- NIH GUIDE

for GRANTS

and CONTRACTS

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

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The GUIDE is published at irregular intervals to provide policy and administrative information to individuals and organizations who need to be kept informed of requirements and changes in grants and contracts activities administered by the National Institutes of Health.

Supplements, printed on yellow paper, are published by the respective awarding units concerning new projects, solicitations of sources, and requests for proposals.

CANCER RESEARCH EMPHASIS GRANTS (CREG)

ANNOUNCEMENT

TITLE - MALIGNANCY INDUCED BY SMALL DNA VIRUSES (ADENOVIRUSES OR PAPOVAVIRUSES)

SCIENTIFIC PROGRAM REQUIREMENT The National Cancer Institute is accepting applications for support of research on the interaction between small DNA viruses and cells as it relates to malignant transformation. This area of research includes: (1) the study of viral and cellular genes governing permissiveness and viral transforming functions, (2) the study of molecular events leading to virus-induced malignant transformation of cells, (3) the interaction of small DNA viruses with the type C RNA viruses or with other classes of known or suspected carcinogens in relation to cell transformation.

SIGNIFICANCE TO NCI PROGRAM GOALS Viruses can cause cancer in animals and have proved to be one of the best tools for exploration of the complex events that lead to malignant transformation of cells. Although DNA viruses have been shown to induce neoplasms in several species of animals under experimental conditions and have been linked to certain human cancers, little is known about the mechanisms that might be involved in the process of transformation. The Virus Cancer Program is interested in supporting studies that will lead to a better understanding of how DNA viruses interact with cells and with other agents in cells during oncogenesis.

- 1. <u>ELIGIBILITY</u> Nonprofit organizations and institutions, State and local governments and their agencies, authorized Federal institutions, and individuals according to NIH grants policies.
- 2. THE APPLICATION Applicants should propose an individual project with a level of effort corresponding to approximately one professional man-year. Applicants may elaborate on the purposes, objectives, rationale, and significance stated in this announcement and must complete portions of the application pertaining to procedural details, the investigator's related experience, facilities available, budgets, and biographical information for key professional personnel. The application should also state the duration of time for which the support is requested. The initial project period will not exceed three years but may be renewable. Please note that a brief semi-annual and more comprehensive annual report to the National Cancer Institute will be required. The National Cancer Institute expects to fund several projects in this area.
- 3. <u>SUBMISSION</u> Use application form NIH-398. In <u>both</u> the covering letter <u>and</u> at the top of the space provided for an abstract on page 2 of the application, identify <u>this</u> CREG announcement by its title, number <u>DCCP-17</u> and the date of publication as the one to which the application responds. Mail the application and letter to Division of Research Grants, National Institutes of Health, Bethesda, Maryland 20014.

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4. <u>RECEIPT DATE</u> Applications <u>received</u> on or before October 1, 1976, will be processed for study section review in February 1977, and for the National Cancer Advisory Board review in May 1977.

REVIEW

Upon receipt, applications will be reviewed for responsiveness to this announcement by the Division of Research Grants (DRG) in consultation with the NCI staff. If an application is judged unresponsive, the applicant will be given an opportunity to withdraw the application or to submit it for consideration in the traditional grant programs of NIH. Applications judged responsive will be reviewed initially for scientific merit by DRG study sections and secondly by the National Cancer Advisory Board.

DRG will not accept an application in response to a CREG announcement that is identical to any other application concurrently being considered by NCI or other NIH awarding units.

For further information, potential applicants may contact <u>Dr. Elke Jordan</u>, (301) 496-6927, Virus Cancer Program, Division of Cancer Cause and Prevention, National Cancer Institute.

TITLE - HERPESVIRUS-INDUCED MALIGNANCY

SCIENTIFIC PROGRAM REQUIREMENT The National Cancer Institute is accepting applications for support of research on the interaction between herpesviruses and cells as it relates to malignant transformation. This area of research includes: (1) the study of viral and cellular genes governing permissiveness and viral transforming functions, (2) the study of molecular events leading to virus-induced malignant transformation of cells, (3) the interaction of herpesviruses with the type C RNA viruses or with other classes of known or suspected carcinogens in relation to cell transformation.

