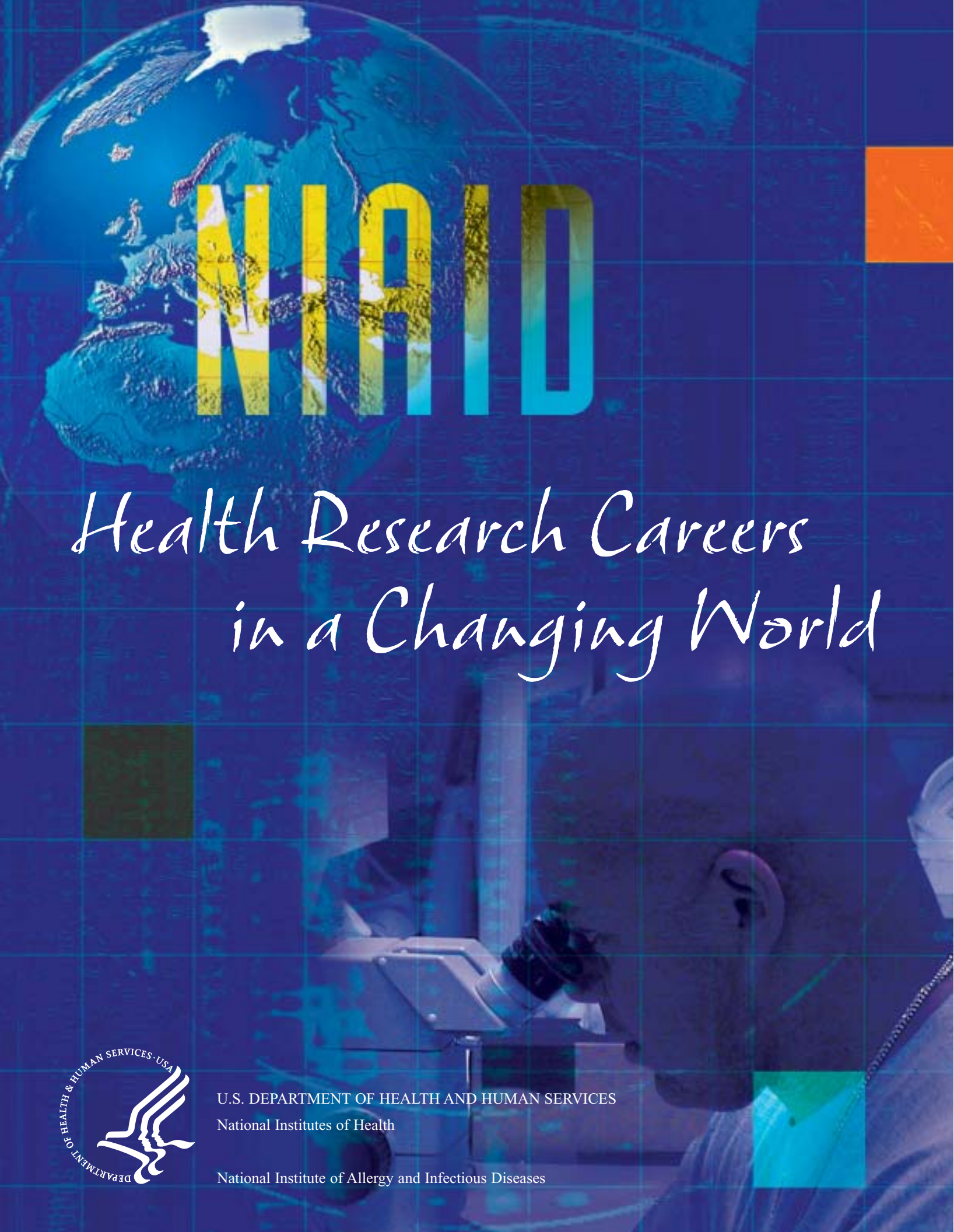


Health Research Careers in a Changing World

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health

National Institute of Allergy and Infectious Diseases

Contents

the

of

millions

Improving lives

NIAID: Our Mission

The National Institute of Allergy and Infectious Diseases (NIAID) strives to understand, treat, and ultimately prevent the myriad infectious, immunologic, and allergic diseases that threaten millions of human lives around the world.

The cornerstones of NIAID's strategic plan to achieve this goal are basic and applied research on infectious diseases, including emerging infections; biodefense; AIDS/HIV; host response to infection; immune-mediated diseases; and immune tolerance.

With the President's proposed fiscal year 2003 budget of more than $4 billion, NIAID is the second largest of the institutes that comprise the NIH.

Infectious diseases are the second largest cause of death worldwide, and the third largest in the United States. The estimated annual economic impact of infectious diseases exceeds $120 billion.

About the Director

Having begun his distinguished career with NIAID in 1968, Anthony S. Fauci, M.D., became the Institute's Director in November 1984. An internationally renowned scientist, Dr. Fauci has made many contributions to understanding the pathogenesis of and developing treatments for a number of immune-mediated diseases.

