

R E S E A R C H INKlings

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South Carolina is currently ineligible for USDA EPSCoR funding

For the current fiscal year the State of South Carolina is not listed as an eligible participant in the USDA Experimental Program for Stimulating Competitive Research (EPSCoR) program. States eligible for USDA EPSCoR funds are those that have a funding level no higher than the 40th percentile of all States participating in the USDA's National Research Initiative Competitive Grants Program (NRI), based on a three-year average (excluding strengthening set-aside funds). Based on the most recent three-year average, South Carolina has graduated from the USDA EPSCoR program by having an NRI funding level above the 40th percentile. South Carolina is no longer in the group of 20 states that receive the lowest amount of funding.

As a result, the NRI 2003 Program Description <www.reeusda.gov/nri> does not include South Carolina on its list of states eligible for the NRI Strengthening Program. Although MUSC investigators are not currently eligible for Strengthening Grants, investigators may submit standard research grants, new investigator applications, postdoctoral proposals and conference grants to the USDA National Research Initiative.

In three years (for fiscal year 2006) a recalculation of the success of states in the NRI program will be done in order to determine those below the 40th percentile. At that time, South Carolina may again be eligible for USDA EPSCoR funding, depending on the success of South Carolina scientists applying to USDA over the next three years.

If you have questions, please contact:

Peter J. Johnson, DVM, Ph.D. <PJohnson@reeusda.gov>

National Program Leader (Animals)

USDA-CSREES-Competitive Programs

National Research Initiative <www.reeusda.gov/nri>

Federal electronic application system may be implemented in a year

The federal E-Grants Program, an electronic government-wide grant application system, is expected to be in use by October 1, 2003, the start of next federal fiscal year. E-Grants replaces the Federal Commons system.

An E-grants executive board, supported by 11 department and agency partners, meets once a month. E-grants will eventually open up to all 26 government agencies.

In the future, potential grant recipients will be able to receive full service electronic grant administration. This initiative comes out of the mandate by the Federal Financial Assistance Management Improvement Act (P.L. 106-107) to provide a Web-based gateway and a searchable synopsis of grant programs and funding opportunities throughout the government.

AAMC issues recommendations on institutional conflicts of interest

Research institutions should segregate human subjects research administration from technology licensing and investment management to avoid institutional conflict of interest (ICOI), according to the second report from a special task force of the Association of American Medical Colleges.

The first report of the Task Force on Financial Conflicts of Interest in Clinical Research, released in December 2001, focused on conflicts of interest for individual researchers. This second effort, "Protecting Subjects, Preserving Trust, Promoting Progress II," offers "principles and recommendations for oversight of an institution's financial interests in human subjects research." It was released September 23.

Individual responsibility for human subjects research should not overlap or coincide with responsibility for institutional financial interests that could be directly affected by research outcome, because institutional officers might affect (or appear to affect) the process of research review, conduct or oversight.

The report goes so far as to recommend that, "under some circumstances, human subjects research not be conducted at a conflicted institution, unless compelling circumstances warrant."

The 28-member task force, chaired by William Danforth, chancellor emeritus of Washington University, includes representatives of the public and patient groups, lawyers, ethicists, media, industry, research and academia.

The report contains guidelines for establishing an Institutional Conflict of Interest Committee. Possible triggers for ICOI Committee investigation include an institution that has obtained an equity interest or entitlement to equity of any value in a non-publicly traded sponsor of human subjects research at the institution, an institution that has obtained an ownership interest or entitlement to equity of greater than \$100,000 in value in a publicly-traded sponsor of human subjects research at the institution, or an institution where officials hold a "significant financial interest" in the commercial research sponsor or the investigational product.

Another list of considerations for establishing institutional policy includes circumstances involving gifts and contracts. A gift that, even when held in the general endowment for the benefit of the entire institution, stands out because of its magnitude, or an institutional officer who was in a position to solicit such a gift, might trigger an ICOI inquiry.

The task force points out it is not trying to keep institutions from "accepting the philanthropy" of corporate research sponsors, but that such gifts should be disclosed and the conflict or appearance of conflict managed through "clear policies."

IRB members, like other institutional officials, should disclose any potential conflicts of interest regarding human subjects research, the task force writes. Following the individual guidelines from their first report, IRB members should observe the Public Health Service threshold of 5% or \$10,000 in equity interest. Institutional policies should reiterate federal regulations stating disclosure and recusal are required on a protocol-by-protocol basis for all IRB members, says the task force.

Finally, the task force recommends that disclosure of institutional financial interests should be made to the IRB of record, to research subjects and in all publications.

Source: Washington Fax, September 24, 2002 ▼



University Research Committee is accepting proposals

Although the University Research Committee (URC) program was suspended for the August deadline, the intramural grants program is accepting applications for the December cycle of deadlines. The URC funds three types of grants: Institutional Applications, Interim Funding and Clinician Trainee Research.

Institutional Applications are the most common type of proposal, typically supporting a "starter grant" for new investigators or a pilot project. New investigators may be junior faculty at the start of their research career, or more senior faculty who are new to MUSC. Pilot projects provide seed funds to investigators to explore an idea or area for which they do not have current grant support. Institutional Applications may also provide limited support for shared equipment or central facilities. For Institutional Applications of all types, awards exceeding \$25,000 are uncommon. The upcoming deadline for Institutional Applications is December 1.

Interim Funding provides short-term support to extramurally funded investigators who plan to resubmit a competing continuation proposal and need "bridge funds" to maintain a productive research operation. The deadline for these requests is January 2.

The third category offers small grants of \$2,000 or less clinical trainees who wish to gain experience in writing and conducting a research protocol with supervision and mentoring by an established investigator. Previously termed "Resident Research Grants," the scope was expanded at the start of the 2002-03 year to include non-physician trainees on clinical tracks. The Clinician Research Trainee program is the only URC mechanism that does not require the applicant to have a faculty appointment. The deadline for this category is December 15.

You may find detailed information on guidelines and forms at the URC website: <http://research.musc.edu/urc/home.htm>. The primary contact is Jackie Middleton in the Office of Research and Sponsored Programs.



NIDA offers free journal

The National Institute on Drug Abuse (NIDA) launched a new journal, *Science and Practice Perspectives*, in July 2002. This twice-yearly, peer-reviewed publication promotes a practical and creative dialogue between researchers and treatment providers whose common goal is to reduce the toll of drug abuse.


Regular features include reviews of critical topics in the science of prevention and treatment, service providers' perspectives on what works in diverse treatment settings and priorities for future research, inter-disciplinary roundtable discussions and examples of successful research-practice collaborations.

Subscriptions are free. Visit <http://www.nida.nih.gov/perspectives/subscribe.html> to complete a subscription form.



New directors are named at NIAAA and NIMH

Ting-Kai Li, M.D., is the new director of the National Institutes of Health's National Institute on Alcohol Abuse And Alcoholism (NIAAA). Dr. Li was previously professor of medicine and of biochemistry and molecular biology at Indiana University School of Medicine, and director of the Indiana Alcohol Research Center.

Thomas R. Insel, M.D., has been named director of the National Institutes of Health's National Institute of Mental Health (NIMH). Dr. Insel most recently served as professor of psychiatry and director of the Center for Behavioral Neuroscience at Emory University School of Medicine. 



NIH director, Elias Zerhouni, is committed to moving stem cell research forward

Elias Zerhouni, Director of the National Institutes of Health, has expressed enthusiastic interest in advancing stem cell research. In National Public Radio's "Talk of the Nation" on September 20, Zerhouni voiced his thoughts on the value of this type of research. He believes that this field demands a long-term investment reaching several areas of research from basic studies to complex investigations.

Zerhouni testified to the Senate labor/HHS subcommittee on behalf of stem cell research in late September. This hearing was scheduled a month after the one-year anniversary of President Bush's August 9, 2001 stem cell research directive that allows federal funding only for stem cell lines in existence at the point of the policy decision. Zerhouni's testimony addressed the NIH Stem Cell Task Force, which seeks to resolve challenges that hinder research with embryonic stem cells.

This level of support and action should come as an encouragement to investigators interested in stem cell research, as it appears that key players are dedicated to overcoming the controversy and obstacles in the way of this field of research.


Source: *Washington Fax*, September 24, 2002





National biodefense research conference occurs December 3-4

Federal Biodefense Research FY 2003 is a comprehensive, in-depth status report and outlook for federal government biodefense research, including budgets, priorities, research projects and prospects for commercialization. The program is designed to provide representatives of the academic, corporate, and government research community the most up-to-date information on how they can help the government achieve its biodefense research goals. This timely conference will feature speakers from the National Institutes of Health (NIH), Centers for Disease Control and Prevention (CDC), Department of Defense (DOD), Department of Energy (DOE), and Environmental Protection Agency (EPA), who will describe their biodefense research plans and funding.

The conference in Washington, DC on December 3-4, 2002 is open for registration. Here you will be able to get the latest information on the Nation's biodefense research needs. To register or obtain more information about this outstanding event, please call (818) 888-4444, or visit the conference website at www.infocastinc.com/Biodefense/home.htm. 



NIH issues revised application guidelines – again

The NIH Office of Extramural Research issued a recent advisory regarding important changes in instructions for two of its most widely used grant application forms, PHS 398 and PHS 2590. Several notable changes were implemented on June 28, 2002, including clarification of the instructions on research involving human subjects. Be sure to discard older versions.

