

Opportunities For International Research Collaboration

National Institutes of Health

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National Institutes of Health

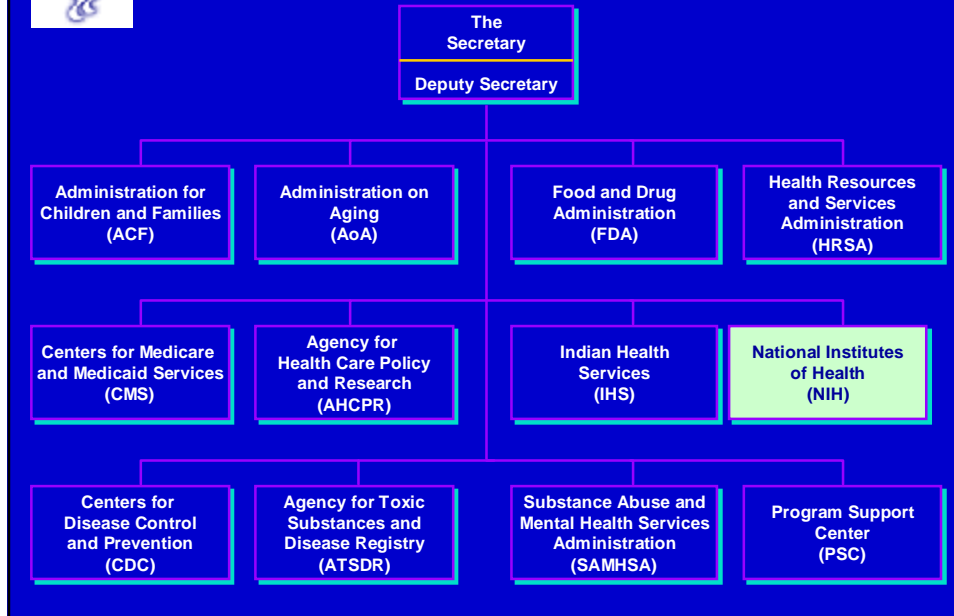
The National Institutes of Health (NIH)
is the principal health research agency for the U.S.
Federal Government.

NIH is a component of the Department of Health
and Human Services (DHHS).