SIGNIFICANCE TO NCI PROGRAM GOALS Viruses can cause cancer in animals and have proved to be one of the best tools for exploration of the complex events that lead to malignant transformation of cells. Although DNA viruses have been shown to induce neoplasms in several species of animals under experimental conditions and have been linked to certain human cancers, little is known about the mechanisms that might be involved in the process of transformation. The Virus Cancer Program is interested in supporting studies that will lead to a better understanding of how DNA viruses interact with cells and with other agents in cells during oncogenesis.

- 1. <u>ELIGIBILITY</u> Nonprofit organizations and institutions, State and local governments and their agencies, authorized Federal institutions, and individuals according to NIH grants policies.
- 2. THE APPLICATION Applicants should propose an individual project with a level of effort corresponding to approximately one professional man-year. Applicants may elaborate on the purposes, objectives, rationale, and significance stated in this announcement and must complete portions of the applications pertaining to procedural details, the investigator's related experience, facilities available, budgets, and biographical information for key professional personnel. The application should also state the duration of time for which the support is requested. The initial project period will not exceed three years but may be renewable. Please note that a brief semi-annual and more comprehensive annual report to the National Cancer Institute will be required. The National Cancer Institute expects to fund several projects in this area.
- 3. <u>SUBMISSION</u> Use application form NIH-398. In <u>both</u> the covering letter and at the top of the space provided for an abstract on page 2 of the application, identify <u>this</u> CREG announcement by its title, number <u>DCCP-18</u> and the date of publication as the one to which the application responds. Mail the application and letter to Division of Research Grants, National Institutes of Health, Bethesda, Maryland 20014.
- 4. <u>RECEIPT DATE</u> Applications <u>received</u> on or before October 1, 1976, will be processed for study section review in February 1977, and for the National Cancer Advisory Board review in May 1977.

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REVIEW

Upon receipt, applications will be reviewed for responsiveness to this announcement by the Division of Research Grants (DRG) in consultation with the NCI staff. If an application is judged unresponsive, the applicant will be given an opportunity to withdraw the application or to submit it for consideration in the traditional grant programs of NIH. Applications judged responsive will be reviewed initially for scientific merit by DRG study sections and secondly by the National Cancer Advisory Board.

DRG will not accept an application in response to a CREG announcement that is identical to any other application concurrently being considered by NCI or other NIH awarding units.

For further information, potential applicants may contact <u>Dr. Elke Jordan</u>, (301) 496-6927, Virus Cancer Program, Division of Cancer Cause and Prevention, National Cancer Institute.

TITLE - METABOLISM AND MECHANISM OF ACTION OF CARCINOGENIC ORGANOHALOGEN COMPOUNDS

CREG ANNOUNCEMENT The Carcinogenesis Program of the Division of Cancer Cause and Prevention is interested in developing additional research in the area of the metabolism and mechanism of action of carcinogenic organohalogen compounds. Unlike a call for contract proposals, in which the research initiative and direction are the National Cancer Institute's; or general grant applications, in which the research initiative and direction are the investigator's; CREG announcements request responses to conduct research in areas specified by the NCI but leaves the approaches and methods to the investigators.

SCIENTIFIC PROGRAM REQUIREMENT The National Cancer Institute is accepting applications for support of research projects in the area of the metabolism and mechanism of action of carcinogenic organohalogen compounds. The objective of this research is to study the reactions that are necessary for this group of compounds, or individual compounds, to produce a carcinogenic response in mammalian species. In particular, information is desired on carcinogenic halogenated aliphatic and aromatic compounds in respect to the following:

- 1. The identification and site of formation of the proximate and ultimate carcinogenic metabolites;
- The identification of cell constituents, e.g., the macromolecules, which are altered as a result of their interaction with the test compounds; and
- 3. The mechanism of interaction between the test compound and the altered tissue constituents.

Applicants should name the compounds proposed for study. These may include both carcinogens and noncarcinogenic structural analogs. Examples of short chain halogenated alkanes and alkenes that are of interest are trichloroethylene, carbon tetrachloride, and chloroform; while cyclic ones might be DDT, chlordane, or dieldrin.