Visit the NIH website at <http://grants1.nih.gov/grants/guide/notice-files/NOT-OD-02-059.html> to get the updated version. 



The feds may help pay your educational loan debt

As an academic health professional, you may be eligible for significant debt relief through a Federal Loan Repayment Program (LRP). The National Institutes of Health (NIH) and the Health Resources and Services Administration (HRSA) offer educational loan repayment opportunities to qualified individuals.

The NIH Loan Repayment Programs have a current deadline of November 30, 2002. HRSA offers a Nursing Education Loan Repayment Program with a November deadline as well.

The NIH LRPs may repay up to \$35,000 a year, depending on the individual's total eligible debt. In return, participants must sign a contract agreeing to conduct qualified research activities for at least 50% effort for a minimum of 2 years. Individuals must qualify for one of the following Programs:

- Clinical Research LRP
- Pediatric Research LRP
- Health Disparities LRP
- LRP for Clinical Researchers from Disadvantaged Backgrounds

Full details about the NIH LRPs are online at www.lrp.nih.gov.

The HRSA Nursing Education Loan Repayment Program (NERLP) has been recently expanded to help address the ongoing nursing shortage. Eligibility requirements include full-time employment at an eligible health facility and an unrestricted license in the State of practice during the term of the NELRP. Interested individuals should read the NERLP web site www.bhpr.hrsa.gov/nursing/loanrepay.htm and then make direct contact with the agency to obtain the most current information.




Fast & easy! Find funding opportunities and learn how to use COS

The Office of Research Development is initiating a regular series of hands-on workshops in using the on-line tools of the *Community of Science* (COS). COS www.cos.com is a subscription service available at no cost to all members of the MUSC research community. This informal session will help you learn how you can put the *Community of Science* to work for you.

Conducted by Karen Harper, COS Liaison for MUSC, the first workshop will occur Thursday, October 31, in Room 437 Library/Admin (Learning Resource Center), from 12:30 to 1:30 pm.

Some of the areas to be covered include:

- COS Expertise - Learn how to start and maintain your curriculum vita as well as produce your NIH biosketch.
- COS Funding Opportunities - Learn to explore and get results in the largest and most comprehensive research funding database on the Web. (Valuable resource for any individual searching for funding.)
- COS Funding Alert - Learn to customized an alert system of funding opportunities matched to your research interests

Reservations are not required, but are recommended, as only 23 computers are available. For more information, contact Karen Harper at 792-0871 or by email harperk@musc.edu. 

R E S E A R C H
Opportunities & Deadlines

BEHAVIORAL SCIENCES

Title: Exploratory/Developmental Translational Grants for Borderline Personality

Agency: NIH - NIMH / National Institute of Mental Health; and NIDA / National Institute on Drug Abuse

Identification: RFA: MH-03-001

Deadline: February 12, 2003, with letter of intent requested by January 13, 2003

The NIMH and NIDA are seeking applications for R21 (exploratory/developmental) awards to fund projects lasting up to three years which will initiate innovative translational studies of borderline personality disorder (BPD), studies based on basic science theories. Annual budgets are generally limited to \$125,000, with exceptions made when more than one institution is involved. The RFA for this program, published in the NIH Guide of August 30, 2002, lists some rather specific requirements for applications which may be briefly stated as follows: 1. They must be translational research on BPD. 2. The research principal(s) must have expertise in the basic science and in the relevant clinical research. Collaborations are encouraged and may involve participants in more than one institution. 3. There must be some participation by scientists early in the training phases of their careers who will have their training furthered and perhaps broadened by the work on the project. 4. The research must be clearly relevant to BPD, usually meaning patients so classified as subjects. 5. The proposed avenue of investigation must be new, consistent with the R21 mechanism of support. 6. The research under the R21 award should presage further more extensive research. The RFP lists several examples of suitable topics for this program and discusses them in some detail. It is anticipated that a total of up to ten awards will be funded by the two institutes. Contact, for questions related to mental health applications, James Breiling, Ph.D., Division of Mental Disorders, Behavioral Research and AIDS (DMDBA), NIMH, at 301/443-3527; FAX: 301/443-4611; or, for issues related to co-occurring BPD and drug dependence, Cecelia L. McNamara, Ph.D, Division of Treatment Research and Development, Behavioral Treatment

Development Branch, NIDA, at 301/402-1488; FAX: 301/443-6814. ▼

Title: National Cooperative Drug Discovery Groups for the Treatment of Mood Disorders or Nicotine Addition (NCDDG-MD/NA)

Agency: NIH - NIMH / National Institute of Mental Health; and NIDA / National Institute on Drug Abuse

Identification: RFA: MH-03-008

Deadline: November 26, 2002, with letter of intent requested by October 25, 2002

This solicitation from the NIMH and NIDA seeks applications for the establishment of some three to five multidisciplinary, possibly multi-institutional groups, which together and in close cooperation with the relevant scientific staff of the two institutes will comprise a National Cooperative Drug Discovery Group (NCDDG) to accelerate the discovery of new drugs, new pharmacologic tools for basic and clinical research in mood disorders and nicotine addiction, and the development of relevant models. The components of the entire NCDDG are expected to include scientists from academia, the pharmaceutical industry, and the NIH. Each individual award will support a cooperative agreement (U01 for one or two projects and no cores; U19 for three or more projects, perhaps with one or more cores). The individual groups are expected to encompass scientists with expertise in "...neuroscience, neuropharmacology, neurobiology, medicinal chemistry, clinical neuroscience, mood disorders research, drug addiction research, radiochemistry, and pharmacokinetics...". The RFA for this program was published in the NIH Guide of August 30, 2002. It gives many details that point to specific targeted areas, categorized by clinical conditions, molecular targets, potential ligands, and chemical approaches. The RFA also gives the details of organization and responsibilities under this initiative that is somewhat complex. Early contact with the NIH scientific staff is encouraged. The contacts are Linda Brady, Ph.D., Chief, Molecular and Cellular Neuroscience Research Branch; Chief, Neuropharmacology & Drug Discovery and Clinical Therapeutics Program; Division of

Neuroscience and Basic Behavioral Science; NIMH; at 301/443-5288; FAX: 301/402-4740; or William Corrigan, Ph.D., Chief, Translational Research Branch; Director, Nicotine and Tobacco Addiction Program; Division of Neuroscience and Behavioral Research; NIDA; at 301/435-1324; FAX: 301/594-6043. ▼

Title: Enhancing Adolescent Health Promotion Across Multiple High Risk Behaviors

Agency: NIH - NINR / National Institute of Nursing Research; NIAAA / National Institute on Alcohol Abuse and Alcoholism; and NHLBI / National Heart, Lung, and Blood Institute

Identification: PA-02-159

Deadline: Ongoing, with deadlines of February 1, June 1, and October 1

The three institutes named above award R01 grants to support meritorious research on behaviors by adolescents which are recognized as highly risky with respect to health. Each application must address at least two types of high-risk behavior. The Program Announcement (PA), published in the NIH Guide of August 30, 2002, identifies and discusses high-risk behavior falling in these categories: use of tobacco; poor dietary habits; inadequate physical activity; substance abuse of various types, including abuse of alcohol, steroids, marijuana, cocaine, and other drugs; risky sexual behavior; and risky behavior involving motor vehicles or guns. Studies dealing with special categories of individuals are encouraged, including racial and ethnic groups, single parent families, etc. The following specific examples of suitable projects are listed in the PA:

- ◆ Studies investigating the effects and interrelationships among psychosocial and environmental factors (e.g., poverty and the adoption of high-risk behaviors among adolescents).
- ◆ Intervention studies that elucidate and incorporate the physiological, psychological, socioeconomic, emotional, environmental, cultural, and genetic factors that influence health compromising and or health promoting behaviors among adolescents.
- ◆ Interventions that incorporate protective factors that aid in preventing adolescents from engaging in multiple risky behaviors.
- ◆ Intervention studies using peer-based approaches to facilitate health promotion/risk reduction

behaviors in adolescents in rural and urban settings.

- ◆ Innovative intervention studies devoted to enhancing self-efficacy, competence, and skill development to support the initiation and/or maintenance of health promoting behaviors.
- ◆ Culturally and linguistically appropriate studies that incorporate the stages of cognitive development in adolescents of [differing] cultural and ethnic background.
- ◆ Innovative interventions targeting heavy drinking and risky sexual behaviors.
- ◆ Unique and culturally sensitive interventions to promote healthier dietary intake and adequate activity in minority adolescents.

