documentation for indexing by the Research Documentation Section.
- Maintains and updates archival document files, including transferring physical files to computer media.
- Serves as the liaison with contractors and the AISB to resolve FLARE computer application problems for the Branch.
- Works with contractors and AISB to refine RAEB's computer applications to meet the Branch's needs.
- Manages RAEB's personnel support functions.

Dianne Ostrow . . . . . Team Leader
Gail Blaufarb . . . . . Technical Information Specialist
Linda Brown . . . . . Computer Assistant
David Hyde* . . . . . Technical Information Specialist

* Left in 2003.

Applied Information Systems Branch

- Satisfies the information technology (IT) requirements of the Division and coordinates IRM activities with other relevant NCI and NIH units and provides high-quality information analysis, design, development, and coordination of applications in support of Divisional business processes.
- Serves as the focal point for the Division in the development, deployment, and application of specialized software and databases required for the conduct of review, referral, coding, advisory, and other extramural applications.
- Serves as the liaison with NCI Information Services Technology Branch (ISTB); other NCI computer professionals; other NCI units charged with execution of extramural IRM functions; other trans-NIH functional units such as the CSR, Office of Policy for Extramural Research Administration (OPERA), and Office of Extramural Research (OER); and the IMPAC II and eRA (Electronic Research Administration) systems.
- Supports resources and Internet and Intranet applications connectivity and design.
- Establishes, administers, and monitors contracts to provide design, production, and maintenance for microcomputer equipment and information storage and retrieval systems not covered by the NCI's Core Services.
- Formulates DEA-specific office automation policy.
- Provides staff/lead users with technical support and training for DEA IT applications.
- Coordinates general use/support and training with NCI or NIH Core Services.
- Provides Division-specific applications of video teleconferencing and audiovisual services in support of review and Board activities.
- Provides management with recommendations for establishing and implementing policies for conducting Divisional computer-assisted presentations, as necessary.
- Reviews user-created applications and recommends and/or designs changes to improve efficiency and effectiveness.

James W. Seach . . . . . Chief

Application Development and Operations Team

- Analyzes and coordinates life-cycle development of software for the Division; develops and designs applications to support the Division's business practices, including user guides.
- Develops, administers, and monitors contracts for acquisition, support, and maintenance of database systems.
- Administers office automation contracts as well as DEA-wide Blanket Purchase Agreements for microcomputer equipment maintenance and supplies.
- Formulates office automation policy, system development, and IMPAC II operations.
- Coordinates internal user groups and the provision of training for specific DEA applications and the use of office automation equipment technology.

Gregory Fischetti . . . . . Team Leader
Deborah Buranich . . . . . Information Technology Specialist
Charles Conley . . . . . Information Technology Specialist
Lauren Lawson† . . . . . Information Technology Specialist
Teresa Park . . . . . Information Technology Specialist
Hector Reyes . . . . . Information Technology Specialist

Information Management Team

- Designs and maintains the Division's Intranet and Internet and identifies documents to be placed on the NCI Web Site to make Division information more accessible to the public.
- Develops new Web-based software applications that will enhance the productivity and efficiency of extramural processes within the DEA and the distribution of Division information throughout the NCI.
- Establishes partnerships and ongoing communications with staff and external customers to foster openness and collaboration in accomplishing the information initiatives of the Division.
- Works with DEA staff to ensure the current utility and linkages of documents placed on the Web.

Amir Sahar-Khiz . . . . . Team Leader
Kichelle Green . . . . . Management Assistant
Lorrie Smith . . . . . Information Technology Specialist
Elaine Taylor . . . . . Information Technology Specialist

† Joined in 2003.

Research Programs Review Branch

- Plans, coordinates, and manages the scientific merit review of program project grants, specialized centers, and other grant mechanisms, as necessary, by chartered review committees and special emphasis panels.
- Arranges for and participates in onsite assessments of the research capabilities and facilities of selected applicants.
- Identifies and recommends appropriate review committee members and site visitors, as required, for the review of assigned applications.
- Provides input and advice on grant review policy and procedures, application patterns, research trends, and other related information, as required.
- Coordinates grant review activities with staff of other NCI Divisions and other DEA Branches.

Olivia Bartlett, Ph.D. . . . . Chief
Virginia Wray, Ph.D. . . . . Deputy Chief
Shakeel Ahmad, Ph.D. . . . . Scientific Review Administrator
Courtney Banks . . . . . Program Support Assistant
Ashley Church . . . . . Office Automation Clerk
Natasha Copeland . . . . . Program Support Assistant
Mary Fletcher, Ph.D. . . . . Scientific Review Administrator
Monica Green . . . . . Program Support Assistant
Michelle Higginbottom‡ . . . . . Review Technical Assistant
Tiffany Jenifer . . . . . Program Specialist (Instructor)
Willie Johnson . . . . . Program Specialist
Deneen Mattocks . . . . . Program Support Assistant
William Merritt, Ph.D. . . . . Scientific Review Administrator
Bratin Saha, Ph.D. . . . . Scientific Review Administrator
Joyce Simms* . . . . . Program Support Assistant
Michael Small, Ph.D. . . . . Scientific Review Administrator
Cheryl Smith . . . . . Program Support Assistant
Maliaka Staff‡ . . . . . Review Technical Assistant
Patricia Stream‡ . . . . . Review Technical Assistant
Shamala Srinivas, Ph.D. . . . . Scientific Review Administrator
Barbara Thompson . . . . . Program Support Assistant
Claudio Dansky Ullman, M.D. . . . . Scientific Review Administrator
Peter Wirth, Ph.D. . . . . Scientific Review Administrator
Brian Wojcik, Ph.D. . . . . Scientific Review Administrator
Sunghan Yoo, Ph.D. . . . . Scientific Review Administrator

* Left in 2003.
‡ Contractor.

Resources and Training Review Branch

- Plans, coordinates, and manages the scientific merit review of cancer center, clinical cooperative group, training, and education grant and cooperative agreement applications by chartered review committees and special emphasis panels.
- Arranges for and participates in onsite assessments of the research capabilities and facilities of selected applicants.
- Identifies and recommends appropriate review committee members and site visitors, as required, for the review of assigned applications.
- Provides input and advice on grant review policy and procedures, application patterns, and research trends and other related information, as required.
- Coordinates grant review activities with staff of other NCI Divisions, other DEA Branches, and the Center for Scientific Review.

David E. Maslow, Ph.D. . . . . Chief and Scientific Review Administrator
Lynn Amende, Ph.D. . . . . Scientific Review Administrator
Robert Bird, Ph.D. . . . . Scientific Review Administrator
Danielle Brown . . . . . Program Support Assistant
Gail Bryant, M.D. . . . . Scientific Review Administrator
Linda Edwards . . . . . Grants Technical Assistant
Stephanie Glynn‡. . . . . Review Technical Assistant
Deborah Jaffe, Ph.D. . . . . Scientific Review Administrator
Ilda McKenna, Ph.D. . . . . Scientific Review Administrator
Raymond Petryshyn, Ph.D. . . . . Scientific Review Administrator
Linda Southworth . . . . . Program Support Assistant
Harvey Stein, Ph.D.* . . . . . Scientific Review Administrator
Zenia Vilensky . . . . . Lead Grants Technical Assistant
Chanee Williams . . . . . Grants Technical Assistant

* Left in 2003.
‡ Contractor.

Appendix A: Glossary of Acronyms

AISB	Applied Information Systems Branch
APR	Accelerated Peer Review
ARA	Awaiting Receipt of Application
AREA	Academic Research Enhancement Award
ATA	Academic/Teacher Award
BAA	Broad Agency Announcement
BRSG	Biomedical Research Support Grant
BSA	Board of Scientific Advisors
BSC	Board of Scientific Counselors
CARRA	Consumer Advocates in Research and Related Activities
CCOP	Community Clinical Oncology Program
CCR	Center for Cancer Research
CCSG	Cancer Center Support Grant
CD	Compact Disk
CEGP	Cancer Education Grant Program
CISNET	Cancer Intervention and Surveillance Modeling Network
CIT	Center for Information Technology
CM	Committee Management
CM-MAA	Committee Management-Master Agreement Announcement
CMO	Committee Management Office
CSR	Center for Scientific Review
CTEP	Cancer Therapy Evaluation Program
CURE	Continuous Umbrella of Research Experience
DARPA	Defense Advanced Research Projects Agency
DCB	Division of Cancer Biology
DCCPS	Division of Cancer Control and Population Sciences
DCEG	Division of Cancer Epidemiology and Genetics
DCP	Division of Cancer Prevention
DCTD	Division of Cancer Treatment and Diagnosis
DEA	Division of Extramural Activities
DHHS	Department of Health and Human Services
EDRN	Early Detection Research Network
eRA	Electronic Research Administration
ESATTS	Extramural Science Administrator Training Tracking System
FACA	Federal Advisory Committee Act
FDA	Food and Drug Administration
FLAIR	Flexible System to Advance Innovative Research
FLARE	Fiscal Linked Analysis of Research Emphasis
FOP	Financial Operating Plan
GRB	Grants Review Branch
HIPPA	Health Insurance Portability and Accountability Act
HPV	Human Papilloma Virus
IC	Institute/Center
ICMIC	In Vivo Cellular and Molecular Imaging Center
IDeA	Institutional Development Award
IMAT	Innovative Molecular Analysis Technologies
IMPAC	Information for Management, Planning, Analysis, and Coordination - database
IOM	Institute of Medicine
IRG	Initial Review Group
IRM	Information Resources Management
ISTB	Information Services Technology Branch
IT	Information Technology

JAD	Joint Application and Development
LRP	Loan Repayment Program
MBCCOP	Minority-Based Community Clinical Oncology Program
MBRS	Minority Biomedical Research Support
MERIT	Method to Extend Research in Time
MMHCC	Mouse Models of Human Cancers Consortium
NCAB	National Cancer Advisory Board
NCDDG	National Cooperative Drug Discovery Group
NCI	National Cancer Institute
NCBP	National Cancer Policy Board
NCRR	National Center for Research Resources
NIA	National Institute on Aging
NIH	National Institutes of Health
NOW	NCI Online Workplace
NRSA	National Research Service Award
NTROI	Network for Translational Research in Optical Imaging
OD	Office of the Director
OER	Office of Extramural Research
OPERA	Office of Policy for Extramural Research Administration
ORRPC	Office of Referral, Review, and Program Coordination
PA	Program Announcement
PAR	Reviewed Program Announcement
PCPT	Prostate Cancer Prevention Trial
PCRB	Program Coordination and Referral Branch
PHS	Public Health Service (DHHS)
PRG	Progress Review Group
RAEB	Research Analysis and Evaluation Branch
RAID	Rapid Access to Intervention Development
REAP	Research Enhancement Awards Program
RFA	Request for Applications
RFP	Request for Proposals
RO	Referral Office
RPG	Research Program Grant
RPRB	Research Programs Review Branch
RTRB	Resources and Training Review Branch
RUG	Review Users' Group
SAIRP	Small Animal Imaging Research Program
SBIR	Small Business Innovation Research
SEP	Special Emphasis Panel
SGE	Special Government Employee
SIC	Special Interest Category
SIG	Shared Instramentation Grant
SOP	Standard Operating Procedure
SPORE	Specialized Program of Research Excellence
SRA	Scientific Review Administrator
SREA	Scientific Review and Evaluation Award
SRLB	Special Review and Logistics Branch
STTR	Small Business Technology Transfer Research
TRIO	Translating Research Into Improved Outcomes
TTURCs	Transdisciplinary Tobacco Use Research Centers

Appendix B: List of Chartered Committees, FY2003

President's Cancer Panel

Chair

LaSalle D. Leffall, Jr., M.D. . . . . .Howard University College of Medicine

Members

Lance E. Armstrong . . . . . .Lance Armstrong Foundation
Harold P. Freeman, M.D. . . . . .North General Hospital
Margaret L. Kripke, Ph.D. . . . . .University of Texas M.D. Anderson Cancer Center

Executive Secretary

Maureen O. Wilson, Ph.D. . . . . .National Cancer Institute

National Cancer Advisory Board

Chair

John E. Niederhuber, M.D. . . . . .University of Wisconsin School of Medicine

Members

Samir Abu-Ghazaleh, M.D. . . . . .Avera Cancer Institute
James O. Armitage, M.D. . . . . .University of Nebraska
Moon S. Chen, Jr., M.P.H., Ph.D. . . . . .University of California, Davis Cancer Center
Kenneth H. Cowan, M.D., Ph.D. . . . . .University of Nebraska, Eppley Institute for Cancer Research
Jean B. deKernion, M.D. . . . . .University of California at Los Angeles, School of Medicine
Stephen C. Duffy . . . . . .American Academy of Facial Plastic and Reconstructive Surgery
Ralph S. Freedman, M.B.B.Ch., Ph.D. . . . . .University of Texas M.D. Anderson Cancer Center
James H. French, Jr., M.D. . . . . .The Center for Plastic Surgery
Elmer E. Huerta, M.D., M.P.H. . . . . .Washington Hospital Center
Eric S. Lander, Ph.D. . . . . .Whitehead Institute, Massachusetts Institute of Technology
Susan M. Love, M.D. . . . . .University of California at Los Angeles, School of Medicine
Arthur W. Nienhuis, M.D. . . . . .St. Jude Children's Research Hospital
Larry Norton, M.D. . . . . .Memorial Sloan-Kettering Cancer Center
Marlys Popma . . . . . .Independent Consultant
Franklyn Prendergast, M.D., Ph.D. . . . . .Mayo Comprehensive Cancer Center
Amelie G. Ramirez, Dr.P.H. . . . . .Baylor College of Medicine
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Taub, Dennis D., Ph.D. . . . . .National Institute on Aging
Terry, Michael A., Ph.D. . . . . .University of Rochester
Tigyi, Gabor J., M.D., Ph.D. . . . . .Federation of American Societies for Experimental Biology
Triozzi, Pierre L., M.D. . . . . .University of Alabama at Birmingham
True, Lawrence D., M.D. . . . . .University of Washington
Truitt, Robert L., Ph.D. . . . . .University of Chicago Medical Center
Trump, Donald L., M.D. . . . . .Roswell Park Cancer Institute Corporation
Tweardy, David J., M.D. . . . . .Baylor College of Medicine

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Valiante, Nicholas M., Ph.D. . . . . .Chiron Corporation
Vannier, Michael W., M.D. . . . . .University of Iowa
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Workman, M. L., Ph.D. . . . . Oncology Nursing Society
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Yancopoulos, George D., M.D., Ph.D. . . . . Regeneron Pharmaceuticals, Inc.
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Yannelli, John R., Ph.D. . . . . University of Louisville
Yap, Jeffrey T., Ph.D. . . . . University of Tennessee Medical Center
Yeager, Andrew M., M.D. . . . . University of Pittsburgh
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Total Number of Reviewers: 328
Total Number of Times Reviewers Served: 406

2. *Consultants Serving as Ad Hoc Committee Members on IRG Site Visit Teams in FY2003*

A

Abrams, Judith, Ph.D. . . . . .Wayne State University
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Davie, James R., Ph.D. . . . . .University of Manitoba
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Davis, Roger B., Sc.D. . . . . .University of Massachusetts Medical School Worcester
De Lissovoy, Gregory V., Ph.D. . . . . .Medtap International, Inc.
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Defranco, Donald B., Ph.D. . . . . .University of Pittsburgh
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Devins, Gerald Michael, Ph.D. . . . . .University Health Network
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Dickersin, Kay P., Ph.D. . . . . .Brown University
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Dressler, Gregory R., Ph.D. . . . . .University of Michigan
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Wang, Chyung-Ru, Ph.D. . . . . .University of Chicago
Weaver, Valerie M., Ph.D. . . . . .University of Pennsylvania
Weber, Richard J., Ph.D. . . . . .University of Illinois College of Medicine
Weick, Martin P., Ph.D. . . . . .Baylor College of Medicine
Weigel, Nancy, Ph.D. . . . . .Baylor College of Medicine
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Weiner, George J., M.D. . . . . .University of Iowa
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Wicha, Max S., M.D. . . . . .University of Michigan
Wilburn, Louella S., MOTH . . . . . .People Living with Cancer
Wilkins, Linda S., A.A.S., OTH . . . . . .Duke University Medical Center
Williard, Paul G., Ph.D. . . . . .Neutron Technology
Wilson-Sanders, Susan E., D.V.M. . . . . .University of Arizona
Winey, Mark E., Ph.D. . . . . .University of Colorado
Wingard, John R., M.D. . . . . .University of Florida
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Total Number of Reviewers: 712
Total Number of Times Reviewers Served: 834