U.S. Department of Health and Human Services



National Institutes of Health

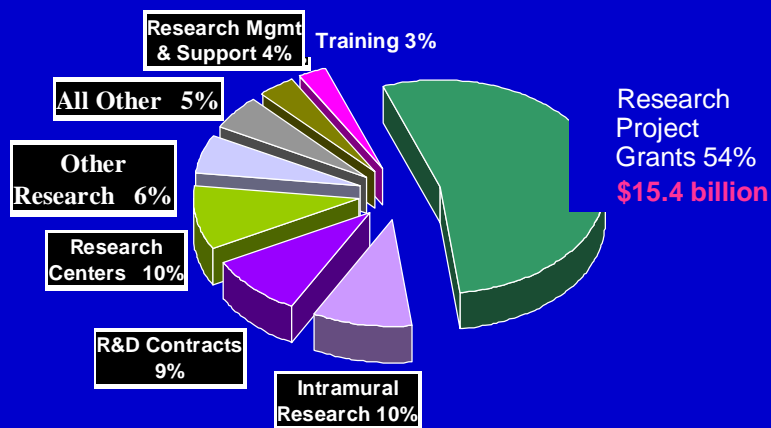
Mission

To uncover new knowledge that will lead to better health for everyone

www.nih.gov



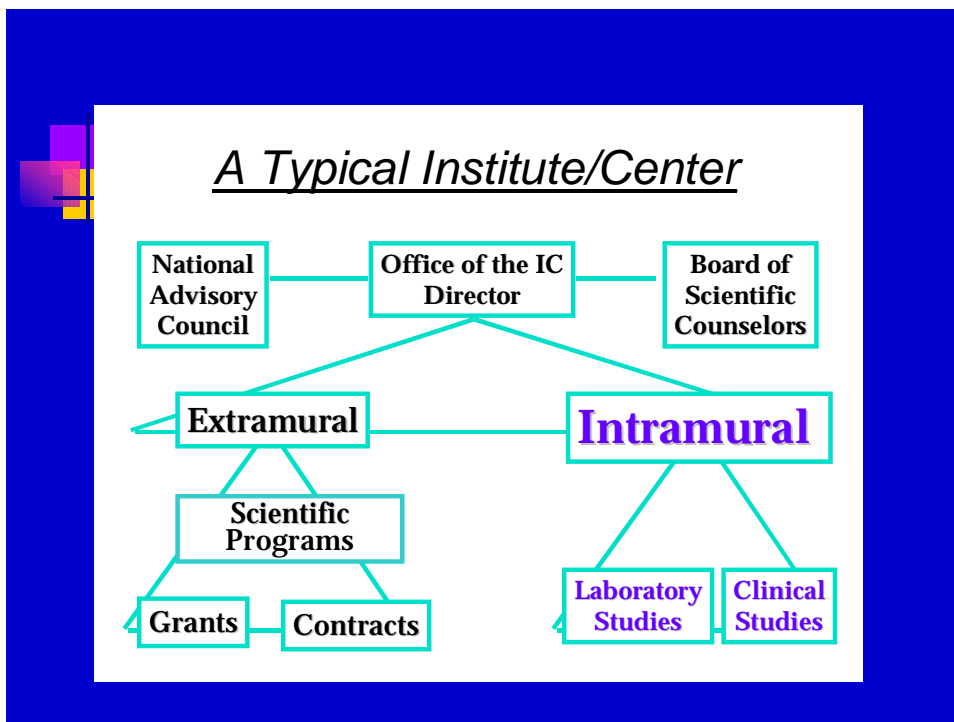
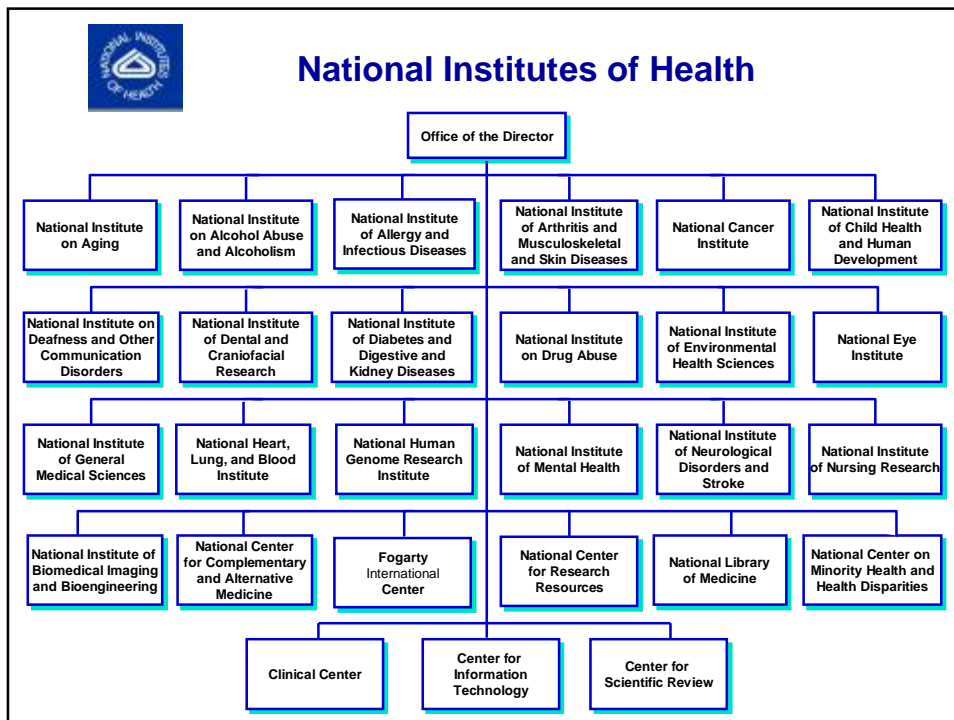
FY '06 Budget \$28.61 Billion Dollars



NIH fulfills its mission by:

- Supporting the research of non-Federal scientists in universities, medical schools, hospitals, and research institutions throughout the country and internationally.
- Conducting research in its own laboratories.
- Helping in the training of research investigators in the U.S. and abroad.
- Fostering communication of medical and health sciences information in the U.S. and abroad.





Intramural Research Visiting Scientist Program

- ∅ Provides opportunities for foreign scientists to train and conduct collaborative research at the NIH
- ∅ Trains 2,000 scientists from other nations to conduct research in basic and clinical science laboratories
- ∅ Is open to scientists at all career levels.



Visiting Program (cont.)

Two categories of participants:

- 1. Visiting Fellows - receive awards for research training**
- 2. Visiting Scientists - receive appointments to conduct research.**

• Work closely with a senior NIH investigator who serves as supervisor or sponsor during the period of award or appointment.



Who Can Apply?

Post-doctoral Visiting Fellow

candidates must hold a doctoral degree and have *no more* than five years of relevant research experience since receipt of their most recent doctoral degree.

