

R E S E A R C H

INKlings

September 2000 • Medical University of South Carolina • Volume IX • No 9

Rand report details federal R&D state by state

The White House Office of Science and Technology Policy and the Rand Corporation recently released a first-of-its-kind report with information detailing the nature, magnitude and whereabouts of the individual activities that make up the federal government's research and development (R&D). The report, titled *Discovery and Innovation: Federal Research and Development Activities in the Fifty States, District of Columbia, and Puerto Rico*, is organized on a state-by-state basis and is the first comprehensive study to identify and describe virtually all federally funded R&D activities within the 50 states, Puerto Rico and the District of Columbia.

The report's lead author noted that, "We decided that a state-by-state breakdown was the most manageable format. It also provides an answer for lawmakers who ask, 'What's going on in my district?'"

The report can be accessed online at <http://www.rand.org/publications/MR/MR1194>

Source: *Research!America Newsletter*, August 2000

New HHS Web site allows access to "snapshots" of nation's health status by county

The Department of Health and Human Services recently announced a new set of Web-based Community Health Status Indicators Reports (CHSI) that will provide access to "snapshots" of 3,082 U.S. counties, including information on mortality, infectious diseases, teen mothers, and a host of other indicators. CHSI is funded by the Health Resources and Services Administration (HRSA) and produced in collaboration with the National Academy of County and City Health Officials (NACCHO), the National Association of State and Territorial Officials (ASTHO) and the Public Health Foundation (PHF).

The reports use existing national data or estimates that are available on all U.S. counties, covering a ten-year period from 1988 to 1998. Each county's report compares demographic information with 20 to 50 "peer" counties that have similar population, density, age distribution and poverty levels. Estimates should be interpreted with caution, as some indicators are derived from national data sources and adjusted to reflect the demographic and socioeconomic characteristics of individual counties.

Using CHSI, counties can measure themselves against their peer counties and all U.S. counties in relation to life expectancy, causes of death, the percent of adults who report fair or poor health, and the average number of unhealthy days reported for a month. Comparisons also are available based on counties' rates of infectious diseases such as hepatitis or measles.

The CHSI reports are available at <http://www.communityhealth.hrsa.gov>.

Source: *Washington Fax*, August 9, 2000



National Nanotechnology Office will be created

The National Science and Technology Council (NSTC) will create a National Nanotechnology Coordination Office and name its first director to facilitate implementation of the National Nanotechnology Initiative announced by President Clinton this past January. The NSTC is laying out a broad plan for nanotechnology.


Through NNI, the National Institutes of Health expect development of several health applications within the next five to ten years, including the possibility of sensors for the early detection of disease and strategies for dispensing therapeutic agents in ways that enhance desired effects while minimizing adverse effects. Implant and organ assist devices could be improved by nanotechnology research. The field may also develop biomaterials that implant more effectively and become more integrated into human tissue. In addition, implantable sensors may be developed to monitor patients at risk for specific diseases, potentially allowing early detection of structural and metabolic changes.

Under NNI, NIH funding would be allocated to five different aspects of nanotechnology research: "grand challenges" such as bionanosensors; fundamental research; centers and networks of excellence; research infrastructure; and societal/ethical implications. The same areas would apply for all government agencies under the initiative.

Other federal agencies in NNI include the Departments of Defense and Energy, the National Aeronautics and Space Administration, and the National Science Foundation. In addition to independent research, NNI would foster collaborative research activities across agencies. For example, on April 13, the National Cancer Institute and NASA signed a memorandum of understanding to collaborate on research for the development of "nanoexplorers for the human body." Through the initiative NASA aims to develop biochemical sensors to monitor astronaut health and nanoscale devices designed to deliver preventative and curative treatments.

More information is available at the NNI Web site at <http://www.nano.gov/>.

Source: *The Blue Sheet*, August 16, 2000





USDA seeks to define "distress" in laboratory animals

The future conduct of animal research could be significantly influenced by the US Department of Agriculture's (USDA) plans to define "distress" in animal welfare regulations for the first time. USDA issued a request for public comments in the August 21 *Federal Register*. USDA first proposed revising guidelines for facilities that use live animals for research, tests, experiments or teaching in the July 10 *Federal Register*.

Researchers are being asked to comment on the need to change the current classification system for assessing and reporting procedures likely to cause animals pain and distress. Issues include: quantifying pain and distress, intensity and duration; adding a definition for distress to regulations; key elements of a definition for distress; the benefits and limitations of the current pain and distress classification system; and whether animal pain and distress should be prospectively or retrospectively reported.

Source: *Health Grants & Contracts Weekly*, August 21, 2000



NIH lifts moratorium on research using stem cells derived from human embryos and fetal tissue

New National Institutes of Health (NIH) guidelines issued in late August are bringing researchers closer to obtaining grants for studies that use human pluripotent stem cells. NIH published final instructions, effective immediately, in the August 25 *Federal Register*. The moratorium on research using human pluripotent stem cells derived from human embryos and fetal tissue put in place by the Director, NIH, in January 1999, was lifted on August 25, 2000.

On December 2, 1999 the NIH published Draft Guidelines for research involving human pluripotent stem cells (hPSCs) for public comment. When the comment period ended on February 22, 2000, approximately 50,000 comments had been received from members of Congress, patient advocacy groups, scientific societies, religious organizations, and private citizens.

Ability to use precursor cells derived from human embryos or fetal tissue should open the door to a wide range of research that holds promise for new treatments and possible cures for many devastating diseases and injuries, such as Parkinson's, diabetes, heart disease, multiple sclerosis and spinal cord injuries.

Applicants requesting funds under the Oct. 1 regular receipt date must comply with new assurance and review procedures by Nov. 15, the first deadline for submission of documents to NIH's Office of Science Policy under the stringent oversight procedures. An ongoing schedule for documentation submission tracks six weeks after each regular research application receipt date.

The guidelines establish a Human Pluripotent Stem Cell Review Group (HPSCRG) at the Center for Scientific Review (CSR). The HPSCRG will function as a special working group of the CSR Advisory Council. The full CSR Advisory Council (CSRAC) must approve the documentation before funding. Ongoing compliance with the guidelines is a term and condition of NIH awards. Failure to comply could lead to debarment of individual investigators or institutions from seeking federal funds.

For compliance review, institutions and investigators must provide a signed assurance that cells were derived in compliance with the guidelines, an abstract of the scientific protocol used to derive the cells, the title of the study that proposes using the cells, and sample informed consent documents. Applicants must also affirm that the proposed research is not a class of research that is ineligible for NIH funding under the guidelines.

Samples of ineligible research include studies in which human pluripotent stem cells are: used to create or contribute to a human embryo; derived using somatic cell nuclear transfer; combined with an animal embryo; or derived using somatic cell nuclear transfer for the purposes of reproductive cloning of a human.

The guidelines do not apply to research involving stem cells from human adults, umbilical cords, or placentas. The guidelines and related documents are available at <http://www.nih.gov/news>. Click on "Stem Cell Information."

At this time, the NIH is establishing these procedures for grant and cooperative agreement applications and intramural projects only. Procedures for contract awards are being developed and will be published in the future. In the meantime, questions and inquiries may be forwarded to: stemcell@mail.nih.gov.


Source: *Federal Register*: August 25, 2000 (Volume 65, Number 166), *Federal Grants & Contracts Weekly*, August 28, 2000, and *The NIH Guide*, August 25, 2000

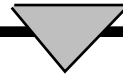


COGR names new president

The Council on Governmental Relations (COGR) has named Katharina (Kate) Phillips as its president effective September 1. Phillips has served as the organization's vice president and has been a senior member of the staff since 1985. She previously had served as an administrator at the University of Florida, the University of Iowa and the University of California.