Contact Dr. Janice Phillips, Office of Extramural Programs, NINR, at 301/594-6152; FAX: 301/480-8260; Dr. Vivian B. Faden, Chief, Epidemiology Branch, Division of Biometry and Epidemiology, NIAAA, at 301/594-6232; FAX: 301/443-8614; or Dr. Charlotte Pratt, Division of Epidemiology and Clinical Applications, NHLBI, at 301/435-0382; FAX: 301/480-1669. ▼

CANCER

Title: Cooperative Planning Grant for Cancer Disparities Research Partnership Program

Agency: NIH - NCI / National Cancer Institute

Identification: RFA: CA-03-018

Deadline: March 20, 2003, with letter of intent requested by February 20, 2003

In the NIH Guide of August 30, 2002, the NCI published an RFA for cooperative planning grants (U56) to support "...the planning, development and conduct of radiation oncology clinical research trials in institutions that care for a disproportionate number of medically underserved, low income, ethnic and minority populations but have not been traditionally involved in NCI-sponsored research. The grant will also support the planning, development and implementation of nurturing partnerships between applicant institutions and committed and experienced institutions actively involved in NCI-sponsored cancer research. All approaches to planning are encouraged, as long as they address the following essential features: a focus on cancer disparities, radiation oncology clinical research, institutional commitment, organizational capabilities, facilities, and interdisciplinary coordination and collaboration." It is anticipated that

up to four awards will be made, each for a project period of up to five years, with annual budgets of up to \$400,000 in direct costs plus additional funds the first year for capital costs. Under these cooperative agreements the scientific staff of the NCI will participate in the activities of the program in ways delineated in the RFA. The NCI expects to issue another RFA under this program next year. Contact Frank Govern, Ph.D., Deputy Chief, Radiation Oncology Sciences Program, or Norman Coleman, M.D., Chief, Radiation Oncology Sciences Program, both at 301/496-6111; FAX: 301/480-5785. ▾

rheumatoid arthritis and juvenile rheumatoid arthritis which will focus on: "i) the evaluation of prevalence and clinical presentation of temporomandibular involvement in these diseases; ii) surrogate markers of disease activity; iii) genetic markers; iv) and therapeutic effects." Contact Eleni Kousvelari, D.D.S., D.Sc., Chief, Cellular & Molecular Biology, Physiology & Biotechnology Branch, NIDCR, at 301/594-2427; FAX: 301/480-8318; or Bernadette Tyree, Ph.D., Director, Cartilage and Connective Tissue Program, NIAMS, at 301/594-5032; FAX: 301/480-4543. ▾



DENTAL MEDICINE

Title: Pathobiology of Temporomandibular Joint Disorders

Agency: NIH - NIDCR / National Institute of Dental and Craniofacial Research; NIAMS / National Institute of Arthritis and Musculoskeletal and Skin Diseases; and ORWH / Office of Research on Women's Health

Identification: RFA: DE-03-005

Deadline: November 20, 2002, with letter of intent requested by October 20, 2002

In the NIH Guide of September 6, 2002, the two institutes of the NIH named above and the ORWH issued a request for R01 grant applications to support multidisciplinary research aimed at furthering the basic understanding of temporomandibular joint disorders (TMJDs). The RFA presents a summary of the knowledge of this disorder, pointing out some of the gaps in understanding. Included in this discussion are some known developmental aspects, the gender difference in prevalence, structural aspects, and the putative roles of mediators. The RFA also gives a list of examples of broad areas of research, including the following abbreviated listing of possible topics: utilization of microarray technologies in furthering understanding of TMJDs; use of genomic and proteomic analyses; studies of the basis of gender influences, including the role of estrogens; development and application of animal models, including knockout and transgenic ones; roles of cell types and mediators in the inflammatory process; identification of biomarkers of risk, diagnosis, and disease progression; and the application of innovative imaging technologies and of molecular imaging probes and contrast agents. The NIAMS is particularly interested in funding research tied to existing clinical studies of patients with



DIABETES, ENDOCRINOLOGY, & METABOLIC DISORDERS

Title: Development of the Endocrine Pancreas

Agency: NIH - NIDDK / National Institute of Diabetes & Digestive & Kidney Diseases

Identification: PA-02-161

Deadline: Ongoing, with deadlines of February 1, June 1, and October 1

The Program Announcement (PA) of this initiative, published in the NIH Guide of August 30, 2002, states that the purpose is "...to stimulate the application of advances in developmental biology, specifically in developmental genetics, embryology, and stem cell biology, to study pancreatic development. Collaborative efforts that link expertise in basic developmental biology or stem cell biology and diabetes are strongly encouraged. It is anticipated that this research will ultimately lead to a better understanding of the pathways required for the development and regeneration of the endocrine pancreas, both in vivo and in vitro. The NIH will allow federal funding for research using human embryonic stem cells and an NIH registry for human embryonic stem cell lines has been established <<http://escr.nih.gov>>. This PA will support efforts in the characterization of these human embryonic cell lines, as well as human fetal and adult stem cells as they relate to the specification of endoderm and differentiation of pancreatic islet cell types. This PA is intended to intensify investigator-initiated research, to attract new investigators to the field, and to encourage interdisciplinary approaches to research in this area." Applications may be submitted for R01 or R21 (exploratory/developmental) awards, the latter limited to two years of support with annual budgets not exceeding \$100,000 in direct costs. The following is the "Scope and Objectives" section of the PA, quoted

verbatim, essentially a list of examples of rather specific topics for research:

- ◆ Developmental genetic screens for identifying mutations that affect pancreas development.
- ◆ Identification of signals, signaling pathway components and transcriptional factors that regulate endoderm specification, dorsal pancreatic bud formation, and pancreatic fate determination.
- ◆ Role of cell-cell interactions, differential cell adhesion, and cell motility in morphogenesis of the pancreatic islet.
- ◆ Role of extracellular matrix in islet cell morphogenesis.
- ◆ Molecular markers for defining all stages of pancreatic development, including cell-specific markers of stem/progenitor cells of the endocrine pancreas.
- ◆ Studies examining endocrine pancreatic cell lineage, including alpha, beta, and delta cell fate determination and differentiation.
- ◆ Molecular characterization and comparison of human embryonic stem cell lines and other human tissue-specific stem/progenitor cells to produce endoderm and ultimately differentiated cells of the endocrine pancreas.
- ◆ Prospective isolation, purification and characterization of pancreatic stem/progenitor cells.
- ◆ Development of clonogenic assays, both in vitro and in vivo, for characterizing stem/progenitor cells of the pancreas.
- ◆ Identification of growth conditions required to generate differentiated cells of the endocrine pancreas from mammalian stem/progenitor cells.
- ◆ Use of model systems for the study of regeneration of the endocrine pancreas.
- ◆ Studies to understand the molecular basis of transdifferentiation of gut, liver, and exocrine pancreatic stem/progenitor cells to produce pancreatic islets.
- ◆ Studies examining the plasticity of hematopoietic, mesenchymal, liver, neural and other tissue-specific stem/progenitor cells in the formation of pancreatic islets

Contact Sheryl M. Sato, Ph.D., Division of Diabetes, Endocrinology and Metabolic Diseases, at 301/594-8811; FAX: 301/480-3503. ▼

Agency: NIH - NIDDK / National Institute of Diabetes & Digestive & Kidney Diseases; NINDS; NEI; NINR; and NHLBI

Identification: PA-02-165


Deadline: Ongoing, with deadlines of February 1, June 1, and October 1

There is evidence that, in addition to the variation in the frequency of diabetes in racial and ethnic groups, there are also differences in the frequencies of complications. This initiative of the five institutes identified above seeks research under R01 or R21 (exploratory/developmental) grants to seek further understanding of these differences. The announcement of the program (PA), published in the NIH Guide of September 10, 2002, discusses the background, objectives, and scope of this initiative, including the following list of examples of appropriate topics for studies:

- ◆ Epidemiologic studies to determine the rates of microvascular (nephropathy, retinopathy, and neuropathy) and macrovascular (cardiovascular disease and stroke) diabetic complications in appropriate representative samples of contemporary populations.
- ◆ Studies to identify genes which might affect the development and progression of micro- and macrovascular complications in different populations.
- ◆ State-of-the-art, hypothesis-driven metabolic studies to determine whether there are differences in metabolism, insulin sensitivity, energy expenditure, beta cell function, and body composition that might influence glycemic control and risk of complications in different populations.
- ◆ Studies to compare the contribution of glycemia versus other risk factors (e.g., smoking, hyperlipidemia, body composition, blood pressure) in the development of micro- and macrovascular disease in patients with diabetes, and to study how treatment of these factors may influence rates of development of complications in different racial/ethnic groups.
- ◆ Studies to investigate environmental factors, such as medical care, behavior and lifestyle, and socioeconomic status that may contribute to risk for development and progression of complications. Such studies could incorporate culturally-specific lifestyle factors into treatment and prevention strategies to reduce risk across racial and ethnic groups.
- ◆ Studies to determine whether different pathophysiologic mechanisms or risk factors are

Title: Race/Ethnic Disparities in the Incidence of Diabetes Complications

operative among subgroups within racial/ethnic minorities (e.g., different subgroups of Hispanic Americans, such as Mexican Americans, Puerto Ricans, Caribbean Hispanics, Cuban Americans).

The R21 grants in this program are limited to two years of support with annual budgets not exceeding \$125,000 in direct costs. Each of the five institutes has a contact identified in the PA. The first named, and probably the one with the most general types of advice, is the staff member from the NIDDK, Kristin Abraham, Ph.D., Division of Diabetes, Endocrinology and Metabolic Diseases, at 301/451-8048; FAX: 301/480-3503. 

