THE CANCER LETTER

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P.O. Box 15189 Washington, D.C. 20003 Telephone 202-543-7665

Rescission Cuts $5-6 Mil. From NCI FY94 Appropriations, Affects Intramural Program

NCI will cut administrative expenses, including intramural research, by $5.5 million to $6 million as part of $3.5 billion in government spending cuts attached to an earthquake relief package passed by Congress.

The impact of the rescission of FY94 appropriations is doubled because the fiscal year is half over, NCI sources said. For NIH overall, the recission was $18.1 million. Congress left it to NIH Director Harold Varmus to decide how to allocate the cuts.

Exactly how NCI will apply the cut remains to be determined, sources said to **The Cancer Letter,** but areas affected will be supplies, travel,

(Continued to page 2)

In Brief

NIH Study Finds Intramural Program Tenures Few Minorities, Calls For Improvements

LESS THAN 3% of tenured faculty at NIH are members of underrepresented minority groups, according to a report of an NIH committee that examined the status of minorities in the intramural program. Counting only minorities who are American citizens, the percentage drops to 2%, NCI Div. of Cancer Treatment Director **Bruce Chabner** said to the DCT Board of Scientific Counselors recently. Barriers to advancement were the small pool of nontenured minority candidates, poor mentorship by tenured faculty, lack of familiarity with the NIH tenure system, and a "lingering suspicion that minority scientists frequenty encounter skepticism on the part of the white majority with respect to their ability to do science," said Chabner, who chaired the committee. The group proposed several initiatives to improve recruitment and mentorship, and suggested that site review teams consider what steps labs have taken to recruit, retain, and promote minorities. . . . **MANUEL VALDIVIESO** has been appointed head of the Div. of Hematology/Oncology at Wayne State Univ. School of Medicine. Valdivieso's clinical expertise is lung cancer, and he has conduced phase I and II studies of agents in several types of cancer. . . . **WENDY BALDWIN** has been appointed NIH deputy director for extramural research. She has been acting deputy director since last June following the departure of John Diggs. Baldwin also has been deputy director of the National Institute of Child Health & Human Development since 1991. . . . **CANCER THERAPY** & Research Center, in San Antonio, TX, last week broke ground on a $13.4 million patient treatment and research facility. The building is expected to be completed in April 1995.

NCI Could Fund 1,090 Grants Under Clinton FY95 Budget

(Continued from page 1)

equipment, and any other administrative expenses. Since the intramural research program is considered an administrative expense, it also will be subject to cuts. The extramural programs will not be directly affected.

NCI Director Samuel Broder provided an update on budget issues to the National Cancer Advisory Board at its recent meeting:

♦FY95 could be a good year for getting a grant funded. Under the President's $2.19 billion budget request for FY95, NCI estimates its success rate for new and competing grants will be 24.8 percent. The success rate this year is expected to be 22.3 percent.

NCI would fund the highest number of grants ever, an estimated 1,090 competing grants. In FY92, NCI set a record with 1,070 grants.

"If you have any ideas, send in your grants this fiscal year so the grants are in competition for FY95 funding," Broder said. "It will not be a bad year for competing grants."

The total number of grants, both competing and noncompeting, would remain at about 3,300.

♦The President's budget would increase cancer funding by $5.3 percent, and AIDS funding by 4.3 percent. Included is a directive that $10 million be used for breast cancer "outreach activities to be supported by NCI's Prevention & Control activity and shared with CDC."

♦An NIH initiative for high performance computing was included in the President's budget. NCI's share is $2.4 million.

♦NCI remains under a hiring freeze, and must justify hiring, particularly for GS-14 level and above, from NIH or HHS officials. The President's budget calls for reductions totalling $15 million for personnel cuts and administrative cost cuts.

♦NIH has increased stipends for trainees, which will result in a cut in trainee positions. NCI's target number of trainees is 1,400, but the Institute will have to support fewer positions. The NCAB passed a resolution last fall recommending that NCI support 1,400 trainess, but it is not likely that NCI will be able to honor that request, Broder said.