The Council on Governmental Relations currently includes 145 of the nation's leading research-intensive universities that receive a significant share of the federal funds for research and scholarship. The Council makes recommendations to executive agencies of government on agency practices that affect university research. In more recent years, the Council's activities have reflected awareness of the growing connection between federal and private sector funding. The Council is headquartered in Washington, D.C.

Source: E-mail press release, August 21, 2000 



MUSC Library will offer course on "Molecular Biology Information Resources"

Renata McCarthy of the National Center for Biotechnology Information (NCBI) has agreed to teach an 8-hour Medical Library Association CE course on "Molecular Biology Information Resources" on January 23, 2001 in Room 438 (Windows Classroom).

Intended for individuals wishing to apply their searching skills to molecular biology databases, the course covers four major areas including nucleotide sequences, protein sequences, three-dimensional structures, and complete genomes and maps, and reviews search systems including Entrez and BLAST.

More information will be available from the Library as the time for the course draws near. 




MUSC establishes new procedure for non-sponsored IRB protocols

The growth of research and research studies which are not supported by external funds have resulted in a heightened awareness of the costs associated with these studies. Reviews to ascertain where true costs are borne indicate that, in many cases, some of these costs are inappropriate and non-compliant. As a result, all non-sponsored IRB applications must include a detailed budget, which outlines all the sources of funding for the non-sponsored IRB protocol.

The new procedure for filing non-sponsored IRB protocols includes the following: filing the IRB protocol; filing the attached budget template; sending a copy of the protocol and the budget to both the IRB Office and the Office of Research and Sponsored Programs (ORSP).

The budget template for the non-sponsored IRB protocol can be obtained from the ORSP office. The template is also available on the ORSP Website under the "forms" link. All questions regarding budgets should be addressed to Mr. Dillard Marshall or Mr. Mike McGinnis extension 792-3838.

Source: Broadcast mail, Aug. 14, 2000 

Office of Research Integrity extends comment period on new research policy

The HHS Office of Research Integrity (ORI) is developing a new policy on instruction in the responsible conduct of research for institutions receiving Public Health Service (PHS) funds for research or research training. The new policy states that all personnel on PHS grants must undergo formal training in the responsible conduct of research, a requirement that presently applies only to trainees.

At a recent meeting convened by ORI, academic representatives expressed concern about the demands that this expanded requirement would create. They strongly suggested extending the comment period on the proposal to allow for more input from the extramural community. ORI has accommodated this request, and the deadline is now Sept. 21.

Institutions and individuals interested in commenting on the proposed policy may obtain it on the ORI web site at <http://ori.dhhs.gov> by clicking on "What's New" or by contacting ORI. All comments must be received by ORI at the address below or by E-mail to jegan@osophs.dhhs.gov no later than September 21, 2000.

For further information contact: Chris B. Pascal, J.D., Acting Director, Office of Research Integrity, Rockwall II, Suite 700, 5515 Security Lane, Rockville, MD 20852, 301-443-3400.

Source: AAMC Stat, August 14, 2000 and NIH Guide, August 11, 2000

HCFA establishes new policy coverage of clinical trials

In response to President Clinton's June 7 executive memorandum ordering Medicare coverage of routine patient care costs incurred by beneficiaries enrolled in clinical trials, HCFA recently released a "national coverage decision" establishing a new policy for Medicare coverage of clinical trials. The decision proposes to provide reimbursement for "all items and services that are otherwise generally available to Medicare beneficiaries (e.g., hospital services, physician services, diagnostic tests) that are provided in a clinical trial except the following: the investigational item or service itself; items and services provided solely to satisfy data collection needs (protocol induced costs); and items and services provided by the trial sponsor without charge." The decision goes on to specify criteria that define routine patient care costs and the types of trials deemed eligible for Medicare coverage. The full draft of the decision can be found at <http://www.hcfa.gov/quality/8d1.htm>.

Source: AAMC Stat, August 14, 2000

NIH updates burden-of-disease data

The NIH Office of Science Policy and Planning has released its updated report, *Disease Specific Estimates of Direct and Indirect Costs of Illness and NIH Support Fiscal Year 2000 Update*. This report estimates the direct and indirect costs of illness and NIH related support. It can be found at <http://www1.od.nih.gov/osp/ospp/ecostudies/COIreportweb.htm>.

Source: Research!America Newsletter, August 2000

Upcoming conferences . . .

Clinical Trials 2000 – October 5-6, 2000 at the Doubletree Hotel in Rockville, MD

The Food and Drug Administration (FDA), in cooperation with the Pharmaceutical Quality Institute (PQI) will sponsor a conference entitled "Clinical Trials 2000." The conference concerns FDA's requirements for the conduct of clinical trials in support of new drug applications, abbreviated new drug applications, biologics license applications, premarket approval applications, and 510(k) product marketing applications. The conference is targeted towards individuals engaged in patient recruitment for clinical trials; and those conducting, recording, reporting, and overseeing clinical trials, including clinical investigators, supporting medical staff, institutional review board members, testing laboratories, software developers, sponsors, monitors, and contract research organizations.

For information regarding workshop content, and who should attend, contact: Diann Shaffer, Food and Drug Administration, Baltimore District, 900 Madison Ave., Baltimore, MD 21201-2199, 410-962-3590, FAX 410-962-2219 or e-mail: dshaffer@ora.fda.gov.

For registration information, contact: Satish K. Laroia, Registrar, PQI, 33 Aspen Circle, Edison, NJ 08820, 973-812-9033, FAX 732-549-7487. The registration form and agenda can also be obtained on the Web at [http://www.fda.gov/cder/calendar/meeting/Clintrials 2000](http://www.fda.gov/cder/calendar/meeting/Clintrials2000). The full conference and workshop registration fee is \$349, or \$325 each for three or more from the same affiliation registering at the same time. One-day registration is also available. Registration is due by September 25, 2000.

Source: *Federal Register: August 18, 2000 (Volume 65, Number 161)*.

Enhancing Working Conditions and Patient Safety: Best Practices – October 17-18 in Pittsburgh

The Agency for Healthcare Research and Quality is joining with the National Institute for Occupational Safety and Health (NIOSH/CDC), the Veterans Health Administration (VHA), the Occupational Safety and Health Administration (OSHA), and the National Center for Infectious Diseases (NCID/CDC) to sponsor a conference on working conditions and patient safety. "Enhancing Working Conditions and Patient Safety: Best Practices" will be held October 17-18, 2000 in Pittsburgh.

Conference participants will discuss practical approaches to simultaneously improving the quality of patient care and working conditions for health care workers. This will be a working meeting with common themes such as organizational culture and safety presented as plenary topics, and working group sessions organized by focus interest areas. Emphasis will be on sharing challenges, pitfalls, and solutions.

Additional information is posted at <http://www.ahrq.gov/about/practice.htm>. To receive conference information and registration materials, send an e-mail with your contact information to workqual@ahrq.gov.

Source: *AHRQ Research Activities, July 2000*

Emerging Challenges for the Responsible Conduct of Research – Nov. 18-20 in Washington, DC

The Office of Research Integrity will convene a conference in the fall designed to inform the development of its nascent research program, "Research on Research Integrity" (RRI). ORI plans to announce its RRI program soon after the conference. An initial Request for Applications was issued in the August 18 NIH Guide. ORI will spend \$500,000 this year for three to five grants.