3. Consultants Serving on Special Emphasis Panels (SEPs) in FY2003

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Scheinberg, David A., M.D., Ph.D. . . . . .Memorial Sloan-Kettering Cancer Center
Schellhase, Kenneth G., M.D. . . . . .Medical College of Wisconsin
Schiemann, William P., Ph.D. . . . . .National Jewish Medical and Research Center
Schlegel, Richard R., M.D., Ph.D. . . . . .Georgetown University
Schnitzer, Jan E., M.D. . . . . .Sidney Kimmel Cancer Center
Schnoll, Robert A., Ph.D. . . . . .Fox Chase Cancer Center
Schoenberg, Mark P., M.D. . . . . .The Johns Hopkins University
Schwartz, Ann G., Ph.D. . . . . .Wayne State University
Schwartz, Anna L., Ph.D. . . . . .University of Washington
Schwartz, David H., M.D., Ph.D. . . . . .The Johns Hopkins University
Schwartz, Gary G., M.D., Ph.D. . . . . .Wake Forest University Health Sciences
Schwartz, Gary K., M.D. . . . . .Memorial Sloan-Kettering Cancer Center
Schwartz, Joel L., DOTH . . . . . .Institute for Cancer Prevention

Schwartz, Marc D., Ph.D. . . . . .Lombardi Cancer Center
Schwartz, Stuart, M.D., Ph.D. . . . . .University of Medicine and Dentistry of New Jersey
Scott, Charles B., Ph.D. . . . . .American College of Radiology
Scully, Sean P., M.D., Ph.D. . . . . .Mayo Clinic, Rochester
Selhub, Jacob, Ph.D. . . . . .Tufts University
Sellers, Thomas A., M.D., Ph.D. . . . . .Mayo Clinic, Rochester
Semenov, Serguei Y., Ph.D. . . . . .Carolinas Medical Center
Serody, Jonathan S., M.D., Ph.D. . . . . .University of North Carolina at Chapel Hill
Shabot, Michael M., M.D. . . . . .Cedars-Sinai Medical Center
Shahidi, Mahnaz, M.D., Ph.D. . . . . .University of Illinois
Shannon, Jackilen, Ph.D. . . . . .Oregon Health and Science University
Shapiro, Charles L., M.D. . . . . .Ohio State University
Sharlow, Elizabeth R., Ph.D. . . . . .Prolx Pharmaceuticals Corporation
Sharp, John G., Ph.D. . . . . .University of Nebraska
Shibata, Darryl K., M.D., Ph.D. . . . . .University of Southern California
Shiff, Steven J., M.D. . . . . .University of Medicine and Dentistry of New Jersey
Shively, John E., Ph.D. . . . . .City of Hope National Medical Center
Shore, Roy E., Ph.D. . . . . .New York University School of Medicine
Showe, Louise C., Ph.D. . . . . .Wistar Institute
Shrieve, Dennis C., M.D., Ph.D. . . . . .University of Utah
Shultz, Terry D., Ph.D. . . . . .Washington State University
Shyr, Yu, Ph.D. . . . . .Vanderbilt University Medical School
Siegfried, Jill M., Ph.D. . . . . .University of Pittsburgh
Signorielli, Nancy, Ph.D. . . . . .University of Delaware
Sikic, Branimir I., M.D., Ph.D. . . . . .Stanford University
Silver, Richard T., M.D. . . . . .Cornell University Medical Center
Silver, Robert B., Ph.D. . . . . .Marine Biological Laboratory
Simon, Tom . . . . . .Caring Ambassadors Program
Simoneau, Anne R., M.D. . . . . .University of California at Irvine
Simons, Jonathan W., M.D. . . . . .Emory University
Simpson, Pippa M., Ph.D. . . . . .University of Arkansas
Singh, Gurmit, Ph.D. . . . . .McMaster University
Singh, Manbir, Ph.D. . . . . .University of Southern California
Sinko, Patrick J., Ph.D. . . . . .Rutgers University
Sison, Cristina P., Ph.D. . . . . .North Shore-Long Island Jewish Research Institute
Sixbey, John W., M.D. . . . . .Louisiana State University Health Science Center of New Orleans
Skinner, Celette S., Ph.D. . . . . .Duke University
Sklar, Charles A., M.D. . . . . .Memorial Sloan-Kettering Cancer Center
Slaga, Thomas J., Ph.D. . . . . .University of Texas M.D. Anderson Cancer Center
Slater, Michael D., Ph.D. . . . . .Colorado State University
Sliva, Daniel, Ph.D. . . . . .Clarian Health Partners
Smirniotopoulos, James G., M.D. . . . . .Uniformed Services University
Smit, Ellen, Ph.D. . . . . .State University of New York at Buffalo
Smith, Darrell N., M.D. . . . . .Brigham and Women's Hospital
Smith, David I., Ph.D. . . . . .Mayo Clinic, Rochester
Smith, Eva D., Ph.D. . . . . .University of Illinois at Chicago
Smith, Gary J., Ph.D. . . . . .University of North Carolina at Chapel Hill

Smith, Theresa J., Ph.D. . . . . University of South Carolina at Columbia
Smolen, Paul D., Ph.D. . . . . University of Texas
Snedeker, Suzanne M., Ph.D. . . . . Cornell University
So, Peter T., Ph.D. . . . . Massachusetts Institute of Technology
Solomon, Alan, M.D. . . . . University of Tennessee
Sondak, Vernon K., M.D. . . . . University of Michigan
Sorger, Peter K., Ph.D. . . . . Massachusetts Institute of Technology
Sotomayor, Eduardo M., M.D. . . . . University of South Florida
Spencer, David M., Ph.D. . . . . Baylor College of Medicine
Sporn, Michael B., M.D. . . . . Dartmouth College
Spriggs, David R., M.D. . . . . Memorial Sloan-Kettering Cancer Center
Srour, Edward F., Ph.D. . . . . Indiana University
Stadler, Walter M., M.D. . . . . University of Chicago
Stahl, Douglas, Ph.D. . . . . City of Hope National Medical Center
Staib, Lawrence H., Ph.D. . . . . Yale University
Stamnes, Knut, Ph.D. . . . . Stevens Institute of Technology
Stanbridge, Eric J., Ph.D. . . . . University of California
Stashenko, Philip P., Ph.D. . . . . Forsyth Institute
Stavri, P. Zoe, Ph.D. . . . . Oregon Health and Science University
Stein, Gary S., Ph.D. . . . . University of Massachusetts Medical School
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Stemmermann, Grant N., M.D. . . . . University of Cincinnati
Sternick, Edward S., Ph.D. . . . . Tufts-New England Medical Center
Stevens, Richard G., Ph.D. . . . . University of Connecticut School of Medicine and Dentistry
Stevens, Victoria L., Ph.D. . . . . Emory University
Stewart, Carleton C., Ph.D. . . . . Roswell Park Cancer Institute Corporation
Stewart, Clinton F., DOTH. . . . . St. Jude Children's Research Hospital
Stewart, Keith A., M.D. . . . . University of Toronto
Stick, Roberta S., DOTH. . . . . Leukemia and Lymphoma Society
Stoner, Gary D., Ph.D. . . . . Ohio State University
Stott, William, Ph.D. . . . . Dow Chemical Company
Stotts, R. Craig, Ph.D. . . . . University of Tennessee Health Science Center
Stover, Patrick J., Ph.D. . . . . Federation of American Society for Experimental Biology
Strecher, Victor J., Ph.D. . . . . University of Michigan at Ann Arbor
Streeter, Oscar, M.D. . . . . Norris Cancer Hospital
Streeter, Philip R., Ph.D. . . . . Oregon Health and Science University
Strom, Sara S., Ph.D. . . . . University of Texas M.D. Anderson Cancer Center
Studts, Jamie L., Ph.D. . . . . University of Louisville
Stuhldreher, Wendy L., Ph.D. . . . . Slippery Rock University
Su, Yan A., M.D., Ph.D. . . . . Georgetown University
Sukumar, Saraswati, Ph.D. . . . . The Johns Hopkins University
Sumner, II, Walton, M.D. . . . . Barnes-Jewish Hospital
Sutphen, Rebecca , M.D. . . . . University of South Florida
Sutter, Thomas R., Ph.D. . . . . University of Memphis
Swaan, Peter W., Ph.D. . . . . University of Maryland Baltimore School of Pharmacy
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Szabo, Csaba, M.D., Ph.D. . . . . Inotek Pharmaceuticals Corporation

T

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Tang, Cha-Mei, Ph.D. . . . . .Creatv Microtech, Inc.
Tatum, James L., M.D. . . . . .Virginia Commonwealth University
Taylor, Jeremy M., Ph.D. . . . . .University California at Los Angeles
Taylor, Kathryn L., Ph.D. . . . . .Georgetown University
Telang, Nitin T., Ph.D. . . . . .Strang Cancer Prevention Center
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Teruel, Mary N., Ph.D. . . . . .Stanford University
Tew, Kenneth D., Ph.D. . . . . .Fox Chase Cancer Center
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Thomas, Jerry A., M.S. . . . . .Uniformed Services University
Thomas, Judith M., Ph.D. . . . . .University of Alabama at Birmingham
Thomenius, Kai E., Ph.D. . . . . .General Electric Co. Corporate Research and Development Center
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Tomlinson, Gail E., M.D., Ph.D. . . . . .University of Texas Southwest Medical Center
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Tosteson, Tor D., Ph.D. . . . . .Dartmouth College
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Trimble, Cornelia L., M.D. . . . . .The Johns Hopkins University
Trinidad, Dennis R., Ph.D. . . . . .University of California at San Diego
True, Lawrence D., M.D. . . . . .University of Washington
Truitt, Robert L., Ph.D. . . . . .Medical College of Wisconsin
Tsao, Ming-Sound S., M.D. . . . . .Princess Margaret Hospital
Ts'O, Paul O., Ph.D. . . . . .Cell Works, Inc.
Tung, Ching-Hsuan, Ph.D. . . . . .Massachusetts General Hospital
Turkson, James K., Ph.D. . . . . .H. Lee Moffitt Cancer Center and Research Institute
Turner, Larry W., B.S. . . . . .Emory University
Tycko, Benjamin, M.D., Ph.D. . . . . .Institute for Cancer Genetics

U

Unger, Elizabeth R., M.D., Ph.D. . . . . .Centers for Disease Control and Prevention
Urnov, Fyodor D., Ph.D. . . . . .Sangamo Biosciences, Inc.
Uthus, Eric O., Ph.D. . . . . .USDA, Grand Forks

V

Valentino, Daniel J., Ph.D. . . . . .University California at Los Angeles
Valentovic, Monica A., Ph.D. . . . . .Marshall University School of Medicine
Van Aelst, Linda Van, Ph.D. . . . . .Cold Spring Harbor Laboratory
Van Breemen, Richard B., Ph.D. . . . . .University of Illinois at Chicago
Van Etten, Richard A., M.D., Ph.D. . . . . .Center for Blood Research, Inc.
Vannier, Michael W., M.D. . . . . .University of Iowa

Varella-Garcia, Marileila, Ph.D. . . . . .University of Colorado Health Sciences Center
Veltri, Robert W., Ph.D. . . . . .Urocor, Inc.
Verlee, Donald, Ph.D. . . . . .Hospital Products Division
Verma, Ajit K., Ph.D. . . . . .University of Wisconsin at Madison
Vessella, Robert L., Ph.D. . . . . .University of Washington
Vignali, Dario A., Ph.D. . . . . .St. Jude Children's Research Hospital
Villalona, Miguel A., M.D. . . . . .Ohio State University
Villarreal, Roberto, M.D., Ph.D. . . . . .University of Texas Health Science Center at San Antonio
Visuri, Steven R., Ph.D. . . . . .University of California-Lawrence Livermore National Laboratory
Vitkin, Alex, Ph.D. . . . . .Ontario Cancer Institute
Vo-Dinh, Tuan, Ph.D. . . . . .UT-Battelle, LLC-Oak Ridge National Laboratory
Vogel, John S., Ph.D. . . . . .University of California
Votaw, John R., Ph.D. . . . . .Emory University

W

Wagner, Henry, M.D. . . . . .University of South Florida
Wagner, Kay-Uwe, Ph.D. . . . . .University of Nebraska Medical Center
Walczak, Irene M., M.A. . . . . .Imagine Sensor Possibilities
Walker, Bailus, Ph.D. . . . . .Howard University
Waller, Edmund K., M.D., Ph.D. . . . . .Cerus Corporation
Walsh, Judith, M.D. . . . . .University of California at San Francisco
Wang, Lihong, Ph.D. . . . . .Texas Engineering Experiment Station
Wang, Yue J., Ph.D. . . . . .Virginia Polytechnic Institute and State University
Wang, Zhigang, Ph.D. . . . . .University of Kentucky
Wang, Zhou, Ph.D. . . . . .Northwestern University
Wangsness, Lori A. . . . . .Mayo Foundation
Warburton, William K., Ph.D. . . . . .X-Ray Instrumentation Associates
Ward, John H., M.D. . . . . .University of Utah
Ward, Pamela, Ph.D. . . . . .University of California at Irvine
Wargovich, Michael J., Ph.D. . . . . .University of South Carolina at Columbia
Warren, Mary E., Ph.D. . . . . .Genpathway, Inc.
Washington, Mary K., M.D., Ph.D. . . . . .Vanderbilt University
Wasserman, Linda M., M.D., Ph.D. . . . . .University of California at San Diego
Watkins, Simon C., Ph.D. . . . . .Essex Corporation
Wear, Keith A., Ph.D. . . . . .Food and Drug Administration
Webb, Kevin, Ph.D. . . . . .Massachusetts Institute of Technology
Weber, Jeffrey S., M.D., Ph.D. . . . . .University of Southern California
Weber, Michael J., Ph.D. . . . . .University of Illinois
Wei, Alexander, Ph.D. . . . . .Purdue University at West Lafayette
Wei, Jeanne Y., M.D., Ph.D. . . . . .University of Arkansas Medical School at Little Rock
Weichert, Jamey P., Ph.D. . . . . .University of Wisconsin
Weick, Martin P., Ph.D. . . . . .Baylor College of Medicine
Weier, Heinz-Ulrich G., Ph.D. . . . . .Lawrence Berkeley National Laboratory
Weinberg, Irving N., M.D., Ph.D. . . . . .Naviscan Pet Systems, Inc.
Weinberger, Scot, Ph.D. . . . . .Ciphergen Biosystems, Inc.
Weiner, George J., M.D. . . . . .University of Iowa
Weiner, Roy S., M.D. . . . . .Tulane University Medical Center
Weiner, Susan L., Ph.D. . . . . .The Children's Cause, Inc.
Weir, Gordon C., M.D. . . . . .Joslin Diabetes Center

