

R E S E A R C H

# INKlings

Nov / Dec 2000 • Medical University of South Carolina • Volume IX • No 11 & 12

## 35th annual MUSC Student Research Day was the best ever!

On Friday, November 3<sup>rd</sup>, the 35<sup>th</sup> annual MUSC Student Research Day took place, featuring research conducted on the MUSC campus. This unique opportunity provides a forum for students, postdoctoral fellows, residents and clinical fellows to exhibit their work, either with an oral presentation or a poster. The 2000 Student Research Day (SRD) included 98 oral and 109 poster presentations by a total of 197 participants. SRD provides a wonderful opportunity for those who participate, as well as giving the entire MUSC community a chance to learn of the diverse and impressive research accomplished here on campus by students of all levels and areas of study.

A panel consisting of faculty and alumni judges the entries. Prizes were awarded to first and second place winners in each of the 22 sessions. Student Research Day is a valuable preparatory experience for young researchers, as they present in a similar format to that of a regional or national conference. Judges provide valuable insight and criticism to the presenters as they carefully browse through poster sessions and attend the oral presentations. Students learn from the effort of presenting as well as from the feedback of these accomplished scientists.

A highlight of the day is the keynote lecture given. Dr. Steven Projan of Wyeht-Ayerst Research was the keynote speaker for this year's SRD, delivering a lecture entitled: "Bacterial Virulence as a Target for Drug Discovery: Will there be a Kinder and Gentler Approach to Antibacterial Therapy?"

Student Research Day is sponsored both corporately and institutionally. Sponsors for this year include the deans of the six colleges, the president, the provost/vice president for academic affairs, the Graduate Alumni Association, the Graduate Student Association and the MUSC Library. Corporate sponsors include Glaxo-Wellcome Eli Lilly and Novartis.

For information on the 2000 Student Research Day participants and winners, please visit the Student Research Day website; <[www2.musc.edu/Graduate/Careers/2000SRDfolder/2000dwgen\\_info.htm](http://www2.musc.edu/Graduate/Careers/2000SRDfolder/2000dwgen_info.htm)>

## 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.

## Office of Research Development welcomes Melissa Matthews

Melissa Matthews joined the Office of Research Development on October 27<sup>th</sup> as administrative assistant and office coordinator. A graduate of the University of Tennessee – Chattanooga, Melissa has excellent experience in the research arena, having worked at MUSC in the Division of Cardiothoracic Surgery Research and previously in Washington, DC with an agency developing grants for aid to developing countries. Among her first contributions in her new role is writing copy for this newsletter. Please join us in welcoming Melissa to our office!



## Working drafts of the human genome sequence are available online

The International Human Genome Sequencing Consortium has made known several electronic sites where the public working draft version of the human sequence can be found in its most usable forms. Many investigators are still not aware of this information. The NHGRI recently sent out a letter to all NIH staff publishing this information and encouraging all members of the scientific community to make use of it. The three sites listed below are all different, yet complementary, assembled views of the human genome. Please make note.

**University of California at Santa Cruz** - <<http://genome.ucsc.edu/>>

**National Center for Biotechnology Information (NCBI)** - <<http://www.ncbi.nlm.nih.gov/genome/guide/>> - and click "Map Viewer"

**European Bioinformatics Institute (EBI)** - <<http://www.ensembl.org/>>

*Source: Broadcast Mail, November 2, 2000* 

---



## Will New PTO Guidelines raise problems for biomedical researchers?

The U.S. Patent and Trademark Office (PTO), along with the Office of Management Budget (OMB), is in the process of finalizing new description and utility guidelines for assessing whether applicants' inventions, products and processes are patent-worthy. The biomedical research community will be affected most significantly by guidelines regarding the utility or "usefulness" of a product or process. The new policy on this field may present applicants with a much tougher test. The old test, used by PTO examiners until 1998, required only that the invention be both "specific" and "credible."

Under the new guidelines, the test is three-pronged. Applicants are required to demonstrate:

- ◆ That the product or process has a utility that is "specific to the subject matter claimed" as opposed to a "general utility" that would be applicable to the broad class of the invention;
- ◆ That the utility has "a real world use," and is not merely a research implement for further research; and
- ◆ That the utility is "substantial," defined in the new guidelines as "both a therapeutic method of treating a known or newly discovered disease and an assay method for identifying compounds that themselves have a substantial utility."

One example of change will be seen in applicants who try to bolster their claims with "throw away" utilities (i.e. use of transgenic mice as food for lab animals, as this is not a "real world context of use.") These applicants may be surprised by having their claims rejected.

John Doll (PTO's director of biotechnology) speculates that the new guidelines may very well face a court challenge. In fact, he says a company whose application was denied by the PTO under the new utility standard has already agreed to be a "test case." If turned down by the Office's internal appeals board, the company will appeal to the Court of Appeals for the Federal Circuit. Theoretically, the matter could then go all the way up to the Supreme Court for final decision.

"It's always a close call when you talk about utility, whether it's a genome or pharmaceutical industry application. Congress makes the laws and we try to interpret them to the best of our ability." Regarding the raising of the bar, the PTO has taken the conservative position, says Doll.


*Source: Washington Fax, November 2, 2000* 

---



## MUSC Receives a Copy of Moyers On Dying Series

Marilyn Schaffner, of MUSC, was invited to participate in the first Leadership Academy in End-of Life Care Conference. This group includes 22 national specialty nursing organizations representing over 450,000 nurses. The aim of the Academy is to identify nurses who are most likely to implement changes within their specialty to improve the care of dying patients and advance the field of palliative care.

PBS recently aired a four part series, Moyers On Dying. This entire nationally acclaimed series has been given to MUSC from Project on Death in America, one of the largest foundations advocating work to support palliative and supportive care. This gift is a result of Marilyn's participation in the Academy's first conference. These tapes will be available through the office of Winnie Hennessy, Palliative Care Coordinator at the Hollings Cancer Center: 792-3542. Please call Winnie to get information or express your interest in facilitating group discussions with the tapes. 

---

## NCI announces a new directory of research tools and services for cancer researchers

The National Cancer Institute (NCI) recently introduced the NCI Research Resources website (<http://cancer.gov/resources>). This one-of-a-kind directory has over 100 entries, including specimen banks, datasets, computer software, repositories of chemicals, and more. The NCI Research Resources website is integral to NCI's commitment to provide basic, clinical and epidemiological researchers with tools and resources to facilitate cancer research. These NCI-developed products and services are available without extensive negotiations or intellectual property issues. The NCI Research Resources website was developed to improve access to these resources and to promote their use by the scientific community.

### **Inquiries regarding NCI Research Resources website may be directed to:**

Samir Sauma, Ph.D.

**Telephone:** 301-402-7518

**FAX:** 301-496-7807

**Email:** [saumas@mail.nih.gov](mailto:saumas@mail.nih.gov)

*Source: NIH Guide, October 27, 2000*

---

## DOE lab sequences genomes of 15 bacterial organisms in one month

In their first genome "marathon," held in October, scientists at the Department of Energy's Joint Genome Institute (JGI) successfully completed high-quality draft sequences of 15 bacterial genomes. That amounts to more than one genome for every one and a half working days, involving a significant amount of data, a diverse set of organisms and a new sequencing approach. Consequently, only two dozen complete bacterial genome sequences have been published so far. Information is quickly made accessible to biologists, however, by publishing a high quality draft at 95% completion, as opposed to delaying until the sequence is finished.

The decision to sequence more than a dozen organisms in just one month came after JGI completed working-draft sequences of human chromosomes 5, 16, and 19 in April of this year and then, just three weeks later, completed a working draft of the "superbug" in the equivalent of a single working day. JGI intends to convene a group of principal biological researchers as soon as possible, in order to gain insight from the experts within the fields of each individual organism. Comparing the genomes of many and various organisms will provide a unique perspective. Two future marathons have already been scheduled for March and August of 2001. The organisms to be sequenced have not yet been chosen. The positive results from October will hopefully incite researchers to nominate subjects of their own research.