The public meeting will be co-sponsored by the National Institutes of Health, the American Association for the Advancement of Science, the Association of American Medical Colleges, and the National Science Foundation.

Source: *The Blue Sheet, July 26, 2000 and Health Grants & Contracts Weekly, August 14, 2000*

R E S E A R C H

Opportunities & Deadlines

AGING

Title: Upcoming RFA for Research on Alzheimer's Disease

Agency: NIH - NIA / National Institute on Aging

Identification: not known

Deadline: not known

As part of a five-year \$50 million initiative announced recently by the White House, the NIA is expected to issue an RFA in the fall to fund research directed toward the development of vaccines and other means of preventing the development and progress of Alzheimer's disease. The budget for this particular program is expected to be \$10 million. Information on this is expected to be available on the Website of the NIA at <http://www.nih.gov/nia>. ▼

Title: National Institute on Aging Support of Scientific Meetings as Cooperative Agreements

Agency: NIH - NIA / National Institute on Aging

Identification: PA-00-128

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

The NIA recently announced that applications for the support of scientific meetings in its areas of programmatic interest may be supported not only by grants, under the R13 (conference grant) mechanism, but also by the U13 (cooperative agreement) mechanism. Under this latter mechanism, a member or members of the scientific staff of the NIA will participate substantially in the planning and operation of the conference. These cooperative agreements may be funded for up to five years. The following contacts are identified: Dr. Huber Warner, Biology of Aging Program, at 301/496-6402; FAX: 301/402-0010; Ms. Georgeanne Patmios, Behavioral and Social Research Program, at 301/496-3138; FAX: 301/402-0051; Dr. Judy Finkelstein, Neuroscience and Neuropsychology of Aging Program, at 301/496-9350; FAX: 301/496-1494; and Ms. Wanda Solomon, Geriatrics Program, at 301/435-3046; FAX: 301/402-1784. ▼

BEHAVIORAL SCIENCES

Title: Risk Factors for Psychopathology Using Existing Data Sets

Agency: NIH - NIMH / National Institute of Mental Health

Identification: PA-99-121

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

The NIMH encourages the submission of R01 or R03 (small grant) applications to support research which utilizes extant data sets, in the public domain or otherwise accessible to the PI, to increase the knowledge of risk and protective factors for the development of psychopathology or resilience. A particular goal is to apply state-of-the-art analytical procedures. Reference is made to another NIMH program announcement which deals with some of the applicable methodology. It is PA-98-031, accessible on the Internet at <http://www.nih.gov/grants/guide/pa-files/PA-98-031.html>. The R03 applications under the present initiative are limited to two years with annual budgets of up to \$50,000 in direct costs. The announcement lists 13 examples of suitable topics for research. It also gives information on a number of public use data sets which may be obtained from the Internet. The Program Announcement with this, and much other, information is available from the files of the NIH Guide, on the Internet at <http://www.grants.nih.gov/grants/guide/pa-files/PA-99-121>. Contact Karen H. Bourdon, M.A., Division of Mental Disorders, Behavioral Research, and AIDS, at 301/443-5944; FAX: 301/480-4415. ▼

CANCER

Title: Research Scholar Grants and Grants for Targeted Research

Agency: American Cancer Society

Identification: none

Deadline: Ongoing, with deadlines of October 15 and April 1

Among its many programs supporting cancer research and research training the American Cancer Society has several major ones with deadlines near at hand.

Among them are three types of "Research Scholar Grants" which are the replacements for grants previously designated as "Research Project Grants".

The three are briefly described here:

Research Scholar Grants for Beginning Investigators.

These are four-year grants for up to \$250,000 per year to support basic, preclinical, clinical, and epidemiologic research by investigators in the first eight years of independent research careers. They are renewable for a second four years.

Research Scholar Grants in Psychosocial and Behavioral Research for Beginning and Senior Investigators.

These grants are for five years of support with budgets of up to \$500,000 per year for investigators at any stage of their careers; however, a senior scientist is encouraged to have a co-principal investigator at an early stage of his or her career. These grants are renewable for a second five-year period.

Research Scholar Grants in Health Services and Health Policy and Outcomes Research for Beginning and Senior Investigators. As the title indicates these grants are to support health services, health policy, and outcomes research proposed by independent investigators at any stage of their careers. A senior investigator is, once again, encouraged to have a more junior co-PI. Grants are for up to four years with annual budgets of up to \$250,000, renewable for a second four-year period.

For any of the three programs contact Dr. Ralph Vogler or Dr. Frank Baker, Extramural Grants Department, at 404/329-7558; FAX: 404/321-4669. The American Cancer Society has set aside 10% of its budget for what it considers a high priority need, to support "Research Directed at Poor and Underserved Populations". It funds three types of grants under this set-aside, with deadlines for all three of October 15 and April 1. The three categories, each of which is a special type of a more general program of the Society, are Research Scholar Grants (the three types described above), Clinical Research Training Grants for Junior Faculty, and Postdoctoral Fellowships. To qualify for consideration under this targeted RFA the proposals "...must focus on poor or underserved populations, but may address a variety of behavioral, epidemiological,

policy, health delivery, clinical and basic science issues. Interdisciplinary collaborations are encouraged and the novelty and uniqueness of the proposed projects will be an important aspect in the evaluation process." The contact for this RFA is the Program Director, Dr. Donella Wilson, at 404/329-7717; FAX: 404/321-4669. Information on these and other programs of the American Cancer Society are available on the Internet at <http://www.cancer.org>.



Title: Phase I and Phase II Clinical Studies of New Chemopreventive Agents

Agency: NIH - NCI / National Cancer Institute

Identification: RFPs: N01-CN-85080-39 (phase I) and N01-CN- 85077-57 (phase II)

Deadline: October 15, 2000, and October 15, 2001 for both solicitations

The Division of Cancer Prevention (DCP) of the NCI recently reminded the biomedical community of its desire to expand the pool of groups approved to conduct phase I or phase II clinical trials of putative chemopreventive agents. Under this "Master Agreement (MA)" mechanism to be used for both solicitations, groups with the necessary services, qualified personnel, materials and supplies, and facilities to carry out the studies are asked to apply for MA agreement awards. All applicants with the requisite capabilities and satisfactory proposals will be entered into the MA pools. When requirements to conduct specific studies arise, the members of a pool will be encouraged to compete for a contract or contracts to carry out the projects.

In the phase 1a studies pharmacokinetics, pharmacology, and toxicology may be targeted. Phase 1b studies will involve a sequential, short-term (3-6 month) dose escalation trial to be conducted in a small group of subjects in which the endpoints may be pharmacokinetics, pharmacology, toxicology, or exploration of the modulation of quantifiable biological effects that are correlated with reduction of cancer incidence. Maximum tolerated and minimum effective doses may be estimated. The full announcement of this program and the requirements for applying for a MA are available on the Internet at http://rcb.nci.nih.gov/appl/rfp/rfps_published.jsp. Contact Theresa H. Shroff, Contracting Officer, at

301/435-3796; FAX: 301/402-8579.

