OBJECTIVES

The National Institute of General Medical Sciences (NIGMS) is establishing a new Special Grants Program in Trauma and Burn research in order to:

- encourage new investigators in the field of Trauma and Burn research to develop their own research on the pathophysiology of trauma. The research should be directed to the discovery of better ways to prevent death from injury, mitigate pain, speed recovery of patients, and lessen the extent of disabilities. A better understanding of the body's total response to trauma, including burns, is sought. This includes fundamental studies on sequential organ failures, nutritional requirements, wound healing, infection, and rehabilitation of injured patients.

- facilitate the transition from research training status to that of productive investigator. This program is to provide the initial support for independent research by talented physicians who wish to address the challenging research problems presented by trauma and burn research.

BACKGROUND AND RATIONALE

Trauma, called the "neglected disease" of modern society, is the principal cause of death in Americans between ages 1 and 44 and the fourth leading cause of death for all age groups. Over 100,000 lives are lost per year to accidental injuries and nearly 500,000 persons suffer some form of permanent disability. More than one-third of the serious burns are incurred by children. The economic cost to the nation exceeds $41 billion annually and a permanent loss of millions of productive work years. More than 2 million bed days are consumed by trauma victims, a figure which exceeds the number of bed days required to care for four million babies born each year, for all the heart patients, and is four times greater than that required for cancer patients. Although accidental death occurs in great magnitude, it is still looked upon with considerable indifference as a national health problem.
As late as the mid-1960's, very little was done in the medical community to single out trauma victims for study to determine the extent of injury and the best methods of therapy. In 1966, the National Institute of General Medical Sciences brought together a small group of interested surgeons to examine seriously the problem of injury and determine what could be done for its alleviation. Following recommendations of this group, the Institute initiated a research program for the study of trauma, including specialized centers where multidisciplinary research could be directly applied to improve patient care and indepth projects on specific aspects of trauma and burns.

The program has had a slow, but steady expansion in the research with resulting decrease in the death rate following severe injury. However, the manpower shortage still seriously inhibits the work to be done in this area.

In 1975, the NIGMS activated a postdoctoral institutional fellowship program (NRSA) to train scientists in the area of trauma and burn research. The new Special Grants Program is designed to bridge the gap between the research trainee and the independent investigator in this field.

**IMPLEMENTATION**

Beginning in fiscal year 1977, the NIGMS is offering a small number (10-12) of Special Grants for New Investigators in Trauma and Burn research. Each grant will have a maximum support period of three years.

This Special Grants program will be reviewed for effectiveness at the end of the first 3-year period. Continuation of the program will be contingent upon success of the program during that period as measured by the number and quality of applications received by the NIH. To assess the effectiveness of the program in fulfilling its objectives, the Institute intends, after the termination of each grant, to follow the progress of the recipient to determine (1) the investigator's professional affiliation, (2) subsequent grant or contract support, and (3) scientific publications.

It is anticipated that in a majority of cases the results achieved with this grant support will provide the basis for successful competition in regular research support programs of the NIH.

The first receipt date for applications will be November 1, 1977. The applications will be reviewed by study section in February - March and by the National Advisory General Medical Sciences Council in May 1978. July 1, 1978, will be the earliest starting date for successful applicants. Subsequent receipt dates will be March 1, July 1, and November 1 annually.

**CRITERIA FOR ELIGIBILITY**

The research project must:

- be a study designed to answer a specific question related to Trauma and Burn research in basic scientific areas such as Physiology, Biochemistry, Microbiology, and Metabolism;
- not be supplemental to a project supported by other funds;
- be designed for completion within the requested period and not more than three years;
- meet the customary criteria of scientific merit.
The investigators must:

- have an M.D. degree at the time of the award;
- present evidence of prior research experience;
- not be the recipient of an NIH Special Fellowship, nor the principal investigator on a research grant or contract or the equivalent, either at present or in the past nor actively supported on a research center grant; however, trainees or regular research fellows are not excluded;
- be a citizen or a non-citizen national of the United States or its possessions and territories, or have been lawfully admitted to the United States for permanent residence prior to signing the grant application;
- provide a well thought out plan for pursuing the research proposed, including a brief review of the pertinent literature;
- submit with the application the names of three persons who are present or past supervisors or preceptors and can attest to the applicant's ability to undertake the project;
- agree to devote at least 50 percent time to the project;
- agree to keep the NIGMS informed about scientific accomplishments, change in professional status or institutional affiliation for a period of six years after termination of the grant.

The applicant institution must (for the period of the grant):

- provide space and facilities necessary to pursue the projects;
- offer expert guidance and counsel in Trauma and Burn research;
- release the award recipient from other responsibilities for the time devoted to the project.

Institutions may submit more than one application. Only domestic institutions may apply.

SUPPORT PROVIDED BY THE GRANT

The NIGMS Special Grants for New Investigators are made for a period of up to three years. Renewals will be considered as competing continuations in the regular research grant category. Supplemental applications will not be accepted. The total direct costs may not exceed $90,000 for the three-year period with no more than $35,000 of that amount for the first year.