SIGNIFICANCE TO NCI PROGRAM GOALS A goal of the Carcinogenesis Program is to understand the chemical and physical reactions that are required to produce a carcinogenic response in humans. Such an understanding may allow the prediction of a chemical's potential carcinogenicity based on its structure and/or reactivity. It also may lead to means of inhibiting or blocking reactions which might result in a carcinogenic response.

APPLICATION REQUIREMENTS

1. $\underline{\it ELIGIBILITY}$ Nonprofit organizations and institutions, State and local governments and their agencies, authorized Federal institutions, and individuals according to NIH grant policies.

- 2. THE APPLICATION Applicants should propose an individual project. Applicants may elaborate on the purposes, objectives, rationale, and significance stated in this announcement and must complete portions of the application pertaining to procedural details, the investigator's related experience, facilities, available budgets, and biographical information for key professional personnel. The application should also state the duration of time for which the support is requested. It is anticipated that the project period will not exceed three years and that the level of effort per year should not exceed two-three man-years in the category of professional personnel.
- 3. <u>SUBMISSION</u> Use application form NIH-398. In <u>both</u> the covering letter <u>and</u> at the top of the space provided for an abstract on page 2 of the application, identify <u>this</u> CREG announcement by its title and number <u>DCCP-19</u> and the date of publication as the one to which the application responds. Mail the application and letter to Division of Research Grants, National Institutes of Health, Bethesda, Maryland 20014. If your institution cannot supply you with form NIH-398, it may be requested from the Division of Research Grants.
- 4. <u>RECEIPT DATE</u> Applications <u>received</u> on or before October 1, 1976, will be processed for study section review in February 1977, and for the National Cancer Advisory Board review in May 1977.

REVIEW

Upon receipt, applications will be reviewed by the Division of Research Grants (DRG) and NCI staff for responsiveness to this announcement. If an application is judged unresponsive, the applicant will be given an opportunity to withdraw the application or to submit it for consideration in the traditional grant programs of NIH. Applications judged responsive will be reviewed initially for scientific merit by DRG study sections and secondly by the National Cancer Advisory Board.

DRG will not accept an application in response to a CREG announcement that is identical to one concurrently being considered by NCI or other NIH awarding units.

For further information, potential applicants may contact <u>Dr. Elizabeth K. Weisburger</u>, (301) 496-5688, Project Director, Division of Cancer Cause and Prevention, National Cancer Institute.

TITLE - EFFECTS OF AGING ON SUSCEPTIBILITY TO CARCINOGENESIS

SCIENTIFIC PROGRAM REQUIREMENT The National Cancer Institute is accepting applications for support of research projects that will attempt to define aging-associated factors that have a reasonable likelihood of influencing the susceptibility of cells to carcinogenesis. Two hypotheses are among those to be considered relevant to this concept: (1) the age of host at the time a carcinogenic stimulus comes in contact with the target cell strongly influences cell susceptibility (as inferred from age-associated incidence tables) and (2) irrespective of the time in life at which the carcinogenic stimulus is experienced, certain age-associated changes serve as promoters or activators of that stimulus and effect histologically observable cell alterations and growth. Preference will be given to those studies in which quantitative measurements can be made of parameters that are known to occur or change during aging or can be strongly justified by inference from existing data to have significance to carcinogenesis.

The NCI is currently aging two colonies of laboratory rats, an inbred AxC strain and a random-bred Sprague-Dawley strain. These have been derived by germ-free procedures, have been exposed to a defined bacterial flora and are being housed under barrier conditions during aging. Shortly after project award, a limited supply of these rats will be available up to 16 months of age. Distribution, however, will be severely limited in order to allow aging in excess of 30 months. Consequently, investigations initiated in approved and funded grants awarded from this announcement must utilize other existing colonies of aged animals (not necessarily rats), to develop a background of knowledge which will more clearly define aging factors associated with cancer induction and which will assist in establishing priorities for use of the above-described colonies of rats being developed. Aged animal colonies, generated for other research purposes, are in existence and are known to be available for other experimental studies. As the availability of the NCI-aged rat colonies becomes more available, all investigators participating in this program will be informed of their availability and the procedures by which they can be obtained.