Visiting Scientist

candidates with three or more years of post-doctoral research experience are eligible for the following types of appointments:

Research Fellow, Clinical Fellow, Staff Scientist Staff Clinician, Investigator, Senior Investigator.

For descriptions of these appointments, go to:

<http://hr.od.nih.gov/employment/Title42/default.htm>



How to Apply

First secure an invitation for an award or appointment from a senior scientist at the NIH.

For a list of Postdoctoral Opportunities:

<http://www.training.nih.gov/webforms/postdoctoral/application/adIndex.asp>

Contact the investigator listed to discuss and get application and instructions. You will need to provide a resume and brief description of your research area and interests.

For Visiting Scientists:

www.usajobs.gov

Search Title 42 positions which are labeled 'AD' pay plan.



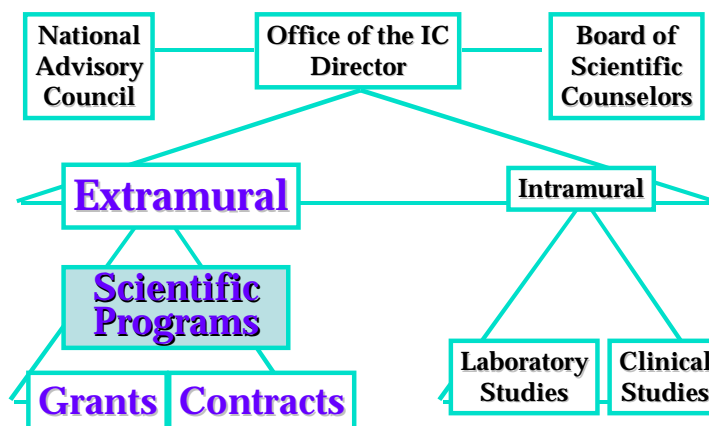
For more detailed information:

Go to the Visiting Program website :

<http://www.jobs.nih.gov/noncitizen.asp>



A Typical Institute/Center



Extramural Support for Research

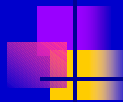
To: Principal Investigators in universities, health professional schools, hospitals, research institutes, and state governments.

For:

- ü Researcher initiated research
- ü Response to institute request for applications (RFA) or general announcement of interest in topic (PA)
- ü Cooperative agreements



NIH International Research Support Mechanisms



NIH now allows
8% indirect
costs to the
foreign site

(R01, R03, R21)

- (1) Direct Award to a Foreign Institution
- (2) Domestic Award with a Foreign Component
- (3) Fogarty International Research Programs for Developing Countries

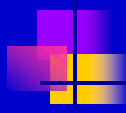


R01 Research Project Grant

- Award for discrete, specified, project in an area of investigator's specific interest and competencies and based on research interests of the NIH institutes
- n Grant applications assigned to an Institute or Center (IC) or multiple ICs to encourage interdisciplinary and multidisciplinary research
- n See IC web sites for funding opportunities. Note contact person listed and call or write to discuss research idea

R01 Characteristics

- n No budget limit, but must reflect the actual needs of the proposed project
- n Awarded for 1-5 years
- n Can be renewed by competing for an additional project period.
- n Only two revisions of application allowed.



R03 Small Grant Program

- n Supports small research projects, conducted in short period of time with limited resources.
 - u Pilot or feasibility studies
 - u Secondary analysis of existing data
 - u Small, self-contained research projects
 - u Development of research methodology
 - u Development of new research technology

R03 Characteristics



- n New projects only, no continuation applications
- n Research Plan in application may not exceed a total of 10 pages.
- n Budget for direct costs of two \$25,000 modules or \$50,000 per year.
- n Not for thesis or dissertation research.
- n Two revisions of previously reviewed R03 allowed.



R21 Exploratory/Developmental Research Grants

- n Provides support for the early conceptual stages of development for exploratory and/or novel ideas.
- n *Not all ICs accept investigator-initiated R21 applications, so check IC.*



R21 Characteristics

- n New projects only, not more than two years in length.
- n No preliminary data required but may be included if available.
- n Combined budget for direct costs of two year project may not exceed \$275,000.
- n All budgets should be in modular format (units of \$25,000).
- n Progress Report not required.



R34 NIH Clinical Trial Planning Grant Program

- n Developed to provide support for the development of Phase III clinical trials.
- n Supports the establishment of the research team, development of tools for data management of the research, definition of recruitment strategies, and finalization of protocol.
- n The Clinical Trial Planning Grant is not designed for the collection of preliminary data or the conduct of pilot studies to support the rationale for a clinical trial.