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Editors: **Kirsten Boyd Goldberg**
Paul Goldberg
Founder & Contributing Editor: **Jerry D. Boyd**

P.O. Box 15189, Washington, D.C. 20003
Tel. (202) 543-7665 Fax: (202) 543-6879

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Capitol Notes

House Calls For $239M Cut President's Request For NIH

Two recent developments on Capitol Hill pose serious threats to NIH in the appropriations cycle for fiscal 1995:

● The House Budget Committee recommended a $239 million reduction of the NIH appropriation contained in the President's budget proposal. The bill, which attempts to make up for a $3.1 billion overage in the President's budget, is scheduled for markup by the Senate Budget Committee next week.

● The House Appropriations Committee has been thrown into disarray by the illness of Rep. William Natcher (D-KY). Natcher, 84, is said to be suffering from congestive heart failure. His illness may open two slots crucial to NCI funding: chairman of the full appropriations committee as well as its subcommittee on Labor, HHS and Education.

Likely successors to Natcher include Reps. David Obey (D-IA) and Neal Smith (D-IA). Obey is a supporter of the theories of Samuel Epstein, professor at the Univ. of Illinois, who argues that exposure to industrial chemicals causes the majority of cancers (**The Cancer Letter**, May 21, 1993).

Smith is said to have strong ties and a good working relationship with Sen. Tom Harkin (D-IA), chairman of the Senate Labor, HHS and Education Appropriations Subcommittee.

♦ ♦ ♦

The House Energy and Commerce Subcommittee on Health and the Environment decided not to mark up the President's health care reform bill (HR 3600), leaving the markup to the full committee.

Capitol Hill sources said the bill lacks solid support at full committee, chaired by John Dingell (D-MI). The committee's markup is expected in April.

ACS Endorses President's Health Reform, With Caveats

The American Cancer Society became the first cancer group to take a stand on any of the plans to reform the health care system.

Last week, the ACS board of directors gave a qualified endorsement to the President's health care reform plan, saying that it comes closest to addressing the needs of the cancer patients.

"We do not support all the elements of any current health care proposal, including that of the President," said Irving Fleming, ACS president. "However, we do support those aspects of the Clinton plan which we believe successfully address [the] vital needs of cancer patients."

While the Society endorsed several aspects of President Clinton's Health Security Act, its board also agreed on the list of issues that remain to be clarified or worked out.

The aspects of the Clinton plan endorsed by ACS include the provision for universal coverage; the end of the insurance industry practice of denying coverage for "pre-existing conditions;" reimbursement of a wide spectrum of cancer related care, with an emphasis on prevention and institution of a federal excise tax on tobacco products.

Uncertainties In Clinton Plan

The Society said the following aspects of the President's plan are either unclear or remain to be worked out:

- It is uncertain whether the plan gives patients sufficient access to cancer specialists;
- The Administration bill does not provide coverage for all cancer detection tests, including mammography screening, in accordance with the ACS guidelines;
- Several issues remain to be worked out in the plan's support and funding for basic and clinical research, including guaranteed coverage for patient care costs in clinical trials.
- The scope of cancer preventative services and delivery mechanisms, including an expanded Public Health Service, comprehensive school health education and a defined role for voluntary health agencies.
- Inclusion of a minimum increase of a $2 per-pack federal excise tax on cigarettes and comparable increases for other tobacco products. The Administration's bill calls for a 75 cent-per-pack tax.

"ACS represents very broad constituencies of literally millions of Americans concerned about cancer, including a large representation from the medical profession," Fleming said. "It is difficult, and perhaps even inappropriate for such an organization to come to total consensus on all elements of an issue as multifaceted as health care reform.

"However, we are in total agreement in our advocacy for the rights and needs of cancer patients and their families," he said.

"Our main concern, rather than advocating for one plan over another, is that overall health care reform is achieved and that our cancer related principles are woven into the final plan."

Kripke: Translational Research Is Greatest Opportunity Today

The greatest opportunity in cancer research today is in the area of translational research, defined as applying basic research findings to benefit cancer patients, Margaret Kripke, president of the American Assn. for Cancer Research, said to the National Cancer Advisory Board.

"Translational research truly represents the chance to recap benefits of the first 20 years of investment in the National Cancer Program and apply these advances for the benefit of cancer patients," said Kripke in an address to the NCAB at its Feb. 22 meeting. "This is where the excitement is."