DR. ANTHONY FAUCI:

- Pioneered the field of human immunoregulation by making a number of basic scientific observations that serve as the basis for current understanding of the regulation of the human immune response
- Delineated the precise mechanisms by which immunosuppressive agents modulate the human immune response
- Developed effective therapies for formerly fatal diseases, such as polyarteritis nodosa, Wegener's granulomatosis, and lymphomatoid granulomatosis
- Made seminal contributions to the understanding of how the human immunodeficiency virus (HIV) destroys the body's immune defenses, leading to its susceptibility to deadly infections, and how the replication of HIV is regulated by signaling molecules of the immune system called cytokines.
- Contributed to the development of strategies for the therapy and immune reconstitution of people with HIV/AIDS

From the Director

Every member of the National Institute of Allergy and Infectious Diseases (NIAID) team helps solve problems that affect hundreds of millions of people in every corner of the world. We approach these health problems with a passion and intensity that comes not only from knowing that our work has improved the lives of so many people, but also from the excitement of the intellectual challenges that we confront in our jobs every day. When you walk down our hallways, through our offices or in our labs, that excitement and passion is easy to see.

Our research goals are among the most critical in biomedicine. Despite many important advances in prevention and therapy, infectious diseases remain a leading impediment to health, economic prosperity, and even social stability in much of the world. The World Health Organization, for example, estimates that 1,500 people still die every hour from an infectious disease. Half of those are children under 5 years of age.

Many of the diseases we study, such as malaria, tuberculosis, and parasitic diseases, have plagued human beings for thousands of years. Others have only recently become human health problems because of drug resistance, environmental changes, and other factors. Still others, we now know, are spread by the actions of terrorists.

Because we live in an interconnected, global community, it is unrealistic to think that we are isolated from health threats that may emerge in distant countries. The breadth and frequency of international travel and trade alone prove that we cannot separate the health problems of Americans from those of the rest of the world. Numerous people travel across international borders each day and between developed and developing countries. Diseases that were once problems only in distant areas of the world can easily be transmitted to people in the U.S.

For more than 50 years, commitment to the best possible science has driven our efforts to improve health in this country and abroad. With a strong research base, talented and committed investigators, and the availability of powerful new research tools, our research continues to result in new and improved vaccines, diagnostics, and treatments for infectious diseases both old and new. As NIAID moves forward in the 21st century, we aim, by our research programs, to provide the tools for a higher standard of health for a greater proportion of the global community, for as the United Nations International Declaration of Health Rights asserts, "The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being."

Accomplishing our mission will require the combined talents of individuals from a number of professional fields. Whether you are a scientist, extramural administrator, policy analyst, or administrative specialist, you may make a lasting contribution to a healthier, safer world. Please explore the following pages for opportunities that best fit you and consider becoming part of our team.

Sincerely,

Anthony S. Fauci, M.D.
Director
National Institute of Allergy and Infectious Diseases
National Institutes of Health
Department of Health and Human Services

infectious diseases kill more

children around the world

than all other diseases

The National Institute of Allergy and Infectious Diseases (NIAID)

A Growth Organization

NIAID research is carried out by hundreds of biomedical scientists working in universities and other research institutions around the world (extramural) as well as in NIAID laboratories in Maryland and Montana (intramural). Extramural research programs are managed by staff of the Division of Microbiology and Infectious Diseases; the Division of AIDS; the Division of Allergy, Immunology and Transplantation; and the Division of Extramural Activities. Intramural research is carried out in the Division of Intramural Research and the Dale and Betty Bumpers Vaccine Research Center.

OFFICE OF THE DIRECTOR

The Office of the Director (www.niaid.nih.gov/director/director.htm) provides overall operational and administrative coordination and policy guidance. The OD is also the focal point of relationships with other components of NIH, other government agencies, Congress, professional societies, voluntary health agencies, and other public groups.

The Office of the Director includes the newly formed Office of Global Research (OGR), whose purpose is to enhance international collaboration, epidemiological training programs, and infrastructure support to developing countries.

DIVISION OF MICROBIOLOGY AND INFECTIOUS DISEASES

DMID (www.niaid.nih.gov/dmid) supports research to control and prevent infectious diseases (other than HIV). Projects include microbial physiology, genomic sequencing, antigenic structure, and pathogenesis. Applied research includes the development of diagnostic tests, experimental drugs and vaccines, and genomic and proteomic studies to elucidate microbial evolution, locate targets for vaccine and drug development, and identify mutations that contribute to drug resistance. The Division also supports clinical trials to test the safety and efficacy of new treatment and prevention strategies.