R34 Characteristics

- o One year project period
- o Budget for direct costs not to exceed \$100,000
- o Proposal must include:
 - § Rationale for the future clinical trial, documenting significance and need to perform the trial and its potential impact on health care, policy or practice.
 - § Information on how the trial protocol
 - § Sample: availability and description of population of study, recruitment plan, outreach activities, and follow-up
 - § Address issues and challenges of adherence to proposed intervention protocol



Conference Grants (R13) or Conference Cooperative Agreement (U13) Awards

- n Any domestic organization is eligible to apply for a conference grant or cooperative agreement. Both domestic and international conferences may be supported; however, an international conference can be supported only through the U.S. representative organization of an established international scientific or professional society.



NIH Guide for Grants and Contracts

How do I find out about NIH PAs and RFAs?

The NIH Guide Announces NIH Scientific Initiatives provides NIH Policy and Administrative Information:

<http://www.nih.gov/grants/guide/index.html>

**Information on types of grants,
institutes that support each
mechanism, and submission
information:**

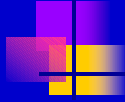
http://grants1.nih.gov/grants/funding/funding_program.htm



**When preparing an application
an investigator should:**

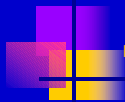
- Write a concise, reviewer-friendly application.
(Never assume that reviewers “will know what you mean”)
- Refer to literature thoroughly
- State rationale of proposed investigation and clearly explain the methodology
- Include well-designed tables and figures
- Present an organized, lucid write-up
- If possible, have someone who has experience working with NIH review the completed application

Use the internet to apply for a grant



- n Apply through www.Grants.gov
- n Use application form SF424 (R&R) a US federal-wide data set for research grant applications
- n Use the eRA Commons to communicate with the NIH
- n <http://odoerdb2.od.nih.gov/ElectronicSubmission/outreach.htm>

Multiple Systems Working Together



- n Grants.gov – the Federal government’s single on-line portal to find and apply for Federal grant funding.
 - n Used by all 26 Federal grant-making agencies.
- n eRA Commons – the NIH electronic Research Administration system that allows applicants/grantees to electronically receive and transmit application and award information.
 - n Used by NIH and other HHS components.

Important!

Each system has its own registration requirements and validation process.

Applications Submitted to NIH are Peer Reviewed

There are two levels of review for each application:

- | Scientific assessment by a chartered peer review group
- | The second review is performed by National Advisory Boards or Councils of the relevant Institute. This Council reviews the applications with regard to their relevance to the Institute's priorities and mission

Dual Review System for NIH Grant Applications

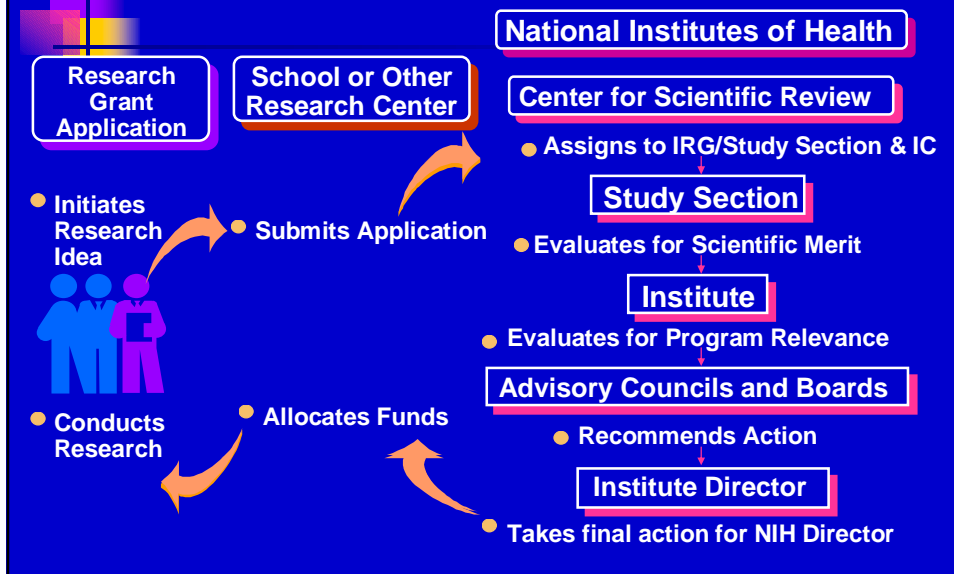
Scientific Review Group (SRG)

- Provides Initial Scientific Merit Review of Grant Applications
- Rates Applications and makes Recommendations for Appropriate Level of Support and Duration of Award