Proposals from individuals or groups with capabilities and experience in carcinogenesis and related fields are desired. Within the general program goal described above, applicants should define specific aims and describe experimental procedures in support of those objectives. Applicants must clearly indicate the availability to them of sufficient numbers of animals (not necessarily rats) at those ages appropriate for the proposed experiments. High-quality animal facilities and care are required to permit adequate survival. Records should be submitted indicating survival rates at various ages approaching the maximum life span of the proposed experimental species. Preference will be given to species having known spontaneous or inducible neoplasia in organs of high relevance to human cancer incidence and mortality. Although such factors as hormonal influences and cytogenetic changes are clearly relevant, an analysis in greater depth, e.g. at the biochemical level, is desired. Three years' support is contemplated with encouragement of renewal based upon progress made. Proposals should develop a study rationale for a sequence of approaches over the three-year period.

SIGNIFICANCE TO NCI PROGRAM GOALS Certain age-associated changes have been observed in species known to develop spontaneous cancer. Other species not predisposed to spontaneous tumor of certain organs possess changes in complete opposition to the tumor-developing species. Information is needed to develop the priorities of useful parameters which ultimately will be applied to a limited and expensive animal resource. This information may lead to clues in developing animal models which simulate the human carcinogenic process of various organs. Preventive measures or modifying approaches to reduce incidence and mortality may be developed. Identification of aging-associated parameters may permit development of an experimental design to induce animal tumors having greater relevance to human neoplasia with a higher incidence and a shorter latent period.

APPLICATION REQUIREMENTS

- 1. <u>ELIGIBILITY</u> Nonprofit organizations and institutions, State and local governments and their agencies, authorized Federal institutions, and individuals according to NIH grants policies.
- 2. THE APPLICATION Applicants should propose either an individual project or a multidisciplinary program project. Applicants may elaborate on the purposes, objectives, rationale, and significance stated in this announcement and must complete portions of the application pertaining to procedural details, the investigator's related experience, facilities, available budgets, and biographical information for key professional personnel. The application should also state the duration of time for which the support is requested. It is anticipated that the project period will not exceed three years, and that the level of effort per year will approximate one to two professional man-years for an individual project or three to four professional man-years for a program project.
- 3. <u>SUBMISSION</u> Use the standard grant application form NIH-398. In <u>both</u> the covering letter <u>and</u> at the top of the space provided for an abstract on page 2 of the application, identify <u>this</u> CREG announcement by its title and number <u>DCCP-20</u> and the date of publication as the one to which the application responds. Mail the application and letter to Division of Research Grants, National Institutes of Health, Bethesda, Maryland 20014. If your institution cannot supply you with form NIH-398, it may be requested from the Division of Research Grants.
- 4. <u>RECEIPT DATE</u> Applications received on or before October 1, 1976, will be processed for study section review in February 1977, and for the National Cancer Advisory Board review in May 1977.

REVIEW

Upon receipt, applications will be reviewed by the Division of Research Grants (DRG) and NCI staff for responsiveness to this announcement. If an application is judged unresponsive, the applicant will be given an opportunity to withdraw the application or to submit it for consideration in the traditional grant programs of NIH. Applications judged responsive will be reviewed initially for scientific merit by DRG study sections and secondly by the National Cancer Advisory Board.

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DRG will not accept an application in response to a CREG announcement that is identical to one concurrently being considered by NCI or other NIH awarding units.

For further information, potential applicants may contact <u>Dr. Richard A.</u> <u>Pledger</u>, (301) 496-5471, Division of Cancer Cause and Prevention, National Cancer Institute.

TITLE - REASONS FOR VARIATION IN CANCER PATIENT SURVIVAL BY RACE

SCIENTIFIC PROGRAM REQUIREMENT The National Cancer Institute is accepting applications for support of research projects designed to increase knowledge concerning the basis for variation by race in cancer patient survival. For many forms of cancer, the survival experience for white patients is more favorable than that for black patients even when the disease is considered localized at diagnosis. Furthermore, a higher percentage of black patients than whites have metastatic disease when cancer is first discovered.