Weis, Marcia R., B.S. . . . . .Washington University
Weiss, Geoffrey R., M.D. . . . . .University of Texas Health Science Center at San Antonio
Weissman, Bernard E., M.D., Ph.D. . . . . .University of North Carolina
Weissman, Sherman M., M.D. . . . . .Yale University
Welch, Gisele, Ph.D. . . . . .Georgia Institute of Technology
Welsh, Joellen E., Ph.D. . . . . .University of Notre Dame
Wender, Richard, M.D. . . . . .Jefferson Medical College
Wenger, Neil S., M.D. . . . . .University of California at Los Angeles
Weston, Allan, M.D. . . . . .Kansas Veteran's Administration Medical Center
Westphall, Michael S., Ph.D. . . . . .University of Wisconsin at Madison
Wetzel, Arthur W., Ph.D. . . . . .Pittsburgh Supercomputing Center
Wewers, Mary Ellen, Ph.D. . . . . .Ohio State University
White, Lisa L., Ph.D. . . . . .Rock Against Cancer
Whitten, Pamela S., Ph.D. . . . . .Michigan State University
Wieand, Samuel H., M.D., Ph.D. . . . . .University of Pittsburgh
Wiernik, Peter H., M.D. . . . . .Our Lady of Mercy Medical Center
Wilding, George A., M.D. . . . . .University of Wisconsin at Madison
Willey, James C., M.D. . . . . .Medical College of Ohio at Toledo
Williams, Daniel B., Ph.D. . . . . .New Mexico Highlands University
Willson, Richard C., Ph.D. . . . . .University of Houston
Wilson, Brian C., Ph.D. . . . . .University of Toronto
Wilson, Thaddeus Andrew, Ph.D. . . . . .University of Tennessee Health Science Center
Wingard, John R., M.D. . . . . .University of Florida
Winn, Robert J., M.D. . . . . .Thomas Jefferson University
Winzelberg, Andrew, Ph.D. . . . . .Stanford University
Wishnok, John S., Ph.D. . . . . .Massachusetts Institute of Technology
Witherspoon, Yvonne, B.A. . . . . .Dana-Farber Cancer Institute
Wolf, Randi L., Ph.D. . . . . .Columbia University Teachers College
Wong, Albert J., M.D. . . . . .Thomas Jefferson University
Woo, Elizabeth S., Ph.D. . . . . .Cellomics, Inc.
Wood, Marie E., M.D., Ph.D. . . . . .University of Vermont and State Agriculture College
Woodgett, James R., Ph.D. . . . . .Ontario Cancer Institute
Woods, Virgil L., M.D. . . . . .University of California at San Diego
Wu, Joseph M., Ph.D. . . . . .New York Medical College
Wu, Xifeng, M.D., Ph.D. . . . . .University of Texas M.D. Anderson Cancer Center

Y

Yaffe, Martin J., Ph.D. . . . . .Sunnybrook and Women's College Health Sciences Center
Yamamoto, Monica E., Ph.D. . . . . .University of Pittsburgh at Pittsburgh
Yan, Lin, Ph.D. . . . . .Protein Technologies International
Yancey, Antronette K., M.D., Ph.D. . . . . .University of California at Los Angeles
Yandell, David W., M.D. . . . . .University of Vermont
Yang, Chung S., Ph.D. . . . . .Rutgers The State University of New Jersey at New Brunswick
Yang, Raymond S., Ph.D. . . . . .Colorado State University
Yannelli, John R., Ph.D. . . . . .University of Louisville
Yates, Jerome W., M.D., Ph.D. . . . . .Roswell Park Cancer Institute
Yawn, Barbara P., M.D. . . . . .Olmsted Medical Group
Yee, Amy S., Ph.D. . . . . .Tufts University at Boston
Yee, Douglas, M.D. . . . . .University of Minnesota

Yeung, Edward F., Ph.D. . . . . .Iowa State University
Yih, Tachung C., Ph.D. . . . . .University of Texas at Arlington
Yu, Herbert H., M.D., Ph.D. . . . . .Yale University
Yueh, Bevan, M.D. . . . . .University of Washington

Z

Zabriskie, Mark, Ph.D. . . . . .Oregon State University
Zagzebski, James A., Ph.D. . . . . .University of Wisconsin at Madison
Zahrbock, Cary, MOTH . . . . . .National Coalition/Cancer Survivorship
Zangar, Richard C., Ph.D. . . . . .Battelle Pacific Northwest Laboratories
Zavislan, James M., Ph.D. . . . . .Lucid Technologies, Inc.
Zebala, John A., M.D., Ph.D. . . . . .Syntrix Biosystems, Inc.
Zebrack, Brad J., Ph.D. . . . . .University of Southern California
Zemel, Richard S., Ph.D. . . . . .University of Arizona
Zeng, Jianchao, Ph.D. . . . . .Georgetown University
Zeng, Qing, Ph.D. . . . . .Brigham and Women's Hospital
Zhang, Xiao-Kun, Ph.D. . . . . .Burnham Institute
Zhang, Zuo-Feng, M.D., Ph.D. . . . . .University of California at Los Angeles
Zhao, Yingming, Ph.D. . . . . .University of Texas
Zhou, Jin-Rong, Ph.D. . . . . .Beth Israel Deaconess Medical Center
Zinn, Kurt R., Ph.D. . . . . .University of Alabama at Birmingham
Zuckerman, Kenneth S., M.D., Ph.D. . . . . .H. Lee Moffitt Cancer Center and Research Institute

Total Number of Reviewers: 1,274
Total Number of Times Reviewers Served: 1,659

Appendix D: Activities of the National Cancer Advisory Board

Originally established as the National Advisory Cancer Council in 1937, the NCAB consists of 18 members who are appointed by the President and 12 nonvoting *ex officio* members. The NCAB advises, assists, consults with, and makes recommendations to the Secretary, DHHS, and to the NCI Director with respect to the activities carried out by and through the Institute and on policies pertaining to these activities. It is authorized to recommend support for grants and cooperative agreements, following technical and scientific peer review. The Director of the DEA serves as Executive Secretary of the NCAB. In fulfilling its role as the locus for second-level review of all peer-reviewed applications involving requests for more than $50,000 in direct costs, the Board reviewed a total of 6,178 applications in FY2003.

The Board heard presentations, discussed, and provided advice on a variety of topics and NCI activities in FY2003, such as:

- Tumor Immunology and Immunotherapy Workshop Report
- NCI Tumor Immunology and Immunotherapy Strategic Initiatives
- NIH Reorganization Committee Report
- Update on NIH Loan Repayment Program
- Impact of HIPAA on Oncology Research
- P01 Process Review Report
- Current Issues in Tobacco Control
- NCI Training Commission
- Obesity—Cancer Risk and Prognosis
- Cancer Trends and Statistics Update
- NCAB Retreat Report and Future Directions
- Overview of Center to Reduce Cancer Health Disparities
- NCI/FDA Partnerships and the Use of Serum Proteomic Patterns for Cancer Detection
- Establishing the NCI Vocabulary and Bioinformatics Initiative
- Subcommittee on Planning and Budget: Bypass Budget Update
- Plans for Cancer Information Service
- Annual Delegations of Authority/New Business I
- P30/P50 Working Group Report
- American Association for Cancer Research Update
- Stomach and Esophageal Cancer Progress Review Group Report

- MERIT Awardee Presentation: Modulators of Prostate Cancer Metastasis
- NCI Director's Report
- President's Cancer Panel Report
- NIH Director's Report
- Legislative Update
- Gene Expression Profiles Predict Survival of Lymphoma Patients After Chemotherapy
- Program Review of Division of Cancer Epidemiology and Genetics
- Program Review of Division of Cancer Prevention
- Transdivisional Research on Human Papilloma Virus (HPV): Definition and Intervention of a Cancer-Causing Agent

As part of its mandate for oversight of NCI activities, the NCAB receives regular updates from the NCI Director, the NCI Office of Legislation and Congressional Activities, the President's Cancer Panel, and the National Cancer Policy Board.

Another major role of the Board is to monitor the overall advisory and oversight activities of the NCI as a whole. In that regard, it annually reviews the site visit outcomes of intramural review and the extramural RFA and RFP concepts acted upon by the BSA. The NCAB also participates in the framing of the annual NCI Bypass Budget and considers the impact of actualized priorities as expressed by the allocation of the annual operating budget.

The full text of recent NCAB meeting summaries is available on the NCI Web site at: **http://deaifo.nci.nih.gov/advisory/ncabminmenu.htm.**

Appendix E: Activities of the Board of Scientific Advisors

The BSA provides scientific advice on a wide variety of matters concerning scientific program policy, progress, and future direction of NCI's extramural research programs, and concept review of extramural program initiatives.

In addition to approving a number of extramural program initiatives (see below), the BSA also heard presentations on the following in FY2003:

- NCI Director's Report
- Future Directions for NCI Imaging
- IOM/NCPB Report: Fulfilling the Potential of Cancer Prevention and Early Detection
- NCI/Congressional Relations
- NCI's 2015 Challenge Goal: Enabling Technologies
- Cancer Genetics Network Progress Report
- Status Report: NCI Bypass Budget
- Prostate Cancer Prevention Trial (PCPT) Results
- Report of the Deputy Director, NCI
- BSA at National Meetings
- Translating Research Into Improved Outcomes (TRIO) Program Progress Report
- Cancer Regression in Patients Following Clonal Repopulation With Antitumor Lymphocytes
- Transdisciplinary Tobacco Use Research Centers Update: Development of New Methods for Measuring the Impact of Scientific Initiatives
- Annual RFA Report
- Status Report: CTEP Concept Evaluation Panels
- Early Detection Research Network (EDRN) Progress Report
- Mouse Models of Human Cancers Consortium (MMHCC) Update
- NCAB P30/P50 Working Group Report—Advancing Translational Cancer Research: A Vision of the Cancer Center and SPORE Programs of the Future
- Peer Review System for Program Project Grants
- Mini-Symposia: Transdisciplinary Tobacco Use Research Centers (TTURCs)
- Division of Cancer Control and Population Sciences: Program Status Reports

RFA Concepts Approved

Office of the Director

- Innovative Molecular Analysis Technologies (IMAT) Program

Division of Cancer Biology

- Integrative Cancer Biology Programs

Division of Cancer Control and Population Sciences

- Transdisciplinary Tobacco Use Research Centers (TTURCs)
- Long-Term Cancer Survivors: Research Initiatives
- Understanding Mechanisms of Physical Activity Behavior Change

Division of Cancer Treatment and Diagnosis

- National Cooperative Drug Discovery Groups (NCDDGs) for Cancer
- Academic Public-Private Partnership Program/Academic Public-Private Partnership Planning Grant

Cooperative Agreements Approved

Division of Cancer Treatment and Diagnosis

- Strategic Partnering To Evaluate Cancer Signature
- Small Animal Imaging Research Program (SAIRP)
- Pediatric Preclinical Testing Program
- Pediatric Brain Tumor Consortium

Division of Cancer Control and Population Sciences

- Cancer Intervention and Surveillance Modeling Network (CISNET)

Division of Cancer Prevention

- Community Clinical Oncology Program (CCOP)/Minority-Based Clinical Oncology Program (MBCCOP)
- Early Detection Research Network (EDRN)

The full text of recent BSA meeting summaries is available on the NCI Web site at: **http://deainfo.nci.nih.gov/advisory/bsaminmenu.htm.**

Appendix F: NCI Grant Guidelines and Descriptions

Below is a brief description of NIH grants, contracts, and extramural policy notices. Additional information about these and other administrative supplements to research grants, guidelines, study section rosters, and information on the Center for Scientific Review, NIH, may be obtained by contacting the Referral Office, Division of Research, or see the DEA Web page on Grants Guidelines and Descriptions at **http://deainfo.nci.nih.gov/flash/awards.htm.**

C Series: Research Construction Programs

C06 Research Facilities Construction Grants

To provide matching Federal funds, up to 75 percent, for construction or major remodeling to create new research facilities. In addition to basic research laboratories, this may include, under certain circumstances, animal facilities and/or limited clinical facilities where they are an integral part of an overall research effort.

F Series: Fellowship Programs

F31 Predoctoral Individual National Research Service Award (NRSA)

To provide predoctoral individuals with supervised research training in specified health and health-related areas leading toward a research degree (e.g., Ph.D.).

F31 Predoctoral Fellowship—Minority Students

A fellowship award that provides predoctoral minority students with supervised research training in specified health and health-related areas leading toward the research degree (e.g., Ph.D.).

F31 Predoctoral Fellowship—Students with Disabilities

A fellowship award that provides predoctoral students with disabilities with supervised research training in specified health and health-related areas leading toward the research degree (e.g., Ph.D.).

F32 National Research Service Award for Individual Postdoctoral Fellows

To provide postdoctoral research training to individuals to broaden their scientific background and extend their potential for research in specified health-related areas.

F33 National Research Service Award for Senior Fellows

To provide opportunities for experienced scientists to make major changes in the direction of research careers, broaden scientific backgrounds, acquire new research capabilities, enlarge command of an allied research field, or take time from regular professional responsibilities to increase capabilities to engage in health-related research.

K Series: Career Development Programs

K01 The Howard Temin Award

An NCI-specific variant of the NIH Mentored Research Scientist Development Award that is designed to provide research scientists with an additional period of sponsored research experience as a way to gain expertise in a research area new to the applicant or in an area that would demonstrably enhance the applicant's scientific career.

K01 Mentored Career Development Award for Underrepresented Minorities

To support scientists committed to research who are in need of both advanced research training and additional experience.

K05 Established Investigator Award in Cancer Prevention, Control, Behavioral, and Population Research

To support scientists qualified to pursue independent research that would extend the research program of the sponsoring institution, or to direct an essential part of this program.

K07 Cancer Prevention, Control, Behavioral, and Population Sciences Career Development Award

To support the postdoctoral career development of investigators who are committed to academic research careers in cancer prevention, control, behavioral, epidemiological, and/or the population sciences. It supports up to 5 years of combined didactic and supervised (i.e., mentored) research experiences to acquire the methodological and theoretical research skills needed to become an independent scientist. The very broad nature of the prevention, control, and population sciences makes it applicable to those individuals doctorally trained in the basic sciences, medicine, behavioral sciences, and public health. The K07 award has been expanded from a scope limited to "preventive oncology" to include the entire spectrum of fields that are of vital importance to cancer prevention and control such as nutrition, epidemiology, and behavioral sciences.

K08 Mentored Clinical Scientists Development Award

To provide the opportunity for promising medical scientists with demonstrated aptitude to develop into independent investigators, or for faculty members to pursue research in categorical areas applicable to the awarding unit, and to aid in filling the academic faculty gap in specific shortage areas within U.S. health professions institutions.

K08 Mentored Clinical Scientists Development Award—Minorities in Clinical Oncology

A specialized type of Mentored Clinical Scientist Developmental Awards (K08s) that support the development of outstanding clinical research scientists, with this type being reserved for qualified individuals from under-represented minority groups. Both types of K08 awards support periods of specialized study for clinically trained professionals who are committed to careers in research and who have the potential to develop into independent investigators. The K08 awards for Minorities in Clinical Oncology are distinct and important because they provide opportunities for promising medical scientists with demonstrated aptitudes who belong to under-represented minority groups to develop into independent investigators, or for faculty members who belong to under-represented minority groups to pursue research aspects of categorical areas applicable to the awarding unit(s), and aid in filling the academic faculty gaps in these shortage areas within health professions institutions in the United States.

K12 Institutional Clinical Oncology Research Career Development Award

To support a newly trained clinician appointed by an institution for development of independent research skills and experience in a fundamental science within the framework of an interdisciplinary research and development program.

K22 The NCI Transition Career Development Award for Underrepresented Minorities

To provide support to outstanding newly trained basic or clinical investigators to develop their independent research skills through a two-phase program: an initial period involving an intramural appointment at the NIH and a final period of support at an extramural institution. The

award is intended to facilitate the establishment of a record of independent research by the investigator to sustain or promote a successful research career.

K22 The NCI Scholars Program

To provide an opportunity for outstanding new investigators to begin their independent research careers, first within the special environment of the National Cancer Institute and then at an institution of their choice. Specifically, this Program provides necessary resources to initiate an independent research program of 3 to 4 years at the NCI followed by an extramural funding mechanism (K22) to support their research program for 2 years at the extramural institution to which they are recruited.

K23 Mentored Patient-Oriented Research Career Development Award

To provide support for the career development of investigators who have made a commitment to focus their research endeavors on patient-oriented research. This mechanism provides support for a 3-year minimum up to 5-year period of supervised study and research for clinically trained professionals who have the potential to develop into productive clinical investigators.