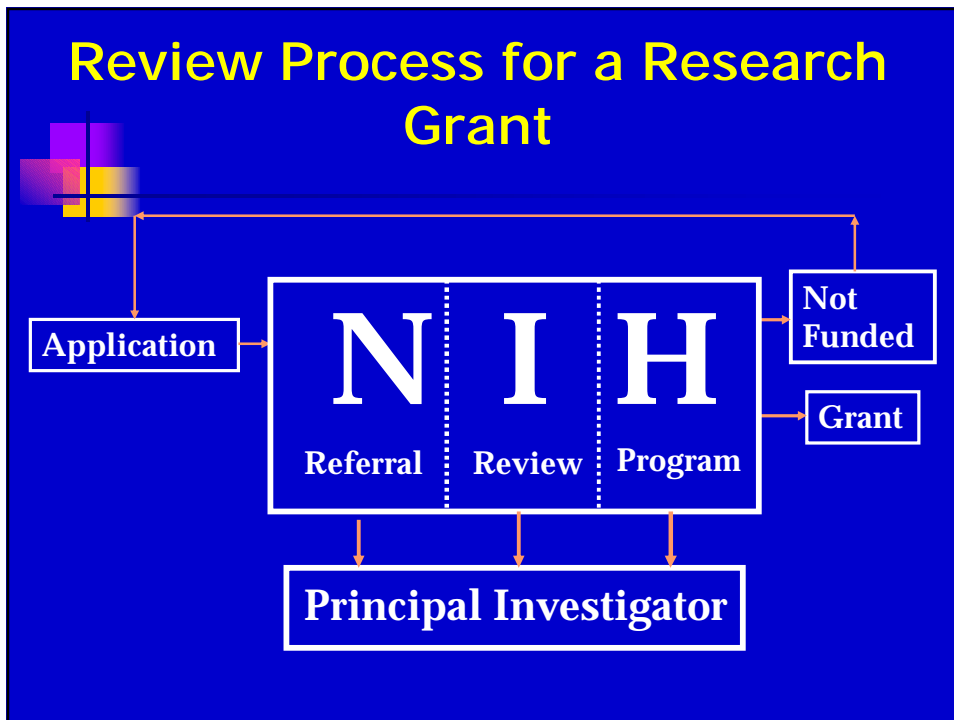
Second Level of Review: Institute or Center Council