DIVISION OF ALLERGY, IMMUNOLOGY AND TRANSPLANTATION

DAIT (www.niaid.nih.gov/research/dait.htm) supports research to elucidate the role of the immune system in protecting against infectious diseases; and the pathogenesis, prevention, and treatment of immune-mediated diseases such as asthma, allergy, autoimmune disorders, and organ transplant rejection. Areas of particular emphasis include basic and applied research in innate immunity; clinical trial networks focused on immune tolerance; and the application of emerging technologies to delineate immunological principles and to develop diagnostic tools and surrogate markers of disease activity, vaccine safety and potency, or therapeutic efficacy.

DIVISION OF ACQUIRED IMMUNODEFICIENCY SYNDROME

DAIDS (www.niaid.nih.gov/daids) was established in 1986 to address research needs created by the advent and spread of the HIV/AIDS epidemic. Specifically, the Division's mission is to increase basic knowledge of the pathogenesis, natural history, and transmission of HIV disease and to support research in its detection, treatment, and prevention. DAIDS accomplishes this through programs of fundamental basic research, discovery, and development of therapies for HIV infection and its complications, and discovery and development of vaccines and other prevention strategies.

DIVISION OF EXTRAMURAL ACTIVITIES

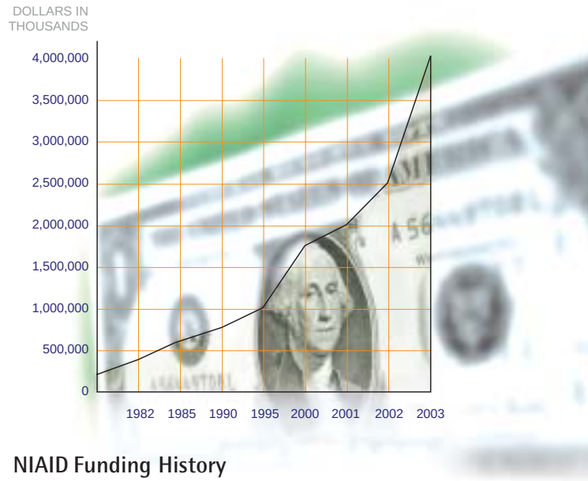
DEA (www.niaid.nih.gov/ncn) serves NIAID's extramural research community and the Institute in many key areas: managing grants and contracts; overseeing NIAID's research training program; and conducting peer review of grant applications and contract proposals. DEA also oversees management of all of NIAID's chartered advisory committees, including the National Advisory Allergy and Infectious Diseases Council.

DIVISION OF INTRAMURAL RESEARCH

DIR (www.niaid.nih.gov/dir) scientists conduct "in-house" basic and applied research in virology, biochemistry, parasitology, epidemiology, mycology, molecular biology, immunology, immunopathology, and immunogenetics. The DIR employs more than 700 permanent staff and roughly 500 fellows working in state-of-the-art laboratories. DIR physician-scientists conduct nearly 100 clinical protocols at any given time at the Warren G. Magnuson Clinical Center on the NIH campus. Supporting branches provide expertise with sophisticated instruments and techniques, such as peptide synthesis, mass spectroscopy, and 4-channel flow cytometry, as well as extensive animal care services. More than a dozen members of the current tenured staff have been elected to the National Academy of Sciences, and many others have received prestigious awards for their contributions to science.

DALE AND BETTY BUMPERS VACCINE RESEARCH CENTER (VRC)

The VRC (www.niaid.nih.gov/vrc) is dedicated to the development of vaccines to prevent infectious diseases. This multidisciplinary effort brings together a team of world-class structural biologists, virologists, and immunologists dedicated to the translation of the latest concepts in disease pathogenesis and immunology into new strategies for vaccines against HIV/AIDS and other diseases. VRC research scientists are supported by core laboratories in immunology, flow cytometry, vector development, a biocontainment laboratory, an animal facility, and a clinical trials program.



NIAID Funding History

FY 2003 President's Budget

World-class Environment

NIAID is the second largest of 27 Institutes and Centers of the world-renowned National Institutes of Health (NIH), the U.S. government's premier biomedical research institution. NIAID provides an unsurpassed setting for research and career development.

These are just a few of the amenities NIAID scientists enjoy:

- Access to the combined resources of the NIH Library and the National Library of Medicine
- Daily lectures and forums by eminent resident and guest scientists
- Unparalleled career development and training programs
- State-of-the-art computer networking and teleconferencing facilities
- Outstanding laboratory facilities and equipment
- Extensive animal care facilities
- Core facilities for peptide synthesis, flow cytometry, confocal microscopy, and mass spectroscopy
- Inter-institute interest groups with senior scientists and fellows from different disciplines

Campus Setting

Most NIAID intramural facilities are located in Bethesda, Maryland. Just outside of Washington, D.C., the 317-acre university-like campus boasts proximity to Bethesda's many excellent restaurants and shops. NIH offers free parking, a ride-sharing network, a Metro subway station ("Medical Center"), and bus stops, providing access to D.C., suburban Maryland, and northern Virginia. Popular mid-Atlantic beaches and inland national parks are a short drive away.