K23 Mentored Patient-Oriented Research Career Development Award for Underrepresented Minorities

To support the career development of investigators who have made a commitment to focus their research on patient-oriented research. This mechanism provides support for a period of supervised study and research for clinically trained professionals who have the potential to develop into productive clinical investigators in patient-oriented research.

K24 Mid-Career Investigator Award in Patient-Oriented Research

To provide support for clinicians to allow them protected time to devote to patient-oriented research and to act as mentors for beginning clinical investigators. The target candidates are outstanding clinical scientists engaged in patient-oriented research who are within 15 years of their specialty training, who can demonstrate the need for a period of intensive research focus as a means of enhancing their clinical research careers, and who are committed to mentoring the next generation of clinical investigators in patient-oriented research.

K25 Mentored Quantitative Research Career Development Award

This award allows an independent scientist in a highly technical field of research to identify an appropriate mentor with extensive experience in cancer research and to receive the necessary training and career development required to become involved in multidisciplinary cancer research.

P Series: Research Program Projects and Centers

P01 Research Program Projects

To support multidisciplinary or multifaceted research programs that have a focused theme. Each component project should be directly related to and contribute to the common theme.

P20 Exploratory Grants

To support planning for new programs, expansion or modification of existing resources, and feasibility studies to explore various approaches to the development of interdisciplinary programs that offer potential solutions to problems of special significance to the mission of the NIH. These exploratory studies may lead to specialized or comprehensive centers.

P30 Center Core Grants

To support shared use of resources and facilities for categorical research by investigators from different disciplines who provide a multidisciplinary approach to a joint research effort, or by investigators from the same discipline who focus on a common research problem. The core grant is integrated with the Center's component projects or Program Projects, though funded independently from them. This support, by providing more accessible resources, is expected to assure greater productivity than that provided through the separate projects and Program Projects.

P50 Specialized Center Grants

To support any part of the full range of research and development from very basic to clinical; may involve ancillary supportive activities such as protracted patient care necessary to the primary research or R&D effort. This spectrum of activities comprises a multidisciplinary attack on a specific disease or biomedical problem area. These grants differ from Program Project grants in that they are usually developed in response to an announcement of the programmatic needs of an Institute or Division, and subsequently receive continuous attention from its staff. Centers also may serve as regional or national resources for special research purposes.

R Series: Research Projects

R01 Research Project

Grants are awarded to institutions to allow a Principal Investigator to pursue a scientific focus or objective in his or her area of interest and competence. Institutional sponsorship assures the NIH that the institution will provide facilities necessary to conduct the research and will be accountable for the grant funds. Applications are accepted for health-related research and development in all areas within the scope of the NIH's mission.

R03 Small Research Grants

Small grants provide research support, specifically limited in time and amount, for activities such as pilot projects, testing of new techniques, or feasibility studies of innovative, high-risk research, which would provide a basis for more extended research.

R13 Conferences

The NIH provides funding for conferences to coordinate, exchange, and disseminate information related to its program interests. Generally, such awards are limited to participation with other organizations in supporting conferences rather than provision of sole support. Costs eligible for support include salaries, consultant services, equipment rental, travel, supplies, conference services, and publications. Prospective applicants are encouraged to inquire in advance concerning possible interest on the part of an awarding Institute/Center (IC), and to obtain more information on application procedures and costs.

R15 The NIH Academic Research Enhancement Awards (AREA)

To enhance the research environment of educational institutions that have not been traditional recipients of NIH research funds, this award provides limited funds to those institutions' faculty members to develop new research projects or expand ongoing research activities in health sciences and to encourage students to participate in the research activity. As funds are anticipated to continue to be available each year, the NIH is now inviting applications for AREA grants through a standing, ongoing Program Announcement.

R21 Exploratory/Developmental Grants

To encourage the development of new research activities in categorical program areas. (Support generally is restricted in level of support and duration.)

R24 Resource-Related Research Projects

To support research projects that will enhance the capability of resources to serve bio-medical research.

R25E Cancer Education Grant Program (CEGP)

A flexible, curriculum-driven program aimed at developing and sustaining innovative educational approaches that ultimately will have an impact on reducing cancer incidence, mortality, and morbidity, as well as on improving the quality of life of cancer patients. The CEGP accepts investigator-initiated grant applications that pursue a wide spectrum of objectives ranging from short courses; to the development of new curriculum in academic institutions; to national forums and seminar series; to hands-on workshop experiences for the continuing education of health care professionals, biomedical researchers, and the lay community; to structured short-term research experiences designed to motivate high school, college, medical, dental, and other health professional students to pursue careers in cancer research. Education grants can focus on education activities before, during, and after the completion of a doctoral level degree, as long as they address a need that is not fulfilled adequately by any other grant mechanism available at the NIH, and are dedicated to areas of particular concern to the National Cancer Program.

R25T Cancer Education and Career Development Program

To support development and/or implementation of a program related to a category in one or more of the areas of education, information, training, technical assistance, coordination, or evaluation.

R33 Exploratory/Developmental Grants, Phase II

To provide a second phase for support of innovative exploratory and developmental research activities initiated under the R21 mechanism. Although only R21 awardees are generally eligible to apply for R33 support, specific program initiatives may establish eligibility criteria under which applications could be accepted from applicants who demonstrate program competency equivalent to that expected under R33.

R37 Method to Extend Research in Time (MERIT) Award

To provide long-term grant support to investigators whose research competence and productivity are distinctly superior and who are highly likely to continue to perform in an outstanding manner. Investigators may not apply for a MERIT Award. Program staff and/or members of the cognizant National Advisory Council/Board will identify candidates for the MERIT Award during the course of review of competing research grant applications prepared and submitted in accordance with regular PHS requirements.

Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs

The NIH welcomes grant applications from small businesses in any biomedical or behavioral research area as described in the solicitations below. Support under the SBIR program is normally provided for 6 months/$100,000 for Phase I, and 2 years/$500,000 for Phase II. However, applicants may propose longer periods of time and greater amounts of funds necessary for completion of the project.

R41 STTR Grants, Phase I
To support cooperative R&D projects between small business concerns and research institutions, limited in time and amount; to establish the technical merit and feasibility of ideas that have potential for commercialization.

R42 STTR Grants, Phase II
To support in-depth development of cooperative R&D projects between small business concerns and research institutions, limited in time and amount, whose feasibility has been established in Phase I and that have potential for commercial products or services.

R43 SBIR Grants, Phase I
To support projects, limited in time and amount, to establish the technical merit and feasibility of R&D ideas that may ultimately lead to commercial products or services.

R44 SBIR Grants, Phase II
To support in-depth development of R&D ideas whose feasibility have been established in Phase I that are likely to result in commercial products or services.

R55 James A. Shannon Director's Awards; Guidelines
To provide a limited award to investigators to further develop, test, and refine research techniques; perform secondary analysis of available data sets; test the feasibility of innovative and creative approaches; and conduct other discrete projects that can demonstrate their research capabilities and lend additional weight to their already meritorious applications.

S Series: Research-Related Programs

S06 Minority Biomedical Research Support (MBRS)
To strengthen the biomedical research and research training capability of ethnic minority institutions, and thus establish a more favorable milieu for increasing the involvement of minority faculty and students in biomedical research.

S07 Biomedical Research Support Grants (NCRR BRSG)
As an example of this funding mechanism, the NIH issued a Request for Applications (RFA) in FY2003 to provide short-term interim support for institutional activities that will strengthen oversight of human subjects research at institutions that receive significant NIH support for clinical research. Although there is considerable flexibility in the types of activities that could be supported under the BRSG program, this RFA emphasized the importance of efforts to enhance the protection of research subjects by means that will be sustained by the recipient institution after the award period ends. Awardees are also required to collaborate with other institutions conducting human subjects research and are not currently funded under this program, to share educational resources, computer technologies, best practices, etc. Although all NIH components supporting clinical research (including the NCI) are providing support for this program, it will be administered by the National Center for Research Resources (NCRR).

S10 Biomedical Research Support Shared Instrumentation Grants (NCRR SIG)
The National Center for Research Resources (NCRR) initiated its competitive Shared Instrumentation Grant (SIG) Program in FY 1982. Shared Instrumentation Grants provide support for expensive state-of-the-art instruments utilized in both basic and clinical research. This program is designed to meet the special problems of acquisition and updating of expensive shared-use instruments that are not generally available through other NIH funding

mechanisms, such as the regular research project, program project, or center grant programs. Applications for funds to design or to advance the design of new instruments are not accepted. The objective of the program is to make available to institutions with a high concentration of NIH-supported biomedical investigators expensive research instruments that can only be justified on a shared-use basis and for which meritorious research projects are described.

T Series: Training Programs

T15 Continuing Education Training Grants

To assist professional schools and other public and nonprofit institutions in the establishment, expansion, or improvement of programs of continuing professional education, especially for programs of extensive continuation, extension, or refresher education dealing with new developments in the science and technology of the profession.

T32 NIH National Research Service Award—Institutional Research Training Grants

To enable institutions to make National Research Service Awards to individuals selected by them for predoctoral and postdoctoral research training in specified shortage areas.

U Series: Cooperative Agreements

U01 Research Projects

To support a discrete, specified, circumscribed project to be performed by the named investigators in an area representing their specific interests and competencies.

U10 Cooperative Clinical Research—Cooperative Agreements

To support clinical evaluation of various methods of therapy and/or prevention in specific disease areas. These represent cooperative programs between participating institutions and Principal Investigators, and are usually conducted under established protocols.

U13 Conference—Cooperative Agreements

In order to coordinate, exchange, and disseminate information related to its program interests, an NIH Institute or Center can use this type of award to provide funding and direction for appropriate scientific conferences. These cooperative agreements allow the NCI to partner with one or more outside organizations to support international, national, or regional meetings, conferences, and workshops that are of value in promoting the goals of the National Cancer Program.

U19 Research Program—Cooperative Agreements

To support a research program of multiple projects directed toward a specific major objective, basic theme, or program goal, requiring a broadly based, multidisciplinary, and often long-term approach.

U24 Resource-Related Research Projects—Cooperative Agreements

To support research projects contributing to improvement of the capability of resources to serve biomedical research.

U54 Specialized Center—Cooperative Agreements

To support any part of the full range of research and development from very basic to clinical; may involve ancillary supportive activities such as protracted patient care necessary to the primary research or R&D effort. The spectrum of activities comprises a multidisciplinary attack on a specific disease entity or biomedical problem area. These differ from program projects in that they are usually developed in response to an announcement of the programmatic needs of an Institute or Division and subsequently receive continual attention from its staff. Centers may also serve as regional or national resources for special research purposes, with assistance from staff of the funding component in identifying appropriate priority needs.

U56 Exploratory Grants—Cooperative Agreements

To support planning for new programs, expansion or modification of existing resources, and feasibility studies to explore various approaches to the development of interdisciplinary programs that offer potential solutions to problems of special significance to the mission of the NIH. These exploratory studies may lead to specialized or comprehensive centers. Substantial Federal programmatic staff involvement is intended to assist investigators during performance of the research activities, as defined in the terms and conditions of award.

Appendix G: Cancer Information Sources on the Internet

DEA Web Sites

The following Web sites are maintained by the DEA to provide detailed information to researchers and the public about NCI funding opportunities and the Advisory Boards and groups supported by the DEA.

http://deainfo.nci.nih.gov/index.htm
: DEA home page. Links to the individual DEA Web pages listed below; mission of the Division; contact information for DEA staff.

http://deainfo.nci.nih.gov/advisory/Boards.htm
: Links to the home pages of NCI's Advisory Boards.

http://deainfo.nci.nih.gov/advisory/pcp/pcp.htm
: Charter of the President's Cancer Panel; meeting agendas; meeting minutes; annual reports.

http://deainfo.nci.nih.gov/advisory/ncab.htm
: Charter of the National Cancer Advisory Board; members of subcommittees; meeting agendas.

http://deainfo.nci.nih.gov/advisory/ncabminmenu.htm
: Full text of NCAB meeting summaries.

http://deainfo.nci.nih.gov/advisory/bsa.htm
: Charter of the Board of Scientific Advisors; members of subcommittees; meeting agendas.

http://deainfo.nci.nih.gov/advisory/bsaminmenu.htm
: Full text of BSA meeting summaries.

http://deainfo.nci.nih.gov/advisory/bsa/bsa_program/bsaprgr.htm
: Program Review Group reports.

http://deainfo.nci.nih.gov/advisory/bsc.htm
: Charter of the Board of Scientific Counselors; members of subcommittees.

http://deainfo.nci.nih.gov/advisory/irg.htm
: Charter of the Initial Review Group; members of subcommittees.

http://deainfo.nci.nih.gov/advisory/sep.htm
: Charter of the Special Emphasis Panel; rosters of recent meetings.

http://deainfo.nci.nih.gov/advisory/joint.htm
: Charter of the Advisory Committee to the Director; meeting schedules, agendas, and minutes; members of NCI Director's Working Groups, Program Review Working Groups, and Progress Working Groups.

http://deainfo.nci.nih.gov/advisory/pog/progress/index.htm
Function and organization of Progress Review Groups, PRG reports and meeting schedules; members of PRGs.

http://deainfo.nci.nih.gov/advisory/dclg/dclg.htm
Charter of the NCI Director's Consumer Liaison Group; meeting schedules, agendas, minutes, and meeting summaries.

http://deainfo.nci.nih.gov/funding.htm
Comprehensive information about funding for cancer research; lists of active PAs and RFAs; and also recently cleared concepts; grant policies and guidelines; downloadable application forms.

http://deainfo.nci.nih.gov/extra/pa/all_pa.htm
Active PAs, with links to detailed descriptions.

http://deainfo.nci.nih.gov/extra/rfa/index.htm
Active RFAs, with links to detailed descriptions.

http://deainfo.nci.nih.gov/grantspolicies/index.htm
Links to full-text NCI and NIH policies related to grants and grant review (e.g., Guidelines on the Inclusion of Women and Minorities as Subjects in Clinical Research and Instructions to Reviewers for Evaluating Research Involving Human Subjects in Grant and Cooperative Agreement Applications).

http://deainfo.nci.nih.gov/flash/awards.htm
Grants Guidelines and Descriptions (descriptions of NCI funding mechanisms, with links to PAs, RFAs, guidelines, and supplemental materials).

http://deais.nci.nih.gov/Query/QueryForm
NCI's Funded Research Portfolio database contains information about research grant and contract awards for the current and past five fiscal years. Searchable by text words contained in project abstracts and by Special Interest Category (SIC) and anatomic site codes.

http://deainfo.nci.nih.gov/whatsnew/news.htm
Extramural events and updates.

NCI Web Sites

The National Cancer Institute maintains a number of Web sites containing information about the Institute and its programs. All NCI Web sites, including those designed to provide cancer-related information to the general public and physicians, can be reached from the NCI home page at **http://cancer.gov/**.

Table 1. Applications Received for Referral by the NCI/DEA (by Mechanism), FY2003*

Mechanism	Activity Code	Totals by Activity	Applications by Board		
			Jan	May	Sep
Research Facilities Construction Grants	C06	1	0	0	1
International Training Grants in Epidemiology (FIC)	D43	26	0	0	26
Predoctoral Individual National Research Service Award	F31	51	0	37	14
Postdoctoral Individual National Research Service Award	F32	441	146	138	157
National Research Service Award for Senior Fellows	F33	3	3	0	0
Research Scientist Development Award - Research and Training	K01	108	30	48	30
Research Scientist Award	K05	8	3	1	4
Academic/Teacher Award	K07	73	27	27	19
Clinical Investigator Award	K08	144	46	53	45
Physician Scientist Award (Program)	K12	13	13	0	0
Career Transition Award	K22	53	12	25	16
Mentored Patient-Oriented Research Development Award	K23	60	19	27	14
Midcareer Investigator Award in Patient-Oriented Research	K24	9	4	1	4
Mentored Quantitative Research Career Development	K25	8	1	2	5
Loan Repayment Program for Clinical Researchers	L30	3	0	0	3
Loan Repayment Program for Pediatric Researchers	L40	5	0	0	5
Research Program Projects	P01	141	46	48	47
Exploratory Grants	P20	52	15	13	24
Center Core Grants	P30	17	9	6	2
Animal (Mammalian and Nonmammalian) Model, and Animal and Biological Material Resource Grants (NCRR)	P40	1	1	0	0
Biotechnology Resource Grant Program	P41	4	0	2	2
Specialized Center	P50	88	11	61	16
Research Project	R01	5,655	1,720	1,843	2,092
Small Research Grants	R03	287	80	110	97

(Continued)

*Source: IMPACII. Includes NCI Primary and Secondary assigned applications and withdrawn applications. Excludes deleted applications. Of the 11,144 applications received during the year, 3,615 were not recommended for further consideration by the initial review committee, and an additional 3,966 received scores in the bottom 33 percent and were not submitted for NCAB action.