Title: Bench to Bedside Research on Type 1 Diabetes and Its Complications

Agency: NIH - NIDDK / National Institute of Diabetes & Digestive & Kidney Diseases; NIAID; NEI; and NHLBI

Identification: RFA: DK-03-001


Deadline: February 26, 2003, with letter of intent requested by January 29, 2003

The four institutes identified above are seeking applications for translational research on type 1 diabetes involving collaboration between basic and clinical scientists. The funding mechanisms to be requested may be the R21 (exploratory/development) award, the R33 (exploratory/development, phase 2) award, or a combination of the R21 and R33 awards, termed a Phased Innovation Award. The R21 offers funding for projects for which little or no preliminary data have been obtained by the applicant. In this program they are limited to two years with annual budgets of up to \$250,000 in direct costs. The R33 mechanism offers support for further exploratory projects where the feasibility has been established by studies under an R21 award or otherwise. They are limited to three years with budgets of up to \$500,000 annually in direct costs. Applications may be made simultaneously for a combination R21/R33 award in which the R33 award is predicated on achievement of negotiated milestones during the R21 phase. The combined application may request up to five years of support with the budgetary limits stated above for each phase of the award period. The aim of the translational research program is to offer improvements in the therapy or prevention of type 1 diabetes and its complications. The RFA, published in the NIH Guide of August 30, 2002, gives this list of examples of suitable topics for investigation:

◆ Development and/or testing of strategies to retard

or reverse the immune and/or inflammatory processes leading to the development of type 1 diabetes and its macro and microvascular complications

- ◆ Development and/or testing of measures to identify and quantify the risk of developing type diabetes or to assess response to therapy to prevent or reverse the autoimmune process and beta cell loss (i.e. pathogenic T-cell assays, imaging of beta cell mass or inflammation, etc.)
- ◆ Development of improved approaches to pancreas harvesting and/or islet isolation, evaluation, or administration
- ◆ Development and/or testing of strategies to develop new or improved sources of beta cells/islets or to enhance the regeneration or viability of beta cells/islets
- ◆ Development and/or testing of improved methods of immunoalteration of beta cells/islets or of the immune response in an attempt to prevent autoimmune and host-versus-graft destruction of beta cells/islets
- ◆ Development and/or testing of devices to measure glucose in blood, saliva or other body fluids and/or deliver insulin which offer advantages over current devices
- ◆ Development of non-human primate or other animal models of type 1 diabetes or its complications which closely parallel the human disease; investigators should make clear that tissues and developed animal models will be made available to the research community and provide a plan for the dissemination of these models
- ◆ Identification and/or evaluation of surrogate endpoints that can be used in clinical trials to prevent, delay or reverse type 1 diabetes and its complications
- ◆ Development or testing of innovative pharmacological agents and interventions to prevent or halt the progression of type 1 diabetes or its complications.

Contacts from each institute are named in the RFA; the first is James F. Hyde, Ph.D., Division of Diabetes, Endocrinology and Metabolic Diseases, NIDDK, at 301/594-7692; FAX: 301/435-6047. 

GASTROENTERIC DISORDERS

Title: Intestinal Failure, Short Gut Syndrome and Small Bowel Transplantation

Agency: NIH - NIDDK / National Institute of Diabetes & Digestive & Kidney Diseases

Identification: PA-02-163

Deadline: Ongoing, with deadlines of February 1, June 1, and October 1

The NIDDK seeks R01 and R21 (exploratory/developmental) applications to support research on "...the pathogenesis, natural history, treatment and complications of intestinal failure and its therapies, including parenteral nutrition and small bowel transplantation." The program announcement for this initiative, in the NIH Guide of September 13, 2002, states that some 20,000 individuals in the U.S. are currently supported by parenteral nutrition for intestinal failure, and that the initiative strives to encourage research which will reduce the numbers requiring this treatment as well as investigations which will improve the quality of life or reduce the costs of those requiring such treatment. The following are some broad topics listed as examples of research relevant to this program:

- ◆ Studies of the etiology and pathogenesis of intestinal failure where the cause is not well understood, especially necrotising enterocolitis in infancy, congenital developmental defects, motility disorders, defects of transport such as microvillus inclusion disease, and early childhood inflammatory disorders of the gut.
- ◆ Studies of the genetic and molecular basis of gut development in animal models that may lead to novel insights into intestinal failure.
- ◆ Basic and clinical studies of gut adaptation to intestinal failure, including the role of nutrients, endogenous factors such as growth factors, intestinal flora, and therapeutic agents.
- ◆ Studies to define nutrient requirements, either oral or parenteral, necessary to maintain optimal health for patients with intestinal failure.
- ◆ Studies of the complications of intestinal failure and its therapy, particularly the etiology, diagnosis and treatment of liver disease associated with parenteral nutrition.
- ◆ Basic or clinical research in small bowel transplantation, either in animal models or humans, that aim to improve multiple aspects of transplantation, including patient selection, transplantation procedures, nutritional support, immunosuppression, and tolerance induction.
- ◆ Research to improve diagnosis or treatment of complications of small bowel transplantation, including graft rejection, infections or diarrhea of unknown etiology following transplantation.

R21 awards under this initiative are limited to annual budgets of \$100,000 per year for no more than

two years. The announcement states that these awards are "...intended to 1) provide initial support for new investigators; 2) allow exploration of possible innovative new directions for established investigators; and 3) stimulate investigators from other areas to lend their expertise to research within the scope of this solicitation." Contact Dr. Michael K. May, Gastrointestinal Neuroendocrinology Program Director, Division of Digestive Diseases and Nutrition, at 301/594-8884; FAX: 301/480-8300. ▽

HEALTH CARE POLICY

Title: Disability Rehabilitation Research Projects (DRRP) Program; Applications for Fiscal Year (FY) 2003

Agency: Department of Education

Identification: CFDA No.: 84.133A

Deadline: November 12, 2002

The Office of Special Education and Rehabilitative Services, National Institute on Disability and Rehabilitation Research (NIDRR), of the U.S. Department of Education, in the Federal Register of September 12, 2002, announced plans to fund five grants, each for a five-year period, as follow:

Health Services Research. Two grants, each with annual budgets of up to \$300,000, are to support projects in one of these areas: 1) Availability and Access to Community-Based Health Services; 2) Impact of the Prospective Payment System for Medical Rehabilitation; or 3) Analysis of Quality Indicators for Assessing Health Services Provided to Individuals with Disabilities.

Mental Health Service Delivery to Deaf, Hard of Hearing, and Deaf-Blind Individuals from Diverse Racial, Ethnic, and Linguistic Backgrounds. Two grants, with annual budgets of up to \$300,000 each, will support research in one of the areas identified in the descriptive title above and described in much greater detail in the announcements in the Federal Register, one inviting the applications, the other identifying the priorities of the program.

Developing Models to Promote the Use of NIDRR Research. A single grant, with annual budgets of up to \$350,000, will support "...a project that will develop and test models for increasing the effective use of NIDRR research results." This project has some very specific requirements for analyzing information and developing training and educational materials for professionals, individuals with disabilities, their families, and researchers.

Contact Donna Nangle, at 202/205-5880; e-mail:

Title: Economic Evaluation of Drug Abuse Treatment and Prevention Services for HIV/AIDS


Agency: NIH - NIDA / National Institute on Drug Abuse

Identification: PA-02-164

Deadline: Ongoing, with probable deadlines of January 2, May 1, and September 1 (AIDS-Related projects)

The NIDA encourages research on economic issues of HIV/AIDS treatment and/or prevention services in conjunction with drug abuse treatment and/or prevention services. This program, described in an announcement in the NIH Guide of September 13, 2002, invites applications for R01, R21 (exploratory/developmental), and R03 (small) grants. The R21s are limited to three years of support and \$100,000 per year in direct costs, the R03s to two years and \$50,000 per year. The Program Announcement (PA) discusses the nature of the economic research sought under this initiative. It is succinctly summarized in this brief paragraph entitled "Research Studies":

"Researchers are encouraged to develop rigorous designs for studies of the economics of HIV/AIDS services and drug treatment and/or prevention services. Studies are sought on: (1) financing, including health insurance and/or payment mechanisms; (2) alternative delivery systems and managed care; (3) cost-benefit, cost-effectiveness, and cost-utility analysis; (4) cost of services and economic burden of the disease; and (5) methodological research."

Each of the five potential areas of investigation is discussed in some detail, including presentation of more specific topics for research. Contact William S. Cartwright, Ph.D., Services Research Branch; Division of Epidemiology, Services and Prevention Research; at 301/443-4060; FAX: 301/443-6815; or Jean-Craft Comolli, B.S.N., M.B.A., Center on AIDS and Other Medical Consequences of Drug Abuse, at 301/402-0630; FAX: 301/594-6566. 

Title: Long-Term Care Recipients: Quality of Life and Quality of Care Research


Agency: NIH - NINR / National Institute of Nursing Research; NIA; NIAMS; NICHD; NIDCR; and NIDDK

Identification: PA-02-162

Deadline: Ongoing, with deadlines of February 1,

The NIH Guide of September 6, 2002 contains a Program Announcement (PA) which encourages the submission of R01 or R21 (exploratory/developmental) grant applications for the support of research on issues of quality of life and quality of care of individuals in long-term care facilities. The PA describes the nature of the situations that have provided the impetus for this initiative. It includes an extensive discussion of the various types of facilities, the populations involved, and the many types of problems. In the process it identifies and specifies many examples of possible research projects. A reasonable summary of the problems and the research being encouraged is included in the brief stated "Purpose of this PA", quoted here:

"The purpose of this program announcement is to encourage research on improving the quality of life, health, functional abilities, and health outcomes for residents of long-term care (LTC) institutions such as nursing homes, extended care, and assisted living facilities. Impaired quality of life, poor functional status, and health concerns are well documented in LTC settings to have a deleterious impact on outcomes. Examples of areas of concern include, but are not limited to, poor nutrition, impaired oral health, diabetes related hyperglycemia and hypoglycemia, renal dialysis, impaired mobility, management of acute and chronic health conditions, and decreased social interactions. Research is also needed for understudied age groups, ethnic groups, and for certain health conditions. The goals of this PA are to stimulate clinical research to advance knowledge about long-term care populations and to encourage testing of interventions to improve quality of life, health, and functional status of long-term care residents. Another important goal of this PA is to encourage studies of interventions that can be translated into practice in current LTC environments."