Most NIAID extramural staff occupy modern office facilities located in nearby Rockledge Park. Laboratories at Frederick Cancer Research and Development Center (FCRDC) at Fort Detrick in Frederick, Maryland, are a short drive from the main campus. Scientists and support staff carry out research at the newly renovated, historic Rocky Mountain Laboratories in Hamilton, Montana's Bitterroot Valley.

For more than 50 years, commitment to the best possible science has driven our efforts to improve health in this country and abroad.

A Range of

Opportunities

with NIAID

Extramural

HEALTH SCIENTIST ADMINISTRATORS

MEDICAL OFFICERS

SCIENTIFIC REVIEW ADMINISTRATORS

REGULATORY AFFAIRS SPECIALISTS

Intramural

SENIOR INVESTIGATORS

INVESTIGATORS

STAFF SCIENTISTS

RESEARCH FELLOWS

NURSE SPECIALISTS

LAB TECHNICIANS

Multidisciplinary Support

FINANCE ANALYSTS

STRATEGIC PLANNERS

INFORMATION TECHNOLOGISTS

TECHNOLOGY TRANSFER SPECIALISTS

COMMUNICATIONS SPECIALISTS

POLICY ANALYSTS

ADMINISTRATIVE OFFICERS

HUMAN RESOURCE SPECIALISTS

GRANTS MANAGEMENT SPECIALISTS

CONTRACT SPECIALISTS

BIOSTATISTICIANS

Extramural Opportunities

NIAID's extramural programs are centered in DMID, DAIDS, DAIT, and DEA. Extramural staff work with scientists from all over the world in academia, the pharmaceutical industry, other government agencies, and non-government organizations.

NIAID Professions

HEALTH SCIENTIST ADMINISTRATORS AND MEDICAL OFFICERS

Health Scientist Administrators (HSAs) and Medical Officers are doctoral-level scientists who oversee an area of basic or clinical research or clinical trials funded by research grants, contracts, and cooperative agreements. HSAs and HMOs identify areas of scientific priority and need, and develop new research efforts to address those needs.

Areas of required science expertise include virology, parasitology, mycology, bacteriology, immunology, microbiology, biodefense, HIV/AIDS, and infectious diseases. These candidates typically hold an M.D., a Ph.D., or a doctoral-level nursing degree.

SCIENTIFIC REVIEW ADMINISTRATORS

Scientific Review Administrators (SRAs) are doctoral-level scientists responsible for peer review of grant applications and contract proposals in infectious diseases, HIV/AIDS, immunology, and biodefense. They provide guidance for policy and procedure to investigators and NIAID program staff.

SRAs usually hold Ph.D. degrees in microbiology, biology, immunology, biochemistry, or infectious disease and have significant independent research experience in the academic, non-profit, government, or private sectors.

REGULATORY AFFAIRS SPECIALISTS

Regulatory Affairs Specialists (RASs) play a key role in translation of research advances from bench to clinic. RASs oversee submission of Investigative New Drug (IND) applications to the Food and Drug Administration (FDA), are responsible for assuring that NIAID research fulfills all relevant regulatory requirements, and coordinate and track drug/vaccine supply and distribution.

RASs usually hold degrees in microbiology, biology, immunology, biochemistry, toxicology, or infectious disease. There are opportunities for those with Bachelors through Doctoral degrees.

These brief summaries describe typical positions available at NIAID. Specific job positions become available in Bethesda and Rockville, Md., and in Hamilton, Mont. Most positions require U.S. citizenship, although permanent residents or non-resident aliens with authorized employment visas may be considered at the M.D. or Ph.D. levels.

NIAID Professions

Intramural Opportunities

Intramural research is carried out in the state-of-the-art laboratories of the Division of Intramural Research and the Dale and Betty Bumpers Vaccine Research Center on the NIH campus, as well as the Rocky Mountain Laboratories in Hamilton, Montana.

Ideal NIAID intramural candidates have experience in multiple disciplines, including microbiology, biology, chemistry, pharmacology, immunology, virology, and bacteriology.

SENIOR INVESTIGATORS/INVESTIGATORS

Senior Investigators are tenured NIAID employees. Tenure represents a long-term commitment of independent resources, including salary, operating budget, personnel, and space for the conduct of an independent basic, clinical, or epidemiological research program. Investigators are tenure-track scientists on a time-limited appointment. Research resources for both Investigators and Senior Investigators are allotted on the basis of scientific merit.

STAFF SCIENTISTS

A Staff Scientist is an NIAID employee who is appointed in a time-limited, renewable position. Staff Scientists usually hold doctoral degrees and are members of the team working with Senior Investigators. Other Staff Scientists are Facility Heads who independently manage a core facility (laboratory) of multiple Senior Investigators.

