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The NIH Guide announces scientific
initiatives and provides policy and
administrative information to indi-
viduals and organizations who need to
be kept informed of opportunities,
requirements, and changes in extra-
mural programs administered by the
National Institutes of Health.

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NOTICES

NIH REGIONAL WORKSHOPS ON IMPLEMENTATION OF THE PHS POLICY ON HUMANE CARE AND USE OF LABORATORY ANIMALS

P.T. 42; K.W. 0201011, 1014003

National Institutes of Health

The National Institutes of Health, Office for Protection from Research Risks, is continuing to sponsor a series of workshops on implementing the Public Health Service Policy on the Humane Care and Use of Laboratory Animals. The workshops are open to institutional administrators, members of animal care and use committees, laboratory animal veterinarians, investigators and other institutional staff who have responsibility for high-quality management of sound institutional animal care and use programs. A workshop is scheduled as follows:

Date: May 8-9, 1990

Location: San Juan, Puerto Rico

Contact: Susan Schwartz, Ph.D.
Assistant Professor
Caribbean Primate Research Center
University of Puerto Rico
Medical Science Campus
P. O. Box 1053
Sabana Seca, Puerto Rico 00749
Telephone: (809) 784-6619 or 0322

For additional information, contact:

Mrs. Roberta Sonneborn
Executive Assistant for Animal Welfare Education
National Institutes of Health
Office for Protection from Research Risks
Building 31, Room 5B59
Bethesda, MD 20892
Telephone: (301) 496-7163

REVISING THE PHS FORM 398

P.T. 34; K.W. 1014002

Division of Research Grants

An NIH committee, with representatives from other agencies in the Public Health Service, has begun work on revising the PHS 398 Research Grant Application Kit. The committee welcomes any suggestions or comments from the scientific community or from other interested persons regarding ways to improve the application kit. Suggestions could concern items such as the page limitations, appendix material, instructions for filling in items, structure of the scientific proposal, abstract, use of key words, and the applicant's professional associates and collaborators. Other areas of concern could be the personal data section, as well as the assurances that are requested of the applicant or applicant organization. Because of the interest of the biomedical research community in this effort, the deadline for receipt of suggestions or comments has been extended to June 1, 1990. Please send them to:

Dr. Patricia Straat
Chief of the Referral Section
Division of Research Grants
National Institutes of Health
Westwood Building, Room 248
Bethesda, MD 20892

NOTICES OF AVAILABILITY (RFPs AND RFAs)

EFFICACY OF TREATMENT OF VOICE DISORDERS

RFA AVAILABLE: DC-90-03

P.T. 34; K.W. 0715055, 0710100, 0740060, 0745070

National Institute on Deafness and Other Communication Disorders

Application Receipt Date: July 17, 1990

The National Institute on Deafness and Other Communication Disorders (NIDCD), through the Division of Communication Sciences and Disorders, invites individual research grant (R01) applications which address efficacy of treatment of voice disorders. Three to four awards may be supported in response to this Request for Applications (RFA).

BACKGROUND

Within the last decade, disorders of voice increasingly have become recognized as a major health problem among persons of all ages. The development of new knowledge and advances in clinical delivery systems have resulted in recognition, diagnosis, and treatment of many patients with voice impairment and laryngeal pathology. Advances in video recordings of the larynx have led to improved understanding of laryngeal movement disorders. Magnetic resonance imaging of the larynx and pharynx has provided important information on phonation and speech production. In addition, many noninvasive tools have been developed to measure voice and identify various aspects of impaired phonation. Advances in the diagnosis of voice disorders have occurred in such disorders as vocal fold neoplasms, vocal fold paralysis, and other disorders of vocal fold movement. Nevertheless, information about the treatment of voice disorders, and particularly on the efficacy of treatment, remains limited.

In January 1989, over 200 U.S. scientists representing various specialties in the communication sciences met to develop a research plan for the NIDCD. One panel of these scientists addressed research needs in voice and voice disorders and highlighted the need for treatment studies in this area. This RFA seeks to address that need by encouraging research in the medical and behavioral treatment of voice disorders, and the efficacy of such treatment.

Applicants are urged to give added attention, where feasible and appropriate, to the inclusion of minorities and women in study populations.