R21 applications submitted under this program are limited to two years of support with annual budgets of up to \$150,000 in direct costs. Contacts are listed for each participating institute. The first named is Dr. Nell Armstrong, Office of Extramural Programs, NINR, at 301/594-5973; FAX: 301/480-8260. 

HEART, LUNG, AND BLOOD DISEASES

Title: COPD Clinical Research Network

Agency: NIH - NHLBI / National Heart, Lung and Blood Institute

Identification: RFA: HL-03-002

Deadline: November 13, 2002, with letter of intent requested by October 16, 2002

In the NIH Guide of August 23, 2002, the NHLBI published an RFA seeking proposals for participation in a network of clinical centers, four to six in number, and a single data coordinating center. The funding at levels of \$600,000 to \$800,000 per year in direct costs for five years will be awarded through cooperative agreements (U10s). The resulting network, composed of personnel from the NHLBI, the clinical centers, and the data coordinating center will collaborate, via mechanisms described in the RFA, to plan and conduct about five short-term therapeutic intervention trials in patients with moderate to severe chronic obstructive pulmonary disease (COPD). There are some rather specific aspects of the organization, management, and operation of the network, which are described in the RFA; they are reflected in special requirements. Contact Dr. Tom Croxton, Division of Lung Diseases, at 301/435-0202; FAX: 301/480-3557. ▽

INFECTIOUS DISEASES

Title: Small Business Biodefense Program

Agency: NIH - NIAID / National Institute of Allergy & Infectious Diseases

Identification: PAS-02-149

Deadline: Ongoing, with deadlines of December 1, April 1, and August 1

In the NIH Guide of August 16, 2002, the NIAID announced the availability of Small Business Innovation Research (SBIR - R43/R44) and Small Business Technology Transfer (STTR - R41/R42) awards to support research by small businesses aimed at the development of therapeutics, vaccines, diagnostics, adjuvants/immunostimulants, and other selected resources for biodefense. Owing to the high priorities of these endeavors, the time and budgetary limits for these awards exceed those usually associated with the SBIR/STTR programs at the NIH. The limits under this program are two years and \$500,000 in total costs per year for Phase I applications for SBIR or STTR grants, three years and \$2,000,000 for Phase II applications. The limits on consultant and contractual costs, normally 50% of total costs, may be expanded when justified, such

as might be the case when clinical studies, clinical trials, or product development is involved. The complete list of high priority products, as available on the NIAID website, is as follows:

"This includes design, development and testing of products specific to NIAID Category A-C priority areas."

Therapeutics

1. Antivirals, especially against smallpox and viral hemorrhagic fevers.
2. Antitoxins to B. anthracis and C. botulinum.
3. Narrow-spectrum antibiotics, especially for anthrax.
4. Passive immunotherapeutics, including antibodies and soluble receptors.
5. Broadly reactive antimicrobials.

Vaccines

1. Cell-based smallpox vaccines.
2. Tularemia vaccines.
3. Plague vaccines.
4. Rift Valley Fever vaccines.
5. Novel influenza vaccine strategies, including vaccines against pandemic influenza.
6. C. botulinum/botulinum toxin vaccines.

Adjuvants/Immunostimulants

1. New immunostimulatory agents including adjuvants.
2. Immune assessment tools to screen responses to drugs/infections/vaccines in different individuals/subpopulations.
3. Products to induce enhanced innate immune protection in the lungs, gastrointestinal tract or systemically.

Diagnostics


1. Methods for detection of NIAID Category A-C priority agents.
2. Tests that evaluate the possible spectrum of antimicrobial resistance or genetic manipulation.
3. High-throughput screens (e.g., microchip-based platforms) containing microbial signature profiles.
4. Functional genomic tools to identify multiple organisms simultaneously.
5. Novel immune assays to study human immune responses.
6. Identification of novel or improved biomarkers for human immune activation.
7. In vivo imaging methods and development of contrast reagents for visualization of pathogens

or host immune responses in vivo.

8. Clinical diagnostic tools for human eczema.

Resources

1. Vaccine delivery systems and platform technologies.
2. Software development as tools for genetic, genomic and proteomic analysis and modeling of host-pathogen interactions
3. Screening tools and services for high throughput antigen identification.
4. Appropriate standardized cell cultures and animal models for antimicrobial vaccine testing and development.
5. Validated assays to measure toxicity, safety, efficacy/immunity and other host responses needed for product licensure.

Contact Dr. Barbara Mulach, Division of Microbiology and Infectious Diseases, at 301/496-1884; FAX: 301/480-4528. 


Title: Clinical Studies for Antiviral Therapies
Agency: NIH - NIAID / National Institute of Allergy & Infectious Diseases
Identification: RFP: NIH-NIAID-DMID-03-08
Deadline: November 15, 2002

The NIAID has issued an RFP seeking proposals for "...clinical trials of therapies for severe, acute and chronic, non-HIV, viral diseases that are important public health problems. The focus of these studies continues to be on herpes virus infections, as well as other rare or emerging viral diseases in special clinical populations such as the immunosuppressed, elderly or children that are not a high priority for the pharmaceutical industry." The RFP should be on the Internet at <http://www.niaid.nih.gov/contract>. A single seven-year contract is anticipated. Contact Sharon Kraft, Contract Specialist, at 301/402-5825; FAX: 301/402-0972.




MISCELLANEOUS

Title: Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs Annual Solicitation
Agency: Department of Energy
Identification: Ref. no.: DOE-SC0059
Deadline: January 14, 2003

The solicitation for SBIR and STTR applications by the Department of Energy is expected to be on the Internet at <http://www.science.doe.gov/sbir> on October 15, 2002. These programs support research which is aimed at the ultimate development of commercial products or services and which is conducted by small businesses. Academic scientists may participate as major consultants in the case of SBIR awards and as co-investigators in the case of STTR awards. The programs award funds in two or more phases. Commonly Phase I funding of up to \$100,000 for nine months is aimed at the establishment of feasibility to support a competitive application for Phase II funds of up to \$750,000. A total of 230 SBIR and 15 STTR awards are anticipated. Among the 47 technical areas identified in the preliminary announcement are these of potential interest to investigators in the biomedical sciences: Enhanced Proteomics Signature Analysis in Support of Pathogen Detection, Bioinformatics, and Epidemiological Modeling; Technologies for Nuclear Nonproliferation and Homeland Defense; Support Technologies for Sensors Used in National Security Applications; Measurement/Monitoring Technologies for the Subsurface Environment; Biological Carbon Sequestration Research and Technology; Medical Sciences; Genome, Structural Biology, and Related Biotechnologies; Carbon Cycle Measurements of the Atmosphere and the Biosphere; Decontamination and Decommissioning of Facilities in the DOE Complex; and Nanotechnology Applications in Industrial Chemistry. Contact Julie Scott, Program Specialist, at 301/903-0569; FAX: 301/903-5488. 

Title: Characterization of Human Embryonic Stem Cell Lines
Agency: NIH - NIA / National Institute on Aging
Identification: Sol. no.: 260-03-06
Deadline: November 21, 2002

The NIA will, about October 7, 2002, issue a solicitation for proposals for the award of a contract for three years, to support studies of specific features of human embryonic stem cells. The solicitation will be on the Internet at <http://ocm.od.nih.gov/drc/rfp.htm>. The following is a quotation which encompasses most of the preliminary announcement of this initiative as published in the FedBizOpps/Commerce Business Daily of September 5, 2002:

"The National Institute on Aging, National

Institutes of Health, is soliciting proposals to develop, maintain, and distribute data on the properties of undifferentiated human embryonic stem cell lines. Analysis will include: a) a microarray analysis of growth factors, cytokines, and ECM molecules that are detectable in ES cell cultures, b) a SAGE analysis of ES cell gene expression, c) an immunotyping profile of human ES cell, d) an analysis of differentiation properties of ES cells, e) a karyotyping and FISH analysis of ES cells,

f) development of a transplant model to assess ES cell differentiation into neural tissue. A three-year cost-reimbursement type contract is anticipated, with an award made on or about May 1, 2003."