RESEARCH FELLOWS

A Research Fellow is an NIAID scientist with a doctoral degree, employed on a time-limited renewable appointment. The appointment gives the fellow experience in laboratory-based or population-based biomedical research. Scientists with considerable experience beyond postdoctoral training may be designated Senior Research Fellows.

NURSE SPECIALISTS

Nurse Specialists provide leadership to the multidisciplinary teams carrying out clinical research, and drug or vaccine development. They work with a variety of others, including physicians and scientists, therapists, social workers, pharmacists, nutritionists, and medical or research technicians.

LAB TECHNICIANS

Lab Technicians provide laboratory technical support to one or more research investigators. Technicians are required to have scientific training and experience using standard and/or specialized techniques; making pertinent observations; and preparing preliminary analyses of experimental data.

These brief summaries describe typical positions available at NIAID. Specific job positions become available in Bethesda and Rockville, Md., and in Hamilton, Mont. Most positions require U.S. citizenship, although permanent residents or non-resident aliens with authorized employment visas may be considered at the M.D. or Ph.D. levels.

Multidisciplinary Support Positions

NIAID could not carry out its mission without the many who support its research programs. Their work makes vital contributions to the improvement of human health across the globe.

FINANCE ANALYSTS AND STRATEGIC PLANNERS

The Office of Financial Management (OFM) offers exciting opportunities to individuals with strong skills in budgeting, financial analysis, and operational or program analysis to forecast the long-range resource requirements of new research initiatives; draft point papers to communicate key issues to Congress, the White House, and the public; and advise senior managers on multi-million dollar decisions.

INFORMATION TECHNOLOGISTS

NIAID's Office of Technology Information Systems (OTIS) offers exciting information technology (IT) opportunities for network, OS, and systems administrators to plan, design, engineer, and implement local, metropolitan, and wide area networks (LAN/MAN/WAN); design proprietary applications for the NIAID intranet; and provide customer and applications support to NIAID staff.

TECHNOLOGY TRANSFER SPECIALISTS

The Office of Technology Development (OTD) facilitates the development of inventions and patents created by NIAID staff and grantees, and the public-private sector partnerships that support NIAID's research agenda. OTD professionals have backgrounds in biomedical science, business, and intellectual property and contract law.

COMMUNICATIONS SPECIALISTS

Communications Specialists in the Office of Communications and Public Liaison (OCPL) serve as the primary interface between NIAID and the public. Communications Specialists field contacts from major media and the general public, and produce news releases, tip sheets, and other information for the media; booklets and information sheets for the general public; technical brochures for researchers; and clinical updates and brochures for healthcare workers and providers. OCPL staff have expertise in science and health writing; Web site content and development; media relations; publications development; and science illustration and graphic design.

POLICY ANALYSTS

The Office of Policy Analysis (OPL) develops policy guidance for NIAID staff, provides legislative liaison and analysis, and develops reports and other narrative materials that articulate Institute plans and describe scientific accomplishments.

Policy Analysts typically have master's degrees in arts or sciences, or Juris Doctor degrees, and possess strong analytic and communication skills.

ADMINISTRATIVE OFFICERS

Administrative Officers perform a variety of duties related to budget formulation, execution, and monitoring; management analysis; procurement; contract and grant administration; space and facilities management; safety and security; travel; and training.

A bachelor's degree or equivalent experience is required. Energetic individuals with good multitasking and people skills are sought.

Accomplishing our mission will require the combined talents of individuals from a number of professional fields.

Multidisciplinary Support Positions (continued)

HUMAN RESOURCE SPECIALISTS

Human Resource Specialists provide human resource services for Institute leadership and prospective employment candidates. Services include recruitment, position management and classification, pay and compensation, employee relations and employee development.

GRANTS MANAGEMENT SPECIALISTS

Grants Management Officers and Specialists are responsible for the administrative and business management of the grants process at NIAID. Staff members review all grant applications for compliance with legal, regulatory, and policy requirements; negotiate the administrative and fiscal terms and conditions of grant awards; monitor grants; and monitor grantee performance. Bachelor's degree or equivalent is required.

CONTRACT SPECIALISTS

Contracts management staff assist in the development and publication of requests for proposals; are the sole point of NIAID contact for potential offerors; participate in the Peer Review of proposals; select contract awardees; negotiate contract terms and conditions; and monitor contractor performance. A Bachelor's degree with at least 24 semester hours in related studies is required; a master's degree is required for highest pay levels. www.niaid.nih.gov/contract