MECHANISM, NUMBER OF YEARS, AND BUDGET

Grants in response to this RFA will be funded through the individual research project grant (R01) mechanism. Three to five years of support may be requested; however, the number of years to be awarded will be recommended at review. Budgets should be carefully justified. This is a one-time RFA with plans to make three or possibly four awards in FY 1990.

METHOD OF APPLYING

Potential applicants may request additional information, copies of the complete RFA, and guidelines for preparing an application from:

Judith A. Cooper, Ph.D.
Program Administrator: Speech, Voice, and Language
National Institute on Deafness and Other Communication Disorders
National Institutes of Health
Federal Building, Room 1C-06
7550 Wisconsin Avenue
Bethesda, MD 20892
Telephone: (301) 496-5061

ONGOING PROGRAM ANNOUNCEMENTS

THE STUDY OF THE ETIOLOGY AND PATHOGENESIS OF INFLAMMATORY BOWEL DISEASE

PA: PA-90-05

P.T. 34; K.W. 0715085, 0765033, 0755030, 1002019, 0710070

National Institute of Diabetes and Digestive and Kidney Diseases

BACKGROUND

The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) invites applications from researchers to investigate the etiology, pathogenesis, immunophysiology, immunopharmacology, biological aspects of nutrient metabolism and kinetics related to the underlying inflammatory process, and the genetics of idiopathic inflammatory bowel disease (IBD). At a workshop entitled: "Future Directions in Inflammatory Bowel Disease", held at the National Institutes of Health, Bethesda, Maryland, on September 18, 1989, several experts in the field of inflammatory bowel disease presented their latest research findings and stated that there were areas found to be lacking in research activities.

IBD has been estimated to affect 500,000-2,000,000 people in the United States, 10 percent of whom are children. Crohn's disease occurs most frequently between the ages of 15 and 25 and persists over the lifetime of the individual. Medical treatment ameliorates the symptoms but does not cure the disease. Surgical resection, which may be required in some of the patients, is followed by recurrence of the disease in 60-80 percent of the cases. The long-term consequences of Crohn's disease as well as ulcerative colitis, which include malabsorption, growth retardation, severe compromise of social and sexual activities, employment and life style, and increased risk for intestinal cancer, can be devastating. Thus, NIDDK believes that an intensified research effort into defining mechanisms of IBD will serve as impetus to the eventual development of better treatment modalities.

Therefore, NIDDK encourages collaborative research among the multiple disciplines of epidemiology, gastroenterology, pathology, physiology, nutrition, immunology and immunopharmacology that will fill gaps in our knowledge regarding the mechanisms and etiology of IBD. Institutions that have demonstrated experience in both clinical and basic science and that can mount a multidisciplinary and collaborative effort will be considered most favorably for research support.

The areas of research in this program could include but are not limited to:

1. The genetic definition and classification of genetic markers.
2. The relationship of alterations of peripheral blood lymphocyte function in IBD.
3. Alterations in immunoglobulin synthesis and secretion.
4. The roles of the complement pathway in IBD, and the role of cell mediators of inflammation.
5. Immunophysiology of IBD: specifically, studies concerned with (a) the nature of the antigens, (b) the identity and the properties of antigen-presenting cells, (c) characterization of intraepithelial T lymphocytes and (d) the role of immunosuppressive drugs in the management of patients with IBD.
6. Alterations in the mucosal immune responses in the setting of intestinal inflammation.
7. Nutritional research to assess malnutrition and therapeutic nutrition interventions as it impacts on outcome.
8. Development of diagnostic criteria for IBD, as well as indices of disease activity.
9. Epithelial cell biology in health and in inflammatory bowel disease.

MECHANISM OF SUPPORT

The mechanism of support for this program will be the grant-in-aid (R01). The regulations (Code of the Federal Regulation, Title 42, Part 52 and, as applicable to the state and local governments, Title 45, Part 74) and policies which govern the research grant programs of the National Institutes of Health will prevail. Although this solicitation is included in the sponsoring Institute's research plans for Fiscal Year 1991, the support for this solicitation is contingent upon receipt of appropriated funds for this purpose. Since a variety of approaches would represent valid responses to this solicitation, it is anticipated that there will be a range of costs among individual grants awarded. With respect to post-award administration, the current policies and the requirements that govern the regular research grant programs of the NIH will prevail.