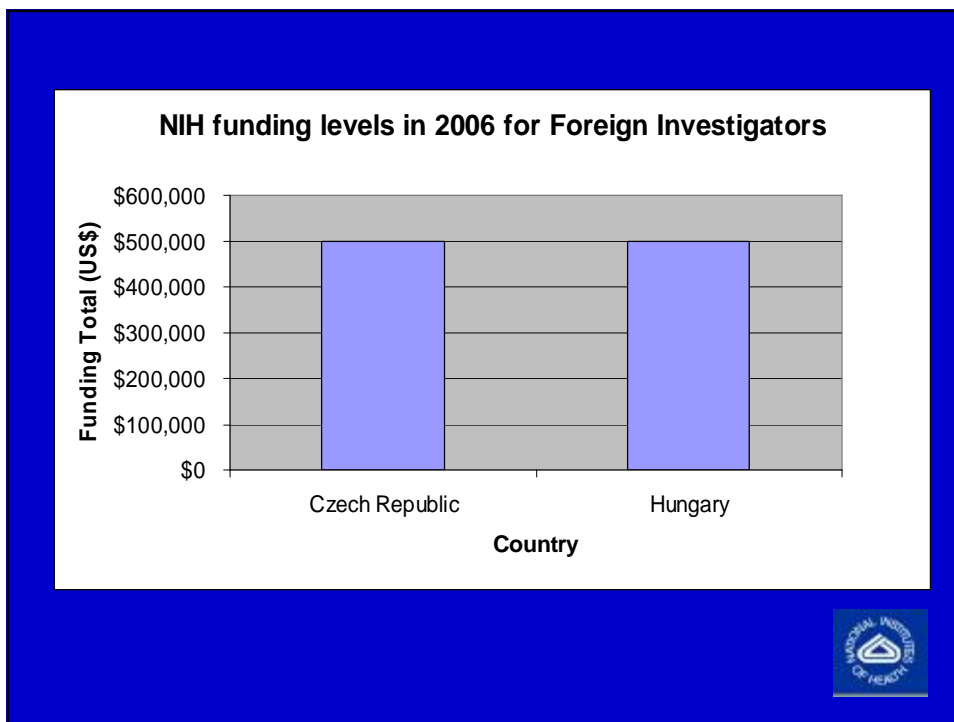
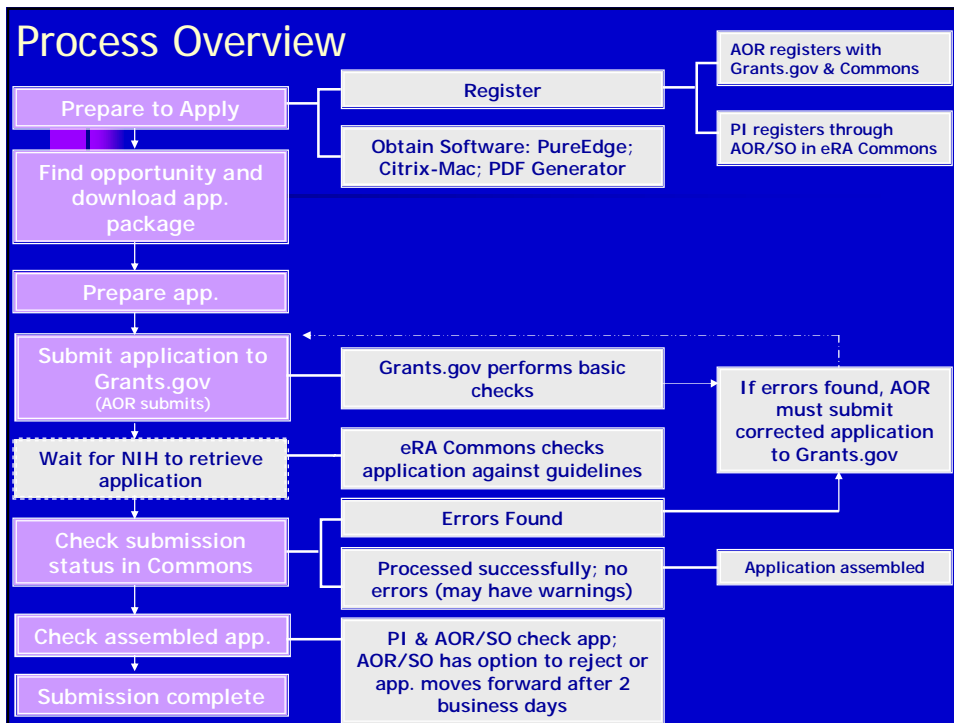
- Assesses Quality of SRG Review of Grant Applications
- Makes Recommendation to Institute Staff on Funding
- Evaluates Program Priorities and Relevance
- Advises on Policy