BIOSTATISTICIANS

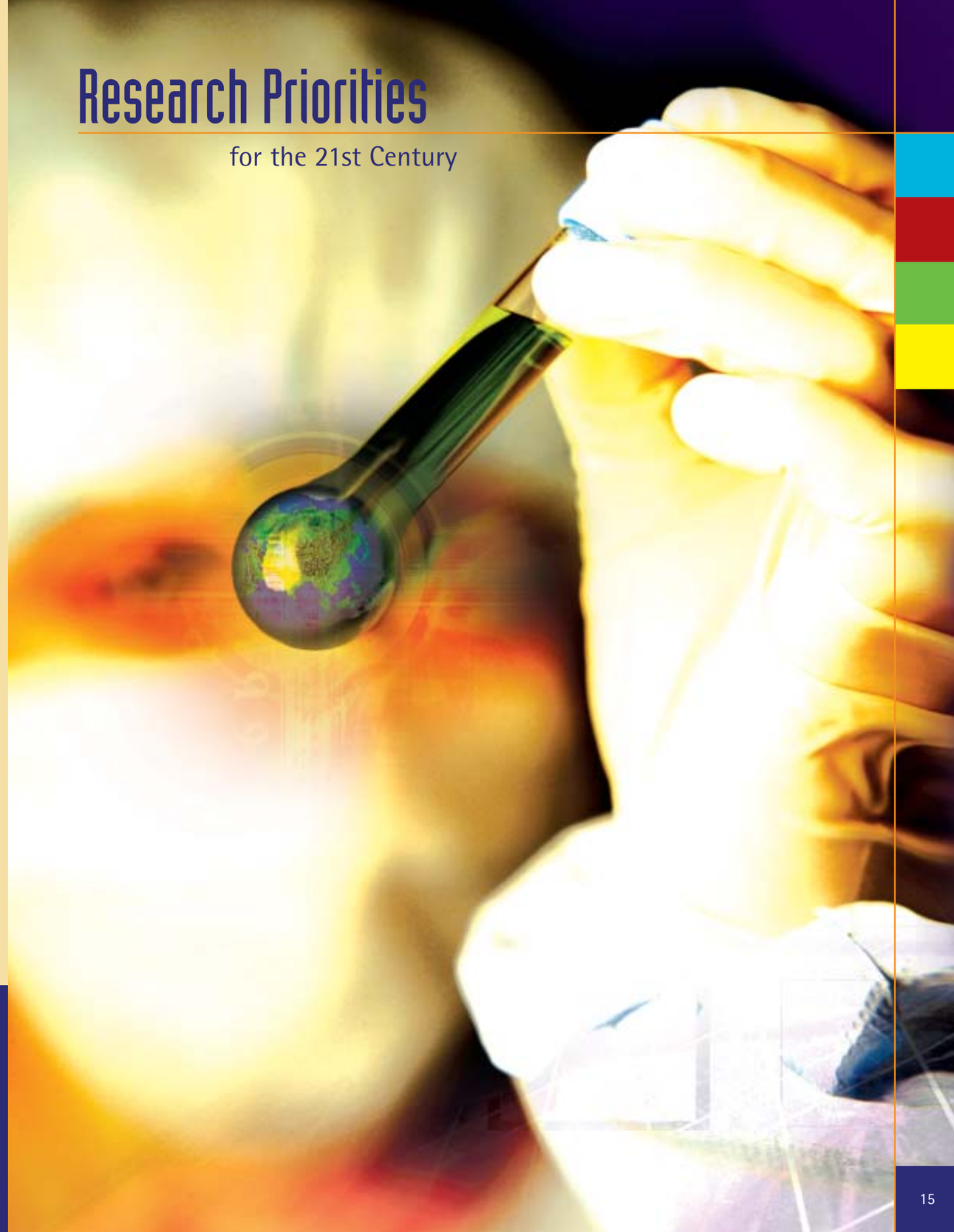
NIAID offers the exciting opportunity to combine biostatistical research support and independent biostatistics methodological research. Biostatisticians collaborate and consult with both intramural and extramural programs regarding study design, conduct, and analysis. A Bachelor's degree with at least 15 semester hours in statistics and nine semester hours in biosciences is required.

NIAID Professions

These brief summaries describe typical positions available at NIAID. Specific job positions become available in Bethesda and Rockville, Md., and in Hamilton, Mont. Most positions require U.S. citizenship, although permanent residents or non-resident aliens with authorized employment visas may be considered at the M.D. or Ph.D. levels.

Research Priorities

for the 21st Century



Emerging and Re-emerging Infectious Diseases

21ST CENTURY PUBLIC HEALTH NEED

Infection kills more people around the world than any other cause. Tuberculosis is the eighth leading cause of death worldwide, and multi-drug resistant strains are evolving. Worldwide, more than 275 million new cases of malaria are reported annually. More than 30 newly recognized infectious diseases and syndromes have emerged in the past two decades alone. Antibiotic resistance and the emergence of infections that once seemed under control are global problems.