Contact John DeCenzo, Contracting Officer, at 301/496-4487; FAX: 301/402-0178. ▼

Title: Services and Intervention Research with Homeless Persons Having Alcohol, Drug Abuse, or Mental Disorders

Agency: NIH - NIAAA / National Institute on Alcohol Abuse and Alcoholism; NIDA / National Institute on Drug Abuse; and NIMH / National Institute of Mental Health

Identification: PA-02-150

Deadline: Ongoing, with deadlines of February 1, June 1, and October 1

The three institutes identified above encourage the submission of applications for R01, R03 (small grant), R21 (exploratory/developmental grant), and certain career development awards (K awards) to support research or research training aimed at increasing the understanding of the efficiency, effectiveness, and diffusion of services provided to homeless persons with alcohol, drug abuse, and/or mental (ADM) disorders. Quoting from the announcement, published in the NIH Guide of August 16, 2002, "This program announcement (PA) encourages innovative and theory-driven empirical research to examine the organization, management, integration, and financing of services as well as the impact of these factors on the quality, cost, access, utilization, outcomes, cost analyses of care. Of particular interest are investigations of services for persons who suffer from co-occurring alcohol, drug abuse, and mental disorders and for persons at risk for or who have HIV/AIDS or other serious health problems." The PA discusses in much more detail the research objectives and gives a rather detailed list of examples of research topics and questions. It encourages potential applicants to contact one of the

institutes early, particularly when one is considering an R03, R21, or K application, since there are specific requirements and limits set by the institutes. The contacts are Harold I. Perl, Ph.D., Health Services Research Branch, Division of Clinical and Prevention Research, NIAAA, at 301/443-0788; FAX: 301/443-8774; Jerry Flanzer, D.S.W., Services Research Branch, Division of Epidemiology, Services and Prevention Research, NIDA, at 301/443-4060; FAX: 301/443-2636; Denise Juliano-Bult, M.S.W., Services Research and Clinical Epidemiology Branch, Division of Services and Intervention Research, NIMH, at 301/443-1638; FAX: 301/443-4045; and David Stoff, Ph.D., Center for Mental Health Research on AIDS, Division of Mental Disorders, Behavioral Research and AIDS, NIMH, at 301/443-4625; FAX: 301/443-9719. ▼

Title: Application of Exploratory/Developmental Technologies to NIAID-Funded Research

Agency: NIH - NIAID / National Institute of Allergy & Infectious Diseases

Identification: PAS-02-160

Deadline: Ongoing, with standard application dates which vary depending upon whether or not AIDS research is involved

The NIH Guide of August 30 contained an announcement of this program, which seeks R21 (exploratory/developmental) grant applications for research which will introduce innovative and state-of-the-art technologies and approaches to ongoing NIAID-funded projects related to "...the study of infectious diseases (bacterial, viral, fungal and parasitic), HIV/AIDS, basic immunology, and immune mediated conditions (autoimmunity, asthma, allergy, organ/tissue transplant rejection). Studies focused on biodefense research are not eligible for this announcement." The intention is to fund some ten to twelve applications, each limited to two years of support with annual budgets not to exceed \$150,000 in direct costs. An application must be related to an ongoing R01 or R37 (MERIT) award the progress of which will be facilitated by the R21 award. The applicant, prospective PI, may be the PI of the current grant or another scientist, in which case the current PI must be listed as a co-investigator. The announcement in the NIH Guide discusses some of the approaches and technologies being targeted by this initiative, of which the following are a few briefly stated examples: genomic approaches including knock-out models and mutational

approaches; proteomic approaches; utilization of human embryonic stem cells; applications of techniques such as "...unique animal models, flow cytometry, X-ray crystallography, mass spectrometry, 2-dimensional gel electrophoresis, and differential display..."; innovative use of imaging technologies including new reagents; and incorporation of bioinformatic software and computational tools for data acquisition, analysis, and dissemination. Contact Alison Deckhut, Ph.D., Program Officer, Division of Allergy, Immunology and Transplantation, at 301/496-7551; FAX: 301/402-2571; Maria Giovanni, Ph.D., Assistant Director for Microbial Genomics, Division of Microbiology and Infectious Disease; at 301/496-1884; FAX: 301/480-4528; or Nabila M. Wassef, Ph.D., PBRB, Division of AIDS, at 301/435-3751; FAX: 301/402-3211. ▼

Title: NIDCD Investigator-Initiated Clinical Trials (PA-02-157); and NIDCD Clinical Trial Planning Grant (PAR-02-158)

Agency: NIH - NIDCD / Nat'l Inst. on Deafness & Other Communication Disorders

Identification: PA-02-157 and PAR-02-158

Deadline: Ongoing, with deadlines of February 1, June 1, and October 1, with a letter of intent requested 30 days prior to a deadline for the PA-02-157 applications.

In the NIH Guide of August 30, 2002, the NIDCD re-announced the availability of R01 grants to support "...phase III clinical trials related to disorders of hearing, balance, smell, taste, voice, speech and language." The program is described in an announcement in the NIH Guide. One item worth comment is that any application requesting more than \$500,000 in direct costs in any year will be converted into an application for a cooperative agreement (U01).

The NIDCD also has a program which funds clinical trial planning grants in the same fields, as described in PAR-02-158 in the same NIH Guide. Funding in this case is limited to \$100,000 for one year under the R21 (exploratory/developmental) mechanism. The purpose is to support a year of planning and development of the elements needed for a successful application for a phase III trial, including a complete manual of operations and procedures (MOP). For inquiries on either program contact A. Julianna Gulya, MD, Division of Extramural Research, at 301/435-4085; FAX: 301/402-6251. ▼

Title: Informal Caregiving Research for Chronic Conditions

Agency: NIH - NINR / National Institute of Nursing Research; NICHD / National Institute of Child Health and Human Development; and NIMH / National Institute of Mental Health

Identification: PA-02-155

Deadline: Ongoing, with deadlines of February 1, June 1, and October 1

As described in a Program Announcement (PA) published in the NIH Guide of August 30, 2002, the three institutes named above support research aimed at improving the science of informal care giving in order to improve "...caregiver health and quality of life, care giving processes, and care giving effectiveness and health outcomes." The PA continues, stating that "A key aspect of this announcement is to encourage research to advance science-based knowledge of informal care giving, with attention to the caregiver. Clinical research areas appropriate to this PA include studies: to improve the quality of informal care giving; to prevent or manage caregiver physical and mental health problems related to care giving; to reduce the burden of care giving; to test the effectiveness of advances in care giving processes, including new technologies; and to determine the impact of formal and informal support systems on care giving outcomes and care giving transitions/trajectories. Applicants should consider the feasibility of translation to practice and cost effectiveness for interventions tested." The PA discusses the background for this initiative, including the prevalence of care giving, the recipient populations, and the problems which lead to the necessity of care giving. A short list of references is included. A large portion of the PA is devoted to the "Research Scope" which includes discussions of a long list of examples of suitable research topics under this disparate group of headings: "Informal Care giving Populations", "Caregiver Abilities, Problem Solving, and Care Decisions", "Impact on Caregiver", and "Formal Health Care and Community Resources for Effective Care giving". Applicants may request funding via R01 or R21 (exploratory/developmental) awards, the latter limited to two (NINR and NICHD) or three (NIMH) years and to \$125,000 (NIMH) or \$150,000 (NINR and NICHD). Contact Dr. Nell Armstrong, Office of Extramural Programs, NINR, at 301/594-5973; FAX: 301/480-8260; Dr. Louis Quatrano, Behavioral Sciences and Rehabilitation Engineering, NICHD, at 301/402-4221; FAX: 301/

496-0832; or Dr. Emeline Otey, Division of Mental Disorders, Behavioral Research and AIDS, NIMH, at 301/443-1636; FAX: 301/443-4611. ▼

Title: NLM Small Grant Program

Agency: NIH - NLM / National Library of Medicine

Identification: PAR-02-148

Deadline: Ongoing, with deadlines of February 1, June 1, and October 1

The NLM supports an ongoing program providing small grants (R03) of up to \$75,000 per year in direct costs and two years in duration for research relevant to its mission. The program announcement (PA) for this initiative was published in the NIH Guide of August 16, 2002. It states that the research may be basic or clinical, conducted by new or more experienced investigators, including those transitioning from a postdoctoral to a faculty position. The following paragraphs from the PA give an overview of the types of research being encouraged:

"Critical research areas include: representation of medical knowledge in computers; organization and retrieval issues for image databases; enhancement of human intellectual capacities through virtual reality, dynamic modeling, artificial intelligence, and machine learning; medical decision-making; linguistic analyses of medical languages and nomenclatures; investigations of topics relevant to health information or library science; and bioinformatics issues relevant to genomics or other large research data-sets.

"Important informatics application areas include:

"Health Care Delivery and Clinical Medicine: e.g., patient safety; privacy, confidentiality, and information security; disaster management; disease management

"Public Health and Health Services: e.g., health promotion; outcome analysis

"Bioinformatics Research: genomics, proteomics; imaging; neuroinformatics".

Contact Susan Sparks, Ph.D., Extramural Programs, at 301/594-4882; FAX: 301/402-2952. ▼

Title: Biotic Surveys and Inventories (BS&I)

Agency: NSF - National Science Foundation

Identification: NSF 01-150

Deadline: Ongoing, with a deadline on the first Friday of each November

The Division of Environmental Biology, Directorate for Biological Sciences, of the NSF seeks each year to fund some 20 - 25 grants to support basic research and collection of biological specimens, the collections of which will contribute substantially to the knowledge of biological diversity in poorly known areas. The "Synopsis of the Program", quoted from the Program Announcement, available on the Internet at <<http://www.nsf.gov/pubs/2001/nsf01150/nsf01150.html>>, follows:

"The Biotic Surveys and Inventories Program supports basic research and collecting activities that are designed to discover and document the biological species diversity of all forms of life on Earth. The Program supports collecting, identifying, vouchering, and naming the biota of a substantial geographic region, including oceanographic areas, as well as expeditionary work to discover and describe biotic diversity in poorly known areas. Knowledge of species-level biodiversity provides the foundation for research in systematic and population biology, ecology, conservation and restoration biology, anthropology, physical geography, biological oceanography, paleobiology and other sciences. This basic knowledge is necessary for monitoring and assessing land-use patterns, global climate change, and the economic value of natural resources. Research projects may address any major group or groups of organisms, from terrestrial, freshwater, and marine environments, usually at landscape to regional scales or larger. Permanent, well-curated collections or cultures and Internet-accessible databases of information are expected as products of BS&I support."