Two subtypes are also involved in the phase II studies, analogous to those of phase 1a and 1b. The complete description of this program and the information for applying for membership in this MA pool are contained in the announcement on the Internet at <http://amb.nci.nih.gov>. Contact Desiree E. Sylver-Foust, Contract Specialist, at 301/435-3833; FAX: 301/402-8579. ▼

Title: In Vivo Cellular and Molecular Imaging Centers (ICMICs)

Agency: NIH - NCI / National Cancer Institute

Identification: RFA: CA-01-014

Deadline: November 28, 2000, with letter of intent requested by October 17, 2000

The NCI is seeking applications for P50 (research center) grants to support the development, in FY 2001, of two centers specifically designed to facilitate the formation and initial operation of multidisciplinary groups directed toward non-invasive methods of studying cancer by exploiting some of the new developments in molecular imaging, as well as those in molecular and cellular biology in general. The centers are expected to concentrate efforts of groups consisting of experts in fields such as imaging sciences, chemistry, radiopharmaceutical chemistry, cellular and molecular biology, pharmacology, computer science, biomedical engineering, immunology, and neuroscience on the overall objectives. The RFA for this initiative, published in the NIH Guide of August 11, 2000, identifies four special features being sought in these centers and discusses each in some detail. These features are: "1) an organizational structure specifically designed to facilitate scientific cross-fertilization between seemingly disparate groups of investigators; 2) specialized resources to support research activities; 3) developmental funds for feasibility testing of new projects; and 4) career development opportunities for new and established investigators." Awards under this program are expected to be for periods of five years, with annual budgets of up to \$2 million in total costs for each center. It is anticipated that future RFAs will seek applications for funding additional centers in FY 2003 and FY 2004. An RFA has also been issued to encourage planning grants for such centers under a

P20 (planning grant) mechanism. This latter program is described in RFA-CA-01-010, available on the Internet at <http://grants.nih.gov/grants/guide/rfa-files/RFA-CA-01-010.html>. Contact Anne E. Menkens, Ph.D., Biomedical Imaging Program, at 301/496-9531; FAX: 301/480-5785. ▼

Title: Role of Hormones and Growth Factors in Prostate Cancer

Agency: NIH - NIDDK / National Institute of Diabetes & Digestive & Kidney Diseases; NIA; NCI; and NIEHS

Identification: RFA: DK-01-008


Deadline: March 27, 2001, with letter of intent requested by February 27, 2001

These four institutes are seeking applications for research on the relationships between hormones and growth factors in the regulation of prostate development, growth, and tumorigenesis. Support may be requested under the R01 mechanism, with limits of four years and \$225,000 for the first year budget, or the R21 (pilot and feasibility grant) mechanism, with limits of two years and \$100,000 for the first year. It is expected that this program will fund 20 - 25 grants. The RFA, published in the NIH Guide of August 11, discusses the background for this solicitation, and presents the following list of examples of some specific targeted topics:

- "o Hormonal or growth factor regulation of prostate development, function, growth, or tumor development
- "o Mechanism of action of nuclear hormones and/or peptide hormones or growth factors in the regulation of prostate-specific gene expression
- "o Novel cell culture or transgenic model systems that allow for study in vitro or in vivo of gene expression in prostate or prostate cells
- "o Role(s) of nuclear accessory proteins in regulation of hormone/growth factor action in prostate
- "o Novel factor(s) associated with nuclear hormone action in prostate involved in tumorigenesis
- "o Analogs, agonists, or antagonists of nuclear hormones/growth factors with potential effects on tumor development and/or progression
- "o Orphan nuclear receptors with role(s) in prostate structure, function, or disease development or progression
- "o Structural biology of the androgen receptor (AR)

focusing on interactions with other receptor interacting proteins, co-activators or co-repressors, hormone, or hormone response elements

- "o Effects of Selective Receptor Modulators (SRM's) on prostate
- "o Role(s) of heat shock, or other chaperone, proteins in regulating androgen (and other hormone) function in prostate
- "o Signaling cross-talk between nuclear receptors and/or growth factor or cytokine, and other cell surface receptors, and effects on regulation of prostate gene expression and disease initiation/progression
- "o Use of DNA arrays, bioinformatics approaches to proteomics, or in silico methods of analysis to evaluate gene expression during growth factor or hormone signaling among different cells in the prostate during development, stages of tumor development, or tumor progression
- "o Age-related changes in hormone or growth factor signaling processes and patterns of gene expression that may be involved in the increasing risk of prostate cancer with age
- "o A mechanism of action of nuclear hormones working through non-receptor-mediated events leading to the initiation of cancer in prostate cells
- "o Role(s) of environmental factors that may interact with or influence the effects of hormones and growth factors on prostate growth, development, and/or tumor development."

Contact Ronald Margolis, Ph.D., Senior Advisor, Molecular Endocrinology, Division of Diabetes, Endocrinology, and Metabolic Diseases, NIDDK, at 301/594-8819; FAX: 301/435-6047; or Monica Liebert, Ph.D., Director, Basic Science Programs in Urology, Division of Kidney, Urology and Hematology, NIDDK, at 301/594-1409; FAX: 301/480-3510. 


Title: Research and Educational Projects Related to Skin Cancer

Agency: Skin Cancer Foundation

Identification: none

Deadline: October 20, 2000

The Skin Cancer Foundation offers grants to fund pilot research projects, basic or clinical, directed toward improved methods of prevention or detection of skin cancer. Educational programs to promote

prevention are also considered. Contact the Skin Cancer Foundation 212/725-5176; FAX: 212/725-5751. 



CHILD HEALTH

Title: Emergency Medical Services for Children (EMSC) - Several Programs

Agency: HRSA / Health Resources and Services Administration

Identification: see below

Deadline: November 1, 2000, with required letter of intent due on October 2, 2000

As reported in the August *INKlings* the HRSA has published its preview of programs for FY 2001. Included are three directed toward improvements in emergency medical services for children (EMSC), each having a deadline for applications close at hand. States and medical schools are eligible to apply to each of the three programs. Information on each program is expected soon to be on the Internet at <http://www.hrsa.gov/grantsf/htm>. Brief descriptions of each program follow:

1) EMSC Implementation 93.127A. "This implementation grant will improve the capacity of a State's EMS program to address the particular needs of children." Applicants are encouraged to conduct activities which (a) address identified needs within the state's EMS system; (b) develop or monitor pediatric EMS capacity; or (c) will be institutionalized within the state's EMS system. A single award of \$250,000 per year for three years is anticipated. Contact Maria T. Baldi at 301/443-6192; e-mail: mbaldi@hrsa.gov.

2) EMSC Implementation 93.127C. "State partnership grants will fund activities that represent the next logical step or steps to take to institutionalize EMSC within EMS and to continue to improve and refine EMSC." The activities should be directed toward needs already documented within the state. Possibilities mentioned include increased involvement of families in EMSC; improvements in linkages between local, regional, or state agencies; expansion of regional standards to the entire state; coordinating or funding poison control centers; and improving triage of children in physical or emotional crises to

appropriate sites for care. Seven awards for periods of three years with annual budgets of \$100,000 each are anticipated. Contact Maria T. Baldi at 301/443-6192; e-mail: <mbaldi@hrsa.gov>.

3) EMSC Implementation 93.127D. "Targeted issue grants are intended to address specific, focused issues related to the development of EMSC knowledge and capacity with the intent of advancing the state-of-the-art, and creating tools or knowledge that will be helpful nationally." The targeted issues, specifically identified in the "EMSC Five Year Plan", are: "cost-benefit analysis related to EMSC, implications of managed care for EMSC, evaluations of EMSC components, models for improving the care of culturally distinct populations, evaluation of systems for provision of emergency health care within day care and/or school settings, and evaluation of family-centered care models." Issues not mentioned may be addressed if they are relevant to the Plan. Eight awards with two- or three-year durations and annual budgets averaging \$150,000 are planned. Contact Cindy Doyle at 301/443-3888; e-mail: <cdoyle@hrsa.gov>. ▼

ENVIRONMENTAL HEALTH

Title: Undergraduate Mentoring in Environmental Biology (UMEB)

Agency: NSF - National Science Foundation

Identification: NSF 00-130

Deadline: Ongoing, with a deadline (target date) each year on October 31

This program has the objective of providing support for talented undergraduate students to gain research experience in biological sciences related to the environment and to foster an enriched and culturally diverse research and educational environment. It also seeks to improve the mentoring abilities of the faculty members involved in the program. It is expected that programs will be developed which are year-round, with individual students continuing in the program for more than one year. Joint proposals involving research universities and predominantly undergraduate institutions are specifically encouraged. Among the latter institutions, those with significant enrollments of underrepresented groups are particularly targeted.