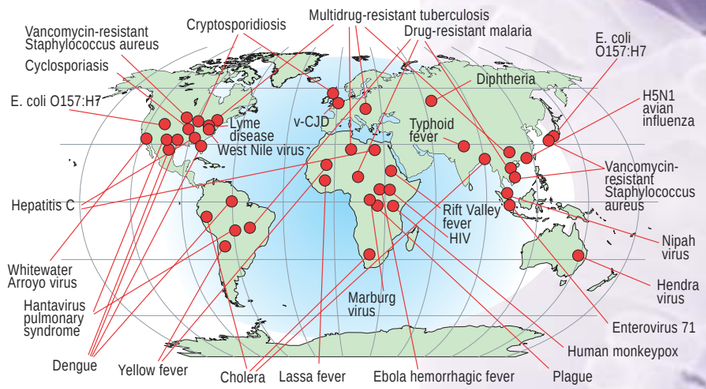
PREPARING THROUGH RESEARCH

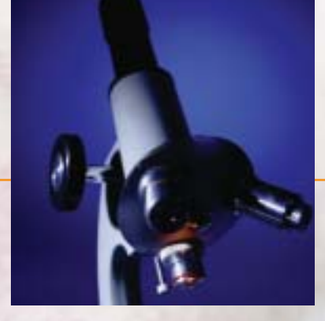
Reducing the threat of these and other emerging infectious diseases is a top research priority at NIAID. By expanding studies in microbiology and infectious disease ecology, we seek to improve prediction and prevention. NIAID has established the following research goals for responding to emerging infectious diseases:

- Strengthen basic and applied research on the multiple human, pathogen, and environmental factors that influence disease emergence.
- Support the development of diagnostics, vaccines, and therapies needed to detect and control infectious diseases.
- Maintain the national and international scientific expertise required to respond to health threats.

Examples of Emerging and Re-emerging Infectious Diseases

Courtesy of Dr. Anthony Fauci, NIAID



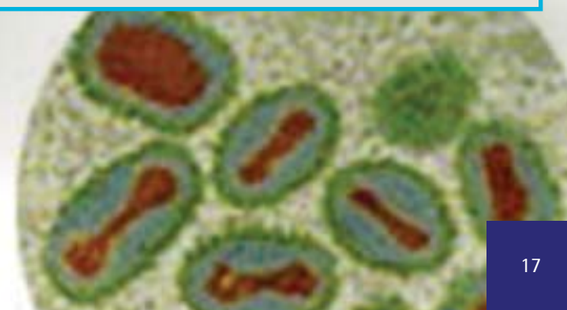


NIAID SUCCESSES:

Emerging and Re-emerging Infectious Diseases

Be part of the team that has made major contributions to global public health.

- NIAID-supported clinical trials led to new therapies for:
  - Influenza
  - Lyme disease
  - Hantavirus pulmonary syndrome
  - Fungal infections
- These vaccines developed by NIAID and its collaborators save millions of lives annually:
  - Hepatitis B
  - Haemophilus influenzae type b conjugate
  - Pneumococcus
  - Acellular pertussis
  - Hepatitis A
  - Adenovirus
  - Typhoid
  - Meningococcus
  - Influenza



Biodefense

21ST CENTURY PUBLIC HEALTH NEED

The intentional and malicious spread of anthrax via the U.S. mail in the waning months of 2001, and abundant evidence of plans for biowarfare in a number of hostile nations sent a wakeup call to address our distinct vulnerability to bioterrorism.

PREPARING THROUGH RESEARCH

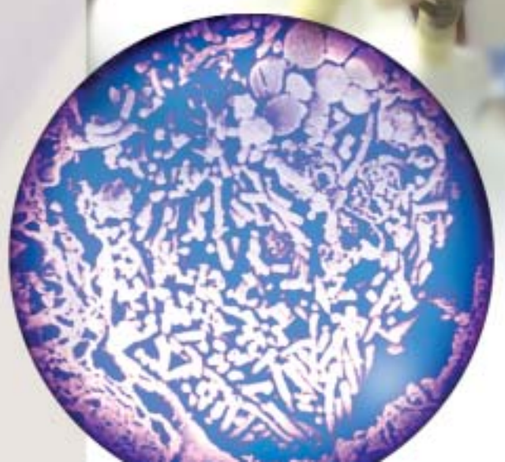
As the lead Institute for biodefense research at NIH, NIAID is responding to the call by building on a long-standing research program, aimed at protecting the public from bioterror agents. A Strategic Plan for Biodefense Research and a Biodefense Research Agenda establish short, intermediate, and long-term goals for conducting this research. These documents can be accessed from the NIAID home page.

NIAID biodefense research is focused on two over-arching and complementary themes:

- Basic research into agents with bioterrorism potential and into the human defense mechanisms against those agents
- Applied research for CDC Category A, B, and C Agents to generate diagnostics, vaccines, and therapeutics

Ultimately, NIAID expects its biodefense research initiative to have positive implications for treating a wide range of diseases, as well.