Issues to be addressed in applications include taxonomic breadth, geographic scale, urgency, conceptual context, and the management plan. The announcement contains much specific information about the nature of the collections being encouraged and gives sources of special instructions relative to ocean-based surveys and surveys in foreign countries. It also stresses the importance of educational and outreach activities. Contact the Program Director, for Biotic Surveys and Inventories, Directorate for Biological Sciences, Division of Environmental Biology, at 703/292-8481. ▼


Title: Frontiers in Integrative Biological Research (FIBR)

Agency: NSF - National Science Foundation

Identification: NSF 02-154

Deadline: Preliminary proposal due by November 1, 2002, to be followed by a full proposal, due February 28, 2003; planning grants are due by November 12, 2002.

This program of the NSF's Directorate for Biological Sciences, described on the NSF Website at <http://www.nsf.gov/pubs/2002/nsf02154/nsf02154.htm>, is seeking proposals for grants to support "integrative" research attacking major questions in the biological sciences. Although much biological research utilizes integrative or interdisciplinary research this particular program seeks to support "...larger and more complex projects than would be funded by any single program." Groups of researchers interacting synergistically and employing diverse tools are expected to attack clearly defined and important questions. Specific mention is made of the areas of genomics, information technology, high throughput instrumentation, imaging and wireless technologies, sensors, and GIS. Note that the NSF does not support research that is directed toward problems of human disease. The "Synopsis of Program" portion of the announcement states "The Frontiers in Integrative Biological Research (FIBR) Program seeks to support integrative research which addresses major questions in the biological sciences. FIBR encourages investigators to identify major under-studied or unanswered questions in biology and to develop innovative approaches to address them by integrating the scientific concepts and research tools of biology, math and the physical sciences, engineering, social sciences and the information sciences. Applicants are encouraged to focus on the biological significance of the question, to describe the integrative approaches, and to develop a research plan, which is not limited by conceptual, disciplinary, or organizational boundaries. Particularly encouraged are the inclusion of young scientists trained in an interdisciplinary environment or in non-biological disciplines, and partnerships with minority serving and primarily undergraduate institutions and community colleges." When applicants are submitting full research proposals, they are required to submit, by the stated deadline, a preliminary proposal which will be reviewed by the NSF, leading to an evaluation upon which a further application is recommended or discouraged. The planning grants, due by November 12, 2002, are limited to \$50,000 for one year to support activities such as focused workshops or virtual meetings, development of management and research interactions, and activities

aimed at generation of proof of a concept under consideration. Contact the FIBR Program Officer, Division of Biological Infrastructure, at 703/292-8470; e-mail: biofibr@nsf.gov. 



NEUROLOGICAL DISORDERS

Title: Studies into the Causes and Mechanisms of Dystonia

Agency: NIH - NINDS / National Institute of Neurological Disorders & Stroke; NEI; NICHD; and NIDCD

Identification: PA-02-156

Deadline: Ongoing, with deadlines of February 1, June 1, and October 1

The four institutes identified above support research with the purposes of improving understanding of the causes of human dystonia, the consequences of these movement disorders, and potential therapeutic approaches to treating them. Support may be via R01, R21 (exploratory/developmental), or K (career development) awards. The Program Announcement (PA) for this initiative, published in the NIH Guide of August 30, 2002, discusses the prevalence of dystonia, the status of knowledge relative to its etiologies, and the particular interests of each participating institute of the NIH. It presents this list of examples of research areas being targeted:

- ◆ Identification of genetic factors and heritable mechanisms associated with dystonia, including new gene discovery, causes of variable penetrance, multigene interactions, and studies of other potential molecularly based disease-modifying factors
- ◆ Identification of proteins that interact with dystonia-related cellular factors (genes, proteins) and determination of their coordinated function
- ◆ Creation and characterization of animal models for studying the pathophysiological basis of dystonia, functional consequences, and potential therapeutic strategies
- ◆ Determination of the role of environmental factors in inducing cellular/neurophysiologic changes associated with dystonia and dystonia-related proteins
- ◆ Studies of abnormalities in both plasticity and motor learning mechanisms that are relevant to dystonias
- ◆ Development of improved diagnostic and prognostic techniques

- ◆ Studies into neurophysiological and imaging (e.g., fMRI and TMS) approaches
- ◆ Studies into the epidemiology of primary and secondary dystonia
- ◆ Therapeutic strategies in primary and secondary dystonia including both pharmacological and non-pharmacological interventions
- ◆ Studies into assistive devices, orthotics, and potential accommodations
- ◆ Studies into environmental risks that cause or exacerbate dystonia
- ◆ Studies into surgical interventions in dystonia
- ◆ Studies of non-motor components of dystonia
- ◆ Studies into the features of pain in dystonia, including how treating pain may affect the underlying disability
- ◆ Sensory components of dystonia including studies ranging from basic motor-sensory circuitry to dystonia therapy
- ◆ Studies contrasting the different phenotypes of dystonia (e.g., causes, onset, trajectory, affected muscle groups, levels of dysfunction, and other manifestations) in order to gain insight into the pathophysiological mechanisms
- ◆ Studies into mechanisms, causes, and treatments of dystonia that occurs as a disabling, secondary symptom in neurological diseases such as Parkinson's disease, Huntington's disease, tardive dyskinesia/dystonia, and other disorders

Four contacts are named, one from each institute. The first is Katrina Gwinn-Hardy, M.D., Program Director, Neurogenetics cluster, NINDS, at 301/496-5745; FAX: 301/402-1501. ▼

TRAINING & CAREER DEVELOPMENT

Title: NHLBI Career Transition Award (K22)
Agency: NIH - NHLBI / National Heart, Lung and Blood Institute
Identification: PAR-02-154
Deadline: Ongoing, with deadlines of February 1, June 1, and October 1

The NHLBI plans to make about five awards per year under this program which provides support to selected scientists embarking on academic careers as investigators in the basic and clinical sciences related to its programmatic areas of interest. These Career Transition Awards (K22) provide funds for salary and significant research expenses over a four-

or five-year period of research and research training. The first two or three years are to be spent pursuing research training with an established investigator in the NHLBI's Division of Intramural Research. The last two years provide support during two years of independent research to be conducted after the award recipient has obtained a tenure-track position in an academic or similar research institution. The latter position may be, but is not generally intended to be, at the NIH. The initial step involves the prospective awardee, with a scientific or clinical doctoral degree and some appropriate postdoctoral training, selecting a mentor or laboratory at the NHLBI and being accepted by the mentor. The major areas for intramural research at the NHLBI are identified in the Program Announcement (PA) for this initiative, published in the NIH Guide of August 30, 2002, which also contains instructions for identifying and contacting a suitable mentor along with other details of the program. The awards are for up to \$150,000 per year, divided about equally between salary support and research and training expenses in both the intra- and extramural phases. The stipend during the intramural phase is set, based on qualifications, by the NHLBI according to its salary structure, and the research support is paid to the laboratory under arrangements made by the mentor. Research on the project supported during the extramural phase must utilize at least 75% of the award recipient's professional effort. Contact, with respect to the intramural phase, Dr. Herbert M. Geller, Director, Office of Education, Division of Intramural Research, at 301/451-9440; FAX: 301/594-8133; or, with respect to the extramural phase, Beth Schucker, M.A., Division of heart and Vascular Diseases, at 301/435-0535; FAX: 301/480-1454. ▼

Title: NIDDK Career Transition Award (K22)
Agency: NIH - NIDDK / National Institute of Diabetes & Digestive & Kidney Diseases
Identification: PAR-02-151
Deadline: Ongoing, with deadlines each November 18th through November 18, 2004

In the NIH Guide of August 30, 2002, the NIDDK announced a program to provide advanced research training for scientists with a recent research or health-professional doctorate or equivalent who wish to pursue a career in an area of programmatic interest to the Institute; this special program provides support while the trainee conducts research under a mentor in an intramural laboratory at the NIDDK

and then during a period of independent research in an extramural location such as a university. The first phase, at the NIDDK, involves making suitable arrangements with an experienced scientist in the area selected for research. Those selected will be supported in the research effort and provided a salary appropriate under NIH standards for a period of three years. Those trainees judged successful in the intramural phase will then be eligible for a two-year period of support at an extramural institution at which the trainee has obtained a tenure-track position. During this extramural phase the trainee will receive annually up to \$75,000 in total or partial salary support plus up to \$100,000 in research support. The amounts may be increased in future years with the increases applicable to all trainees in the program at that time. It is possible, at the end of the intramural phase, for the trainees to pursue alternate paths, including additional training or tenure-track opportunities at the NIH. Applicants should have some postdoctoral research experience, enough to demonstrate potential, but not enough to have become independent investigators, usually no more than five years. The announcement of this program contains many more details, including statements of the general research opportunities at the NIDDK and suggestions for making the initial contacts with potential mentors there. Contact, for inquiries related to the intramural phase, Louis Simchowicz, M.D., M.B.A., Director, Office of Fellow Recruitment and Career Development, at 301/451-9808; e-mail: <ls347f@nih.gov>; or, for inquiries on the extramural phase, Judith Podskalny, Ph.D., Program Director for Training and Career Development, at 301/594-8876; FAX: 301/480-8300.