**For the latest sequencing information from JGI's first sequencing marathon, visit:** [http://jgi.doe.gov/JGI\\_microbial/html/](http://jgi.doe.gov/JGI_microbial/html/)

*Source: Washington Fax, November 13, 2000*

---

## USC will host a workshop on the Ecology of South Carolina Cities

Dr. Kirstin Dow, of the Department of Geography at University of South Carolina (USC), is organizing a small, interdisciplinary workshop to bring together researchers and specialists with an interest in the human, technological, and natural processes that contribute to the unique ecology of cities. The purpose of this workshop is to incorporate the thoughts and insight of people from a variety of disciplines into an edited volume on the human role in shaping the ecology of South Carolina cities.

The workshop will be March 26-27, 2001 at the Daniel Management Center at USC. The regional focus is intended to acknowledge the unique character of Southern cities and to take advantage of available expertise on South Carolina. This effort is supported by the Sustainable Universities Initiative (SUI) and is associated with the national Ecological Cities Project based at the University of Massachusetts - Amherst. Attending will be the Director of the Ecological Cities Project, Dr. Rutherford Platt.

**More information on the Shaping the Ecology of a City Workshop is available through the SUI website:** <http://www.sc.edu/sustainableu/EcologyConferenceIntro.htm>

**The deadline for receipt of registration and initial abstracts is December 15<sup>th</sup>.**

Dr. Kirstin Dow - Department of Geography - University of South Carolina  
(803) 777-2482 ([Kirstin-Dow@sc.edu](mailto:Kirstin-Dow@sc.edu))

---

## **Federal funding for nanotechnology research will increase dramatically in FY2001**

When the ink dries on the federal budget for FY2001, one of the clear winners will be nanotechnology research. The President's budget proposed last spring included \$495 million, an increase of 83 %, for the National Nanotechnology Initiative (NNI), funded through multiple agencies. Nanotechnology, broadly defined as a science of miniaturization, involves research in various fields such as chemistry, physics, biology, medicine and engineering.


Established in January 2000 by President Clinton, NNI seeks to stimulate research and development on the nanoscale level—a billionth of a meter. One nanometer is the size of a single water molecule, ten times smaller than the diameter of a human hair, or 100 times smaller than a virus.

The National Science Foundation expects to receive the lion's share of the increased NNI funding, with an award of \$150 million to be spread across several of the agency's directorates. This is a 55% increase over the \$97 million NSF spent on nanotechnology in FY 2000.

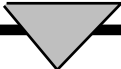
Five agencies will divide the remainder of the award: Department of Defense, \$110 million; Department of Energy, \$93 million; NASA, \$21 million; National Institutes of Health, \$39 million; and the Department of Commerce, \$10 million. (Some of these figures won't be official until the appropriate funding bills are completed, possibly the week of December 4, when Congress returns.)

The potential applications of nanotechnology range into almost every conceivable domain. In transportation, a goal is to develop materials about seven times lighter than metal that can be used to build highly fuel-efficient air and land vehicles, conserving fossil resources and producing far less pollution. The defense industry imagines tiny biosensors to combat chemical warfare; a sensor that detects anthrax and tuberculosis is currently in commercial development. The medical field looks forward to enhanced gene and drug delivery systems powered by nanofabricated devices along with new technology that will allow cancers to be rooted out when only a few cells in size. And environmentalists await the ability to detoxify water and soil with chemicals they can bind to pollutants and whisk away.

To see how quickly the field of nanotechnology is expanding, go to *the Virtual Journal of Nanoscale Science & Technology* at <<http://www.vjnano.org>>. An NSF fact sheet on nanotechnology is available at <<http://www.nsf.gov/od/lpa/news/media/2000/fsnano2001.htm>>.

*Source: Washington Fax, November 22, 2000* 

---



## **Office of Laboratory Animal Welfare Notice of Management and Technology Conference**

### **CONFERENCE 2001**

The NIH Office of Laboratory Animal Welfare (OLAW), Office of Extramural Research, along with the University of Tennessee Health Science Center, Meharry Medical College, the American Association for Laboratory Animal Science, and the Laboratory Animal Management Association, will cosponsor a conference on Laboratory Animal Management and Technology, February 10-13, 2001, in Memphis, Tennessee.

The conference will focus on the management and technology needs of the laboratory animal science community, emphasizing information pertinent to the day-to-day management of laboratory animal facilities and career development for managers, directors, and administrators. The meeting is open to anyone involved in the field of laboratory animal science, including institutional administrators, members of Institutional Animal Care and Use Committees, laboratory animal veterinarians, investigators, researchers, regulatory personnel, managers, supervisors, and other staff who are responsible for laboratory animal care and use programs.

#### **The conference web site is available at:**

<[http://www.aalas.org/education/meetings/MT\\_Conference/MT\\_Conf-index.htm](http://www.aalas.org/education/meetings/MT_Conference/MT_Conf-index.htm)>

#### **For additional information contact:**

Carol Wigglesworth

**Phone:** 301-402-5913

**Email:** carol\_wigglesworth@nih.gov

*Source: NIH Guide, November 10, 2000* 

---

## R E S E A R C H

## Opportunities &amp; Deadlines

## AGING

**Title:** Research and Public Education on Diseases and Disorders of the Elderly

**Agency:** HCR Manor Care Foundation

**Identification:** none

**Deadline:** none

The HCR Manor Care Foundation offers grants in the range of \$5,000 - \$50,000 to organizations for the support of research and public education related to problems of the elderly. The goals are to help innovative senior care programs of nonprofit organizations, to support research in the treatment of diseases and disorders of the elderly, and to provide information to help seniors and their families cope with problems related to diseases. Preference in funding is given to organizations in areas where HCR Manor Care Corporation has operations; this includes the Charleston area. The Foundation has a website at <<http://www.hcr-manorcare.org>>. Contact Jennifer Steiner, Executive Director, at 419/252-5989; FAX: 419/252-5521. ▽

## AIDS

**Title:** Microbicide Preclinical Development Program

**Agency:** NIH - NICHD / National Institute of Child Health & Human Development; and NIAID / National Institute of Allergy and Infectious Diseases

**Identification:** RFA: HD-00-018

**Deadline:** March 30, 2001, with letter of intent requested by December 18, 2000

These two institutes of the NIH are seeking applications for program project grants (P01) to support research related to late stages of preclinical and early stages of clinical research on agents of putative use in the prevention of sexual transmission of HIV-1. The following quotation from the "Purpose" included in the RFA states: "For the purpose of this RFA, all novel microbicides for prevention of sexual transmission of HIV-1 that are based on virus inactivation or prevention of viral infection of susceptible cells will be termed 'microbicides.' The preclinical activities supported through this RFA will target both new agents and products already identified as having potential for microbicide development. The program project grants funded through this initiative will be established to advance the development of novel microbicides with or without contraceptive activity. Each program project will consist of: (1) a Principal Investigator, who is responsible for the scientific and administrative aspects at his/her institution, including

the Administrative Core; (2) three or more independent Research Projects, each directed by a Project Leader; and (3) Support Core(s) directed by Support Core Leader(s) that provide essential facilities or services to the Research Projects." It is anticipated that six to eight awards will be made, with the upper limit for the first year of support generally being \$750,000; the period of support may be up to four years. The interaction of academic and industrial organizations is encouraged under this initiative, which is seeking novel or under-investigated agents for vaginal or rectal use. The RFA presents a short list of the categories of agents of potential interest, as follows:

"a. products that interfere with binding, membrane fusion and/or entry of HIV such as small peptides or monoclonal antibodies;

"b. inhibitors of HIV replication previously developed as therapeutic products, such as non-nucleoside reverse transcriptase inhibitors, small peptides or organometallic complexes;

"c. naturally occurring antimicrobial inhibitors such as magainins, defensins, protegrins and secretory leukocyte protease inhibitor;

"d. adhesion and aggregation products that adhere to cell surfaces rendering them impervious to infection or interact with receptors on multiple virus targets resulting in viral aggregates with resulting loss of infectivity;

"e. other novel approaches."