Applicant institutions, alone or jointly where more than one is involved, must have at least two ongoing, or recently terminated, multiyear grants from the NSF related to the environment and a third award, also environmentally related, from another source. For this purpose "environmental biology" is broadly interpreted, as stated in the program solicitation, on the Internet at <<http://www.nsf.gov/pubs/2000/nsf00130/nsf00130.htm>>. At least one PI from each of these supporting grants must agree to serve as a mentor on the UMEB award. An interesting aspect of this award is that it explicitly encourages international research activities involving several students and a mentor at a field site or laboratory abroad. Funding under this program may be for periods of four years with annual budgets of \$100,000, plus an additional \$4,000 for "ethics activities." The budgetary items allowed include such items as student stipends, student housing, travel expenses for meetings and for research at field sites for students and mentors, and research costs. The solicitation identifies four contacts, one from each of four divisions in the Directorate for Biological Sciences. The one for the Division of Environmental Biology is Elizabeth E. Lyons at 703/292-7188; e-mail: <elyons@nsf.gov>. ▼

HEART, LUNG, AND BLOOD DISEASES

Title: Parker B. Francis Fellowship in Pulmonary Research

Agency: Francis Families Foundation, administered by the Harvard School of Public Health

Identification: none

Deadline: October 16, 2000

The Parker B. Francis Fellowship program annually funds about 15 fellowships for doctoral level basic or clinical scientists who are at a late stage of postdoctoral training or an early stage of an academic career. The awards, for three years, are to allow the recipients to conduct research related to pulmonary disease and lung function as their major activity. A mentor who is an established investigator in a relevant field and who can guarantee that 75% of the fellow's time will be available for the research must be identified. The funds, which total \$38,000, \$40,000, and \$42,000 respectively for each of the three years, are for a stipend and travel expenses, which are

limited to \$1,500 per year. The successful candidates will most likely have several productive years of postdoctoral experience but no more than seven years. Contact Dr. Joseph Brain, Director of the Fellowship Program, or Ms. Arlene Kirsch, Administrator of the Fellowship Program, at 617/432-4099; FAX: 617/277-2382. Additional information and application forms are available on the Internet at <<http://www.hsph.harvard.edu/pbf/guidelines.html>>. ▼

Title: Fellowships and Grants - 2001-2002 Programs
Agency: Mid-Atlantic Affiliate of the American Heart Association
Identification: none
Deadline: November 16, 2000

The American Heart Association's Mid-Atlantic Affiliate has announced four programs to support training and research on cardiovascular function and diseases, stroke, or basic science, clinical, behavioral, or public health problems related to these areas.

Pre-doctoral Fellowships. These awards provide support of \$12,000 in stipend, \$1,200 in fringe benefits, and \$5,000 in project support. Awards are usually for two years of support. Students on certain types of exchange visas may apply for these awards. Up to ten awards will be made.

Post-doctoral Fellowships. These awards support trainees with either a professional or research doctoral degree for two years while they conduct research under an established mentor. Stipends plus fringe benefits are limited to \$30,000 per year. Persons with certain types of exchange visas are eligible to apply.

Beginning Grant-in-Aid. This program provides research support for up to two years with up to \$60,000 per year; \$30,000 of this amount may be for salary plus fringe benefits for the PI. These awards are for doctoral level scientists who have full-time faculty or staff status up to the rank of assistant professor; they must not have more than \$100,000 in direct research support from other sources.

Grant-in-Aid. These grants of up to \$60,000 per year for two years are awarded for innovative, meritorious research projects to be conducted by independent investigators without restrictions as to rank or seniority. The funds may be used for research support including up to \$30,000 per year in salary for the PI. Additional information and application forms are

available on the Internet at <<http://www.americanheart.org>>. Contact the Affiliate Research Services of the Mid-Atlantic at 410/637-4540/4539. ▼



INFECTIOUS DISEASES

Title: Cooperative Agreements for Research on Lyme Disease

Agency: CDC / Centers for Disease Control and Prevention

Identification: see below

Deadline: October 15, 2000, with letters of intent requested by September 10, 2000

The CDC has announced the availability of cooperative agreements to support research in three distinct areas related to Lyme disease. Under this funding mechanism scientific personnel of the CDC will collaborate in specified ways during the planning, conduct, and/or reporting of the research. All three programs were described in the Federal Register of August 14, 2000. Information on them and on other CDC programs is available on the Center's website at <<http://www.cdc.gov>> under "funding", followed by "Grants and Cooperative Agreements". Brief descriptions of each program follow:

"Cooperative Agreement for Research on the Ecology of Lyme Disease in the United States", Program Announcement 01003. About five awards are anticipated with project periods of three years and budgets for the initial year of \$150,000 - \$300,000. A wide variety of activities being targeted are mentioned in the announcement, all aimed ultimately at reducing the transmission of the disease. Suggested are studies of tick population densities; prevalence of the infectious agent, *Borrelia burgdorferi*, in the tick populations; prevalence of other related spirochetes; and special consideration of *B. lonestari* and its vectors. Contact Joseph Piesman, D.Sc., Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases, at 970/221-6400; e-mail: <jfp2@cdc.gov>.

"Cooperative Agreements To Prevent Lyme Disease in the United States", Program Announcement 01004. This program will support two types of awards. One is to "Promote and support community and other population-based interventions to prevent Lyme disease." A second is to "...develop novel strategies for Lyme disease prevention that are likely to be

successfully implemented in the near future." All awards will be for up to three years. The program for population-based interventions will fund about five awards with budgets of \$200,000 - \$600,000 per year. The one for novel strategies will fund about four awards with annual budgets of \$100,000 - \$200,000. Awards in the first category are expected to support a number of specified activities directed toward educating, changing attitudes, and obtaining the collaboration of community leaders and residents in affected areas. The second approach is to design and apply any potentially good novel approaches to reducing the populations of vectors or the transmission of the disease. Contact Edward B. Hayes, M.D., Joseph Piesman, D.Sc., Kathleen Orloski, D.V.M., M.S., or David Dennis, M.D., M.P.H., Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases, at 970/221-6400; e-mail: <jfp2@cdc.gov> or <ebh2@cdc.gov>.

"Cooperative Agreement for Research on the Laboratory Diagnosis and Pathogenesis of Lyme Disease in the United States", Program Announcement 01005. Under this program about seven three-year agreements are expected to be funded, with annual budgets of \$100,000 - \$300,000. "The purpose of the program is to develop improved and standardized laboratory tests to identify and characterize infection by *Borrelia burgdorferi* and related *Borrelia* species in humans and to better understand the pathogenic mechanisms of *B. burgdorferi*." Contact Barbara J. B. Johnson, Ph.D., Division of Vector-Borne Infectious Diseases, National Center for Infectious Diseases, at 970/221-6400; e-mail: <bjj1@cdc.gov>.