Table 1. Applications Received for Referral by the NCI/DEA (by Mechanism), FY2003* (Continued)

Mechanism	Activity Code	Totals by Activity	Applications by Board		
			Jan	May	Sep
Conferences	R13	150	53	45	52
Academic Research Enhancement Awards (AREA)	R15	86	35	30	21
Research Demonstration and Dissemination Projects	R18	1	0	0	1
Exploratory/Developmental Grants	R21	1,532	374	452	706
Resource-Related Research Projects	R24	1	1	0	0
Education Projects	R25	90	30	33	27
Exploratory/Developmental Grants Phase II	R33	83	34	33	16
Method to Extend Research in Time (MERIT) Award	R37	25	12	3	10
Small Business Technology Transfer (STTR) Grants - Phase I	R41	126	28	52	46
*Small Business Technology Transfer (STTR) Grants - Phase II	R42	16	5	5	6
Small Business Innovation Research Grants (SBIR) - Phase I	R43	1,218	353	457	408
Small Business Innovation Research Grants (SBIR) - Phase II	R44	295	88	126	81
Minority Biomedical Research Support (MBRS)	S06	7	2	5	0
Biomedical Research Support Grants (NCRR)	S07	23	0	0	23
Continuing Education Training Program	T15	7	7	0	0
Institutional National Research Service Award	T32	64	27	22	15
Institutional National Research Service Award with Involvement of NIH Intramural Faculty	TU2	2	0	0	2
Research Project (Cooperative Agreements)	U01	58	9	5	44
Cooperative Clinical Research (Cooperative Agreements)	U10	54	36	2	16
Conference (Cooperative Agreements)	U13	2	2	0	0
Research Program (Cooperative Agreements)	U19	1	0	0	1
Resource-Related Research Project (Cooperative Agreements)	U24	1	0	1	0
Specialized Center (Cooperative Agreements)	U54	33	16	0	17
Exploratory Grants - Cooperative Agreement (NCI)	U56	18	10	0	8
Overall Totals		11,144	3,308	3,713	4,123

*Source: IMPACII. Includes NCI Primary and Secondary assigned applications and withdrawn applications. Excludes deleted applications. Of the 11144 applications received during the year, 3615 were not recommended for further consideration by initial review committee, and an additional 3966 received scores in the bottom 33 percent and were not submitted for NCAB action.

Table 2. Applications Reviewed by the NCI/DEA (by Mechanism), FY2003*

Mechanism	Activity Code	Totals by Activity	Applications by Board		
			Jan	May	Sep
Research Scientist Development Award - Research and Training	K01	105	30	47	28
Research Scientist Award	K05	8	3	1	4
Academic/Teacher Award	K07	73	27	27	19
Clinical Investigator Award	K08	114	38	34	42
Physician Scientist Award (Program)	K12	13	13	0	0
Career Transition Award	K22	53	12	25	16
Mentored Patient-Oriented Research Development Award	K23	48	16	23	9
Midcareer Investigator Award in Patient-Oriented Research	K24	9	4	1	4
Mentored Quantitative Research Career Development	K25	7	1	2	4
Loan Repayment Program for Clinical Researchers	L30	199	0	0	0
Loan Repayment Program for Pediatric Researchers	L40	44	0	0	0
Research Program Projects	P01	138	44	48	46
Exploratory Grants	P20	49	15	10	24
Center Core Grants	P30	11	3	6	2
Specialized Center	P50	77	11	50	16
Research Project	R01	211	108	62	41
Small Research Grants	R03	276	77	107	92
Conferences	R13	80	38	22	20
Exploratory/Developmental Grants	R21	287	121	96	70
Education Projects	R25	90	30	33	27
Exploratory/Developmental Grants - Phase II	R33	66	30	23	13
Small Business Technology Transfer (STTR) Grants - Phase I	R41	20	6	12	2
*Small Business Technology Transfer (STTR) Grants - Phase II	R42	1	0	1	0
Small Business Innovation Research Grants (SBIR) - Phase I	R43	152	58	61	33
Small Business Innovation Research Grants (SBIR) - Phase II	R44	67	30	21	16
Continuing Education Training Program	T15	1	1	0	0

(Continued)

*Source: IMPACII. Includes NCI Primary and Secondary assigned applications and withdrawn applications. Excludes deleted applications. Of the 2,164 applications reviewed during the year, 482 were not recommended for further consideration by the initial review committee, and an additional 779 received scores in the bottom 33 percent and were not submitted for NCAB action.

Table 2. Applications Reviewed by the NCI/DEA (by Mechanism), FY2003* (Continued)

Mechanism	Activity Code	Totals by Activity	Applications by Board		
			Jan	May	Sep
Institutional National Research Service Award	T32	64	27	22	15
Institutional National Research Service Award with Involvement of NIH Intramural Faculty	TU2	2	0	0	2
Research Project (Cooperative Agreements)	U01	36	9	5	22
Cooperative Clinical Research (Cooperative Agreements)	U10	54	36	2	16
Resource-Related Research Project (Cooperative Agreements)	U24	1	0	1	0
Specialized Center (Cooperative Agreements)	U54	33	16	0	17
Exploratory Grants - Cooperative Agreement (NCI)	U56	18	10	0	8
Overall Totals		2,164	814	742	608

Table 3: Applications Reviewed by NCI IRG Subcommittees for NCAB Meetings, FY2003

NCI IRG Subcommittee	Types of Applications Reviewed	Number of Applications	Total Costs	
			Requested First Year	Requested All Years
A—Cancer Centers	P20, P30	17	$56,150,261	$300,951,157
C—Basic and Preclinical	P01, R13	71	122,734,299	639,999,237
D—Clinical Studies	P01	36	76,680,688	389,701,989
E—Cancer Epidemiology, Prevention and Control	P01, R01, U01, U24	28	60,023,323	290,660,175
F—Manpower and Training	K01, K08, K22, K25, R25, T15, T32, TU2	274	46,129,074	241,014,234
G—Education	K01, K05, K07, K12, K22, K23, K24, R25	243	50,843,360	251,600,489
H—Clinical Groups	R01, U10	34	91,425,940	586,258,599
I—Career Development	K08, K22	54	7,117,310	32,674,311
Grand Totals		757	$511,104,255	$2,732,860,191

Table 4. Summary of Investigator-Initiated P01 Applications Reviewed for Each NCAB Meeting, FY2003

Type of Application	Jan 2003 NCAB	May 2003 NCAB	Sep 2003 NCAB	Total for FY2003
New	12	15	12	39
New Amended	8	13	8	29
Recompeting	13	7	12	32
Recompeting Amended	8	10	13	31
Supplement	2	2	0	4
Totals	43	47	45	135

Table 5. Summary of Review Formats for Unsolicited Program Project Applications Reviewed, FY2003

NCAB Meeting	Number of Applications	SRG Review	SEP Review	Site Visit	Telephone Conference	Applicant Interview	Committee
January 2003	43	39	4	25	15	3	0
May 2003	47	43	4	22	24	1	0
September 2003	45	41	4	26	18	1	0
Totals	135	123	12	73	57	5	0

Table 6. Summary of Unsolicited P01 Applications Reviewed by NCI Program Division, FY2003

Program Division	Number of Applications	Total Costs	
		Requested First Year	Requested All Years
Division of Cancer Biology (DCB)	48	$85,751,081	$445,823,279
Division of Cancer Control and Population Sciences (DCCPS)	8	20,489,351	100,332,903
Division of Cancer Prevention (DCP)	9	24,575,814	128,386,293
Division of Cancer Treatment and Diagnosis (DCTD)	70	151,754,858	784,342,782
Grand Totals	135	$282,571,104	$1,458,885,257

Table 7. Requests for Applications (RFAs) Published by the NCI, FY2003

PAR	Mechanism	Title	Division	Date of Publication
CA03-017	TU2	NCI Institutional Pre-Doctoral Research Training Partnership Award	ODDES, CTB	10/10/2002
CA04-002	U01	Mouse Models of Human Cancers Consortium	DCB	10/10/2002
TW03-006	R01, U01	Global Health Research Initiative Program for New Foreign Investigators	DCB	11/4/2002
ES03-001	U01	Breast Cancer and the Environment Research Centers	DCCPS	11/11/2002
DK03-011	R01, R21	Hepatitis C: Natural History, Pathogenesis, Therapy and Prevention	DCB	1/6/2003
OB03-001	R01	Pathway Linking Education To Health	DCCPS	1/8/2003
OB03-004	R24	Mind-Body Interactions and Health: Research Infrastructure Program	DCCPS	1/9/2003
OB03-005	R21	Mind-Body Interactions and Health: Exploratory/Developmental Research	DCCPS	1/9/2003
OB03-003	R01	Maintenance of Long-Term Behavioral Change	DCCPS	1/15/2003
CA04-001	U01	Consortium of Therapeutic Studies of Primary Central Nervous System	DCTD	1/16/2003
CA04-003	R01, R03, R21	Long-Term Cancer Survivors: Research Initiatives	DCCPS	4/7/2003
CA04-004	R01	Molecular Targets for Nutrients in Prostate	DCP	4/24/2003
CA04-007	U10	Minority-Based Community Clinical Oncology Program	DCP	5/16/2003
CA04-008	U10	Community Clinical Oncology Program	DCP	5/19/2003
CA04-009	R01, R21	Mechanisms of Physical Activity Behavior Change	DCCPS	6/23/2003
CA04-005	U56	Academic Public-Private Partnership Program (AP4) Planning Grant	DCTD	7/30/2003
CA04-006	U01	The Early Detection Research Network: Biomarker Developmental Laboratories	DCP	9/22/2003

Table 8. Program Announcements (PAs) Published by the NCI, FY2003

PA	Mechanism	Title	Division	Date of Publication
PA03-003	R21	Exploratory Studies in Cancer Detection, Prognosis and Prediction	DCTD	10/3/2002
PA03-020	R21	Molecular Targets for Cancer Drug Discovery: Exploratory Grants	DCTD	11/7/2002
PA03-021	R41, R42, R43, R44	Molecular Targets for Cancer Drug Discovery: SBIR/STTR	DCTD	11/7/2002
PA03-024	R01	Molecular Epidemiology of HIV Associated Cancer	DCCPS	11/7/2002

Table 9. Program Announcements with Special Referral (PARs) Published by the NCI, FY2003

PAR	Mechanism	Title	Division	Date of Publication
PAR03-002	K08	Mentored Clinical Scientist Award for Underrepresented Minorities	ODDES, CMBB	10/3/2002
PAR03-005	R21	Quick Trials for Novel Cancer Therapies	DCTD	10/7/2002
PAR03-006	K23	Mentored Patient-Oriented Research for Underrepresented Minorities	ODDES, CMBB	10/7/2002
PAR03-009	R01	Improving Diet and Physical Activity Assessment	DCCPS	10/10/2002
PAR03-010	R03	Small Grants Program for Cancer Epidemiology	DCCPS	10/16/2002
PAR03-013	R41, R42, R43, R44	Small Business Grants for Identifying Molecular Signatures of Cancer	DCTD	10/22/2002
PAR03-016	K01	NCI Mentored Career Development Award for Underrepresented Minorities	DCCPS	10/30/2002
PAR03-022	P20	Planning Grants for NCI Research Centers	DDES	11/8/2002
PAR03-093	R25	Cancer Education Grant Program	DCP	4/3/2003
PAR03-098	R21, R33	Phased Application Awards in Cancer Prognosis and Prediction	DCTD	4/8/2003
PAR03-099	R41, R42, R43, R44	Cancer Prognosis and Prediction: SBIR/STTR Initiative	DCTD	4/8/2003
PAR03-104	K01	The Howard Temin Award	DCTD	4/15/2003
PAR03-124	R21, R33	Development of Novel Technologies for *In Vivo* Imaging	DCTD	5/19/2003
PAR03-149	K05	Established Investigator Award in Cancer Prevention, Control, Behavioral, and Population Sciences	ODDES, CTB	7/8/2003
PAR03-148	R25	Cancer Education and Career Development Program	ODDES, CTB	7/16/2003
PAR03-157	R21	Industry-Academic Partnerships for Development of Biomedical Imaging Systems	DCTD	7/29/2003
PAR03-158	P50	Specialized Programs of Research Excellence (SPOREs) in Human Cancer for the Year 2003	ODDES, OSB	8/4/2003

Table 10. Requests for Applications (RFAs) Reviewed by the NCI/DEA, FY2003

Title of Initiative	Bypass† Initiative	RFA Number	Activity Codes	Applications by NCAB Round				Total Costs	
				Totals	Jan	May	Sep	Requested First Year	Requested All Years
Cooperative Grants for Nutritional Modulation of Genetic Pathways Leading to Cancer	01	CA03-001	R01	1	1	0	0	$379,575	$1,899,575
Cooperative Grants for Nutritional Modulation of Genetic Pathways Leading to Cancer	01	CA03-001	U54	14	14	0	0	25,381,945	132,277,848
Network for Translational Research: Optical Imaging	02	CA03-002	U54	17	0	0	17	23,904,142	136,642,879
Molecular Targets for Nutrients in Prostate Cancer Prevention	04	CA03-003	R01	60	60	0	0	20,327,722	97,287,571
Chemoprevention of Tobacco-Related Cancers in Former Smokers: Preclinical Studies	05	CA03-004	R01	17	17	0	0	6,847,143	20,577,263
Chemoprevention of Tobacco-Related Cancers in Former Smokers: Preclinical Studies	05	CA03-004	R21	1	1	0	0	200,000	400,000
Chemoprevention of Estrogen Receptor (ER) Negative Breast Cancer Preclinical Studies	04	CA03-005	R01	24	24	0	0	9,045,128	42,901,030
Chemoprevention of Tobacco-Related Cancers in Former Smokers: Clinical Studies	05	CA03-006	U01	8	8	0	0	6,259,577	30,542,140
Centers of Excellence in Cancer Communications Research	06	CA03-007	P50	16	0	16	0	35,951,183	181,334,443
Cooperative Planning Grant for Comprehensive Minority Institution/ Cancer Center Partnership	C2	CA03-008	U56	10	10	0	0	3,555,838	18,288,638
Planning Grant for Minority Institution/ Cancer Center Collaboration	C2	CA03-009	P20	14	14	0	0	2,310,003	6,808,835
Comprehensive Minority Institution/ Cancer Center Partnership	C2	CA03-010	U54	2	2	0	0	2,034,809	10,467,696
Community Clinical Oncology Program	C3	CA03-011	U10	16	16	0	0	12,820,584	62,770,992
Minority-Based Community Clinical Oncology Program	C3	CA03-012	U10	4	4	0	0	1,993,104	8,068,625
Molecular Interactions Between Tumor Cells and Bone	C1	CA03-013	R01	54	0	54	0	17,279,075	82,426,536
Molecular Interactions Between Tumor Cells and Bone	C1	CA03-013	R21	44	0	44	0	6,473,851	12,756,874
In Vivo Cellular and Molecular Imaging Centers (ICMICs)	02	CA03-015	P50	9	0	9	0	$17,922,379	$89,934,917

(Continued)

† The designation refers to a Bypass "opportunity" or "challenge" initiative as noted on p. 6.