The next 20 years should be a period of enormous advance in cancer diagnosis and treatment, Kripke said. However, a priority should be to maintain the momentum in untargeted basic research.

Challenges to progress in cancer research include the demoralization of cancer researchers and the infrastructure and funding for translational research, Kripke said.

"Morale is low and anxiety is high, due to the diminishing pool of funds, earmarking by special interest groups, and a peer review process which is too onerous and time-consuming," she said.

Researchers do not want to review grants when the potential for funding is so low, Kripke said. At most, a grant is read by one or two reviewers.

"Together, these factors conspire to create a climate not conducive to creativity or productivity in research," she said.

"Many think that targeting organ sites will bring translational research," she said. "While that is true to some extent, there seems to be a lack of appreciation

for what it means to move from bench to bedside.

"To get science to think about how to apply existing knowledge requires interaction with clinicians who understand the problem," Kripke said. "It doesn't just happen. People have to be dedicated to making it happen. It takes translational researchers. It will not happen overnight. It will certainly not happen without nurturing, time and money."

Cancer Research "Must Speak With One Voice"

Another cause of uncertainty is the possible health care reform, Kripke said. Researchers should address the question of who will pay for medical research under a managed health care system.

"People who care about cancer research must speak with one voice," Kripke said. "One goal is to reduce cancer incidence and mortality, but there is a great disparity in our ideas of how to reach that goal. To achieve this, cancer researchers must hear and understand the concerns and needs of cancer patients and their families. Cancer advocates must understand how research works, what is the process of scientific discovery, what motivates scientists to do science and to be creative."

AACR wants to "play a more active role" in the National Cancer Program's setting of research priorities, Kripke said.

Kripke serves on a special subcommittee of the National Cancer Advisory Board that is evaluating the National Cancer Program as part of a review requested by Congress in the FY93 appropriation for NCI.

The first phase of the evaluation was completed last year with "Measures of Progress" panels in six specific areas. The second phase concluded earlier this year with a series of meetings of the President's Cancer Panel.

NCAB Chairman Paul Calabresi is chairman of the subcommittee. Other members besides Kripke are Karen Antman, Erwin Bettinghaus, C. Norman Coleman, Deborah Mayer, John Niederhuber, Charles Sanders, Ellen Sigal, Pelayo Correa, former Rep. Joseph Early, LaSalle Leffall, Ellen Stovall, Mimi Yu, and President's Cancer Panel Chairman Harold Freeman (ex officio). The subcommittee has met seven times since last September.

The subcommittee is scheduled to meet March 16-17 in San Francisco, and April 27-29 in North Carolina. The subcommittee's report will be presented to the NCAB at its next meeting May 31-June 1 in Bethesda.

NCI To Fund More SPOREs In FY95 Recompetition

NCI plans to expand the Specialized Programs of Research Excellence in breast, prostate and lung cancer by adding one new award in each of the three organ sites.

Advisors to NCI's Div. of Cancer Biology, Diagnosis & Centers last week voted unanimously to set aside $27.5 million in fiscal 1995 for first-year funding of the awards (total costs).

NCI would fund five breast cancer SPOREs, three prostate cancer SPOREs and three lung cancer SPOREs. Each SPORE could request up to $2.5 million in total costs per year. Future year increases would be capped at 4%.

The DCBDC Board of Scientific Counselors had approved the original concept for the SPOREs three years ago.

For the recompetition, NCI plans to stagger the peer review of the grant applications so that staff are not overwhelmed as they were during the program's first award cycle, said Andrew Chiarodo, chief of the Organ Systems Branch and project director of the SPOREs. The Request for Applications for the breast cancer SPORE is expected to be released in June, followed three months later by the prostate SPORE and six months later by the lung SPORE.

Following is the full text of the concept statement for the breast cancer SPORE. Text is similar for the prostate and lung SPOREs.

Specialized Programs of Research Excellence in Breast Cancer. Recompetition of P50 grants, total $12.5 million in the first year, five awards.