Research in this area might include sociocultural parameters in an attempt to explain possible differences by race in delay from onset of disease to cancer diagnosis. Studies of recurrence and/or patient survival must take into account variables of known prognostic and etiologic significance, e.g. histologic type, extent of disease and other demographic, morphologic, and physiological descriptions of neoplasm and host. Proposals should be oriented toward specific forms of cancer and should include detailed plans for data collection and statistical analysis.

SIGNIFICANCE TO NCI PROGRAM GOALS Recognition of cancer at its most limited and early manifestation is considered a promising way of reducing cancer mortality. Therefore, study of groups of patients demonstrating differences in survival improves the chances of identifying biological factors that may prove useful in the selection of optimum therapeutic approaches, or in modifying some aspects of the delivery of, or access to, medical care.

- 1. <u>ELIGIBILITY</u> All nonprofit organizations and institutions, State and local governments and their agencies, authorized Federal institutions, and individuals are eligible, according to NIH grants policies, regardless of whether or not they are participating in the SEER program.
- 2. THE APPLICATION Applicants should propose individual projects. The application should very specifically describe the background for the proposed project, the rationale behind conducting the proposed study, measurable objectives, and significance in advancing knowledge of cancer etiology and prognosis. Applicants must complete portions of the application pertaining to procedural details including study design, assurance of high quality data and analytical procedures, the investigator's related experience, facilities available, budget, and biographical information for key professional personnel. The application should also state the duration of time for which the support is requested. It is anticipated that the project period will not exceed five years, and that the level of effort per year will approximate one to two professional man-years.

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- 3. <u>SUBMISSION</u> Use application form NIH-398. In <u>both</u> the covering letter and at the top of the space provided for an abstract on page 2 of the application, identify <u>this</u> CREG announcement by its title and the number <u>DCCP-21</u> and its date of publication. Mail the application and lower to Division of Research Grants, National Institutes of Health, Bethesda, Maryland 20014.
- 4. <u>RECEIPT DATE</u> Applications must be <u>received</u> on or before October 1, 1976, in order to be considered in the competition under this announcement. If received no later than October 1, 1976, they will be processed for study section review in February 1977, and for National Cancer Advisory Board review in May 1977.

REVIEW

Upon receipt, applications will be reviewed by the Division of Research Grants (DRG) and NCI staff for responsiveness to this announcement. If an application is judged unresponsive, the applicant will be given an opportunity to withdraw the application or to submit it for consideration in the traditional grant programs of NIH. Applications judged responsive will be reviewed initially for scientific merit by DRG study sections and secondly by the National Cancer Advisory Board.

DRG will not accept an application in response to a CREG announcement that is identical to one concurrently being considered by NCI or other "IH awarding units.

For further information, potential applicants may contact <u>Dr. James L.</u>
<u>Murray</u>, (301) 496-3116, Division of Cancer Cause and Prevention, National Cancer Institute.

TITLE - CANCER EPIDEMIOLOGY IN COLLABORATION WITH THE NCI PROGRAM
OF CANCER SURVEILLANCE, EPIDEMIOLOGY AND END RESULTS (SEER)

SCIENTIFIC PROGRAM REQUIREMENT The National Cancer Institute is accepting applications for support of research projects in the field of cancer epidemiology and etiology which will be conducted in collaboration with cancer registries participating in the SEER program of cancer Surveillance, Epidemiology and End Results. The SEER program provides information on trends in the incidence of the various forms of cancer, variation in the occurrence of cancer among different population groups and in different geographic areas, changes in general treatment practice and the associated cancer patient survival patterns. Data are obtained from a selected number of population-based cancer registries that provide uniform information on a continuing basis and participate in ad hoc studies designed to identify and assess etiologic and prognostic factors.

Only limited pilot or feasibility studies can be supported under the present contract agreements with the participating registries. Therefore, NCI is now soliciting full-scale comprehensive CREG research proposals for analytic studies in etiology and/or prognosis for any form of cancer. Of special interest are research projects which may lead to identification of factors which can be modified to reduce the incidence and mortality of cancer. Purely descriptive studies are not desired. Although specific research protocols are requested, the actual approaches and methods will be left to the initiative of the applicants. Studies may be either retrospective or prospective in design.