REVIEW PROCESS

The initial review for scientific and technical merit will be by an appropriate study section of the Division of Research Grants, NIH; and secondary review will be by an advisory council. Funding decisions will be based upon relative scientific merit, program relevance and the availability of appropriate funds.

INCLUSION OF MINORITIES IN STUDY POPULATIONS

Applicants are urged to give added attention (where feasible and appropriate) to the inclusion of minorities in study populations for research into the etiology of diseases, research in behavioral and social sciences, clinical studies of treatment and treatment outcomes, research on the dynamics of health care and its impact on disease, and appropriate interventions for disease prevention and health promotion. If minorities are not included in a given study, a clear rationale for their exclusion should be provided.

INCLUSION OF WOMEN IN STUDY POPULATIONS

Applicants are urged to consider the inclusion of women in the study populations for all clinical research efforts. Exceptions would be studies of diseases which exclusively affect males or where involvement of pregnant women may expose the fetus to undue risks. Gender differences should be noted and evaluated. If women are not to be included, a clear rationale should be provided for their exclusion.

APPLICATION PROCEDURES

Applications should be submitted on form PHS 398 (rev. 10/88) which is available in the business or Grants and Contracts Office of most research and academic institutions. In item #2 on the face page of the application, the word "yes" should be checked and the phrase, "NIDDK: Etiology and Pathogenesis of Inflammatory Bowel Disease PA-90-05" should be inserted.

The original and 6 copies of the application should be sent or delivered to:

Application Receipt Office
Division of Research Grants
National Institutes of Health
Westwood Building, Room 240
Bethesda, MD 20892**

For further information concerning the announcement and mechanisms of support, research investigators are encouraged to contact:

Frank A. Hamilton, M.D., MPH
Director
Gastrointestinal Mucosal
and Immunology Program
Westwood Building, Room 3A16
Bethesda, MD 20892
Telephone: (301) 496-7821

Joseph Albright, Ph.D.
Chief, Basic Immunology Program
Westwood Room 757
Bethesda, MD 20892
Telephone: (301) 496-7551

PATHOGENESIS OF JOINT, MUSCLE, AND INFLAMMATORY PAIN AS RELATED TO
TEMPOROMANDIBULAR DISORDERS

PA: PA-90-06

P.T. 34; K.W. 0715148, 0715150, 0765033, 0785055, 0715026, 0745020, 0745027

National Institute of Dental Research

The Craniofacial Anomalies, Pain Control and Behavioral Research Branch of the National Institute of Dental Research (NIDR) supports studies on the pathogenesis, epidemiology, prevention, diagnosis, and treatment of dental and craniofacial pain. Improved understanding of neurobiological processes involved in transmission and modulation of acute dental pain, and of the behavioral factors which influence pain, has led to more effective prevention and control of acute pain. This announcement aims to stimulate corresponding progress regarding chronic pain through:

- o clarifying the etiological factors underlying chronic orofacial pain conditions, with particular emphasis on pain conditions involving the temporomandibular (jaw) joint and/or facial or jaw muscles.
- o increasing understanding of fundamental processes, such as inflammation, which influence the development and chronicity of musculoskeletal pain.

BACKGROUND

Despite impressive gains over the past decade in understanding neural and biological processes underlying acute, cutaneous pain, less attention has been directed toward understanding biological and behavioral factors influencing transmission and modulation of pain from "deeper" tissues (e.g., muscle, skeletal joints, and the viscera). This is unfortunate because most persistent or chronic clinical pain problems involve non-cutaneous tissues. Also, deep tissue and cutaneous pain differ in a number of important ways. For example, deep tissue pain is often more difficult to localize, more subject to referral to other body regions, and typically generates greater emotional or affective distress. This affective component appears linked to recently characterized ascending spinomesencephalic and spinothalamic pathways, which have been found to converge on neural sites known to mediate affective responses. These ascending pathways appear to act in concert with ascending spinothalamic pathways long recognized to transmit sensory aspects of nociceptive stimuli.

A type of "deep tissue" pain of unique interest to dentistry is experienced in the jaw joint, and surrounding masticatory and facial muscles. Now referred to as temporomandibular disorders (TMD), this terminology encompasses several distinct disorders differing in etiology, response to therapies, and clinical course. Basic research on the pathogenesis of these conditions requires improved understanding of factors influencing joint, muscle, and inflammatory pain. In addition, research is needed to clarify the etiologies of the different jaw-related disorders included under the TMD rubric.