Introduction: The objective of this initiative is to recompete the Specialized Programs of Research Excellence in Breast Cancer, and to expand the current program with the addition of at least one new SPORE. SPOREs are at institutions that will make a strong institutional commitment to the organization and conduct of these programs. Each SPORE must demonstrate a balanced approach to research on prevention, etiology, screening, diagnosis and treatment of human breast cancer that translates basic research findings into more applied, innovative research settings involving patients and populations; the SPORE could be used in rehabilitation and quality of life research. Each SPORE must provide career development opportunities for new, independent investigators who wish to pursue active research careers in translational breast cancer research; develop human breast cancer tissue resources that will benefit translational research; develop extended collaborations in criti-

cal areas of research need with laboratory scientists and physician scientists within the institution and in other institutions; and participate with other SPOREs on an annual basis to share information, assess scientific progress in the field and identify new research opportunities that may have an impact in reducing breast cancer incidence and mortality. It is expected that each SPORE will support a mix of interactive basic and applied research that "translates" into areas of early detection, diagnosis, therapy, and prevention and control. The SPORE mechanism is not intended to support basic research to the exclusion of clinical or applied research.

Background: Breast cancer is the most common cancer among US females, is the highest incidence cancer in the US and is the second leading cause of cancer death among women. Since 1980, breast cancer incidence has increased dramatically in both pre- and postmenopausal women at a rate of approximately 2% per year. During this time, the scientific information base for breast cancer has expanded significantly; however, application of this scientific base to clinical and preventive activities has not been commensurate with this expansion. There is thus a need to encourage translational research that would require interdependence between basic and clinical investigators in both the planning and implementation of research and would emphasize clinical application of basic research findings with patients and populations. Translational research also applies clinical findings to advance basic research that ultimately may lead to hypothesis-driven clinical trials or prevention and control interventions. It should be noted that clinical research that is not based on nor derived from laboratory findings is not considered translational for purposes of this RFA.

Special Requirements: The institutions selected for award of SPOREs must assemble a critical mass of basic and clinical scientists dedicated to the translation of basic findings into more applied, innovative research settings involving patients and populations with the ultimate objective of reducing incidence and mortality to the disease. Each SPORE must include the following elements:

1. A strong institutional commitment. Institutions receiving these awards must incorporate the SPORE into its institutional priorities. It must provide a plan which addressees how the institutional commitment will be maintained and sustained and- how it will maintain accountability for promoting scientific progress. A SPORE application can originate from an institution with or without an existing P30 core grant. If a P30 already exists, lines of authority should be clearly indicated such that the SPORE does not interfere with the P30 chain of authority.

2. A qualified Program Leader. A leader must be selected as the principal investigator who can oversee, conduct planning activities and provide direction to SPORE with a translational research emphasis.

3. A substantive breast cancer patient population. Each SPORE must be a recognized leader in the treatment of breast cancer and have access to a patient population that can participate in and benefit from the innovative applied clinical and population research activities of the SPORE.

4. Research Projects. Each research project must be headed by basic and clinical co-investigators. This should facilitate exploiting the translational potential of the research. The research must be oriented toward translational activities using human materials and human subjects which address new, innovative possibilities in breast cancer research. This program will not support basic research that is without translational potential or significance nor will it support clinical studies that are not translated from basic research. At least one research project must be on breast cancer prevention or early detection and screening. NCI is particularly interested in early detection and screening efforts that will either refine mammography methodology or provide alternative approaches that will be improvements over mammography. There is also a strong interest in developing genetic methods for determining high risk to breast cancer either through inheritance or through environmental exposures. However, NCI is open to all novel innovative approaches to prevention.

It is expected that all SPOREs will have a balanced approach to breast cancer that encompasses the areas of prevention, etiology, screening, diagnosis and treatment. This balanced approach may be either through research being conducted in their institution, or through collaborative associations they have developed or plan to develop with other SPOREs or with other investigators in the biomedical research community.

5. Specialized Resources. Each SPORE must have a dedicated activity to human breast cancer tissue collection. This resource must benefit the specific research activities of the SPORE as well as the research activities of other scientists within and outside of the parent institution who are concentrating on translational research issues. The SPORE must be willing to participate in any national prioritization for distribution of tissues through NCI supported tissue networks. A plan must be proposed for prioritizing distribution of tissues to SPORE scientists and others based on the most innovative ideas in translational breast cancer research. This plan should be flexible enough to accommodate and complement broader national priorities as they are developed. The development of other resources of special significance to translational breast cancer research is encouraged.