Registries currently participating in the SEER program are:

	Registry Institution	Area Covered	Population Covered - 1970
1.	California State Department of Health	San Francisco Bay area, five counties	3,109,519
2.	Connecticut State Department of Health	Entire State of Connecticut	3,031,709
3.	University of New Mexico	Entire State of New Mexico	1,016,000
4.	University of Utah	Entire State of Utah	1,059,273
5.	Research Corporation of the University of Hawaii	Entire State of Hawaii	768,561
6.	University of Iowa	Entire State of Iowa	2,824,376
7.	Fred Hutchinson Cancer Research Center	Seattle-Tacoma area, six counties	2,071,075

	Registry Institution	Area Covered	Population Covered - 1970
8.	Michigan Cancer Foundation	Detroit Metropolitan area, three counties	4,199,931
9.	Charity Hospital of Louisiana at New Orleans	New Orleans area, three parishes	982,224
	TOTAL population covered, present	participants:	19,063,668

Applications are not limited to the participation of SEER institutions above.

SIGNIFICANCE TO NCI PROGRAM GOALS The SEER program contributes to Objective No. 5 of the National Cancer Plan, i.e., "develop the means to achieve an accurate assessment of the presence, extent, and probable cause of cancer risks in population groups (including attention to precancerous lesions) and of individuals alone (diagnosis) and in groups (detection) as an aid to prevention, cure or prognosis." The program also provides a means for measuring progress in achieving Objective No. 6, namely, "develop the means to cure as many patients as possible and to maintain maximum control of the cancerous process in patients not cured."

It is anticipated that epidemiologic research supported by this CREG program will produce significant new information which will help achieve the objectives of the National Cancer Plan.

- 1. <u>ELIGIBILITY</u> All nonprofit organizations and institutions, State and local governments and their agencies, authorized Federal institutions, and individuals are eligible, according to NIH grants policies, regardless of whether or not they are participating in the SEER program.
- 2. THE APPLICATION Applicants should propose individual projects. The application should very specifically describe the background for the proposed project, the rationale behind conducting the proposed study, measurable objectives, and significance in advancing knowledge of cancer etiology and prognosis. Applicants must complete portions of the applications pertaining to procedural details including study design, assurance of high quality data and analytical procedures, the investigator's related experience, facilities available, budget, and biographical information for key professional personnel. The application should also state the duration of time for which the support is requested. It is anticipated that the project period will not exceed five years, and that the level of effort per year will approximate one to two professional man-years.
- 3. <u>SUBMISSION</u> Use application form NIH-398. In <u>both</u> the covering letter <u>and</u> at the top of the space provided for an abstract on page 2 of the applications, identify <u>this</u> CREG announcement by its title and the number <u>DCCP-22</u> and its date of publication. Mail the application and letter to Division of Research Grants, National Institutes of Health, Bethesda, Maryland 20014.

4. <u>RECEIPT DATE</u> Applications <u>received</u> on or before October 1, 1976, will be processed for study section review in February 1977, and for the National Cancer Advisory Board review in May 1977.

REVIEW

Upon receipt, applications will be reviewed by the Division of Research Grants (DRG) and NCI staff for responsiveness to this announcement. If an application is judged unresponsive, the applicant will be given an opportunity to withdraw the application or to submit it for consideration in the traditional grant programs of NIH. Applications judged responsive will be reviewed initially for scientific merit by DRG study sections and secondly by the National Cancer Advisory Board.

DRG will not accept an application in response to a CREG announcement that is identical to one concurrently being considered by NCI or other NIH awarding units.

For further information, potential applicants may contact <u>Dr. James L. Murray</u>, (301) 496-3116, Division of Cancer Cause and Prevention, National Cancer Institute.

NUTRITION RESEARCH GRANT APPLICATIONS SOUGHT BY THE NATIONAL INSTITUTE OF DENTAL RESEARCH

ANNOUNCEMENT

This announcement is a revision of, and thus supersedes, the announcement contained on page 1, Vol. 3, No. 16, NIH Guide for Grants and Contracts.