The RFA also discusses some of the possible types of models for the preclinical investigations, including in vitro and in vivo systems, possible using genetically modified organisms for delivery of the microbicides and for assessing efficacy. An interesting example of three inter-related research projects is the following: "transgenic production of monoclonal antibodies, evaluation of the activity of the monoclonal antibodies, and distribution of labeled monoclonal antibody in the mouse vaginal model."

Contact, for investigations involving agents with potential contraceptive activity, Patricia Reichelderfer, Ph.D., Contraception and Reproductive Health Branch, NICHD, at 301/496-1661; FAX: 301/480-1972; and, for agents known to lack contraceptive activity, Roberta Black, Ph.D., Vaccine and Prevention Research Program, Division of AIDS, NIAID, at 301/496-8199; FAX: 301/402-3684. ▽

## BEHAVIORAL SCIENCES

**Title:** Behavioral Science Track Award for Rapid Transition (B/START) - NIDA

**Agency:** NIH - NIDA / National Institute on Drug Abuse

**Identification:** PAR-01-014

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

October 1

NIDA has a program to support newly independent investigators in the behavioral sciences who wish to conduct behavioral studies related to drug abuse. The awards under the program are designated as B/START awards, a special category of R03 (small grant) awards, limited to one year of support with a budget of no more than \$50,000 in direct costs. Applicants must be beyond their training period when applications are submitted, independent of a mentor at the beginning of the award, but not be more than five years beyond training status. They cannot have been recipients of major grants from any federal source. The announcement of this program, published in the NIH Guide of November 10, 2000, delineates the field of research being targeted as follows: "All areas of behavioral research related to drug abuse are sought under this announcement including (a) animal and human basic behavioral and cognitive research aimed at elucidating underlying behavioral and cognitive mechanisms, determinants and correlates of drug abuse, and characterizing the consequences of drug abuse and addiction; (b) research incorporating neural and other biological approaches if the research has a primary focus on behavior or cognition; (c) drug abuse epidemiology, risk and protective factors, prevention, treatment, and drug abuse services; and (d) behavioral as well as cognitive research directed at the relationship between drug abuse and HIV/AIDS and other infectious diseases." The announcement continues with a list of 16 more specific categories of research, given as examples. Contact Cora Lee Wetherington, Ph.D., Division of Neuroscience and Behavioral Research, at 301/435-1319; FAX: 301/594-6043. ▼

---

**Title:** Design, Measurement, and Statistical Analysis in Mental Health Research

**Agency:** NIH - NIMH / National Institute of Mental Health

**Identification:** PA-01-018

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

The NIMH encourages the submission of R01 and R03 (small grant) applications to support research on aspects of the design, measurement, and statistical challenges inherent in health services research in the mental health arena. A clear objective is to help build the infrastructure by encouraging statisticians and investigators with related expertise and interests to enter the field of mental health research. The small grant program has some special rules and limits which require that prospective applicants for such awards contact a staff member at NIMH, usually the one identified below as the contact. The Program Announcement for this initiative describes the status of research efforts in this area and presents the following brief descriptions of topics considered as examples of appropriate research projects:

"o Studies focusing on the development and refinement of

instruments and procedures for assessing both stable and unstable characteristics of individuals (e.g., psychopathology, mental disorder, positive/adaptive personality functioning) and environments (e.g., stressful and supportive conditions of home, workplace, social networks, service systems), with particular attention to psychometric indices of reliability and validity, including susceptibility to response bias, gender differences, cultural relevance, and applicability to diverse study populations

"o Studies examining the effects of multiple administrations of measures/procedures over time on the reliability, validity, and interpretability of responses relative to the construct or phenomenon under study

"o Research concerning the development of new or improved data analytic strategies for handling the difficulties and challenges encountered in analyzing data from longitudinal studies

"o Research assessing the relative utility of assessment batteries and protocols, including their cost and ease of administration, acceptability to respondents, and usefulness in advancing the knowledge base

"o Research on the applicability to mental health research of methodologies and analytic strategies such as decision analysis, meta-analysis, diary studies, and ethnography

"o Research to develop design, assessment, and data analytic methods that address the shortcomings, for clinical decision making, of sample-based statistical conclusions

"o Studies bearing on the use and/or combination of data from multiple informants, including attention to (1) individual characteristics and environmental context, and (2) how the influences of these factors change as a function of the nature of the information reported

"o Studies of the reliability and validity of instruments in multiple outcome domains particularly for understudied populations, e.g., severely mentally ill persons who are homeless, minorities, rural residents, and severely emotionally disturbed children

"o Research assessing the relative utility, including costs and ease of administration, of various packages of instruments to assess mental health outcomes and to assess and predict costs of care."

Contact Ann A. Hohmann, Ph.D., M.P.H., Division of Services and Intervention Research, at 301/443-4235; e-mail:

<ahohmann@nih.gov>. ▼

---

**Title:** Developing Translational Research in Behavioral Science

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

**Identification:** RFA: MH-01-005

**Deadline:** April 11, 2001, with letter of intent requested by February 11, 2001

As stated in the RFA these two institutes "...seek to encourage the development of collaborative partnerships between scientists who study basic behavioral processes (e.g., cognition, emotion, decision, making, social networks, culture) and those who study

the etiology, diagnosis, treatment, and prevention of mental and behavioral disorders (including drug abuse and addiction) and the delivery of services to those suffering from those disorders. NIMH and NIDA are issuing this Request for Applications (RFA) as a catalyst for a major, long-term commitment to (a) encourage the systematic translation of basic behavioral theory, methods, and findings into research designed to reduce the burden of mental illness and behavioral disorders and (b) encourage basic behavioral scientists to seek a further understanding of behavioral processes through an exploration of how those processes are altered by mental and behavioral disorders. This RFA was developed in response to a report written by the National Advisory Mental Health Council's Behavioral Science Workgroup, entitled 'Translating Behavioral Science into Action,' <<http://www.nimh.nih.gov/tbsia/tbsiatoc.cfm>>.

"This RFA contains three mechanisms to support varying types of translational research partnerships: (1) networking grants for the initiation of research partnerships; (2) developmental grants for the initial instantiation of translational research projects; and (3) research project grants for single and multisite translational research projects."

Funding will utilize either R21 (exploratory/developmental) awards, R01 awards, or Collaborative R01 awards. A total of about \$3,000,000 has been set aside for the first year of support of awards under this initiative. R21 applications may request up to three years of support at up to \$150,000 or \$175,000 (consortium) per year for a networking grant, five years and \$350,000 per year for a developmental grant. The RFA describes in some detail the general characteristics expected of all these awards and the specific characteristics of the "Networking R21 Grants", the "Grants for Translational Research Development", and the "Translational R01 Grants." Each type requires a minimum of two investigators, one a basic scientist, usually a behavioral one, and one a clinical or services scientist. The following is a list of examples of suitable topics of research identified in the RFA:

- "o Research pertaining to the factors that maintain the engagement of patients with treatments for mental disorders, including drug abuse or addiction, whether psychosocial or pharmacologic
- "o Studies of cognitive, attentional, and/or emotional processes in attention-deficit/hyperactivity disorder
- "o Research devoted to an understanding of the nature of specific functional deficits in mental or drug abuse disorders (e.g., deficits in attention, memory, emotion-regulation, social interactions and relationships), and development of targeted interventions for rehabilitation and relapse prevention
- "o Research regarding neurocognitive and emotional functioning related to severely disabling mental disorders or drug abuse, such as schizophrenia, bipolar illness, depression, and addiction
- "o Studies of cultural factors involved in the diagnosis, prevention, treatment, and delivery of services in mental disorders, including drug abuse and addiction
- "o Research regarding behavioral and neurodevelopmental factors in disorders characterized by impaired affiliative behavior and social functioning such as autism and schizophrenia