If the SPORE is part of a NCI-designated cancer center, the development of resources should not duplicate resources already provided by the center on an existing Cancer Center Support Grant (P30). The applicant should show that the P50 will become an effective, integrated

research arm of the cancer center when it is supported by a P30 grant.

6. Career Development. The SPORE must demonstrate an increased commitment to career development. A minimum of $100,000 in direct costs per year must be dedicated to the salaries and research activities of new, independent investigators who wish to pursue translational research careers on breast cancer and who would be expected to leave the SPORE with the necessary research experience to develop independent breast cancer research programs within or outside of the parent institution.

7. Developmental Research Funds. Each SPORE must allocate a significant proportion of its budget and efforts to the conduct of pilot projects that continually explore new innovative ideas in collaboration with scientists within the institution and with other institutions. It is important that SPOREs use developmental funds to stimulate projects that take maximum advantage of new research opportunities.

8. Annual Meeting of SPORE. Breast Cancer SPOREs will be expected to participate in an annual meeting with the Organ Systems Coordinating Branch of the NCI to share data, assess progress, identify new research opportunities, and establishing priorities relative to the most effective approaches for reducing incidence and mortality.

If a SPORE is located in an institution that is already an NCI-designated Cancer Center, the Program Director of the SPORE must be a senior leader in the cancer center and the SPORE must be a major programmatic element. However there must be a separate and distinctive commitment of financial resources and/or positions in the institution to breast cancer research.

Cost and time projections: This initiative proposes to expand the current effort of four SPOREs by at least one new award. All new and competing renewal P50 SPORE applications may request a maximum annual direct cost of $1.5 million and maximum annual total cost of $2.5 million per individual SPORE. Future year increases are limited to 4% but may not exceed this cap. Funding for successful P50 renewal applications will be for five years. Initial funding for new P50 SPOREs will be for three years.

Renewal would be for five years subject to successful recompetition. Recognizing that the initial funding period for new SPOREs may be too short for substantive scientific accomplishments, the recompetition would evaluate progress toward accomplishment rather than accomplishment itself. This would include, for example, progress toward planning, developing and implementing new innovative translational research programs, progress toward developing the careers of new scientists, progress toward procuring and distributing tissue specimens, progress toward developing substantive collaborative interactions, etc.

Specialized Program of Research Excellence in Prostate Cancer. Total $7.5 million in first year, three awards. Introduction: (See breast cancer text). Because basic research in prostate cancer has lagged behind that of other major solid tumors, greater leeway is given for basic research studies on prostate cancer. However, such studies must have translational significance.

Background: Prostate cancer is now the most common cancer in US males and the second leading cause of cancer death in men. Mortality due to prostate cancer is two-fold higher in US blacks than US whites. At present, this disease costs more than $1 billion annually, requires a quarter of a million hospitalizations and results in more than 35,000 deaths. Prostate cancer research has lagged far behind research in other major forms of cancer and there has been a lack of new investigators entering the field. In part, this has been due to lack of accessibility to human prostate tissues and a lack of suitable in vitro and in vivo models Effective reduction of incidence and mortality to prostate cancer will require a special effort to expand the scientific information base.

Specialized Programs of Research Excellence must address the weaknesses in the scientific information base and provide focal points for sustaining and maintaining state-of-the-art research that will contribute to improved detection, diagnosis, treatment and prevention of prostate cancer. SPOREs will not only be expected to conduct a wide spectrum of research activities, but also to contribute significantly to the development of specialized research resources, career development of new investigators, the development of improved research model systems and the expansion of the research base through collaborative research with scientists and clinicians in other institutions locally and nationwide.

Specialized Requirements: (See text for breast cancer above, items 1,2,3, 6, 7 and 8).

4. Research Projects. Each research project must be headed by basic and clinical co-investigators. This should facilitate exploiting the translational potential of the research. The research should be oriented toward the most critically needed areas of prostate cancer research. At least one research project must be on prostate cancer prevention or early detection and screening. NCI is particularly interested in early detection and screening efforts. There is also a strong interest in developing genetic methods for determining high risk to prostate cancer either through inheritance or through environmental exposures.