Title: Operation of a Facility for the Study of Infectious Agents, Vaccines and Antimicrobials in Adult and Pediatric Human Subjects
Agency: NIH - NIAID / National Institute of Allergy & Infectious Diseases
Identification: RFP-NIH-NIAID-DIR-01-01
Deadline: November 15, 2000

The Laboratory of Infectious Diseases, Division of Intramural Research, NIAID, is seeking proposals for the "...performance of clinical trials of vaccine candidates and their respective wild type viruses for a variety of viruses including respiratory viruses (e.g., respiratory syncytial and parainfluenza viruses),

gastroenteritis viruses (e.g., rotaviruses), and other viruses (e.g., dengue viruses). These trials will be conducted in persons of all ages, such as pediatric populations (including one month old infants) for respiratory syncytial virus vaccines and adults over the age of 65 with influenza virus vaccines. This will involve community education and publicity, participation in the development of protocols for the trials, recruitment and screening of volunteers, inoculation with candidate vaccines, recovery and characterization of vaccine viruses from infected vaccinees, assessment of humoral responses to the vaccines, medical evaluation of volunteers to assess potential toxic effects of the vaccines, challenge of adult volunteers with type virus, and reporting of the information at scientific meetings." A single contract with a performance period of seven years is planned. The RFP should be on the Internet under RFP-NIH-NIAID-DIR-01-01 at <<http://www.niaid.nih.gov/contracts/>>. Contact Ms. Brenda Velez, Contracting Officer, at 301/496-7117.

INSTRUMENTATION & FACILITIES

Title: Small Animal Imaging Resource Programs (SAIRP)
Agency: NIH - NCI / National Cancer Institute
Identification: RFA: CA-01-012
Deadline: November 28, 2000, with letter of intent requested by October 19, 2000

To increase the availability of small animal imaging facilities each expected to serve the needs of multiple basic cancer research projects the NCI is seeking applications for the establishment of about five new facilities of that type, using the resource-related research project (R24) mechanism. Each of these SAIRPs is expected to meet some very specific requirements. It must support the development of a state-of-the art facility designed to serve several funded cancer research projects, perhaps including the provision of ancillary services related to animal care and treatment and data processing and analysis; it must also serve as a training resource for professional and technical personnel. In addition to serving service and training functions, it is also expected direct at least one-third to one-half of its resources and time to research and development of small animal imaging

technology. The budget for funding all awards for the first year of this program is about \$5.9 million which will include the expected purchase of major equipment; the subsequent years will have annual budgets totaling about \$3.5 million for the five anticipated awards. Contact Barbara Y. Croft, Ph.D., Diagnostic Imaging Program, at 301/496-9531; FAX: 301/480-5785. ▼



MISCELLANEOUS

Title: Dermatology Grants, Fellowships, and Career Development Awards

Agency: Dermatology Foundation

Identification: none

Deadline: October 15, 2000

The Dermatology Foundation offers several types of awards for research and research training in the field of dermatology. Among them are the following:

Dermatologist Investigator Research Fellowship Award. This is a one-year award for dermatologists who have finished their residency training and are embarking on a career in academic dermatology. The stipend is \$25,000.

Career Development Award in Skin Research. These fellowships are to assist junior faculty members in departments of dermatology during a period of transition from postdoctoral research trainee to that of established investigator. The award consists of a stipend of \$40,000 per year for up to three years.

Health Care Policy Clinical Career Development Award. These awards of up to \$40,000 per year for periods up to three years are to support the establishment of health policy careers for dermatologists. The health policy research in dermatology includes studies of outcomes, development of information systems, and the development and evaluation of methods for delivery and practice of dermatology.

Fellowships. The Foundation offers postdoctoral fellowships in dermatology and cutaneous biology, including photobiology. Applicants may have an M.D. or Ph.D. degree. The one-year fellowship has a stipend of \$25,000.

Grants. General grants of \$10,000 for one year are offered to support pilot projects in dermatology and cutaneous biology, with some special grants for skin cancer, dermatologic surgery and oncology, cutaneous

pharmacology, and epidermolysis bullosa.

Contact the Medical and Scientific Committee at 847/328-2256; FAX: 847/328-0509. ▼

Title: Clinical Studies of Safety and Effectiveness of Orphan Products; Availability of Grants

Agency: FDA - Food & Drug Administration

Identification: CFDA no.: 93.103

Deadline: October 16, 2000, and March 15, 2001

The FDA is seeking applications for grants to support any phase of clinical trials of safety and effectiveness of products for treatment of a rare disease or condition. The definition of "rare disease or condition" used in this context is one with a prevalence of fewer than 200,000 people in the U.S. Any phase clinical trial is eligible for up to \$150,000 in direct costs per year for up to three years, and phase 2 and 3 trials may request up to \$300,000 per year for three years. A total of \$4 million is available in FY2001 for new grants in this program, grants awarded in response to applications meeting either of the two deadlines. Grants to study diagnostic tests or vaccines may be submitted, provided, of course, that the targeted condition falls in the "rare" category. It is emphasized that applications must contain assurance of the availability of the materials to be tested and the populations needed for the studies. Contact Ronda A. Balham, Office of Orphan Products Development (HF-35), at 301/827-3666. ▼

Title: Small Business Innovation Research (SBIR) Program

Agency: NIH / National Institutes of Health; and CDC / Centers for Disease Control and Prevention

Identification: OD-00-047

Deadline: November 3, 2000

The NIH and the CDC have jointly published, in the NIH Guide of August 11, 2000, a list of the topics specifically identified as those suitable for projects to be investigated under the SBIR program for FY 2001. Recall that this program provides funds to small businesses for the support of research directed toward the development of commercially valuable products or services. Although full-time faculty members of educational institutions are not eligible to serve as PIs on these projects, since they are not principally

employees of the small business-applicants, they do often serve as major consultants or subcontractors and may be the originator of the research plan. This research is conducted in three phases. Phase I is to determine merit and feasibility of the idea. It is usually funded at no more than \$100,000 in total costs for a six-month period. Phase II, funded competitively based on success in Phase I, is to move the project toward commercialization. It is generally funded at a level of no more than \$750,000 in total costs to be used over a period of up to two years. Phase III is usually the period of commercialization, funded entirely by the small business. The notice of this program lists almost 50 titles for projects, many of which are quite specific and some of which seem rather novel or surprising. Full information on this program is available on the Internet at <http://grants.nih.gov/grants/funding/sbir.htm>. ▼

structural genomics and should demonstrate the ability to accomplish the computational and experimental facets as an integrated and high throughput operation. Effective plans for management and administration of the research centers are crucial. Attention should be paid to costs and efficiency, as well as technology development. Rapid release of data into the public databases will be required, as described below." The RFA continues with descriptions of the five required components of these centers under these titles: "Family Classification and Target Selection"; "Generation of Protein for Biophysical Analyses"; "Sample Preparation for Structural Studies"; "Structure Determination"; and "Analyses and Dissemination of Results". There are several special requirements identified in the RFA. Contact John C. Norvell, Ph.D., Division of Cell Biology and Biophysics, at 301/594-0533; FAX: 301/480-2004. ▼

Title: Pilot Projects for the Protein Structure Initiative (Structural Genomics)

Agency: NIH - NIGMS / National Institute of General Medical Sciences

Identification: RFA: GM-00-006

Deadline: February 12, 2001, with letter of intent requested by November 3, 2000

The NIGMS seeks applications for the establishment of three centers to serve as pilots seeking the best approaches for the ultimate development of large-scale research networks in structural genomics. This is part of the Institute's "Protein Structure Initiative (PSI)". Awards under the present RFA are expected to be for five years, each with a budget for the first year of up to \$3 million. The feasibility and goals of this major undertaking, the PSI, were largely developed in three workshops, the summaries of which are available on the Internet at <http://www.nih.gov/nigms/funding/psi.html>. The present RFA states its Objectives and Scope as follow:

"The purpose of this RFA is to announce support for research centers in the new and emerging field of structural genomics. These research centers are intended to serve as pilots that will lead to subsequent large-scale research networks in structural genomics and high throughput structural determination of proteins by X-ray crystallography and NMR methods. They should contain all of the constituent tasks of

Title: Quality of Life for Individuals at the End-of-Life

Agency: NIH - NINR / National Institute of Nursing Research; NCI; NCCAM; NIAID; NIDCR; NIMH; and NIA

Identification: PA-00-127

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

These six institutes and one center of the NIH jointly encourage the submission of R01 grant applications for the support of research which has the potential of generating scientific information which may enhance the quality of life remaining for individuals who are nearing the end of their lives. Improvements may result from better management of physical or psychological symptoms, better communication with patients and families, or modifications in ethical or clinical decision making. Applications may request up to five years of support. The Program Announcement, published in the NIH Guide of August 4, 2000, identifies close to 20 rather specific topics as examples of those suitable for investigation under this program. They are grouped under the following five rubrics: 1) "Clinical management to promote the quality of life of individuals across the life span who are at the end-of-life." 2) "Communication." 3) "Ethics and clinical decision making." 4) "Caregiver support." 5) "Care

delivery." A contact is identified for each of the seven funding components. The first named is Dr. Ann Knebel, Division of Extramural Activities, NINR, at 301/594-5966; FAX: 301/480-8260. ▾

Title: Conferences, International Travel, Workshops and Special Years in the Mathematical Sciences

Agency: NSF - National Science Foundation

Identification: NSF 00-109

Deadline: none

The Directorate for Mathematical Sciences of the NSF each year funds some 30 conferences plus some international travel and visiting scientist programs for mathematical scientists. Awards for conferences are funded generally at \$10,000 to \$20,000. The principal objective of this program is to promote the participation of mathematical scientists in research activities. The announcement includes this statement: "Conference proposals that are linked to National Science Foundation research priorities, Federal initiatives or strategic areas, especially by providing opportunities to these activities and/or to participate in multidisciplinary projects will have a high priority." Contact an appropriate Program Officer of the Directorate for Mathematical Sciences, names of whom are accessible on the Internet at <http://www.nsf.gov/mps/dms/start.htm>. ▾

Title: Research on Research Integrity

Agency: Office of Research integrity, DHHS and NIH - NINDS / National Institute of Neurological Disorders and Stroke

Identification: RFA: NS-01-008

Deadline: December 15, 2000, with letter of intent requested by November 17, 2000

The Office of Research Integrity and the NINDS are jointly seeking applications for R01 grants to support research directed toward identification of factors which positively or negatively influence integrity in research, the ultimate objective being to inform policy making at DHHS, NIH, and research institutions in ways that will promote integrity in publicly funded research. The RFA defines "integrity" as "adherence to rules, regulations, guidelines, and commonly accepted professional codes or norms." It is anticipated that three to five grants will be awarded

with award periods of up to two years and annual budgets of up to \$100,000 in direct costs. Future support for continuation of these grants and the awarding of more is being planned. The RFA for this program, published in the NIH Guide of August 18, 2000, lists a number of particular areas of interest which might be targeted under the grants funded by this initiative. They are grouped under six broad categories which are: 1) research norms and practices; 2) institutional climate and responsibility; 3) education on the responsible conduct of research (RCR); 4) integrity of publication practices and the research record; 5) conflict of interest; and 6) research policies. It is hoped that input from diverse areas of expertise may be brought to bear on this subject through the participation of experts in "...anthropology, applied philosophy, business, economics, education, information studies, law, organizational studies, political science, psychology, sociology, and survey and evaluation research, plus the physical, biomedical, and clinical sciences." Contact Mary D. Scheetz, Ph.D., Office of Research Integrity, Division of Education & Integrity, at 301/443-5302; e-mail: MScheetz@osophs.dhhs.gov; or Mary Ellen Cheung, Ph.D., NINDS, at 301/496-1447; e-mail: mm108w@nih.gov. ▾

Title: Bone Health & Military Medical Readiness (Osteoporosis and Related Bone Diseases)

Agency: U.S. Army

Identification: BAA: CBD-BHR-0804

Deadline: December 20, 2000, with letter of intent required by November 1, 2000

The U.S. Army Medical Research and Materiel Command is seeking proposals for a wide variety of studies of bone physiology in populations of military age, an effort coordinated with the National Coalition for Osteoporosis and Related Bone Diseases and the National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS). The goal is to advance understanding which will contribute to improved bone health in young men and women, thereby improving military readiness and reducing the incidence of osteoporosis in later life. The following is quoted from the announcement published in the Commerce Business Daily of August 17, 2000: "Research insights into fundamental mechanisms of bone biology and pathogenesis of bone diseases (such as

osteoporosis, Paget's disease of bone, and osteogenesis imperfecta) contribute to these goals. We solicit proposals to continue the program on biomechanical influences on bone including basic science and [clinical] science applications. For this announcement, high priority will be given to epidemiological and laboratory projects that address specific topics related to dietary factors that moderate biomechanical effects on bone, including: (1) The allelic variation in Vitamin D receptor and bone density/structure and fracture risk; (2) Influence of geographical and racial variables on dietary intake needs for vitamin D (including influence of sunscreens and occupations such as submariners); (3) Dietary intake requirements for calcium and vitamin D to optimize bone mineral accretion in young men and women of recruit age (ages 17 - 20); (4) Interaction of exercise and calcium intake on bone physiology and fracture risk; (5) Role of IGF1 (and other somatotrophic factors regulated by dietary intake) on bone structure and function; (6) Applications of microimaging techniques in animal models to study bone structure and function beyond that provided by bone mineral density studies." Projects are expected to be of two to four years in duration and to be funded at about \$200,000 per year. At least \$5 million will be available for the entire period of support for all projects. A special category, concept exploration proposals (CEP), will be considered, where the total direct costs are not to exceed \$100,000. These are designed to support pilot studies in which preliminary data will be sought. The full Broad Agency Announcement, basically an RFP, is available on the Internet at <http://www-usamraa.army.mil/baa/baalist.htm>. Contact Craig D. Lebo, Contracting Officer, at 301/619-2036. ▼

Title: International Education and Cultural Activities Open Grant Program; Request for Proposals

Agency: U.S. Department of State

Identification: Public Notice 3380

Deadline: October 27, 2000

The Office of Citizen Exchanges, Bureau of Educational and Cultural Affairs, of the Department of State encourages the submission of applications for funds to support activities designed to promote educational and cultural interactions between people

of the United States and those in other countries. The approach most often supported involves citizen exchanges. The Act which supports this program is best known as the Fulbright Hays Act. In general applications may be made for any relevant program which may be classified as being of "crucial importance"; however, the Bureau identifies certain countries and areas for which programs in specific fields are particularly desired. The present notice was published in the Federal Register of August 3, 2000. Among the areas of expertise being encouraged to participate are environmental specialists and educators in general. Some geographic areas and topics include the following:

For Thailand proposals are sought to improve education via the following themes: (1) Definition of the university's relationship with the society and the State with emphasis on the role of the university as innovator; (2) Improvement of the quality of professional education; (3) Stimulation of scientific and technological research within the university to promote local and regional development; (4) Consolidation of the university's role in supporting national culture; (5) Strengthening bonds between the university and the private sector; (6) Rationalization of resources and diversification of financing of the university; (7) Incorporation of new systems of academic and administrative management."