"o Studies of decision making as it affects the behavior of patients and providers in mental health or drug abuse services settings" Contact Bruce N. Cuthbert, Ph.D., Adult Psychopathology and Prevention Research Branch, Division of Mental Disorders, Behavioral Research, and AIDS, NIMH, at 301/443-3728; FAX: 301/443-4611; Lisa Onken, Ph.D., Behavioral Treatment Development Branch, Division of Treatment Research and Development, NIDA, at 301/443-0107; FAX: 301/443-8674; or Herbert Weingartner, Ph.D., Behavioral Sciences Research Branch, Division of Neuroscience and Behavioral Research, NIDA, at 301/443-1263; FAX: 301/594-6043. ▽

**Title:** Broad Agency Announcement: U.S. Army Research Institute for Behavioral and Social Sciences's Basic Research Program

**Agency:** U.S. Army

**Identification:** DASW01—01-K

**Deadline:** February 21, 2001

The Research and Advanced Concepts Office of the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) is seeking proposals for the support of fundamental research in behavioral science the results of which might be relevant to the development of new behavioral technologies capable of improving the effectiveness of Army personnel and their units. Investigations of purely physiologic mechanisms or psychopathology cannot be considered, but neuroscience approaches to memory, cognition, and personality are not excluded. The areas of the Army's activities to which the results of this research may be applicable are identified in the announcement which was published in the Commerce Business Daily of October 16, 2000, and are briefly discussed there. Under the heading "Basic Research—Training" mention is made of approaches to improved understanding and studies of various training methodologies including videoconferencing, simulations, virtual whiteboards, and team learning. Research of potential relevance to recruiting is another category; included are studies bearing on the making of choices and the role of the changing nature of the Army. Research of potential value in the improvement of leadership is another category discussed. A fourth broad category is research on "Social Structures Affecting Army Performance". Under this program research projects of up to three years in duration may be supported, although a special interest in shorter projects, even as short as six months, is expressed. "Short-term, small-scale efforts in high-risk/high-gain areas are also welcome", and options for further support based on preliminary findings may be proposed. Multidisciplinary and multi-institutional efforts are acceptable. This announcement is on the Internet at <<http://207.133.209.51/baa01.html>>. Contact Dr. Michael Drillings at 703/617-8641; e-mail: <[drillings@ari.army.mil](mailto:drillings@ari.army.mil)>; or Dr. Jonathan Kaplan at 703/617-8828; e-mail: <[kaplan@ari.army.mil](mailto:kaplan@ari.army.mil)>. Communications by e-

mail are generally preferred. The ARI web page is accessible at <http://www-ari.army.mil>.

## CANCER

**Title:** Correlative Studies Using Specimens from Multi-Institutional Prevention and Treatment Trials

**Agency:** NIH - NCI / National Cancer Institute

**Identification:** PA-01-015

**Deadline:** Ongoing, with deadlines of February 1, June 1, and October 1, with letter of intent requested four weeks prior to the deadline

NCI's Cancer Therapy Evaluation Program and Cancer Diagnosis Program are encouraging the submission of R01 or R21 (exploratory/pilot) grant applications to support research which is directed toward performing clinical translational research on predictive and prognostic markers of potential usefulness in cancer risk assessment, early detection, prognosis, and for predicting response to therapy and to prevention interventions. NCI encourages the use of tissue specimens from the NCI Clinical Trials Cooperative Groups or other large multi-site treatment and prevention clinical trials which have extensive data on subjects and outcomes. Collaborative efforts between groups with promising markers and those with clinical specimens and data are encouraged. If ongoing arrangements are not already established the NCI invites those with putative markers to seek collaborators using the Cancer Diagnosis Program website at <http://www.specimens.ims.nci.nih.gov>. The R21 applications may request support for up to two years with annual budgets in direct costs of up to \$100,000, somewhat more when a consortium is involved. Contact Ms. Diane Bronzert, Cancer Therapy Evaluation Program, at 301/496-8866; FAX: 301/480-4663; Dr. Tracy Lugo, Cancer Diagnosis Program, at 301/496-1591; FAX: 301/402-7819; or Dr. Donald Henson, Division of Cancer Prevention, at 301/496-9424; FAX: 301/496-8667.

**Title:** Development of High-Yield Technologies for Isolating Exfoliated Cells in Body Fluids

**Agency:** NIH - NCI / National Cancer Institute

**Identification:** PAR-01-019; and RFA: CA-01-016

**Deadline:** April 10, 2001, with letter of intent requested by March 6, 2001 for both solicitations; and an additional deadline of November 15, 2001, with letter of intent by October 11, 2001, for PAR-01-019

These two programs of the NCI are aimed at encouraging investigators to develop improved methods for isolating and enriching exfoliated cells from various body fluids. Such improvements should facilitate the use of cells for molecular

analysis for diagnostic purposes. PAR-01-019 solicits grant applications using the R21 (exploratory/developmental) mechanism, with a limit of two years of support and \$100,000 per year in direct costs, unless a consortium is involved, where the limit is \$125,000. The RFA, CA-01-016, seeks Phase I or Phase II applications under the Small Business Innovation Research (SBIR) or the Small Business Technology Transfer (STTR) mechanism, used to support research by small businesses, often with some input from academic scientists, directed toward the ultimate development of a commercially valuable product or process. Funding under these mechanisms is provided in phases, usually lasting about six to twelve months each, with reevaluation at the end of each phase. The "Goals and Scope" are identical for the two initiatives and are stated as follows:

"In pursuit of these goals, the NCI invites applications to address the following areas:

"o development of novel technologies for identifying abnormal exfoliated cells in body fluids;

"o development of novel technologies for capturing, enriching, and preserving abnormal exfoliated cells in body fluids;

"o development of enrichment methods for the isolation of tumor cells;

"o development of sensitive, high-throughput molecular, cytomorphometric, immunologic, and other relevant technologies to isolate tumor cells in malignant effusions for detection of low tumor burden and to help distinguish reactive cells from tumor cells.

"Applicants are encouraged to address the technology of enriching and isolating exfoliated cells, but they should also address their viability and usefulness for cytologic and molecular studies."

Contact, for either program, Sudhir Srivastava, Ph.D., M.P.H., Division of Cancer Prevention, at 301/435-1594; FAX: 301/402-0816. For information on the general features of the SBIR and STTR programs refer to PHS 2000 - 2 on the Internet at <http://grants.nih.gov/grants/funding/sbir.htm>.

## ENVIRONMENTAL HEALTH

**Title:** Toxicogenomics Research Consortium

**Agency:** NIH - NIEHS / National Institute of Environmental Health Sciences

**Identification:** RFA: ES-01-002

**Deadline:** March 15, 2001, with letter of intent requested by February 15, 2001

The NIEHS seeks applications for U19 Cooperative Agreements in order to establish a group of five or six research groups to constitute a national Toxicogenomics Research Consortium (TRC). The RFA defines "toxigenomics" as "...a scientific field that studies how genomes respond to environmental stressors/toxicants. Toxicogenomics combines genome-wide mRNA expression profiling with protein expression patterns using bioinformatics to understand the role of gene-environment

interactions in disease and dysfunction." Each cooperative agreement is expected to be funded for five years with annual budgets in the neighborhood of one million dollars. It is expected that each applicant will have strong scientific expertise in basic research utilizing gene expression profiling technologies applied to several organisms including yeast, Drosophila, mouse, rat, and human as well as expertise in the field of environmental toxicology. The minimum requirements for each Cooperative Research Member (CRM) are stated as follows:

- "Competent and experienced principal investigator who is committed to and directly involved in using gene expression profiling in his or her research.
  - "o Availability of competent and experienced project leaders to direct individual research projects associated with the proposed CRM.
  - "o Availability of the fully operational technical resources and facilities necessary (core laboratories) for the conduct of the experiments.
  - "o Access to properly managed animal facilities for projects conducting animal studies.
  - "o Substantive evidence of departmental and institutional support for and commitment to the proposed Research Member.
  - "o Documented willingness to carry out experimental toxicological studies designed by the consensus process of the TRC Steering Committee to be performed by members of the TRC, including providing materials and data from such toxicological research to the participating TRC members and, as deemed appropriate, to the NIEHS contracted gene expression analysis/bioinformatics support resource.
  - "o Documented willingness to deposit toxicologically relevant data into public databases following procedures developed by the consortium in accord with the Steering Committee consensus process and extant applicable NIH grant policies in this regard.
  - "o A proposed overall CRM project structure consisting of:
    - (1) a minimum of two basic research projects with a minimum of one aim in each related to toxicology as described in this RFA, and
    - (2) core components representing at a minimum the administrative core, technical facility(ies) core(s) and toxicology research core as described in this RFA."
- Contact Michael E. McClure, Ph.D., Chief, Organs and Systems Toxicology Branch, Division of Extramural Research and Training, NIEHS, at 919/541-5327; FAX: 919/541-5064. ▼

The Department of Defense Strategic Environmental Research and Development Program (SERDP) has issued two Broad Agency Announcements focused on the area of cleanup, compliance, conservation, and pollution prevention technologies. The first, BAA-01-0001, seeks preproposals in the form of white papers, five pages in length, describing a research project relevant to the BAA; proposers of selected projects will be requested to submit full proposals, from which a final group of projects, funded altogether for about two million dollars, will be awarded. The related program, BAA-01-0002, seeks proposals in similar areas for less ambitious SERDP Exploratory Development (SEED) projects which will be funded at a level of no more than \$100,000 each for one-year periods. More information on these programs, including a list of the individual types of proposals sought, designated "Statements of Need (SON)", is available on the Internet at <<http://www.SERDP.org/baa-nonfederal/>> and <<http://www.SERDP.org/seed-nonfederal/>>. The contact for both solicitations is Brenda Batch at 703/696-2127. ▼

## GASTROENTERIC DISORDERS

**Title:** Development of the Gut, Liver and Exocrine Pancreas

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

**Identification:** RFA: DK-01-023

**Deadline:** April 10, 2001, with letter of intent requested by March 9, 2001

This RFA from the NIAMS encourages applications for R01 or R21 (exploratory) grants to support clinical or basic research on the development of the intestinal tract, the liver, and the exocrine pancreas. More specifically the "Purpose" section of the RFA states: "Key research issues to be addressed will be (1) how the developing endoderm gives rise to heterogeneous populations of cells in these developing and adult tissues, and (2) the molecular characterization of stem cells and their immediate descendants. Interdisciplinary projects that focus on basic developmental biology, stem cell biology and relevant clinical conditions associated with the GI tract, liver and pancreas are encouraged." It is anticipated that six to eight R01 grants, each limited to five years and \$250,000 per year in direct costs, and six to eight R21 grants, each limited to two years and \$100,000 per year in direct costs, will be awarded as a result of this initiative. The RFA presents numerous examples of relevant topics of research, some for the R01 grants where some preliminary results are generally expected, and some for the R21 awards where preliminary results are not required. The examples under the R21 list are as follow:

- "o Generation of panels of markers for stem cell characteristics that are common across species, for isolation and characterization of stem cells in relevant tissues.
- "o Development of reliable and convenient clonogenic assays for lineage progenitors.
- "o Creation and/or use of new and broadly applicable methods for

**Title:** Strategic Environmental Research and Development Program and the related "SEED Research"

**Agency:** U.S. Army Corps of Engineers

**Identification:** BAA-01-0001 and BAA-01-0002 (SEED Research)

**Deadline:** BAA-01-0001: January 9, 2001, for a brief preproposal; BAA-01-0002: February 8, 2001, for the full proposal

amplifying mRNA isolated from single or small numbers of recovered epithelial cells so that gene expression profiling can be done.

"o Development and/or use of innovative and broadly applicable, invasive or non-invasive methods for monitoring gene expression in vivo.

"o Use and/or identification of cell lines and ex vivo culture conditions that provide useful representations of cell lineages in vivo.

"o Development and/or use of systems where recombination of target genes can be induced at any time during or after completion of morphogenesis, under selected physiologic or pathologic conditions.

"o Development of new bioinformatic and computational tools for compiling, annotating, searching and comparing databases of genes expressed in various normal and diseased cell populations in the intestine, liver and exocrine pancreas."

As is usually the case with proposals submitted in response to RFAs from the NIH these will be given initial review by a peer review group convened for that purpose by the institute which issued the request, in this case NIDDK. Contact Michael K. May, Ph.D., DDDN/NIDDK, at 301/594-8884; FAX: 301/480-8300.



## INSTRUMENTATION & FACILITIES


---

**Title:** Major Research Instrumentation (MRI) Program

**Agency:** NSF - National Science Foundation

**Identification:** NSF 01-7

**Deadline:** February 7, 2001

The NSF has this program to support the acquisition or development of major equipment for research and research education, particularly items which are to be shared by several departments and investigators and used by graduate students. In addition to its acquisition the NSF will also fund the maintenance and operation of such items of equipment for limited periods. Awards are generally in the range of \$100,000 - \$2,000,000. The average award in recent years has been about \$331,000; the success rate is somewhat higher for requests at the lower end of the range. The full description of this program, which seems to be recurring annually, and instructions for preparing an application are on the Web at <<http://www.nsf.gov/pubs/2001/nsf017/nsf017.htm>>. Contact the Office of Integrative Activities at 703/292-8040; e-mail: <[mri@nsf.gov](mailto:mri@nsf.gov)>. 

## MISCELLANEOUS


---

**Title:** Fiscal Year 2001 Discretionary Announcement for University-Head Start Partnerships and Graduate Student Head Start Research Grants

**Agency:** Administration for Children and Families of the Department of Health and Human Services

**Identification:** ACF/ACYF/HS FY 2001-03

**Deadline:** February 7, 2001, at the Federal Agency in Virginia. see below

The Administration for Children and Families of the DHHS has announced the availability of two types of awards related to the Head Start program, designated as "University-Head Start Partnerships" and as "Graduate Student Head Start Research Grants." Both are to "...support research activities in the areas of infant and toddler development within the cultural context, school readiness, mental health and field-initiated research which will increase our knowledge of low-income children's development for the purpose of improving services or have significant policy implications." The University-Head Start Partnerships support three-year projects, with total costs of \$75,000 in the first year, a planning year, and \$150,000 for the subsequent two years. Four to eight projects will probably be funded. The Graduate Student Head Start Research Grants support research by master's and doctoral level students. The grants are for up to two years of support with a budget of \$10,000 - \$20,000 for the first year, a limit of \$40,000 for two years. It is anticipated that five to ten awards will be made, no more than one for a given university. The full description of these programs should be obtained from the ACYF Operations Center at 800/351-2293; e-mail: <[hsr@lcgnet.com](mailto:hsr@lcgnet.com)>. It is also on the web at <<http://www.acf.dhhs.gov/programs/hsb>>. Additional information is available from the contact, William Wilson, Head Start Bureau, who may be reached at the Operations Center. South Carolina is one of the states which utilizes a Single Point of Contact (SPOC) in applying for many federal programs including this one. This SPOC should be contacted early when one is considering an application which must pass through that office so as to obtain instructions and deadlines. The most recent information indicates that the SPOC for South Carolina is Omega Burgess, State Budget Office, at 803/734-0494; FAX: 803/734-0645. 

**Title:** Developmental Centers for Evaluation & Research in Patient Safety and some related programs

**Agency:** AHRQ / Agency for Healthcare Research and Quality

**Identification:** RFA: HS-01-007

**Deadline:** January 24, 2001, with letter of intent requested by January 3, 2001

This RFA seeks proposals to support three-year projects aimed at ultimately developing about ten Developmental Centers for Evaluation and Research in Patient Safety. During the first period of the grant, lasting about one year, the awardee is expected to assemble a multidisciplinary research team, establish ties with delivery systems for the research on patient safety, and develop educational programs on patient safety and its improvement via research-driven approaches. During the subsequent period of the award the awardee is expected to conduct a pilot research project which will demonstrate the quality of the team and its approach.