Table 10. Requests for Applications (RFAs) Reviewed by the NCI/DEA, FY2003 (Continued)

Title of Initiative	Bypass† Initiative	RFA Number	Activity Codes	Applications by NCAB Round				Total Costs	
				Totals	Jan	May	Sep	Requested First Year	Requested All Years
Diet, DNA Methylation and Other Epigenetic Events, and Cancer Prevention	03	CA03-016	R01	37	0	0	37	$13,189,817	53,570,671
Diet, DNA Methylation and Other Epigenetic Events, and Cancer Prevention	03	CA03-016	R21	14	0	0	14	2,064,259	4,136,233
Cooperative Planning Grant for Cancer Disparities Research Partnership Program	C6	CA03-018	U56	8	0	0	8	6,450,611	26,570,465
Exploratory/Developmental Grants: Overcoming Barriers to Early Phase Clinical Trials	C3	CA03-501	R21	18	18	0	0	10,091,706	20,098,835
Cooperative Trials in Diagnostic Imaging	02	CA03-502	U01	2	0	0	2	6,736,922	34,104,450
Cooperative Breast Cancer Tissue Resource	C2	CA03-503	U01	4	0	4	0	1,123,848	4,494,325
Integrating Aging and Cancer Research in NCI Cancer Centers	C2	CA03-504	P20	24	0	0	24	17,531,202	89,848,570
Consortium of Therapeutic Studies of Primary Central Nervous System	NA	CA04-001	U01	19	0	0	19	5,396,107	27,783,899
Totals				437	189	127	121	$255,270,530	$1,195,993,310

Table 11. PA/PAR Special Emphasis Panel (SEP) Applications Reviewed by the NCI/DEA, FY2003

Title of Initiative	Bypass† Initiative	RFA Number	Activity Codes	Applications by NCAB Round				Total Costs	
				Totals	Jan	May	Sep	Requested First Year	Requested All Years
Mentored Patient-Oriented Research Career Development Award	C8	PA00-004	K23	1	1	0	0	$113,400	$453,600
Small Grants Program for Cancer Epidemiology	NA	PA01-021	R03	46	15	31	0	3,282,510	6,470,262
Non-Mammalian Organisms as Models for Anticancer Drug Discovery	NA	PA01-042	R01	1	1	0	0	327,073	1,662,673
Flexible System to Advance Innovative Research (FLAIR)	04	PA01-091	R41	8	0	8	0	0	3,412,175
Flexible System to Advance Innovative Research (FLAIR)	04	PA01-091	R42	1	0	1	0	0	1,947,589
Flexible System to Advance Innovative Research (FLAIR)	04	PA01-091	R43	36	0	36	0	932,789	14,013,519
Flexible System to Advance Innovative Research (FLAIR)	04	PA01-091	R44	12	0	12	0	4,567,395	23,718,839
Specialized Programs of Research Excellence (SPOREs)	C2	PA01-110	P50	1	0	1	0	2,749,944	14,079,325
Innovative Toxicology Models: SBIR/STTR	NA	PA02-075	R41	3	2	0	1	0	1,102,697
Innovative Toxicology Models: SBIR/STTR	NA	PA02-075	R43	31	12	0	19	250,000	10,157,870
Innovative Toxicology Models: SBIR/STTR	NA	PA02-075	R44	7	3	0	4	3,132,786	12,704,914
Development of High-Yield Technologies for Isolating Exfoliated Cells in Body Fluids	04	PA02-086	R21	15	7	3	5	2,477,787	5,360,437
Mentored Quantitative Research Career Development Award	C8	PA02-127	K25	1	0	0	1	119,135	640,898
Cancer Prevention Research Small Grant Program	NA	PAR00-025	R03	36	36	0	0	2,726,653	5,552,335
Cancer Education Grant Program	C6	PAR00-033	R25	3	2	1	0	699,452	4,343,682
Institutional Clinical Oncology Research Career Development Program	C8	PAR00-063	K12	2	2	0	0	914,787	4,717,842
Cancer Education and Career Development Program	C8	PAR00-064	R25	2	0	2	0	1,078,416	5,330,024
The Howard Temin Award	C8	PAR00-066	K01	1	0	1	0	94,213	711,396

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† The designation refers to a Bypass "opportunity" or "challenge" initiative as noted on p. 6.

Table 11. PA/PAR Special Emphasis Panel (SEP) Applications Reviewed by the NCI/DEA, FY2003 (Continued)

Title of Initiative	Bypass† Initiative	RFA Number	Activity Codes	Applications by NCAB Round				Total Costs	
				Totals	Jan	May	Sep	Requested First Year	Requested All Years
Specialized Programs of Research Excellence (SPORE)	C2	PAR00-087	P50	1	0	1	0	$2,646,111	$13,904,719
Cancer Communication and Interactive Media Technology	06	PAR00-137	R44	1	0	1	0	149,689	149,689
Small Grant Program for Conference Support	NA	PAR00-141	R13	1	0	1	0	50,000	50,000
Cancer Prognosis and Prediction: Phased Application Awards	C4	PAR01-061	R21	24	16	8	0	3,581,475	43,517,162
Cancer Prognosis and Prediction: Phased Application Awards	C4	PAR01-061	R33	12	4	8	0	6,011,430	23,572,794
Cancer Prognosis and Prediction: SBIR/STTR Initiative	C4	PAR01-062	R41	2	1	1	0	0	273,677
Cancer Prognosis and Prediction: SBIR/STTR Initiative	C4	PAR01-062	R43	9	3	6	0	0	1,576,204
Cancer Prognosis and Prediction: SBIR/STTR Initiative	C4	PAR01-062	R44	4	3	1	0	948,265	10,347,913
Development of Novel Imaging Technology (Phased Innov. Award)	02	PAR01-101	R21	26	25	1	0	4,936,019	35,990,009
Development of Novel Imaging Technology (Phased Innov. Award)	02	PAR01-101	R33	11	11	0	0	5,844,761	17,185,284
Development of Novel Imaging Technology (SBIR/STTR) Initiative	02	PAR01-102	R41	1	1	0	0	0	0
Development of Novel Imaging Technology (SBIR/STTR) Initiative	02	PAR01-102	R43	27	27	0	0	179,250	9,134,801
Development of Novel Imaging Technology (SBIR/STTR) Initiative	02	PAR01-102	R44	14	14	0	0	3,272,571	25,500,087
Innovative Technology for Molecular Analysis: Phased Innovation Award	04	PAR01-104	R21	31	4	12	15	5,080,553	48,843,758
Innovative Technology for Molecular Analysis: Phased Innovation Award	04	PAR01-104	R33	10	2	6	2	6,534,517	19,763,205
Innovative Technology for Molecular Analysis: Phased Innovation Award	04	PAR01-104	R44	1	1	0	0	0	995,634
Innovative Technology for Molecular Analysis: SBIR/STTR	04	PAR01-105	R41	2	0	2	0	0	357,437

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Table 11. PA/PAR Special Emphasis Panel (SEP) Applications Reviewed by the NCI/DEA, FY2003 (Continued)

Title of Initiative	Bypass† Initiative	RFA Number	Activity Codes	Applications by NCAB Round				Total Costs	
				Totals	Jan	May	Sep	Requested First Year	Requested All Years
Innovative Technology for Molecular Analysis: SBIR/STTR	04	PAR01-105	R43	28	9	10	9	$306,040	$8,241,262
Innovative Technology for Molecular Analysis: SBIR/STTR	04	PAR01-105	R44	17	4	4	9	5,524,992	22,196,498
Applications of Innovative Technologies: Phased Innovation Award	04	PAR01-106	R21	44	14	13	17	6,973,691	73,225,192
Applications of Innovative Technologies: Phased Innovation Award	04	PAR01-106	R33	29	10	9	10	21,759,606	64,245,043
Applications of Innovative Technologies: Phased Innovation Award	04	PAR01-106	R44	1	1	0	0	486,813	1,391,435
Applications for Innovative Technologies: SBIR/STTR	04	PAR01-107	R41	2	1	1	0	159,756	368,880
Applications for Innovative Technologies: SBIR/STTR	04	PAR01-107	R43	19	7	9	3	0	3,780,785
Applications for Innovative Technologies: SBIR/STTR	04	PAR01-107	R44	6	1	2	3	1,491,952	9,567,719
Specialized Programs of Research Excellence (SPOREs) in Human Cancer FY2002	C2	PAR01-110	P20	1	1	0	0	2,749,973	14,416,202
Specialized Programs of Research Excellence (SPOREs) in Human Cancer FY2002	C2	PAR01-110	P50	21	11	9	1	55,138,275	291,765,718
Small Grants Program for Behavioral Research in Cancer Control	NA	PAR02-037	R03	63	26	17	20	4,797,618	9,044,634
Colorectal Cancer Screening in Primary Care Practice	C3	PAR02-042	R21	48	21	12	15	7,709,093	14,982,497
Specialized Programs of Research Excellence (SPORES) in Pancreatic Cancer for the Year 2002	C2	PAR02-068	P20	3	0	3	0	8,007,675	41,409,592
Specialized Programs of Research Excellence (SPORES) in Pancreatic Cancer for the Year 2002	C2	PAR02-068	P50	11	0	11	0	31,388,154	166,804,619
Innovative Toxicology Models for Drug Evaluation: Exploratory/ Developmental Grants and Phased Innovation Award	NA	PAR02-074	R21	14	10	0	4	2,123,053	4,413,339

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Table 11. PA/PAR Special Emphasis Panel (SEP) Applications Reviewed by the NCI/DEA, FY2003 (Continued)

Title of Initiative	Bypass† Initiative	RFA Number	Activity Codes	Applications by NCAB Round				Total Costs	
				Totals	Jan	May	Sept	Requested First Year	Requested All Years
Innovative Toxicology Models for Drug Evaluation: Exploratory/ Developmental Grants and Phased Innovation Award	NA	PAR02-074	R33	3	2	0	1	$828,916	$3,150,388
Specialized Programs of Research Excellence (SPOREs) in Human Cancer for the Year 2003	C2	PAR02-126	P50	11	0	0	11	29,750,435	153,214,849
Diet, DNA Methylation and Other Epigenetic Events, and Cancer Prevention: Competing Supplements	NA	PAR02-175	R01	1	0	0	1	450,000	1,350,000
Small Grants Program for Research in Cancer Prevention	NA	PAR02-176	R03	92	0	58	34	6,789,921	13,498,476
Small Grants Program for Cancer Epidemiology	C4	PAR03-010	R03	38	0	1	37	2,864,640	5,512,878
Planning Grants for NCI Research Centers	C2	PAR03-022	P20	1	0	1	0	340,000	545,000
Specialized Program of Research Excellence in Human Cancer (SPORE)	C2	PAR99-167	P50	1	0	1	0	2,589,811	13,580,361
Totals				838	311	305	222	$254,931,395	$1,284,247,817

Table 12. Non-RFA PA SEP Applications Reviewed by NCI/DEA, FY2003

Mechanism	Activity Codes	Applications by NCAB Round				Total Costs	
		Totals	Jan	May	Sep	Requested First Year	Requested All Years
Conferences	R13	78	38	20	20	$1,882,046	$4,067,087
Research Project	R01	1	0	1	0	0	0
Specialized Center	P50	6	0	2	4	15,001,931	81,883,685
Small Research Grants	R03	1	0	0	1	72,500	145,000
Research Program Projects	P01	14	5	4	5	43,525,697	227,171,080
Clinical Investigator Award	K08	1	0	1	0	151,200	756,000
Exploratory/Developmental Grants	R21	1	0	1	0	0	0
Cooperative Clinical Research (Cooperative Agreements)	U10	1	1	0	0	545,609	2,880,500
Small Business Innovation Research Grants (SBIR) - Phase II	R44	1	0	1	0	450,000	900,000
Totals		104	44	30	30	$61,628,983	$317,803,352

Table 13. Average Total Cost and Number of Research Program Grant Awards by Division, FY1999-FY2003

	FY1999		FY2000		FY2001		FY2002		FY2003		Percent Change '99-'03	
	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost
R01												
NCI Overall	2,796	$275,000	3,011	$295,000	3,234	$312,000	3,378	$324,000	3,573	$338,000	27.8%	22.9%
DCB	1,631	253,000	1,780	270,000	1,838	280,000	1,942	298,000	2,028	305,000	24.3	20.5
DCP	80	517,000	65	552,000	122	423,000	126	403,000	151	448,000	88.7	-13.3
DCTD	794	244,000	852	266,000	915	281,000	918	288,000	973	308,000	22.5	26.2
DCCPS	291	411,000	313	449,000	357	494,000	389	497,000	418	512,000	43.6	24.5
P01												
NCI Overall	169	1,477,000	179	1,599,000	178	1,692,000	173	1,836,000	178	1,891,000	5.3	28.0
DCB	68	1,236,000	66	1,343,000	61	1,451,000	63	1,571,000	70	1,651,000	2.9	33.6
DCP	7	1,890,000	8	2,076,000	11	1,776,000	13	1,931,000	12	2,014,000	71.4	6.6
DCTD	80	1,615,000	87	1,723,000	91	1,754,000	80	1,995,000	83	1,988,000	3.7	23.1
DCCPS	14	1,612,000	18	1,693,000	15	2,169,000	16	2,015,000	13	2,321,000	-7.1	44.0

Table 14. Summary of NCI Grant Awards (by Mechanism), FY2003

	Mechanism	Award Count	Dollars in Thousands Dollar	Average Cost	% of NCI Total Number	% of NCI Total Dollar	Competing Requested	Competing Awarded	Success Rate
RPG	R01 - Traditional Research Grants	3,573	1,207,388	338	53.55	39.62	3,543	948	26.8
	P01 - Program Reports	178	336,607	1,891	2.67	11.04	115	42	36.5
	R03 - Small Grants	203	15,207	75	3.04	0.50	252	107	42.5
	R15 - Academic Research Enhancement Awards (AREA)	21	3,086	147	0.31	0.10	53	21	39.6
	R21 - Exploratory/ Developmental Research	360	67,741	188	5.40	2.22	910	208	22.9
	R33 - Phased Innovation Grant (Phase 2)	81	37,714	466	1.21	1.24	77	10	13.0
	R29 - First Awards	17	1,584	113	0.21	0.05			
	R37 - Merit Awards	70	35,359	505	1.05	1.16	20	20	100.0
	U19, U01 - Cooperative Agreements	27	31,127	1,153	0.40	1.02	6	5	83.3
	R01 - Program Evaluation		58,721		0.00	1.93			
	Total for RPG POOL Group	4,527	1,794,534	4,876	67.85	58.88	4,976	1,361	27.4
	P01, R01, R03, R21, R33, U01 - Request for Applications	81	26,697	330	1.21	0.88	231	39	16.9
	U01, U19, U42 - Cooperative Agreements - RFA	171	146,645	858	2.56	4.81	42	21	50.0
	TOTAL for RFA/ Cooperative Agreement	252	173,342	1,188	3.78	5.69	273	60	22.0
	U43, U44, R43, R44 - Small Business Innovation Research	328	85,137	260	4.92	2.79	957	227	23.7
	R41, R42-Small Business Technology Transfer	28	5,720	204	0.42	0.19	92	20	21.7
	Total for SBIR/STTR	356	90,857	464	5.34	2.98	1,049	247	23.5
	Total for RPG	5,135	2,058,733	6,528	76.96	67.55	6,298	1,668	26.5
CENTERS	U54 - Specialized Center (Cooperative Agreements)	14	19,166	1,369	0.21	0.63	2	2	100.0
	Comprehensive Core Grants	34	153,968	4,528	0.51	5.05	7	7	100.0
	P20 - Exploratory Grants	43	10,588	246	0.64	0.35	25		0.0
	P30, P40, P41, U42 - Core Clinical	21	52,517	2,501	0.31	1.72	6	5	83.3
	P20, P50 - Spores	53	123,107	2,323	0.79	4.04	56	18	32.1

(Continued)

Table 14. Summary of NCI Grant Awards (by Mechanism), FY2003 (Continued)