Review Process for A Grant Application Submitted to CSR, NIH

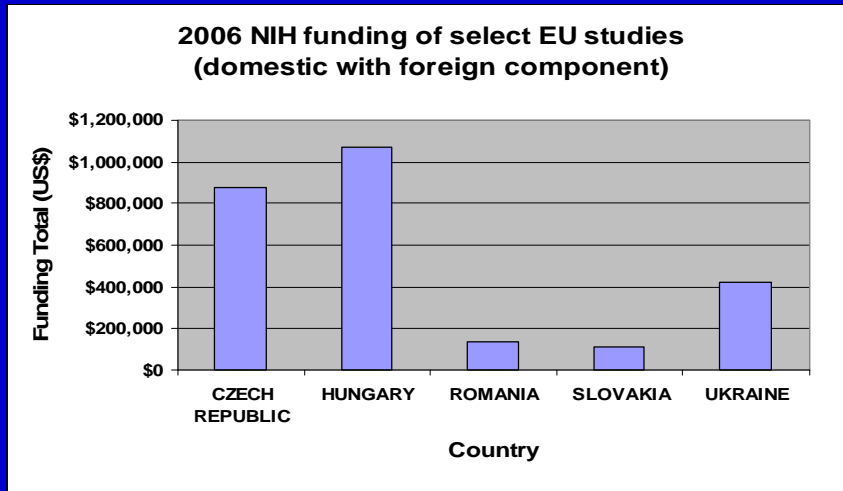


Review Process for a Research Grant

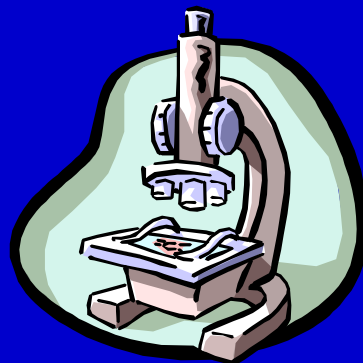


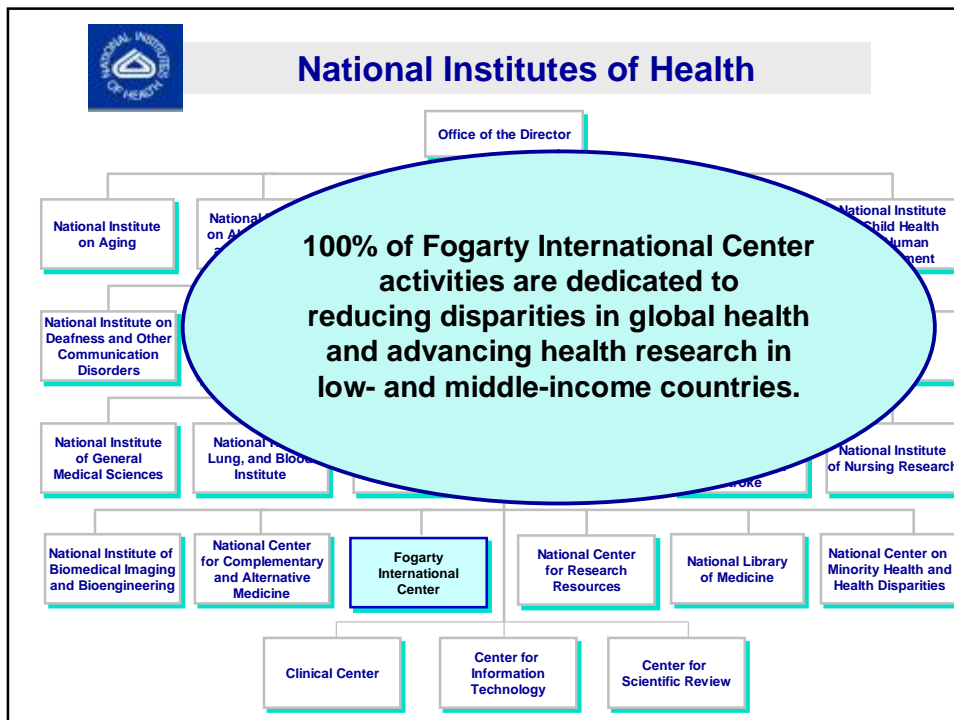


NIH Support of EU Research



Training Opportunities





Fogarty International Center, NIH

FIC fulfills its mission by:

Providing research and research training opportunities that prepare current and future health scientists in the U.S. and abroad to meet global health challenges.

“Science for Global Health”

The screenshot shows a web browser window with the address <http://www.fic.nih.gov/programs/gprn.html>. The page header includes the John E. Fogarty International Center logo and the text "Programs and Initiatives". A navigation bar contains links for "News, Events, Information", "International Services", "Programs and Initiatives", and "Regional Activities". The main content area is titled "Research and Training Programs" and includes a search bar, "About FIC", "Home Page", and "Back" buttons. Below the title, it states "Updated October 2001" and "Standard Application forms are required for most programs. They are available online: PHS 398 (Revised April 1998)". A blue banner across the middle of the page contains the text "FIC Research and Training Programs: <http://www.fic.nih.gov/programs.html>". Below this, there is a note about National Research Service Award (NRSA) stipend levels and a section titled "This page contains information about" with a list of links: "Initiatives", "Training Grants", and "Research Grants".

Fogarty International Center Research Grant Programs

- Brain disorders in the Developing World: Research Across the Lifespan
- Ecology of Infectious Diseases
- Fogarty International Research Collaboration Award (FIRCA)
- Global Health Research Initiative Program for New Foreign Investigators (GRIP)
- Health Environment and Economic Development (HEED)
- International Cooperative Biodiversity Groups (ICBG)
- International Studies on Health and Economic Development
- International Tobacco and Health Research and Capacity Building
- Stigma and Global Health Research Program





Fogarty International Research Collaboration Award (FIRCA)

- § Supports international research partnerships between NIH-funded U.S. scientists and collaborators in low to middle income nations
- § Award is to the U.S. institution for collaborative work at the foreign site
- § \$32,000 per year (for up to 3 years) for equipment and supplies for the foreign lab, travel and limited salary support for the foreign investigator



Fogarty International Research Collaboration Award (FIRCA)

- § All areas of biomedical research eligible
- § Approximately 180 applications per year involving 30-40 low to middle-income countries (3 review cycles per year)
- § Fund approximately 25% of the FIRCA applications received

Example of Neuroscience FIRCA's

- **US/Hungary** (Sussman and Winkler): “Preperceptual and Perceptual Organization of Sound”
- **US/Hungary** (Lyons-Ruth and Sasvari-Szekely): “Genetic and Caregiving Effects on Disordered Attachment”
- **US/Slovakia** (Sabban/Kvetnansky) - Mechanisms of Stress Specific Changes In Gene Expression
- **US/China** (Grundke-Iqbal/) – Neurofilaments in Alzheimer Disease