The results will serve as a basis for an application to AHRQ or some other source for longer-term support of a center. Funding for this program will utilize the P20 (Exploratory Grant) mechanism with annual budgets of about \$200,000 in total costs. About ten awards are anticipated. The RFA for this initiative gives a rather detailed description of the background of the initiative and of its special requirements. It discusses the nature of the research being sought, categorized under these labels: (1) "Learning from Errors and Communicating that Information." (2) "Epidemiology of Errors." (3) "Systems and Cultures." (4) "Informatics." Under each topic are listed several potential research questions that might be addressed. A few references are also given in the RFA as are the URL's for many relevant websites. Contact Shana Christrup, Center for Quality Measurement and Improvement, at 301/594-6673; FAX: 301/594-2155.

This RFA also contains brief descriptions of five anticipated, related RFA's entitled: "Health System Error Reporting, Analysis, and Safety Improvement Demonstrations", "Clinical Informatics to Promote Patient Safety (CLIPS)", "Centers of Excellence for Patient Safety Research and Practice", "Effect of Working Conditions on Patient Safety", and "Patient Safety Research Dissemination and Education". These initiatives are in part an outgrowth of a conference held by the AHRQ in September 2000 designated the "National Summit on Medical Errors and Patient Safety Research." A summary of the findings of that conference are on the Internet at <<http://www.quic.gov/summit/resagenda.htm>>. ▼

---

**Title:** Research on Laboratory Animal Care and Use  
**Agency:** American College of Laboratory Animal Medicine (ACLAM) Foundation  
**Identification:** none  
**Deadline:** February 6, 2001, for a two-page preliminary proposal

The ACLAM Foundation offers funding for research on the care and use of vertebrate animals in biomedical research and education. The following areas are targeted: 1) laboratory animal analgesia/anesthesia; 2) laboratory animal behavior/well-being; 3) diagnostics/diseases of laboratory animals; 4) laboratory animal husbandry; and 5) refinements in toxicology experiments involving laboratory animals. Grants are for up to \$20,000 per study. The preliminary proposals are used to select some projects for further consideration based on more extensive applications, of six pages. Additional information and the format are available on the ACLAM website at <<http://www.aclam.org>>. Also available are some very useful tips that might improve the chances for success in applying for this grant or others. A copy of the "Grant Application Information" is also available from Ms. Trisha Addison in the MUSC Office of Research Development, at 792-0869. Contact Dr. Martin Morin at 410/810-1870; e-mail: <[morinasc@hpiug.org](mailto:morinasc@hpiug.org)>. ▼

**Title:** Research Opportunities in Space Life Sciences: Fundamental Space Biology  
**Agency:** NASA / Goddard Space Flight Center  
**Identification:** NRA-00-OBPR-01  
**Deadline:** January 19, 2001

The Office of Biological and Physical Research (OBPR) of the National Aeronautics and Space Administration (NASA) solicits proposals in "Fundamental Space Biology." The research is to be ground-based. The full solicitation is available on the Internet at <[http://peer1.idi.usra.edu/peer\\_review/nra/00\\_OBPR\\_01.html](http://peer1.idi.usra.edu/peer_review/nra/00_OBPR_01.html)>. Contact Dr. David Liskowsky, Enterprise Scientist for Gravitational Biology and Ecology P, at 202/358-1963; FAX: 202/358-4168; e-mail: <[dliskowsky@mail.hq.nasa.gov](mailto:dliskowsky@mail.hq.nasa.gov)>. ▼

---

**Title:** NIST and NOAA Small Business Innovation Research (SBIR) Programs  
**Agency:** National Institute of Science and Technology (NIST) and National Oceanic and Atmospheric Administration (NOAA) of the Department of Commerce  
**Identification:** NIST 2001-1 and NOAA 2001-01  
**Deadline:** January 17, 2001

These two agencies of the Department of Commerce, as is true of all federal agencies which support significant extramural research, allocate portions of their budgets for the SBIR program which funds research by small businesses which may be expected to lead to the development of commercially valuable products or services. The research is supported in two phases, Phase II support being based on success in Phase I. A third and last phase is usually supported solely by the small business; it is the development phase leading to the commercial application. Although the PI for these awards must be an employee of the small business applicant, it is not uncommon for faculty members of universities and colleges to play major roles in the development and conduct of the research, usually as paid consultants. Most of the research supported by NIST is in non-biological areas of science and technology; however, included in the list of possible areas for Phase I SBIR support, published in the Commerce Business Daily of October 17, 2000, is a category entitled "Advanced Biological and Chemical Sensing Technologies." Among the NOAA topics for research are "Living Marine Resources" and "Ocean Science". The full solicitations for these programs are available on the Internet at <<http://www.nist.gov/sbir>> and at <<http://www.rdc.noaa.gov/~amd/SOLINDEX.HTML>>. Contact Jacqueline G. Turnage at 301/713-0829; ext. 198. ▼

---

**Title:** Physical Activity and Obesity Across Chronic Diseases  
**Agency:** NIH - NCI / National Cancer Institute; NHLBI; NIA;

NIAMS; NICHD; NIDDK; and NINR

**Identification:** PA-01-017

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

These seven institutes are encouraging the submission of R01 grant applications, and in some instances other types, to support research directed at improving the understanding of the relationship between physical activity and obesity. The Program Announcement describes the aim of the program as follows: "Three general areas of research are encouraged: (1) studies (including observational and prospective) examining physical activity and obesity relationships; (2) studies to improve methodology of assessment of physical activity and energy balance; and (3) studies to test intervention approaches that incorporate physical activity for obesity prevention or treatment related to chronic diseases." Over 20 more specific topics are given in the announcement as examples of research areas that may be suitable for this program; they are categorized under the three more general topics above. There are eight programmatic contacts listed from various branches of the institutes; the first listed is Richard P. Troiano, Ph.D., R.D., CDR, USPHS, National Cancer Institute, at 301/496-8500 or 301/435-6822; FAX: 301/435-3710.




---

**Title:** Stem Cell Plasticity in Hematopoietic and Non-Hematopoietic Tissue

**Agency:** NIH - NHLBI / National Heart, Lung and Blood Institute; NIDDK / National Institute of Diabetes and Digestive and Kidney Diseases; and NINDS / National Institute of Neurological Disorders and Stroke

**Identification:** RFA: HL-01-007

**Deadline:** March 12, 2001, with letter of intent requested by February 6, 2001

These three institutes are seeking applications for four-year research proposals with annual budgets of no more than \$250,000 each for the pursuit of studies of the plasticity of adult stem cells from different tissue sources in well-defined in vivo systems. Grants will be of the R01 type. It is anticipated that 12 - 18 awards will be made. The RFA, from the NIH Guide of November 17, 2000, presents the following list of examples of desired research topics:

"o Rigorous testing for stem cell plasticity through application of clonal approaches (e.g., micro-manipulation of single cells, limiting dilution analyses, retroviral insertion marking, etc.)

"o Determine whether individual cells with hematopoietic potential can express other potentials.

"o Determine whether individual cells with other potentials (muscle, CNS, etc.) in other sites of the body also have hematopoietic potentials.


"o Conduct comparative studies between adult somatic cells with

pluripotential properties with the aim of defining a rigorous phenotype for somatic stem cells from specific tissues. Also, comparative studies between somatic stem cells and embryonic stem cells to identify the extent that individual primary and ES cells share properties are of interest.

"o Examine the mechanisms of trafficking, homing, engraftment, and integration of stem cells in the host with the emphasis on the capability of cells derived from one tissue to engraft into another.

"o Develop novel approaches to manipulate transplantable cells and/or the host in order to facilitate production of desired cell types for stem cell transplantation.

"o Develop clinically relevant small and large animal models to make use of the concept of stem cell plasticity."