This research is ultimately expected to improve dentistry's capability to provide rational, effective management for these perplexing, relatively prevalent orofacial pain conditions. (Studies indicate that over 10 percent of the adult population may experience recurrent jaw pain; for some individuals jaw pain/dysfunction can become severely disabling.) This research initiative also may contribute toward improved understanding of other pain-producing disease processes involving joints, muscle, or inflammation, (e.g., rheumatoid arthritis, degenerative joint disease, low back pain).

OBJECTIVES AND SCOPE

The NIDR provides support for research to increase understanding of processes controlling pain and other sensory functions in teeth and surrounding orofacial structures. Recent advisory groups have specifically recommended an expansion of research on chronic orofacial pain conditions with particular emphasis on the pathogenesis of chronic pain disorders such as TMD. These recommendations emerge from a recognition that new research approaches from diverse fields (e.g., neurophysiology, immunocytochemistry, molecular biology) and improved animal models for chronic pain have enhanced opportunities for rapid progress. They also reflect concern that limited fundamental knowledge concerning TMD-related conditions provides an insufficient scientific base to guide clinical research and dental practice.

The following examples illustrate potential research topics falling within the scope of this announcement:

- o assess central and peripheral neural correlates of TMD, evaluating neurochemical mechanisms related to the development, maintenance, or exacerbation of facial and jaw pain; characterize the neurochemical mediators and processes involved in chronic or recurrent orofacial pain states, utilizing as needed immunocytochemistry, cell biology and molecular biology approaches;
- o clarify the roles of structural or histopathological changes in the temporomandibular (jaw) joint related to the development or progression of chronic orofacial pain conditions; identify mechanisms through which transmission or modulation of nociceptive inputs are influenced by degenerative changes or altered structures or functioning within the temporomandibular joint;
- o identify histopathological changes associated with chronic muscle hyperactivity or spasm and their role in the development of jaw muscle pain; identify processes underlying pain referral in the orofacial region, as related to chronic pain states;
- o characterize pathophysiological mechanisms underlying the exquisite muscle tenderness seen in myofascial pain; clarify the characteristics and significance of "trigger points" or inflammatory processes in masticatory muscles as these relate to the development or maintenance of chronic orofacial pain;
- o assess the significance of environmental or psychosocial stressors and of oral habits (e.g., bruxism) in the development of masticatory muscle or temporomandibular joint pathology, or in the initiation or exacerbation of facial or jaw pain;
- o clarify neurochemical or behavioral correlates of depression related to the initiation or exacerbation of TMD.
- o characterize inflammatory processes as these impact on sensitization of nociceptors, exacerbation of pain responsivity, or pathophysiological changes in joint or muscle.

It should be recognized that the above list is neither comprehensive nor exclusive and that potential topics are not presented in priority order. Biological or behavioral research on other topics related to chronic pain conditions seen in the jaw joint, masticatory, or facial muscles may receive support.

MECHANISMS OF SUPPORT

Support mechanisms which can be utilized include the traditional research project grant (R01), the First Independent Research Support and Transition (FIRST) award (R29), the small grant (R03), the postdoctoral individual fellowship (F32) and senior fellowship (F33) awards, and career development awards which include the Modified Research Career Development Award (K04), the Physician Scientist for Dentist Award (K11), and the Individual Dentist Scientist Award (K15). Required application forms are available in the business or grants and contracts offices of most academic and research institutions or may be obtained from:

Office of Grants Inquiries
Division of Research Grants
Westwood Building, Room 449
National Institutes of Health
Bethesda, MD 20892-4500
Telephone: (301) 496-7441

INCLUSION OF FEMALES AND MINORITIES IN STUDY POPULATIONS

Applicants are urged to consider the inclusion of females and minorities in study populations for any clinical research efforts proposed. Gender or racial differences should be noted and evaluated. If females or minorities are not to be included, a clear rationale should be provided for their exclusion.

APPLICATION AND REVIEW PROCEDURES

Applications will be accepted on an indefinite basis on receipt dates specified in the pertinent application kits. Applications will be reviewed in accordance with usual National Institutes of Health peer review procedures.