	Mechanism	Award Count	Dollars in Thousands Dollar	Average Cost	% of NCI Total Number	Dollar	Competing Requested	Competing Awarded	Success Rate
	P30 - Core Basic	6	15,669	2,612	0.09	0.51	1	1	100.0
	Center for AIDS Research		3,064		0.00	0.10			
	Total for Centers	171	378,079	13,579	2.56	12.41	97	33	34.0
Other Research (A)	U56 - Exploratory Grants - Cooperative Agreement (NCI)	26	11,559	445	0.39	0.38	18	12	66.7
	U10 - Clinical Cooperative Groups	78	158,714	2,035	1.17	5.21	20	19	95.0
	R09, U09 - Scientific Evaluation	1	8,085	8,085	0.01	0.27			
	S06 - Minority Biomedical Research Support		3,853		0.00	0.13			
	R24, U24 - Research/ Resource Grant	54	29,976	555	0.81	0.98	3	3	100.0
	T15 - Training Conference Grants	4	340	85	0.06	0.01	2	1	50.0
	Biomedical Research Support Grant		3,842		0.00	0.13			
	U13 - Conference (Cooperative Agreement)		12		0.00	0.00			
	D43,R13 - Conference Grants/ International Training Grants in Epidemiology	104	2,099	20	1.56	0.07	82	70	85.4
	Total for Other Research (A)	267	218,480	11,225	4.00	7.17	125	105	84.0
Other Research (B)	R25 - Cancer Education	102	30,041	295	1.53	0.99	76	24	31.6
	K01 - Temin Award K01	105	14,209	135	1.57	0.47	109	35	32.1
	K05 - Established Investigator Award in Cancer Prevention and Control K05	12	1,462	122	0.18	0.05	5	2	40.0
	K07 - Preventive Oncology Award K07	88	11,243	128	1.32	0.37	67	25	37.3
	K08 - Mentored Clinical Scientist K08	141	18,512	131	2.11	0.61	101	31	30.7
	K25 - Mentored Quantitative Research Career Development Award K25	2	273	137	0.03	0.01	3	1	33.3
	K12, K14 - Mentored Career Award K12	15	8,391	559	0.22	0.28	14	5	35.7
	K30 - Institutional Curriculum Award K30		1,599		0.00	0.05			

(Continued)

Table 14. Summary of NCI Grant Awards (by Mechanism), FY2003 (Continued)

	Mechanism	Award Count	Dollars in Thousands: Dollar	Dollars in Thousands: Average Cost	% of NCI Total: Number	% of NCI Total: Dollar	Competing Requested	Competing Awarded	Success Rate
	K23 - Mentored Patient-Oriented Research Career Development Award K23	53	6,873	130	0.79	0.23	42	12	28.6
	K24 - Mid-Career Investigator in Patient-Oriented Research Award K24	38	4,406	116	0.57	0.14	6	1	16.7
	K22 - Clinical Research Track K22	32	4,877	152	0.48	0.16	43	12	27.9
	Total for Other Research (B) —Careers	486	71,845	1,610	7.28	2.36	390	124	31.8
	Total for Other Research (A+B)	855	320,366	13,130	12.81	10.51	591	253	42.8
NRSA	T32, T34, T35, T36 - NRSA Institution	182	59,890	329	2.73	1.97	60	30	50.0
	F30, F31, F32, F33, F34 - NRSA Fellowships	138	5,960	43	2.07	0.20	285	72	25.3
	Total for NRSA	320	65,850	372	4.80	2.16	345	102	29.6
Cancer Control									
	Total for Cancer Control	191	221,620	2,130	2.86	7.27	59	36	61.0
Contruction									
	C06 - Construction		3,000		0.00	0.10			
	Total NCI Grants	6,672	3,047,648	35,739	100.00	100.00	7,390	2,092	28.3

Table 15. NCI Special Interest Category (SIC) Dollars for FY2003—Percent Change from FY2002*

Special Interest Category (SIC)	2002 Grants	2003 Grants	Percent Change	2002 Contracts	2003 Contracts	Percent Change	2002 Totals	2003 Totals	Percent Change
Adoptive Cell Immunotherapy	62,020,806	65,348,655	5.37	0	0		62,020,806	65,348,655	5.37
Adv. Manufacturing Technology	12,573,059	7,477,696	-40.53	1,698,837	2,364,215	39.17	14,271,896	9,841,911	-31.04
Aging	130,562,127	155,261,752	18.92	8,548,329	10,698,428	25.15	139,110,456	165,960,180	19.30
AIDS	54,639,185	110,670,266	102.55	6,315,417	8,400,382	33.01	60,954,602	119,070,648	95.34
Alternative Medicine, Direct	29,883,761	56,622,885	89.48	3,066,382	859,109	-71.98	32,950,143	57,481,994	74.45
Alternative Medicine, Indirect	28,408,151	28,480,937	0.26	1,277,445	1,566	-99.88	29,685,596	28,482,503	-4.05
Alzheimers Dementia	1,030,384	1,621,994	57.42	0	0		1,030,384	1,621,994	57.42
Arthritis	1,120,913	1,584,332	41.34	0	0		1,120,913	1,584,332	41.34
Asbestos	1,836,892	4,491,877	144.54	0	0		1,836,892	4,491,877	144.54
Ataxis Telangiectasia	7,916,376	6,834,383	-13.67	34,035	2,785	-91.82	7,950,411	6,837,168	-14.00
Autoimmune Diseases	7,067,274	8,686,585	22.91	23	0	-100.00	7,067,297	8,686,585	22.91
Behavior Research, Direct	205,410,803	234,536,774	14.18	4,198,913	6,575,016	56.59	209,609,716	241,111,790	15.03
Bioengineering	248,182,230	249,639,347	0.59	33,279,602	45,020,366	35.28	281,461,832	294,659,713	4.69
Biological Response Modifiers	662,169,054	693,802,345	4.78	39,296,508	47,628,016	21.20	701,465,562	741,430,361	5.70
Biomaterials Research	19,921,311	24,642,591	23.70	4,017,504	8,915,546	121.92	23,938,815	33,558,137	40.18
Birth Defects	8,353,572	8,859,294	6.05	15,035	0	-100.00	8,368,607	8,859,294	5.86
Bone Marrow Transplantation	65,937,038	62,342,401	-5.45	0	0		65,937,038	62,342,401	-5.45
Breast Cancer Detection	85,530,617	87,083,783	1.82	3,115,652	3,109,893	-0.18	88,646,269	90,193,676	1.75
Breast Cancer Education	15,775,726	16,892,672	7.08	539	25,166	4,569.02	15,776,265	16,917,838	7.24
Breast Cancer Epidemiology	64,790,564	68,313,342	5.44	2,996,210	982,938	-67.19	67,786,774	69,296,280	2.23
Breast Cancer Genetics	78,160,277	76,095,610	-2.64	730,266	564,142	-22.75	78,890,543	76,659,752	-2.83
Breast Cancer Prevention	27,877,909	32,648,918	17.11	2,801,617	2,011,223	-28.21	30,679,526	34,660,141	12.97
Breast Cancer Rehabilitation	12,268,949	13,111,191	6.86	25,707	0	-100.00	12,294,656	13,111,191	6.64
Breast Cancer Screening	27,483,358	27,099,723	-1.40	0	74,349		27,483,358	27,174,072	-1.13
Breast Cancer Treatment	139,311,736	145,047,262	4.12	6,481,948	6,749,515	4.13	145,793,684	151,796,777	4.12
Breast Cancer—Basic	124,002,636	140,617,772	13.40	476,244	697,101	46.37	124,478,880	141,314,873	13.53
Cancer Survivorship	121,248,170	155,516,370	28.26	2,402,478	4,012,075	67.00	123,650,648	159,528,445	29.02
Carcinogenesis, Environmental	489,132,687	519,568,630	6.22	30,671,225	15,414,427	-49.74	519,803,912	534,983,057	2.92
Cervical Cancer Education	1,988,194	449,332	-77.40	0	0		1,988,194	449,332	-77.40
Chemoprevention	108,460,873	139,276,608	28.41	29,238,960	31,939,659	9.24	137,699,833	171,216,267	24.34
Chemotherapy	385,496,067	418,100,555	8.46	20,080,145	22,543,090	12.27	405,576,212	440,643,645	8.65
Child Health	42,029,648	46,735,300	11.20	721,264	140,916	-80.46	42,750,912	46,876,216	9.65
Childhood Cancers	134,620,199	145,225,096	7.88	41,915	266,123	534.91	134,662,114	145,491,219	8.04
Clinical Trials, Diagnosis	58,080,246	76,113,941	31.05	33,127,604	54,197,359	63.60	91,207,850	130,311,300	42.87
Clinical Trials, Other	11,304,651	15,472,520	36.87	338,023	90,069	-73.35	11,642,674	15,562,589	33.67
Clinical Trials, Prevention	54,760,830	63,222,364	15.45	10,723,782	16,330,637	52.28	65,484,612	79,553,001	21.48
Clinical Trials, Therapy	376,474,443	394,745,137	4.85	7,440,726	16,942,091	127.69	383,915,169	411,687,228	7.23
Combined Treatment Modalities	242,999,243	233,282,835	-4.00	0	494,586		242,999,243	233,777,421	-3.80
Diabetes	7,215,043	7,548,368	4.62	160,380	0	-100.00	7,375,423	7,548,368	2.34
Diagnosis	457,525,593	495,151,906	8.22	45,212,195	68,869,978	52.33	502,737,788	564,021,884	12.19
Diagnostic Imaging	208,649,190	229,522,569	10.00	28,408,030	47,656,346	67.76	237,057,220	277,178,915	16.92
Diethylstilbestrol	799,254	20,335	-97.46	1,311,257	1,422,768	8.50	2,110,511	1,443,103	-31.62

(Continued)

* Some categories are not mutually exclusive, resulting in overlap in reported funding; dollar totals, therefore, exceed 100 percent of the extramural budget.

Table 15. NCI Special Interest Category (SIC) Dollars for FY2003—Percent Change from FY2002* (Continued)

Special Interest Category (SIC)	2002 Grants	2003 Grants	Percent Change	2002 Contracts	2003 Contracts	Percent Change	2002 Totals	2003 Totals	Percent Change
Dioxin	1,203,176	1,086,371	-9.71	0	97,991		1,203,176	1,184,362	-1.56
DNA Repair	132,131,096	153,272,564	16.00	1,227,104	142,698	-88.37	133,358,200	153,415,262	15.04
Drug Development	372,377,063	411,687,594	10.56	32,510,368	36,193,414	11.33	404,887,431	447,881,008	10.62
Drug Resistance	91,532,583	106,222,127	16.05	149,743	151,379	1.09	91,682,326	106,373,506	16.02
Drugs—Natural Products	129,558,190	133,489,902	3.03	5,655,782	3,195,322	-43.50	135,213,972	136,685,224	1.09
Endocrinology	156,203,671	182,937,161	17.11	5,205,320	4,031,416	-22.55	161,408,991	186,968,577	15.84
Epidemiology—Biochemical	241,511,924	234,520,510	-2.89	10,454,574	10,820,716	3.50	251,966,498	245,341,226	-2.63
Gene Transfer Clinical	19,026,602	20,278,841	6.58	0	0		19,026,602	20,278,841	6.58
Helicobacter	2,155,965	4,242,773	96.79	0	0		2,155,965	4,242,773	96.79
Hematology	410,583,465	439,919,550	7.14	5,519,782	5,523,293	0.06	416,103,247	445,442,843	7.05
Hematopoietic Stem Cell Research	89,663,101	95,335,267	6.33	0	0		89,663,101	95,335,267	6.33
Hormone Replacement Rx	12,170,912	13,502,323	10.94	0	0		12,170,912	13,502,323	10.94
Hospice	1,554,969	5,429,050	249.14	0	0		1,554,969	5,429,050	249.14
Iatrogenesis	52,363,969	56,747,784	8.37	1,344,565	2,068,617	53.85	53,708,534	58,816,401	9.51
Infant Mortality	415,516	137,648	-66.87	0	0		415,516	137,648	-66.87
Information Dissemination	225,817,314	253,168,775	12.11	101,603,549	111,193,860	9.44	327,420,863	364,362,635	11.28
Interferon	32,284,204	33,908,831	5.03	0	0		32,284,204	33,908,831	5.03
Magnetic Resonance Imaging	66,882,447	78,768,024	17.77	727,054	4,283,466	489.15	67,609,501	83,051,490	22.84
Mammography	34,655,900	35,959,438	3.76	25,707	74,349	189.22	34,681,607	36,033,787	3.90
Metastasis	250,350,433	291,583,495	16.47	3,022,663	4,447,992	47.15	253,373,096	296,031,487	16.84
Mind/Body Research	11,405,866	16,186,181	41.91	0	0		11,405,866	16,186,181	41.91
Molecular Disease	1,158,808,792	1,254,249,336	8.24	11,969,047	7,810,872	-34.74	1,170,777,839	1,262,060,208	7.80
Neurofibromatosis	779,543	895,105	14.82	0	0		779,543	895,105	14.82
Neurofibromatosis, Related	4,941,020	4,401,999	-10.91	0	0		4,941,020	4,401,999	-10.91
Nursing Research	9,702,363	11,916,138	22.82	0	0		9,702,363	11,916,138	22.82
Nutrition	179,032,658	200,562,461	12.03	11,854,416	11,958,656	0.88	190,887,074	212,521,117	11.33
Nutrition Monitoring	38,850,410	36,098,086	-7.08	0	0		38,850,410	36,098,086	-7.08
Obesity	28,475,968	31,377,290	10.19	270	111,701	41,270.74	28,476,238	31,488,991	10.58
Occupational Cancer	12,992,732	13,542,319	4.23	861,012	1,664,027	93.26	13,853,744	15,206,346	9.76
Oncogenes	542,665,620	615,438,803	13.41	8,973,622	5,039,633	-43.84	551,639,242	620,478,436	12.48
Organ Transplant Research	75,564,744	72,356,860	-4.25	0	0		75,564,744	72,356,860	-4.25
Osteoporosis	1,372,960	1,168,234	-14.91	0	0		1,372,960	1,168,234	-14.91
P53	114,641,163	130,311,151	13.67	2,032,371	1,405,304	-30.85	116,673,534	131,716,455	12.89
Pain	9,302,205	14,411,836	54.93	0	0		9,302,205	14,411,836	54.93
Palliative Care	16,548,850	21,296,057	28.69	0	0		16,548,850	21,296,057	28.69
Pap Testing	13,578,109	14,509,718	6.86	76,370	0	-100.00	13,654,479	14,509,718	6.26
Pesticides	3,580,892	3,308,388	-7.61	704,095	823,095	16.90	4,284,987	4,131,483	-3.58
Population Research	10,335,971	10,491,878	1.51	0	0		10,335,971	10,491,878	1.51
Prevention, Primary	286,005,520	325,152,163	13.69	33,630,480	38,607,415	14.80	319,636,000	363,759,578	13.80
Radiation—Electromagnetic Fields	467,375	495,945	6.11	0	0		467,375	495,945	6.11
Radiation—Ionizing	41,945,036	39,053,743	-6.89	156,917	1,821,452	1,060.77	42,101,953	40,875,195	-2.91
Radiation—Low-Level Ionizing	13,877,729	12,100,041	-12.81	0	0		13,877,729	12,100,041	-12.81
Radiation—Non-Ionizing	34,067,458	35,855,310	5.25	173,319	1,038,185	499.00	34,240,777	36,893,495	7.75
Radiation—Non-Ionizing Dx or Rx	87,338,415	94,526,145	8.23	727,054	4,283,466	489.15	88,065,469	98,809,611	12.20

(Continued)

Table 15. NCI Special Interest Category (SIC) Dollars for FY2003—Percent Change from FY2002* (Continued)