This initiative arose in part from a meeting sponsored by the NHLBI in March 2000. The report of that meeting is on the Internet at <<http://www.nhlbi.nih.gov/meetings/scplast.htm>>. Contact Dr. Helena O. Mishoe, Division of Blood Diseases and Resources, NHLBI, at 301/435-0050; FAX: 301/480-0868; Dr. David G. Badman, Division of Kidney, Urologic, and Hematologic Diseases, NIDDK, at 301/594-7717; FAX: 301/480-3510; or Dr. Arlene Y. Chiu, Repair and Plasticity Program, NINDS, at 301/496-1447; FAX: 301/480-1080. 

---

**Title:** Exploratory Research on Facioscapulohumeral Dystrophy

**Agency:** NIH - NIAMS / - Nat'l Inst. of Arthritis & Musculoskeletal & Skin Diseases; and NINDS / National Institute of Neurological Disorders and Stroke

**Identification:** RFA: AR-01-002

**Deadline:** March 14, 2001, with letter of intent requested by February 1, 2001

These two institutes are encouraging the submission of R21 (exploratory/developmental) research grant applications to support "creative, novel, and/or high risk/high payoff approaches" that could bring about advances in the field of knowledge of facioscapulohumeral dystrophy (FSHD), a rather common (prevalence of 1/20,000) genetic disease of skeletal muscle. The R21 mechanism in this instance allows for support for three years with annual budgets of up to \$125,000 in direct costs, slightly more when consortia of two or more institutions are involved. The RFA, published in the NIH Guide of November 10, 2000, reviews the status of knowledge of FSHD, emphasizing genetic aspects. It identifies a report of a conference on the disease held in May 2000, which is available on the Internet at <<http://www.nih.gov/niams/reports/fshdsummary.htm>>. The notice contains a list of examples of areas of research deemed appropriate for this RFP. Included are projects directed toward further clarification of the molecular genetics of the disorder(s), studies of changes in the muscle cells as the disease progresses, studies of the patterns of affected muscles and a possible relationship to biochemical changes, studies of the role of inflammation in the disease pathogenesis, studies of cultured muscle cells from

diseased tissues, and development of new models of the genetic pathogenesis of FSHD. Contact Richard W. Lymn, Ph.D., Muscle Biology Program, NIAMS, at 301/594-5128; FAX: 301/480-4543; or Giovanna M. Spinella, M.D., Division of Fundamental Neuroscience and Developmental Disorders, NINDS, at 301/496-5745; FAX: 301/402-0887. ▾

---

**Title:** Research Grants Related to Glaucoma

**Agency:** The Glaucoma Foundation

**Identification:** none

**Deadline:** Ongoing, with deadlines of March 1 and September 1

This foundation funds research grants of up to \$35,000 for the first year, with renewals possible for a second year with budgets of up to \$50,000 to support research in two areas. These areas of support for basic or clinical research are: 1) "Optic nerve rescue and restoration: Research into new approaches designed to protect the optic nerve against glaucomatous damage, to restore vision lost to glaucoma and eventually reverse blindness by restoring or regenerating the function of the optic nerve cells, and to explore the feasibility of achieving transplantation of optic nerve cells." and 2) "Molecular genetics: Research into the genetic causes of the various forms of glaucoma, particularly the identification of the responsible genes, with the long-term goal of finding ways to reverse these genetic defects." The guidelines and application forms for these grants are available on the Internet at <<http://www.glaucoma-foundation.org/info/doctors.htm>>. Contact Christine Pipchick at 212/651-2504; e-mail: <[info@glaucoma-foundation.org](mailto:info@glaucoma-foundation.org)>. ▾

---

**Title:** Creative Research Ideas to Explore Deeper Reality through Neurobiology

**Agency:** The John Templeton Foundation

**Identification:** none

**Deadline:** March 1, 2001

The John Templeton Foundation, a philanthropic organization with a particular interest in the role of spirituality in healing, has announced a grant program to elicit proposals from which about ten \$5000 "prizes" will be awarded, based on brief proposals, "...for rigorous neurobiological research into deeper human realities..." These elusive values to be considered include" love, purpose, moral sense, worship, mystical experience, creativity, genius, imagination, curiosity and the search for meaning." Competition for these awards involves three steps: 1) registration with the Foundation as soon as possible. 2) submission of a brief (<1,000 words) "...description of the deeper reality to be explored and your neurobiological research idea." This must be submitted by the deadline of March 1, 2001. 3) The judges will select some 50 of these submissions, the authors of which will be invited to submit 4,000-word essays on the topics for neurobiological

investigation. The Foundation states that "...we are not looking for detailed research proposals but rather for well substantiated creative ideas with scientific merit. It is the Foundation's expectation that one or more of these winning essays could serve as the basis for a significant future research program." A more detailed description of this program, including a page or two of references to the topics targeted by this program, is available on the Internet at <<http://www.templeton.org/grants.asp>>. ▾

---

**Title:** Distance Learning and Telemedicine Loan and Grant Program

**Agency:** U.S. Department of Agriculture

**Identification:** DLT Program

**Deadline:** March 2, 2001 for grants

The Rural Utilities Service of the U.S.D.A. supports a variety of programs to better the quality of life in rural America. One such program is this one, designed to "...meet the educational and health care requirements of rural America. It is a program about rural America, for rural America, and delivered to rural America. The purpose of the DLT program is to provide financial assistance to enhance learning and health care opportunities for rural residents. The program asks applicants to define the educational or health care problems that face their [rural] communities and determine how Federal distance learning or telemedicine assistance can help." Grants are funded in the range of \$50,000 to \$500,000. There are rather strict organizational requirements which seem generally to require a partnership between such entities as medical centers and rural community facilities. The details of this program are available on the Internet at <<http://www.usda.gov/rus/telecom/dlt/dlt.htm>>. Contact Orren E. Cameron, Director, Advanced Services Division, Rural Utilities Service, at 202/690-4493; FAX: 202/720-1051. ▾

---

**Title:** Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Programs

**Agency:** U.S. Department of Energy (DOE)

**Identification:** DOE SC/0008

**Deadline:** February 20, 2001

The Department of Energy is seeking proposals for research by small businesses directed toward the development of commercially useful products or services under the SBIR and STTR programs. It is anticipated that some 200 awards of about \$100,000 each for Phase I studies lasting about six months will be made under the SBIR program. Success in Phase I studies could lead to Phase II funding of up to \$750,000. Under the STTR program, about 15 Phase I awards of up to \$100,000 each with nine-month award periods are planned, with successful awardees eligible for a subsequent \$500,000 Phase II award. The DOE lists 42 topics as being suitable for research under these programs.

Included are some of potential interest to scientists as MUSC, who might serve as consultants to a small business under the SBIR program or as a co-investigator under the STTR program. These areas include "Medical Sciences", "Genome, Structural Biology, and Related Biotechnologies", "Environmental Monitoring Technologies for Soils, Subsurface Sediments, and Groundwater", and "Monitoring of DOE Sites, Facilities, and Personnel". The full solicitation should be available on the Internet at <<http://sbir.er.doe.gov/sbir>>. Contact Julie Scott, Program Specialist, at 301/903-0569. ▼

## NEUROLOGICAL DISORDERS

**Title:** NINDS Administrative Supplements for Research on Parkinson's Disease (PD)

**Agency:** NIH - NINDS / National Institute of Neurological Disorders & Stroke

**Identification:** Notice: NS-01-002

**Deadline:** February 7, 2001

The NINDS offers supplements to R01, R21, R29, R44 (Phase II SBIR), P01, P50, and U54 grants from the Institute for the support of supplements to expand ongoing research into areas related to Parkinson's disease. Supplements may be for up to \$50,000 in total costs for the R- series, \$100,000 for the others; a supplemented grant must have a period of support ending April 30, 2002 or later. Examples of the types of activities being encouraged are the following:

"o Requests involving the basic cellular and molecular biology or basic pathophysiology of PD within existing PD grants.

"o Analysis of animal models, developed through existing grants on other disorders, for potential use in PD. Models may include invertebrates.

"o Requests within existing grants on the development of biomarkers or genetic tools in neurodegenerative diseases to include PD."