Title: NINR Mentored Research Scientist Development Award for Minority Investigators

Agency: NIH - NINR / National Institute of Nursing Research

Identification: RFA: NR-03-001

Deadline: December 16, 2002, with letter of intent requested by November 15, 2002

This RFA, published in the NIH Guide of August 30, 2002, invites applications for Mentored Research Scientist Development Awards (K01) from members of racial or ethnic groups underrepresented in the biomedical and behavioral sciences who wish to pursue a period of up to three years of research under an established mentor conducting research relevant

to the mission of the NINR as preparation for a career in nursing research. The purposes of this program, as stated in the RFA, are to: (1) foster the development of independent investigators in nursing research on the faculties of TMBIs [Traditionally Minority Based Institutions] and majority academic institutions; (2) stimulate nursing research and nursing research training at these institutions; and (3) encourage the development of qualified minority nurse investigators in academic research settings who can become effective role models for minority students." Applicants must be full time faculty members in tenure-track positions, have a research or health-professional doctoral degree, have a license as a Registered Nurse, and have secured the commitment of a suitable mentor at the applicant's institution or elsewhere. The awardee must spend at least 75% of his or her professional effort on the research and research training encompassed as the program for the award. The program must include an appropriate research project and additional training designed to develop knowledge and skills needed for a career in nursing research. The awards include up to \$50,000 per year for salary support plus \$20,000 for training and research expenses. Contact Janice Phillips, PhD, RN, FAAN, Office of Extramural Programs, at 301/594-6152; FAX: 301/480-8260. 

Title: NINR Career Transition Award

Agency: NIH - NINR / National Institute of Nursing Research

Identification: RFA: NR-03-002

Deadline: December 16, 2002, with letter of intent requested by November 15, 2002

The NINR seeks applications from registered nurses, who have recently received the Ph.D. degree and who plan to pursue a career in research, for this program which provides support for a period of up to three years of mentored research experience at the NIH followed by support during the first two years of research as an independent investigator in an extramural, usually academic, position. An applicant must first arrange for the intramural period at the NIH by identifying, contacting, and agreeing on the NIH site and project for this period of 100% research. The RFA for the program, published in the NIH Guide of September 6, 2002, gives some detailed information about Websites and other sources of information useful in finding a suitable sponsor at the NIH. These awards are funded via the Career Transition (K22)

mechanism. They provide up to \$125,000 per year for five years. The funds during the first three years are to offset the costs, including salary for the trainee, provided by the laboratory or other facility at the NIH. During the two-year extramural phase of the award, up to \$50,000 for salary, as set by the extramural institution, is provided plus up to \$75,000 for research expenses, including expenses for appropriate travel. At least 75% effort must be spent on the research project during this period. This extramural phase, probably in a beginning tenure-track position, is to be arranged by the award recipient toward the end of the period of research at the NIH. It is anticipated that three awards will be made in the program during this fiscal year and that the program will also be supported in future years. Contact, for information on the intramural phase, Melinda M. Tinkle, PhD, RN, Intramural Program Director for Research and Training, at 301/402-7889; FAX: 301/480-2479; or, for information on the extramural phase, Hilary D. Sigmon, PhD, RN, Program Director, at 301/594-5970; FAX: 301/480-8260. ▼

Title: Postdoctoral Research Fellowships in Interdisciplinary Informatics
Agency: NSF - National Science Foundation
Identification: NSF 98-162
Deadline: November 4, 2002

This fellowship program, a joint one of the Directorate for Mathematical and Physical Sciences (MPS) and the Directorate for Biological Sciences (BIO), supports postdoctoral research and training in biology and informatics for recent doctoral recipients in biology, chemistry, physics, mathematics, statistics, computer science, and other fields. They are expected to work under the supervision of an established scientist, to teach, and to broaden their scientific horizons. The fellows must work in an institution different from the site of their Ph.D. training and under a different mentor. Applicants are encouraged to seek suitable foreign sites for this postdoctoral training. The following statements, from the Program Announcement on the Internet at <<http://www.nsf.gov/pubs/1998/nsf98162/nsf98162.htm>>, define the requirements with respect to research activities:

"Applicants for the fellowships must propose leading-edge research in biology, include a strong linkage between information/computational science and biology, and develop and/or apply leading-edge

informatics/computational tools or approaches to the stated biological problem. Applications are expected to address how the research will advance the field and to be characterized by one or more of the following:

"o Integrate or synthesize disciplines from biology (broadly defined) and information (computer sciences, mathematics, statistics) sciences.

"o Make innovative use of existing technology and/or mathematical/statistical techniques.

"o Involve large quantities of data.

"o Be based on empirical data, usually already available. If additional data are needed, it is clearly explained why and how they would be collected.

"o Define and leverage existing methods and tools, or identify the needed expertise when method or tool development is proposed.

"Applications that do not fall within this guidance will be returned without review.

"Applicants are reminded that NSF does not support research with disease-related goals..."

The fellowships are for two years, with an additional year possible when at least one year has been spent abroad. The total annual budget for a fellowship is \$50,000, consisting of a monthly stipend of \$3,000; an annual allowance of \$9,000 for research support, including travel, this budget controlled by the Fellow; and \$5,000 to the host institution to support the fellow and research activities. It is noteworthy that the NSF also supports "Research starter grants" of up to \$50,000 for the first year of an academic appointment after a fellowship period, this grant requiring, a 2:1 match by the institution. It is anticipated that about 35 fellowships will be awarded in the Informatics program this coming year. Contact Carter Kimsey (BIO), Program Manager, at 703/292-8470; e-mail: <ckimsey@nsf.gov>; or C. Denise Caldwell (MPS), Program Director, at 703/292-7371; e-mail: <dcaldwel@nsf.gov>. ▼ ▼



Have you visited the Research Bulletin Board?

The Research Web Site hosts a new bulletin board for the MUSC research community. To visit the bulletin board from the MUSC Main Page, simply click on "Research" on the left side of your screen, then click on "bulletin board" in the top right sector. Feel free to post questions, job openings, inquiries about technologies or expertise. The intent is to provide a site where members of the MUSC research community at all stages of training and in any area of interest can develop a spontaneous forum to exchange information, swap resources or advertise a need or interest.



Institutional Support for Research through the URC (University Research Committee)

The University provides support to strengthen the research capabilities of the faculty and to provide research training for residents interested in pursuing an academic career. Additional information and questions may be directed to the Office of Research and Sponsored Programs at 792-3838.

Deadline, Review and Funding Dates

Institutional Application	Deadline Resident Application	Interim Funding Request	Review Decision by	Funding Dates
April 1	April 15	May 1	June 15	July 1
August 1	August 15	September 1	October 15	December 15
December 1	December 15	January 2	February 15	April 1

NIH STANDARD RECEIPT DATES AND REVIEW AND AWARD CYCLES

TYPES OF APPLICATIONS

Institutional National Research Service Awards*
 All Academic Research Enhancement Awards, except those involving AIDS-related research
 New Research Grants, Conferences, and Research Career Awards.
 All Program Project* and Center Grants* (New & Revised)
 Interactive Research Project Grants
 Competing Continuation, Supplemental, and Revised Grants
 Individual National Research Service Awards (Standard)**
 All AIDS-Related Grants

CYCLE I

January 10
 January 25
 February 1
 February 1
 February 15
 March 1
 April 5
 May 1

CYCLE II

May 10
 May 25
 June 1
 June 1
 June 15
 July 1
 August 5
 September 1

CYCLE III

September 10
 September 25
 October 1
 October 1
 October 15
 November 1
 December 5
 January 2

Scientific Merit Review	June-July	Oct-Nov.	February-March
Advisory Council Review	Sept-Oct	Jan-Feb	May-June
Earliest Project Start Date	December	April	July

*For these specialized grant applications, consult with the appropriate PHS awarding component prior to the preparation of an application, particularly if the requested budget exceeds \$500,000.

**The National Research Service Award Individual Predoctoral Fellowships for Minority Students and Students with Disabilities have special receipt dates.

Receipt Date Policy

- * An unsolicited, investigator-initiated application is considered on time if it is either (1) received by or (2) mailed on or before the published receipt date and a proof of mailing is provided. Proof of timely mailing consists of a legibly dated U.S. Postal Service postmark or a dated receipt from a commercial carrier or the U.S. Postal Service. Private metered postmarks are not acceptable. This policy also applies to unsolicited AIDS-related applications and to AREA applications.
- * Solicited applications and proposals must be received by the specified date. However, an application received after the deadline may be acceptable if it carries a legible proof-of-mailing date assigned by the carrier and the proof-of-mailing is not later than one week prior to the deadline date. Solicited applications include those in response to Requests for Applications (RFAs); Program Announcements (PAs) with specified receipt dates (dates other than the standard ones specified in the chart below), such as Small Business Innovation Research (SBIR), and Small Business Technology Transfer (STTR); and Requests for Proposals (RFPs).
- * Starting Nov. 13, 2001, NIH will no longer accept hand-delivered applications to the Center for Scientific Review. All applications and other deliveries to the Center for Scientific Review must either come via courier delivery or the USPS.
- * When a receipt date falls on a weekend or holiday, the receipt date will be the following business day.

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