Except where otherwise indicated in this announcement, the policies which apply to research project grants apply also to the Special Grants for New Investigators in Trauma and Burn research.

Personnel

- salary and fringe benefits for the award recipient to the extent that they reflect the time or effort devoted to the research project, not to exceed 70% of the total direct costs per year. One part-time technical assistant may receive salary from the grant if the need for technical assistance can be justified in terms of the research.
Equipment

- the facilities available should provide most of the equipment. The purchase of equipment essential to the specific research effort must be carefully justified and receive prior approval by appropriately designated officials.

Supplies

- the cost of necessary supplies must be detailed and justified.

Travel

- expenses for attendance at one national meeting closely related to the project may be requested for each 12-month period.

Other Expenses

- if other items are necessary for performance of the research effort, these must be clearly justified in terms of that need.

Indirect Costs

- will be provided in accordance with established DHEW policies for regular research grants.

APPLICATION

Assignment of applications will in all cases be made by the Division of Research Grants on the basis of the NIH referral guidelines for research grants. Applications must be submitted on Form NIH 398. The original copy and the folder in which it is submitted should be clearly labeled (in red ink) NIGMS SPECIAL GRANTS FOR NEW INVESTIGATORS IN TRAUMA AND BURN RESEARCH. The proposed project should be presented using the format described in the "instructions" in the application kit.

The authorized institutional official must submit a signed statement, as part of the application, detailing the commitments made to the project.

The completed grant application should be mailed to the Division of Research Grants, NIH, Bethesda, Maryland 20014. A postal card will be mailed to the applicant acknowledging receipt of the application. When the application has been assigned to an initial review group (study section), the applicant will again be notified by mail. The applicant should then request each of three supervisors or preceptors to send a letter of reference to the study section. The letters need not comment on the merit of the project, but should attest to whether the applicant has the knowledge and skills to pursue the project proposed.
Applications must be submitted by the regular new research project grant dates (November 1, March 1, July 1). Applications received too late for one round of review will be considered in the next round. Applicants will be informed of the results of the review shortly after final consideration by the National Advisory General Medical Sciences Council.

Further information about this program may be obtained by contacting:

Dr. Elizabeth M. O'Hern
Room 955, Westwood Building
NIGMS, NIH
Bethesda, Maryland 20014

Telephone: (301) 496-7047
RESEARCH CAREER DEVELOPMENT AWARDS

NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES

After July 1, 1977, the National Institute of General Medical Sciences will accept applications for Research Career Development Awards only on behalf of individuals who wish to develop a career directed toward bridging the gap between basic and clinical sciences in one of the following fields:

1. clinical pharmacology
2. trauma and/or burn research
3. anesthesiology
4. biomedical engineering

Candidates for the award should provide documentary evidence that they have a high potential for a productive research career but require additional experience in an active research environment before they can launch careers as independent scientists. Since the rank of associate professor or the successful competition for more than one substantial research grant usually indicates that the candidate has been judged to be an independent investigator, preference in selection of NIGMS awardees will be given to individuals whose achievements at the time of application have not been so recognized.

For additional information see the NIH Guide for Grants and Contracts, Vol. 6, No. 4, p. 1, March 1, 1977, or contact:

Dr. Roger Fuson
Fellowships Officer, NIGMS

Telephone: (301) 496-7368
Fellowships are available to support research training of cardiovascular investigators in a variety of disciplines to promote multidisciplinary research capability. The research training may be in fundamental studies of basic processes and functions, behavioral studies (including dietary modifications), population genetics, or clinical investigations directed toward long-term involvement in research toward increasing our knowledge and understanding in cardiovascular areas related to our programs in Hypertension, Arteriosclerosis, Coronary Heart Disease, Cardiovascular Aspects of Diabetes, Arrhythmias, Heart Failure and Shock, Cerebrovascular Disease, Peripheral Vascular Disease, Congenital and Rheumatic Heart Diseases, Cardiomyopathies and Infections of the Heart, Circulatory Assistance, and Cardiovascular Devices and Technology.

Individual Postdoctoral Fellowships are available to recipients of a doctoral degree who are United States citizens or non-citizens who have been admitted for permanent residence. Research training should be the above or other disciplines directly related to heart and vascular diseases. Applicants must be sponsored by an investigator at a domestic or foreign nonprofit public institution that has the staff and facilities to provide the desired training. Applications for training outside the United States require a detailed justification of the need to study abroad based on unique facilities and/or training opportunities. Stipends range between $10,000 and $13,200 for the first year of postdoctoral research training depending on the years of relevant postdoctoral experience.

Deadlines for the receipt of applications are:

   February 1 with announcement of results in September
   June 1 with announcement of results in February
   October 1 with announcement of results in May

Further information or applications may be obtained from:

   Dr. Max A. Heinrich, Jr.
   Manpower Branch
   Division of Heart and Vascular Diseases
   National Heart, Lung, and Blood Institute
   National Institutes of Health
   Bethesda, Maryland 20014

   Telephone: (301) 496-1846