The National Institute of Dental Research (NIDR) has a continuing interest in nutrition research. The primary objective of the program is to obtain new knowledge which will contribute to a better understanding of the role of poor nutrition as an etiologic factor in oral disease and the role of sound nutrition as a preventive measure. Studies are therefore encouraged in three broad areas: (1) population or epidemiologic studies, (2) laboratory studies using model systems, and (3) human clinical studies.

Of specific interest are nutritional factors which affect the development and functional capability of the major structures of the craniofacial complex including predisposing factors which may eventually lead to dysfunction of the teeth, salivary glands, oral mucous membranes and bone. Protocols designed to assess the various effects of nutritional deficiencies or excesses on the defense mechanism(s) of the oral cavity including the host immune response, integrity of mucous membranes, influence on the composition of salivary secretions and their protective function, effects on tooth development and possible predisposition to bone resorption and periodontal disease are of specific interest. Studies designed to assess both age and nutritional factors on oral health or physiologic and behavioral factors on diet selection are also encouraged.

The deadlines for the receipt of grant applications are July 1, November 1, and March 1. Review and award of nutrition-oriented grants will be through the usual NIH procedures.

Preliminary drafts of the proposals and other inquiries regarding this program may be addressed to either Dr. Paul D. Frazier, Chief, or Drs. Matthew A. Kinnard or Robert J. Schuellein, Scientist Administrators, Soft Tissue Stomatology and Nutrition Program Branch, National Institute of Dental Research, National Institutes of Health, Bethesda, Maryland 20014, (301) 496-7807.

SPECIAL DENTAL RESEARCH AWARD

ANNOUNCEMENT

This announcement is a revision of, and thus supersedes, the announcement contained on page 1, Vol. 3, No. 7, NIH Guide for Grants and Contracts.

The National Institute of Dental Research (NIDR) makes Special Dental Research Awards (SDRA) to provide funds for young scientists to conduct independent investigations during the early stages of their careers. Scientists are encouraged to seek grant funds through this award and make their contributions in the expanding field of oral health research. Investigators with no more than four years of research experience beyond completion of research training may apply for an SDRA grant.

The Special Grants can support meritorious basic or clinical research projects pertinent to oral disease in more than 30 disciplines covering a wide variety of subject matter. The Institute encourages investigations on Periodontal Disease, on Dental Caries, and on Oral Soft Tissue Diseases including herpes simplex and other viral infections. Research on these diseases may be done within a broad spectrum of disciplines such as biochemistry, microbiology, immunology, nutrition, and pharmacology. Investigators may utilize the in vitro techniques of cell, tissue, and organ culture, or may employ animal or human models. Also encouraged are proposals related to Craniofacial Anomalies such as cleft lip/palate or other congenital syndromes. Such projects may be basic in nature employing the laboratory approaches of cell biology and embryology, or may consist of applied research involving animals or humans. In the field of Orofacial Pain, studies of sensory responses, of fear and anxiety, of painful conditions such as trigeminal neuralgia, and projects on the behavioral aspects of oral conditions are appropriate. In studies on Salivary Secretions the role in health and disease of particular constituents of saliva will be encouraged. Also acceptable are proposals on the improvement of Dental Filling Materials, adhesive sealants, maxillofacial prosthetic materials, and tooth implants.

Applicants may request up to \$10,000 (direct costs) per year for three years. The funds may be used for small items of equipment, supplies, travel, publications, and salaries for support personnel. SDRA funds cannot be used to pay the principal investigator's salary, to support thesis research, nor to supplement projects already funded by the Public Health Service or other Federal agencies. However, holders of NIH fellowships or Research Career Development Awards and trainees who otherwise meet the eligibility requirements, may apply for an SDRA. All other policies pertaining to NIH grant-supported research projects apply to the SDRA program.

When the SDRA grant period terminates, the investigator may apply for a renewal of the grant for an additional period, but the grant will no longer be considered a special award. Instead, renewal applications will be considered as competing continuations of regular research grants.

Applicants should use the regular research grant application (NIH-398) and write "Special Dental Research Award" on the top of the face page. Applications are available at institutional central application control offices (see Vol. 2, No. 8, October 26, 1973). The deadlines for submission of applications are July 1, November 1, and March 1.

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