Brain Disorders in the Developing World: Research Across the Lifespan

- o For collaborative research between high-income and low to middle-income country scientists – (either partner may be the Principal Investigator)
- o Focuses on nervous system function and disorders.
- o Training component must also be included
- n **Contact:** BRAINFIC@NIH.GOV

Some Brain Disorders Planning Grants

- **US/ Russia** (Bonner and Balachova): ““Preventing Fetal Alcohol Syndrome and Alcohol Related Neurodevelopmental Disorders In Russian Children”
- **US/Peru**, (Zunt and Montano): “Central Nervous System Infections In Peru”
- **South Africa/UK** (Solarsh and Wirz): “Developmental Disabilities In A Time Of AIDS”
- **US/Venezuela** (Gilliam and Maestre) -”Gene-Environment Interaction In Cognition”
- **US/India** (Stiles and Singh) – “Cerebral Malaria Associated Neurological Disorders In India”

FIC Research Training (D43) Grants (Institutional Training Awards)

- ✓ Trainees from low to middle-income nations study and work on international research projects at the Ph.D., masters, and post-doctoral levels
- ✓ Individuals who wish to become trainees must apply to the Training Program Director at the awardee institution.
- ✓ For a list of grants, go to www.fic.nih.gov/programs and click on Training programs

Fogarty International Center Training Grants for Developing Countries

- | Clinical, Operational, and Health Services Research
- | HIV/AIDS
- | Infectious Diseases
- | Environmental and Occupational Health
- | Genetics
- | Informatics for Global Health
- | Maternal and Child Health
- | Population and Health
- | Research Bioethics
- | Tobacco and Health Research

International Clinical, Operational, and Health Services Research and Training (ICOHRTA)

n First series of grants focused mostly on **mental health** and **drug abuse** -related research training for clinical, health services and operational research

n 14 Programs for collaborative research training between U.S. Institutions and institutions in: Brazil, China, Czech Republic, India, Peru, Poland, South Africa, Turkey, Ukraine, Vietnam

See: www.fic.nih.gov under "Programs" for list of programs and contacts

Contact: Kathleen Michels, 301-496-1653,
michelsk@nih.gov



International Collaborative Genetics Research Training

- n Supports five year training programs to strengthen genetics research capacity in low- and middle-income countries
- n Neuro-relevant current programs:
 - n US-Venezuela: Neurodegenerative disorders
 - n US-Costa Rica: Psychiatric genetics
 - n US-India: Psychiatric genetics
 - n US-Thailand: Genetics of drug dependence

Program Officer: Dr. Flora Katz, 301-496-1653
Flora_Katz@nih.gov

Other NIH Opportunities

NIDA Fellowships

The National Institute of Drug Abuse (NIDA) provides international opportunities: <http://international.drugabuse.gov/invest.html>

NIDCR Programs

The National Institute of Dental and Craniofacial Research (NIDCR) provides international opportunities:
<http://www.nidcr.nih.gov/Research/InternationalActivities/IntlResearchOpps.htm>

International Neurological Sciences Fellowship

The National Institute of Neurological Disorders and Stroke (NINDS) provides this fellowship for foreign scientists who wish to do a fellowship in the United States.

National Center For Complementary and Alternative
Medicine postdoctoral Fellowships for developing country scientists



Howard Hughes Medical Institute (HHMI)

- n HHMI's International Research Scholars Program will award five-year grants to support promising basic biomedical research scientists working in the Baltics, Central and Eastern Europe, Russia, and Ukraine.
www.hhmi.org/grants/individuals/bceeru.html



Human Frontier Science Program (HFSP)

HFSP supports novel, innovative and interdisciplinary basic research focused on the complex mechanisms of living organisms; topics range from molecular and cellular approaches to systems and cognitive neuroscience.
www.hfsp.org

International Brain Research Organization (IBRO)

Objectives:

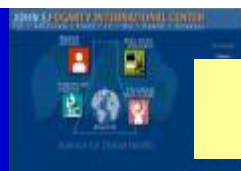
- n to develop, support, co-ordinate and promote scientific research in all fields concerning the brain;
- n to promote international collaboration and inter-change of scientific information on brain research throughout the world; and
- n to provide for and to assist in education and the dissemination of information relating to brain research by all available means.

NIH Websites



National Institutes of Health

www.nih.gov (grants tab)www.nih.gov



Fogarty International Center

www.fic.nih.gov



Research and Training Opportunities at NIH

<http://www.training.nih.gov>