Special Interest Category (SIC)	2002 Grants	2003 Grants	Percent Change	2002 Contracts	2003 Contracts	Percent Change	2002 Totals	2003 Totals	Percent Change
Radiation—UV	31,910,200	33,983,034	6.50	173,319	1,038,185	499.00	32,083,519	35,021,219	9.16
Radiotherapy	215,427,906	201,939,626	-6.26	418,936	1,896,883	352.79	215,846,842	203,836,509	-5.56
Radon	3,062,288	2,247,435	-26.61	0	0		3,062,288	2,247,435	-26.61
Rare Diseases	36,784,776	41,324,416	12.34	1,854,127	516,669	-72.13	38,638,903	41,841,085	8.29
RAS Inhibitors	11,496,118	12,024,328	4.59	419,867	448,444	6.81	11,915,985	12,472,772	4.67
Rehabilitation	21,727,475	23,424,350	7.81	2,270,210	2,133,909	-6.00	23,997,685	25,558,259	6.50
Resources	387,027,189	412,144,493	6.49	137,814,273	165,774,178	20.29	524,841,462	577,918,671	10.11
Rural Populations	26,641,779	30,622,310	14.94	14,940,067	13,160,025	-11.91	41,581,846	43,782,335	5.29
Sexually Transmitted Diseases	40,417,819	43,121,144	6.69	1,443,351	3,669,351	154.22	41,861,170	46,790,495	11.78
Smokeless Tobacco	9,079,157	7,923,647	-12.73	108,451	128,883	18.84	9,187,608	8,052,530	-12.35
Smoking and Health	128,987,933	132,499,349	2.72	3,193,683	4,272,828	33.79	132,181,616	136,772,177	3.47
Smoking Behavior	73,479,632	78,209,883	6.44	898,311	748,181	-16.71	74,377,943	78,958,064	6.16
Smoking, Passive	5,144,280	6,023,879	17.10	85,026	64,442	-24.21	5,229,306	6,088,321	16.43
Structural Biology	300,907,474	338,681,284	12.55	4,909,708	3,199,926	-34.82	305,817,182	341,881,210	11.79
Surgery	139,416,973	135,221,839	-3.01	1,197,577	665,662	-44.42	140,614,550	135,887,501	-3.36
Taxol	73,218,250	71,264,155	-2.67	115,953	374,079	222.61	73,334,203	71,638,234	-2.31
Telehealth	78,386,738	97,153,182	23.94	64,190,845	39,576,797	-38.35	142,577,583	136,729,979	-4.10
Therapy	971,888,124	1,049,142,096	7.95	59,909,897	77,690,439	29.68	1,031,798,021	1,126,832,535	9.21
Tropical Diseases	8,553,908	11,087,651	29.62	684,611	725,000	5.90	9,238,519	11,812,651	27.86
Tumor Markers	411,307,341	471,967,996	14.75	13,043,137	17,146,841	31.46	424,350,478	489,114,837	15.26
Tumor Necrosis Factor	21,666,167	27,597,775	27.38	0	0		21,666,167	27,597,775	27.38
Underserved Populations	87,086,363	112,322,588	28.98	15,811,281	17,821,410	12.71	102,897,644	130,143,998	26.48
Virus Cancer Research	176,999,020	191,710,572	8.31	3,660,942	4,576,971	25.02	180,659,962	196,287,543	8.65
Virus—Epstein-Barr	21,842,219	23,253,988	6.46	0	25,000		21,842,219	23,278,988	6.58
Virus—Genital Herpes	791,268	666,153	-15.81	0	0		791,268	666,153	-15.81
Virus—Hepatitis B	10,892,276	10,387,770	-4.63	335,501	0	-100.00	11,227,777	10,387,770	-7.48
Virus—Hepatitis C	3,411,568	4,640,622	36.03	335,501	74,918	-77.67	3,747,069	4,715,540	25.85
Virus—Herpes	49,648,779	51,753,550	4.24	0	25,000		49,648,779	51,778,550	4.29
Virus—HHV6	48,563	40,917	-15.74	0	0		48,563	40,917	-15.74
Virus—HHV8	12,455,991	17,712,740	42.20	0	74,918		12,455,991	17,787,658	42.80
Virus—HTLV-I	5,817,459	7,718,640	32.68	684,611	725,000	5.90	6,502,070	8,443,640	29.86
Virus—HTLV-II	272,629	15,161	-94.44	0	0		272,629	15,161	-94.44
Virus—HTLV-Unspecified	225,104	69,094	-69.31	0	0		225,104	69,094	-69.31
Virus—Papilloma	38,294,419	46,445,814	21.29	1,203,737	3,424,351	184.48	39,498,156	49,870,165	26.26
Virus—Papova	48,070,872	58,451,388	21.59	1,203,737	3,424,351	184.48	49,274,609	61,875,739	25.57
Virus—SV40	1,813,705	8,645,371	376.67	0	0		1,813,705	8,645,371	376.67
Vitamin A	23,883,101	21,937,835	-8.14	2,123,408	549,010	-74.14	26,006,509	22,486,845	-13.53
Vitamin C	6,379,668	6,809,996	6.75	0	0		6,379,668	6,809,996	6.75
Vitamins, Other	13,073,118	21,047,264	61.00	816,487	26,553	-96.75	13,889,605	21,073,817	51.72

Table 16. NCI Organ Site-Specific Dollars for FY2003—Percent Change from FY2002*

Special Interest Category (SIC)	2002 Grants	2003 Grants	Percent Change	2002 Contracts	2003 Contracts	Percent Change	2002 Totals	2003 Totals	Percent Change
Adrenal	2,461,533	3,960,952	60.91	0	0		2,461,533	3,960,952	60.91
Anus	2,830,955	3,802,505	34.32	0	554,188		2,830,955	4,356,693	53.89
Bladder	26,027,326	28,537,263	9.64	1,274,097	838,168	-34.21	27,301,423	29,375,431	7.60
Blood	973,156	638,763	-34.36	7,518	136,071	1,709.94	980,674	774,834	-20.99
Bone Marrow	19,677,230	18,738,105	-4.77	0	0		19,677,230	18,738,105	-4.77
Bone, Cartilage	17,247,451	22,398,965	29.87	0	0		17,247,451	22,398,965	29.87
Brain	82,797,727	92,635,682	11.88	1,041,891	2,643,784	153.75	83,839,618	95,279,466	13.64
Breast	466,221,807	487,276,101	4.52	15,147,918	11,859,220	-21.71	481,369,725	499,135,321	3.69
Buccal Cavity	4,452,219	5,193,075	16.64	776,646	429,189	-44.74	5,228,865	5,622,264	7.52
Central Nervous System	17,456,905	18,803,554	7.71	155,922	142,785	-8.43	17,612,827	18,946,339	7.57
Cervix	56,185,149	66,450,143	18.27	3,859,186	5,607,727	45.31	60,044,335	72,057,870	20.01
Childhood Leukemia	47,525,099	47,364,916	-0.34	0	25,000		47,525,099	47,389,916	-0.28
Colon, Rectum	222,963,391	222,623,080	-0.15	16,908,463	20,565,109	21.63	239,871,854	243,188,189	1.38
Connective Tissue	7,857,870	7,572,951	-3.63	0	0		7,857,870	7,572,951	-3.63
Embryonic Tissue, Cells	10,165,631	7,746,541	-23.80	0	0		10,165,631	7,746,541	-23.80
Erythrocytes	1,017,898	985,198	-3.21	0	0		1,017,898	985,198	-3.21
Esophagus	15,633,684	18,297,131	17.04	558,406	742,552	32.98	16,192,090	19,039,683	17.59
Eye	2,504,907	2,340,893	-6.55	0	91,795		2,504,907	2,432,688	-2.88
Gall Bladder	222,092	757,328	241.00	0	0		222,092	757,328	241.00
Gastrointestinal Tract	11,463,853	14,090,712	22.91	2,207,704	1,782,279	-19.27	13,671,557	15,872,991	16.10
Genital System, Female	1,699,401	1,224,104	-27.97	655,629	711,385	8.50	2,355,030	1,935,489	-17.81
Genital System, Male	978,638	764,895	-21.84	1,739,438	2,402,836	38.14	2,718,076	3,167,731	16.54
Head and Neck	24,867,379	33,873,712	36.22	1,666,099	1,842,386	10.58	26,533,478	35,716,098	34.61
Heart	6,253,719	6,774,839	8.33	380,408	0	-100.00	6,634,127	6,774,839	2.12
Hodgkins Lymphoma	11,314,840	15,735,723	39.07	4	160,235	4,005,775.00	11,314,844	15,895,958	40.49
Invertebrate Tissue, Cells	13,247,408	7,851,614	-40.73	222,251	229,539	3.28	13,469,659	8,081,153	-40.00
Kaposi Sarcoma	16,402,643	18,485,724	12.70	167,574	267,773	59.79	16,570,217	18,753,497	13.18
Kidney	18,754,097	23,012,397	22.71	475,715	0	-100.00	19,229,812	23,012,397	19.67
Larynx	1,538,946	1,239,045	-19.49	0	0		1,538,946	1,239,045	-19.49
Leukemia	167,559,408	190,719,926	13.82	1,851,787	2,021,451	9.16	169,411,195	192,741,377	13.77
Leukocytes	70,161,712	68,432,226	-2.46	1,064,377	1,091,676	2.56	71,226,089	69,523,902	-2.39
Liver	51,157,569	52,377,535	2.38	3,247,716	2,548,304	-21.54	54,405,285	54,925,839	0.96
Lung	206,648,203	233,722,488	13.10	18,114,315	20,281,024	11.96	224,762,518	254,003,512	13.01
Lymph Node	678,029	418,211	-38.32	0	0		678,029	418,211	-38.32
Lymphatic System	2,068,357	1,772,709	-14.29	0	0		2,068,357	1,772,709	-14.29
Melanoma	72,703,068	81,518,973	12.13	2,461,213	1,733,587	-29.56	75,164,281	83,252,560	10.76
Muscle	9,793,642	10,585,789	8.09	0	0		9,793,642	10,585,789	8.09
Myeloma	17,356,968	23,349,917	34.53	761,393	108,120	-85.80	18,118,361	23,458,037	29.47
Nervous System	3,523,660	2,947,832	-16.34	0	0		3,523,660	2,947,832	-16.34
Neuroblastoma	16,908,206	23,084,752	36.53	0	25,000		16,908,206	23,109,752	36.68
Non-Hodgkins Lymphoma	77,141,012	87,043,129	12.84	2,415,160	658,184	-72.75	79,556,172	87,701,313	10.24

(Continued)

* This table reports funding for research grants and contracts only; training grants and intramural projects are excluded.

Table 16. NCI Organ Site-Specific Dollars for FY2003— Percent Change from FY2002* (Continued)

Special Interest Category (SIC)	2002 Grants	2003 Grants	Percent Change	2002 Contracts	2003 Contracts	Percent Change	2002 Totals	2003 Totals	Percent Change
Nose, Nasal Passages	2,019,221	1,889,287	-6.43	0	0		2,019,221	1,889,287	-6.43
Ovary	78,133,675	80,445,298	2.96	9,597,944	13,833,083	44.13	87,731,619	94,278,381	7.46
Pancreas	30,643,668	39,271,824	28.16	959,681	1,393,282	45.18	31,603,349	40,665,106	28.67
Parathyroid	144,535	103,368	-28.48	0	0		144,535	103,368	-28.48
Penis	555,233	570,915	2.82	0	0		555,233	570,915	2.82
Pharynx	3,054,679	3,496,979	14.48	0	0		3,054,679	3,496,979	14.48
Pituitary	2,330,309	2,223,903	-4.57	0	0		2,330,309	2,223,903	-4.57
Plant Tissue, Cells	299,402	417,169	39.33	0	0		299,402	417,169	39.33
Platelets	766,283	1,014,760	32.43	0	0		766,283	1,014,760	32.43
Prostate	242,985,186	261,534,830	7.63	16,198,261	20,628,018	27.35	259,183,447	282,162,848	8.87
Reticuloendothelial System	24,077,970	22,633,635	-6.00	934,837	0	-100.00	25,012,807	22,633,635	-9.51
Respiratory System	2,231,189	1,752,342	-21.46	0	0		2,231,189	1,752,342	-21.46
Retinoblastoma	2,013,370	2,275,980	13.04	0	0		2,013,370	2,275,980	13.04
Skin	55,643,355	58,036,360	4.30	2,255,975	2,071,557	-8.17	57,899,330	60,107,917	3.81
Small Intestine	1,940,181	2,744,882	41.48	0	0		1,940,181	2,744,882	41.48
Spleen	334,096	397,133	18.87	0	0		334,096	397,133	18.87
Stomach	6,555,573	9,819,892	49.79	2,097,465	591,103	-71.82	8,653,038	10,410,995	20.32
Testis	5,330,602	5,913,343	10.93	105,039	268,930	156.03	5,435,641	6,182,273	13.74
Thymus	1,011,485	830,245	-17.92	0	0		1,011,485	830,245	-17.92
Thyroid	3,948,141	4,832,175	22.39	0	0		3,948,141	4,832,175	22.39
Trachea, Bronchus	386,225	156,675	-59.43	393,732	0	-100.00	779,957	156,675	-79.91
Urinary System	703,615	540,930	-23.12	0	0		703,615	540,930	-23.12
Uterus	21,336,142	24,291,159	13.85	527,039	108,695	-79.38	21,863,181	24,399,854	11.60
Vagina	690,010	542,925	-21.32	0	0		690,010	542,925	-21.32
Vascular	51,333,578	47,688,318	-7.10	518,142	1,327,432	156.19	51,851,720	49,015,750	-5.47
Wilms Tumor	4,499,303	4,773,264	6.09	0	0		4,499,303	4,773,264	6.09

Table 17. Requests for Proposals (RFPs)* Reviewed by NCI/DEA in FY2003

Announcement Number	Annoucement Title	Workload Round
RFP N01-CN-25000-39	Recompetition: Phase I & Phase II Clinical Studies of Chemopreventive Agents	2/03
RFP N43-CP-31039-66	Particle-Based Assays for Detection and Quantification of Viral Antibodies	5/03
RFP N43-CM-37011-54	New Approaches for the Determination of 3-D Protein Structure	5/03
RFP N43-CM37015-28	Technologies for the Study of Genetic Alterations	5/03
RFP N43-CM-37016-19	New Technologies for Monitoring the Tumor Micro-environment	5/03
RFP N43-CO-31044-64	Development and Application of High-Throughput Proteomics Technology	5/03
RFP N01-CP-31032-66	Development of Oligonucleotide Selection Software for Molecular Genetic Analysis	5/03
RFP N43-CM-37015-28	Biomedical Informatics System for Basic and Clinical Cancer Research	5/03
RFPN01-CO-27042-32(BAA)	Initiative: Fundamental Technologies for Development of Bimolecular Sensors	5/03
RFP N01-CO-37007-16(BAA)	Novel Technologies for Noninvasive Detection, Diagnosis and Treatment of Cancer	5/03
RFP N43-CM-37012-23	Clinical Trials Data Collection Using Hand-Held Technology	5/03
RFP N01-CP-31012-66	Epidemiological Studies of Cancer Among Atomic Bomb Survivors	5/03
RFP N01-CN-25026-76	Preclinical *In Vitro* and *In Vivo* Screening Assays	5/03
RFP N43-CN-35022-61 (Topic 187)	Expert- vs. User-Tailored Interactive Media	5/03
Topic 188	Technologies to Promote Best Practice in Data Sharing	5/03
RFP N43-CN-35022-61 (Topic 189)	Real-Time Cancer Communications Data Collection	5/03
RFP N43-CM-37018-16	Development of Novel Agents Directed Against Childhood Cancer Molecular Targets	5/03
RFP N01-CM-37008-45	Early Clinical Trials of Imaging Agents	10/03
RFP N01-CP-31006-50	The Agricultural Health Study - Field Stations	10/03
RFP N01-CN-25002-72	Preclinical Toxicology of New Cancer Preventing Agents - Using Work Assignment Mechanism	10/03
RFP N01-CP-31018-50	U.S. Radiologic Technologist Cohort: New Strategies for Follow-up and Detailed Study of Radiation and Genetic Factors	10/03
NOT-OD-03-057	Loan Repayment Program for Clinical Researchers	10/03
NOT-OD-03-058	Loan Repayment Program for Pediatric Researchers	

* NCI reviewed a total of 404 proposals. The proposals were in response to RFPs (35), the 2003 SBIR contract solicitations (94), BAA initiatives (31), and the Loan Repayment Programs (244).

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