For the Western hemisphere among proposals sought are those which might improve environmental education, with particular emphasis on such educational activities in Costa Rica, Honduras, El Salvador, and Panama.

With respect to potential programs in Africa special consideration is directed toward educational activities which may help improve the health care for patients with HIV/AIDS and reduce spread of the disease. Environmental education is also identified as a topic of interest for countries of the Near East, North Africa, and South Asia, particularly for Egypt, Israel, the West Bank and Gaza, Lebanon, Bahrain, India, and Nepal where air and water pollution often impact seriously on public health and the economy.

Funds available in this exchange program are to be used principally for the support of travel, per diem, and related expenses for exchanges in either direction. Grants of less than \$135,000 are encouraged and for those institutions with limited experience in managing international exchanges the limit is \$60,000. At least

one-third of the costs of programs must be funded from other sources. Competition for these awards is intense, and those which have partial support from private sources are favored to some extent. Contact the Office of Citizen Exchanges at 202/619-5348.



NEUROLOGICAL DISORDERS


Title: NINDS Career Transition Award (K22)

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

Identification: PAR-00-122

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

The NINDS offers Career Transition Awards (K22) to scientists with M.D. or Ph.D. degrees or their equivalent and with some limited research experience to enable these individuals to become independent investigators in the fields of programmatic interest to that institute. The awards are for a total of five years, about one-half to be spent working in the intramural program of the NINDS under a senior scientist-mentor, the other half in a more independent environment, usually an academic institution where the award recipient is embarking on a career in a tenure-track position. The applicant must make arrangements with a prospective mentor at the NINDS prior to submitting an application. The research areas active there include basic, translational, and clinical neuroscience research in areas such as structure-function studies of ion channels and synapses, stem cell biology, analysis of neural circuits, and clinical and preclinical studies seeking new therapeutic strategies for neurological disorders. Detailed information on the NINDS intramural research and potential mentors is available on the Internet at <http://intra.ninds.nih.gov>. At the end of the two- or three-year period in Bethesda, the awardee is expected to move to a new institution to continue his or her career development; however, a tenure-track position in the NINDS is not prohibited, should such an option seem mutually advantageous. The second, extramural portion of the program requires a second application which must be submitted by the new institution, and which will include the research and career plans for the individual as well as the institution's commitments to support the new faculty member. It is expected that at least 75% effort will be devoted to the research


during this phase of the award. During the intramural phase of the award the stipend will be set in accordance with the scales at the NIH; research expenses including travel funds will be negotiated with the mentor and his supervisors. Up to \$75,000 may be requested. During the extramural phase at the academic institution the K22 award will furnish up to \$150,000 per year for research and salary, with the salary contribution limited to \$75,000. Supplements, with some limits on sources, may be used to bring salaries into congruence with institutional scales. Contact Dr. Henry Khachaturian, Training and Career Development Officer, at 301/496-4188; e-mail: hk11b@nih.gov; or Dr. Story Landis, Scientific Director, at 301/435-2232; e-mail: sl122c@nih.gov. 

Title: Research and Training Grants

Agency: Tourette Syndrome Association

Identification: none

Deadline: Letter of intent required by October 2, 2000

The Tourette Syndrome Association offers one-year training fellowships for MDs or PhDs. The stipend is \$40,000. It also offers grants for basic neuroscience or clinical research related to Tourette syndrome, with awards of up to \$75,000. Contact Sue Levi-Pearl, Liaison, Scientific and Medical Programs, at 718/224-2999; FAX: 718/279-9596. 

TRAINING & CAREER DEVELOPMENT

Title: Career Awards in the Biomedical Sciences

Agency: Burroughs-Wellcome Fund (BWF)

Identification: none

Deadline: October 2, 2000, with an internal deadline for MUSC at an earlier date

The Burroughs-Wellcome Fund offers each year about 25 awards to biomedical scientists at early stages of their careers to afford support during a period of three years of advanced postdoctoral research followed by three years of independent research in a tenure-track academic position. The postdoctoral training may be in the U.S., Canada, the U.K., or Ireland; the faculty position must be in the U.S. or Canada. These awards are for up to \$574,000 for the six-year period. A

special category of this award supports research training in the reproductive sciences. More information on this program and other programs of the BWF is available on BWF's website at <http://www.bwfund.org>. Contact Rolly Simpson, Program Associate, at 919/991-5110; e-mail: rsimpson@bwfund.org. Since the number of applicants from a single institution is limited and since a dean or department chair must sponsor the applicant, early contact with the MUSC Office of Research Development is strongly advised. More information on internal deadlines is available on the MUSC research website at <http://research.musc.edu>. ▼

Title: Arthur Ashe Program in AIDS Care
Agency: National Medical Fellowships, Inc.
Identification: none
Deadline: January 19, 2001, with letter of intent required by October 1, 2000

This Program, established by the Henry J. Kaiser Family Foundation, each year supports eight medical students from underrepresented minority groups while they attend and participate in a four-week multidisciplinary training program in HIV/AIDS clinical care and research. Current third year students are eligible to apply now for the fellowship next year. The training program will be held at Harvard in October 2001. Fellows receive a stipend of \$6,000 to cover room, board, travel, and other expenses. Contact "National Medical Fellowships" at 212/714-1007. ▼

Title: Disability and Rehabilitation Research Fellowships
Agency: U.S. Department of Education
Identification: CFDA no.: 84.133F
Deadline: October 10, 2000

The National Institute on Disability and Rehabilitation Research of the Department of Education is seeking applications for fellowships to support one-year periods of full-time research in any area authorized by section 204 of the Rehabilitation Act of 1973, as amended. "Fellows may address problems encountered by individuals with disabilities in their daily lives that are due to the presence of a disabling condition, problems associated with the provision of

rehabilitation services to individuals with disabilities, and problems connected with the conduct of disability research." There are two categories of fellowships, Merit Fellowships and Distinguished Fellowships. Applicants for the Distinguished Fellowship program must have a doctorate of other terminal degree and seven or more years of relevant research experience; those for the Merit Fellowship program must have either advanced professional training or relevant experience in independent study. The Distinguished Fellowships are for \$55,000, the Merit ones for \$45,000. It is estimated that ten awards will be made. This program and other documents of the Department of Education may be found on the Internet at <http://ocfo.ed.gov/fedreg.htm> or <http://www.ed.gov/news.html>. Contact Kym Butler at 202/205-9250; e-mail: Kym_Butler@ed.gov. ▼

Title: Vocational Education
Agency: U.S. Department of Education
Identification: not known
Deadline: not known

The Department of Education has an ongoing program, funded at \$1.7 million, to develop academic standards and curricula in 16 defined career areas, designated as "clusters". The project encourages educators to partner with industry and employer groups in developing these vocational educational programs. Pilot projects are underway in the first five cluster areas attacked, which are manufacturing; transportation/logistics and distribution; information technology; health services; and arts and communications. It is anticipated that a new announcement of programs for the remaining areas will be announced in September 2000. These are agriculture and natural resources; business and administrative services; education and training; human services; legal and protective services; public administration and government; scientific research, engineering and technical services; construction; financial services; hospitality and tourism; retail/wholesale sales and service. It is expected that any announced programs will have short lead times. Therefore, anyone interested is encouraged to watch for the announcement which will probably be made in the Federal Register. One might also wish to keep an eye on the ED's website at <http://www.ed.gov>. ▼▼

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 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.

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