5. Specialized Resources. Each SPORE must dedicate itself to the development of model systems for research and to the implementation of human prostate cancer tissue bank for research. A prioritized plan to make model systems and tissues available to investigators within and outside of the SPORE should be proposed. The SPORE must be willing to participate in any national prioritization for distribution of tissues through

NCI supported tissue networks. A plan must be proposed for prioritizing distribution of tissues to SPORE scientists and others based on the most innovative ideas in translational prostate cancer research. This plan should be flexible enough to accommodate and complement broader national priorities as they are developed. The development of other resources of special significance to prostate cancer research is also encouraged.

Specialized Program of Research Excellence in Lung Cancer. Total $7.5 million in first year, three awards. Introduction: (See breast cancer text).

Background: Lung cancer, by far, is the leading cause of cancer deaths in the US, with an estimated 146,000 deaths in 1992. However, the incidence rate for lung cancer has begun to decline in men from a high in 1984. In women, the rate continues to increase. Since 1987, more women have died yearly of lung cancer than of breast cancer. The scientific information base for lung cancer continues to expand significantly; however, its application to clinical and preventive activities is incommensurate with research activities. Thus, there is a need to encourage translational research that would require interdependence between basic and clinical investigators in the planning and implementation of research. An emphasis on translational research would intensify the application of basic research findings to clinical patients and to populations.

Special Requirements: (See breast cancer text sections 1,2,3,5,6,7, and 8).

4. Research Projects. Each research project must be headed by basic and clinical co-investigators. This should facilitate exploiting the translational potential of the research. This program will not support basic research that is without translational potential or significance nor will it support clinical studies that are not translated from basic research. At least one research project must be on lung cancer prevention. NCI is particularly interested in research aimed at reducing environmental risks to lung cancer.

DCPC Advisors OK New P01 Grants Program In Nutrition

NCI's Div. of Cancer Prevention & Control Board of Scientific Counselors has given concept approval to a new program that would provide $2.5 million per year over the next four years to fund program project grants in nutrition research.

The board also gave concept approval to a proposed RFA that would fund studies in genetic testing and counseling for hertiable cancer risks.

Following are the concept statements:

Program Projects in Nutrition Research for Cancer Prevention. Proposed new RFA for program project grants (P01s), $2.5 million per year, four years, three to four awards per year. Program directors: Susan Pilch, DCPC Diet & Cancer Branch, and Carl Smith, DCE Chemical & Physical Carcinogenesis Branch.

The Diet and Cancer Branch in DCPC's Cancer Prevention Research Program and the Chemical & Physical Carcinogenesis Branch, Div. of Cancer Etiology, seek to encourage nutrition research relevant to cancer prevention. Specifically, they seek to encourage application of the techniques of molecular biology and molecular genetics to address questions about the fundamental role of nutrition in the initiation, promotion, progression, and prevention of cancer and use of that knowledge to develop dietary interventions for the prevention of cancer, with a special emphasis on breast cancer, prostate cancer, and cancer in women and minorities.

The studies encouraged by this concept will employ innovative approaches to examine fundamental effects of nutrients and other food constituents on initiation, promotion, progression, and prevention of cancer, as well as individual variability in response, to develop more effective nutrition interventions for prevention of cancer, especially breast and prostate cancer. A wide range of potential program projects, comprising individual projects ranging from basic to translational research and practical applications, may be considered for support; however, all applications must delineate clearly the relevance of each proposed research project, especially those with a basic biology focus, for the prevention of human cancer.

The program project grant will be employed as a mechanism for the support of an integrated, multiproject research program involving a number of independent investigators who share knowledge and common resources. The central research focus of a program project grant involves several disciplines or several aspects of one discipline and may involve multiple institutions. The individual projects must be interrelated and synergistic, and build upon the leadership of the principal investigator and interaction of the participating investigators, resulting in a greater contribution to program goals than if each project were pursued separately. Individual investigators may apply their specialized research capabilities to basic research projects, clinical research projects, cancer control research projects, or combinations of such projects as they relate to the focused central theme of the overall program project.

Program projects will be required to comprise basic research efforts and at least one component project involving studies of human subjects or human tissues.

Illustrative, but not exhaustive, examples of research areas relevant to this concept include:

•Evaluate nutrient-genome interactions in carcinogenesis and anticarcinogenesis, e.g., nutrient effects on DNA repair or modulation of gene expression.