Initial review for scientific/ technical merit will be conducted by an appropriate study section within the NIH Division of Research Grants or the NIDR. An appropriate National Advisory Council will provide secondary review. Funding decisions will be based upon relative scientific merit, program relevance, and availability of appropriated funds.

On the first (face) page, item 2, of the application form PHS 398 (rev. 10/88), the word "Yes" should be checked and the phrase "NIDR PA-90-06: PATHOGENESIS OF JOINT, MUSCLE, AND INFLAMMATORY PAIN" should be typed in the space provided. For fellowship applications, the same phrase should be typed on line 3 of the face page of form PHS 416-1 (rev. 7/88). Except for small grant applications, which must be submitted directly to the NIDR Scientific Review Branch (Westwood Building, Room 519), an original and six copies of the application should be sent or delivered to:

Grant Application Receipt Office
Division of Research Grants
National Institutes of Health
Westwood Building, Room 240
Bethesda, MD 20892-4500**

For further information concerning this announcement and available mechanisms of support, applicants may contact:

Patricia S. Bryant, Ph.D.
Health Scientist Administrator
Craniofacial Anomalies, Pain Control
and Behavioral Research Branch
Extramural Program
National Institute of Dental Research
Westwood Building, Room 506
Bethesda, MD 20892-4500
Telephone: (301) 496-7808

This program is described in the Catalog of Federal Domestic Assistance No. 13.1212. Awards will be made under authorization of the Public Health Service Act, Title III, Section 301 (Public Law 78-410, as amended; 42 USC 241) and administered under PHS grant policies and Federal Regulations 42 CFR Part 52 and 45 CFR Part 74. This program is not subject to the intergovernmental review requirements of Executive Order 12372 or Health Systems Agency review.

RESEARCH ON MENTAL DISORDERS IN RURAL POPULATIONS

PA: PA-90-07

P.T. 34; K.W. 0715129, 0715195, 0411005

National Institute of Mental Health

The purpose of this announcement is to stimulate research on mental disorders in Americans living in rural areas, to increase understanding of the major mental health problems and risks associated with rural life, to identify ways that the incidence and prevalence can be assessed and perhaps lowered, and to determine ways to organize effective services into an integrated system to be delivered economically in rural areas.

Applications may be submitted by any nonprofit or for-profit organization, including State and local governments. Women and minority investigators are especially encouraged to apply.

Support for research that does not include funds for demonstration services may be requested through applications for a regular research grant (R01), small grant (R03), First Independent Research Support and Transition (FIRST) Award (R29), or center grant (P50). Support for research demonstrations that include funds for services may be requested through applications for research demonstration grants (R18).

Applicants are urged to give added attention (where feasible and appropriate) to the inclusion of minorities in study populations for research into the etiology of diseases, research in behavioral and social sciences, clinical studies of treatment and treatment outcome, research on the dynamics of health care and its impact on disease, and appropriate interventions for disease prevention and promotion. If minorities are not included in any given study, a clear rationale for their exclusion should be provided.

Applicants are urged to consider the inclusion of women in the study populations for all clinical research efforts. If women are not to be included, a clear rationale for their exclusion should be provided.

To qualify for fiscal year 1990 funding, applications must be submitted for the receipt date of June 1, 1990, and be complete at the time of submission. In subsequent years, the regular receipt and review dates will apply.

For further information, potential applicants should contact:

Ann A. Hohmann, Ph.D., M.P.H.

or

Charles Windle, Ph.D.

Division of Biometry and Applied Sciences, NIMH

Biometric and Clinical Applications Branch

Room 18-14, 5600 Fishers Lane

Rockville, MD 20857

Telephone: Dr. Hohmann (301) 443-3364

Telephone: Dr. Windle (301) 443-4233

**THE MAILING ADDRESS GIVEN FOR SENDING APPLICATIONS TO THE DIVISION OF RESEARCH GRANTS OR CONTACTING PROGRAM STAFF IN THE WESTWOOD BUILDING IS THE CENTRAL MAILING ADDRESS FOR THE NATIONAL INSTITUTES OF HEALTH. APPLICANTS WHO USE EXPRESS MAIL OR A COURIER SERVICE ARE ADVISED TO FOLLOW THE CARRIER'S REQUIREMENTS FOR SHOWING A STREET ADDRESS. THE ADDRESS FOR THE WESTWOOD BUILDING IS:

5333 Westbard Avenue
Bethesda, Maryland 20816