A description of this program is on the Internet at <<http://www.ninds.nih.gov/funding/pdsupplements.htm>>. Contact Diane D. Murphy, Program Director, Neurodegeneration Group, at 301/496-5680; FAX: 301/480-1080. ▼

## SUBSTANCE ABUSE

**Title:** Exploratory/Developmental Grant Applications (R21)

**Agency:** NIH - NIDA / National Institute on Drug Abuse

**Identification:** PA-01-012

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

NIDA announced in the NIH Guide of November 10, 2000, a renewal of the program of support for research under its exploratory/development (R21) grant mechanism. This statement

from the announcement describes the characteristics of the projects being sought: "The objective of the exploratory/developmental grant (R21) mechanism is to encourage applications from individuals who are interested in testing innovative or conceptually creative ideas that are scientifically sound and may advance our understanding of drug abuse and addiction. The exploratory/developmental mechanism of grant support is intended to enable an investigator to explore the feasibility of an innovative research question or approach. Thus, preliminary data specific to the proposed project are not expected, but data demonstrating feasibility are desirable. Novel and creative approaches are essential." R21 grants under this program are limited to three years of support, with annual budgets generally no more than \$100,000 in direct costs. Higher budgets may be justifiable for special approaches such as those involving PET imaging technology. Contact Harold Gordon, Ph.D., Division of Treatment Research and Development, at 301/443-4877; FAX: 301/443-6814. ▼

**Title:** Economics of Drug Abuse Treatment and Prevention Services

**Agency:** NIH - NIDA / National Institute on Drug Abuse

**Identification:** PA-01-013

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

NIDA encourages research on the economics of drug abuse and treatment and invites relevant applications for research using R01, R03 (small grant), P30 (center core grant), and P50 (specialized grant) mechanisms. A prospective applicant should consult the contact named below for any specific instructions, such as budgetary limits, related to the R03, P30, or P50 applications. The announcement of this program, published in the NIH Guide of November 10, 2000, discusses the types of research being encouraged, including a rather extensive list of examples. These examples are grouped within the following categories: "(1) financing of drug abuse treatment and prevention services, 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 and production of drug abuse treatment and prevention, and (5) methodological research." Contact William S. Cartwright, Ph.D., Division of Epidemiology, Services, and Prevention Research, at 301/443-4060; FAX: 301/443-6815. ▼

## TRAINING & CAREER DEVELOPMENT

**Title:** NCI Mentored Career Development Award for Underrepresented Minorities (K01)

**Agency:** NIH - NCI / National Cancer Institute

**Identification:** PAR-01-016

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

The NCI offers this special K01 award to members of groups which are underrepresented in the biomedical research community, but who are trained and on the way to a scientific career; the Award offers the opportunity to have salary and extra research support during the latter stage of mentored research training and the early stage of a career as an independent investigator. In addition to belonging to an underrepresented group, applicants must have "...been recipients of uninterrupted support from an NIH Research Supplement for Underrepresented Minority Award or any National Research Service Award (individual F31/F32 or institutional T32) or can demonstrate that they have been supported by any peer reviewed research project grant mechanism (e.g., R01, P01, ACS)." They may be basic, clinical, or population scientists with a clinical or research doctoral degree. The period of the award is five years; one to five years, phase I, is a mentored research experience, followed by a period of four or fewer years of independent research in the same institution or a different one. A special feature of the Award is a requirement that recipients "...will be expected to observe or participate (depending upon prior research experience and/or level of independence and without additional compensation) in the NCI/NIH peer review process, as well as to participate annually in workshops focused on preparing, writing and submitting NIH grant applications; these activities will be coordinated and/or sponsored by the CMBB [Comprehensive Minority Biomedical Branch, NCI]." The candidate must devote at least 75% of his or her professional effort to cancer-related research and the other designated activities of the program, including the peer review portion. The award includes up to \$75,000 each year for salary support, which may be supplemented provided the funds are from allowed sources, generally non-federal in nature. In addition an annual sum of \$30,000 during phase I and \$50,000 during phase II is included for research, training, travel, and other related expenditures. An Awardee may spend a portion of his/her time in an institution away from his home institution with suitable approval by his institution for short periods, the NCI for longer ones. Such approved leave may be spent in a foreign laboratory. Contact Sanya A. Springfield, Ph.D., Chief, Comprehensive Minority Biomedical Branch, at 301/496-8347; FAX: 301/402-4551. ▼

---

**Title:** Individual Postdoctoral NRSA Fellowships in Epidemiology/Clinical Trials Research/Outcomes Research in Skin Diseases  
**Agency:** NIH - NIAMS / Nat'l Inst. of Arthritis & Musculoskeletal & Skin Diseases; and the Herzog Foundation  
**Identification:** RFA: AR-01-003  
**Deadline:** January 22, 2001

This RFA announces a program of postdoctoral training supported by the NIAMS and the Herzog Foundation to increase the number of dermatologists with specialized training in epidemiology, clinical trials, and outcome research. The ultimate objective is to expand the cadre of investigators with the interest and expertise needed to study the treatment of skin diseases by the approaches of population sciences. The program will utilize the NRSA postdoctoral award mechanism (F32). Applicants must be M.D.'s with at least two years of residency training in clinical dermatology, completed no more than five years prior to submission of the application. Each award is to provide about \$37,500 in total costs per year for two years from the NIAMS, supplemented each year by \$30,000 from the Herzog Foundation. This supplement may be used for additional stipend support or for costs of training not covered by the NRSA. It is expected that the awardees will spend two years in formal advanced training to gain expertise in the methodologies of epidemiology, clinical trials research, and outcomes research. A special feature of the program is the provision of tuition and fees for course work in a school of public health or a graduate program in a relevant program such as biostatistics, usually as a candidate for an MPH, a PhD, or a similar degree. A mentor must be selected at the sponsoring institution, an active investigator in either skin disease research or in epidemiology/clinical trials/outcomes research. It is anticipated that eight awards will be made in response to applications under this initiative. Contact Alan N. Moshell, M.D., Skin Disease Program Director, NIAMS, at 301/594-5017; FAX: 301/480-4543. ▼

---

**Title:** Fund for the Improvement of Postsecondary Education (FIPSE)—Special Focus Competition (Invitational Priority: Institutional Cooperation and Student Mobility in Postsecondary Education Between the United States and Brazil)  
**Agency:** U.S. Department of Education  
**Identification:** CFDA No.: 84.116M  
**Deadline:** March 30, 2001

In the Federal Register of November 14, 2000, the Department of Education announced the availability of awards directed toward support of projects aimed at improving postsecondary education by specific approaches or by addressing a particular problem area. Projects that support consortia of U.S. and Brazilian institutional cooperation and student mobility are especially encouraged, although this is not an absolute requirement. The Brazilian Ministry of Education supports a parallel competition in that country. It is anticipated that ten awards will be made, each for a four-year period, with first-year budgets for each of about \$30,000, total budgets for the four years of \$200,000. This announcement is available in the Federal Register on the Internet at <<http://ocfo.ed.gov/fedreg.htm>> or <<http://www.ed.gov/news.html>>. Contact Cindy Fisher, FIPSE Office, at 202/502-7500. ▼ ▼

**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**

<b>Institutional Application</b>	<b>Deadline Resident Application</b>	<b>Interim Funding Request</b>	<b>Review Decision by</b>	<b>Funding Dates</b>
April 1	April 15	May 1	June 15	July 1
August 1	August 15	September 1	October 15	December 1
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).
- \* Applications may be hand-delivered to the Rockledge Center, which is open 24 hours per day. To obtain a signed receipt for a hand-delivered application, the package must be delivered no later than 5:00 p.m. (Monday through Friday).
- \* When a receipt date falls on a weekend or holiday, the receipt date will be the following business day.

**EDITORIAL STAFF**

Peggy Schachte.....Editor  
 Billy Baggett, PhD.....Science Editor  
 Melissa Matthews.....Writer  
 Trisha Addison.....Production Manager  
 Phone (843) 792-5828 FAX (843) 792-1657