•Examine the potential for nutrients or other dietary constituents to influence the activation of oncogenes or inactivation of tumor suppressor genes.

•Study nutrient influences on differentiation and on signals induced by physiological or chemical differentiation in various tissues.

•Evaluate nutrient effects on growth factors for cellular transformation, including the ability to block or prevent the interaction of growth factors with receptors.

•Examine nutrient-carcinogen-promoter interactions, including cellular defense mechanisms against environmental carcinogens/promoters that may be regulated by dietary factors.

•Elucidate mechanisms and controls of nutrient transport to target sites in various tissues.

•Quantify dose-response relationships for nutrients, nutrient derivatives, and other bioactive dietary constituents as part of the analysis of their absorption, metabolism, and distribution in target tissues and their effects on molecular and cellular events .

•Identify biomarkers indicative of early cellular transformation that may be monitored in nutrition epidemiologic studies and modulated in dietary intervention trials. Identify biomarkers that will provide improved assessment of dietary intake and/or nutritional status for use in nutrition epidemiologic studies and dietary intervention trials.

•Characterize the nature, extent, and causes of individual variability in cancer risk and in responses to dietary constituents.

•Develop dietary intervention strategies to modulate expression of genetically determined cancer risk, including risk resulting from loss of response to natural regulators of proliferation and/or risk resulting from blocked expression of differentiation (maturation) programs.

•Conduct small-scale clinical/metabolic intervention studies to test dietary modifications with potential for cancer prevention developed on the basis of knowledge of nutrient-genomic interactions.

Studies of Genetic Testing and Counseling for Heritable Cancer Risks. Proposed new RFA. Funding from NCI $1 million per year for three years; total NIH funding is expected to be $2.2 million to $2.5 million per year for three years, with funding from, the National Center for Human Genome Research, the National Institute for Mental Health, and the National Institute for Neurological Research. Program director (for NCI): Susan Nayfield, Community Oncology & Rehabilitation Branch.

The potential to offer genetic testing in the near future has created an urgent need to assess and develop ways to deliver genetic testing and counseling for heritable cancer risks. The National Center for Human Genome Research released RFA HG-94-001 to support research in specific areas (**The Cancer Letter,** Feb. 11).

Multidisciplinary research teams are encouraged to submit R01 or R03 applications addressing topics as:

1. Examining professional and public knowledge and attitudes about genetic testing for cancer risks;

2. Establishing the parameters of genetic testing for cancer risks, including to whom such testing should be offered;

3. Identifying the optimum providers, settings, and timing for genetic testing for cancer risks;

4. Determining the optimum strategies for pretest education and counseling for people considering genetic testing for cancer risks;

5. Exploring the psychosocial impact of testing for genetic risk factor for cancer, in both individuals positive and negative for the mutations under study;

6. Defining the optimum strategies for post-test counseling and follow-up care for individuals found to have genetic risk factors for cancer:

7. Developing policies about management of genetic information and cancer risk status;

8. Investigating the impact of identifying genetic risk factors in individuals on longevity, quality of life, and adherence to health promotion and disease prevention strategies.

Research design should consider surveys of both patient, provider, and/or public attitudes and knowledge of genetic testing for cancer risk, using standard survey research methodology, to address study questions or gather baseline information. Structured interviews, focus groups, or other sociologic techniques may also be appropriate. Qualitative ethnographic approaches to the study of family dynamics and psychosocial impact should be encouraged. Applications which address issues limited to specific aspects of attitudes/knowledge should utilize the R03 application mechanism which provides total direct costs up to $50,000 per year for a maximum period of two years.

Applications which include testing counseling or educational interventions, and those which address knowledge and attitudes with complex study designs, should consider the R01 application mechanism. However, funding for R01 applications in response to this RFA is limited to three-years. For applications which test specific interventions, an experimental design is the preferred approach; however, the individual person or provider may not necessarily be the appropriate unit of randomization. A quasi-experimental design may be considered in some circumstances. The intervention must be clearly described in the application.

Management and Support Services for DCPC. Recompetition of a contract, total $4.144 million over five years. Project officer: James Prather, Administrative Management & Planning Branch. This contract assists DCPC staff in logistics of various activities. The research support is in a variety of scientific areas, such as scientific conferences, meetings, etc.; data collection retrieval and documentation.