- Advancements in diagnostics, therapeutics, and vaccines will improve our ability to diagnose, treat, and prevent major killer-diseases, including malaria, tuberculosis, and HIV/AIDS.
- Basic research will greatly enhance our understanding of the molecular and cellular mechanisms of the innate immune system and its relationship to the adaptive immune system, which should lead to improvements in treating and preventing immunologic diseases, including systemic lupus erythematosus, rheumatoid arthritis, and other autoimmune diseases.
- Improved understanding of the mechanisms that regulate the human immune system will also have positive implications for treating cancer, immune-mediated neurologic diseases, and allergic and hypersensitivity diseases, as well as for preventing organ transplant rejection.



NIAID SUCCESSES:

Biodefense

Be a part of the team that has already made major strides toward protecting the nation through biodefense research.

- Clinical trials proved that the existing supply of smallpox vaccine could be diluted to protect five times more people without sacrificing activity.
- Pre-clinical research proved that Cidofovir is active against smallpox.
- Comparative genome sequencing studies from anthrax attacks provided useful information in anthrax investigation.
- Key features of anthrax pathogenesis and structure identified.
- $1.5 billion expansion of comprehensive Basic Research and Product Development Program underway.

HIV/AIDS

21ST CENTURY PUBLIC HEALTH NEED

HIV/AIDS is one of the greatest threats to global health and one of the most destructive scourges in human history. Since the beginning of the HIV pandemic, an estimated 58 million people worldwide have been infected with HIV, of whom about 22 million have died.

PREPARING THROUGH RESEARCH

NIAID and other research entities have made significant progress in HIV/AIDS research. Research has led to a better understanding of the structure of HIV and how HIV causes disease, and the role of the immune system in controlling HIV infection. Potent therapeutic regimens commonly referred to as highly active antiretroviral therapy, or HAART, has, in the United States and other developed countries, greatly improved the quality of life of many people with HIV and led to a dramatic decline in AIDS-related deaths. However, prolonged use of this therapeutic regimen has led to development of drug resistance, metabolic abnormalities and toxicities, and noncompliance due to the complexity of these regimens. Furthermore, HAART is generally unavailable in the developing world where most people with HIV live.

With the ever-changing demographics of the epidemic, a global research agenda emphasizes development of integrated prevention and therapeutic strategies suited for both developed and developing nations. NIAID's main HIV/AIDS research priorities include the following:

» Development of new therapeutic agents and approaches to expand the number and clinical benefit of currently approved therapies.

» Development of a preventive HIV vaccine that is simple to administer, inexpensive, and induces long-lasting immunity against most HIV subtypes.

NIAID SUCCESSES:

HIV/AIDS

Be part of the team that has made major contributions to the global fight against HIV/AIDS.

» Identified the HIV protease enzyme as a target for antiviral drugs, which led to the development of very potent protease inhibitors.

» Discovered means to prevent mother-to-infant transmission of HIV, first by treating infected pregnant women and their infants with zidovudine (AZT), and more recently, by a single dose each to mother and child of the more cost-effective drug nevirapine. In developing countries, nevirapine may protect 300,000 to 400,000 newborns per year from HIV infection.

» Demonstrated the superior effectiveness of triple-drug treatments (HAART) over one- or two-drug treatments.

» Discovered the role of HIV co-receptors and their interaction with chemokines as the basis for future anti-HIV strategies.

» Discovered the potential for cytokines in HIV/AIDS therapy.

Immunology and Immunologic Diseases

21ST CENTURY PUBLIC HEALTH NEED

More than 50 million Americans suffer from allergies or asthma. Autoimmune diseases, including rheumatoid arthritis, systemic lupus erythematosus, and multiple sclerosis, afflict about 9 million people in the United States. The combined burden of immunologic diseases is staggering. In the United States alone, these conditions result in direct and indirect costs that exceed $100 billion annually.

PREPARING THROUGH RESEARCH

NIAID-funded research in basic and clinical immunology has led to many promising approaches for treating individuals with immunologic conditions (see "NIAID Successes: Immunologic Diseases"). To guide the continuation of this progress, NIAID has an immunologic diseases strategic plan, which focuses on several core areas:

» Understanding the fundamental biology of the immune system

» Developing new tolerogenic and immunomodulatory approaches to treat autoimmune diseases, asthma, allergic diseases, graft rejection in solid organ, tissue, and cell transplantation

» Developing effective vaccines to prevent and treat immunologic diseases

» Applying emerging technologies to advance fundamental understanding of immunologic principles and to develop better diagnostic tools, improved patient monitoring techniques, surrogate markers of disease activity, and more effective therapies

» Continuing long-term support of fundamental discoveries of immune regulation that may ultimately be translated into practical applications for treating and preventing a broad range of diseases

NIAID SUCCESSES:

Immunologic Diseases

Be part of the team that has made major advancements in the diagnosis, treatment, and prevention of multiple debilitating immunologic diseases.

» Basic Research in Immunology

- Discovered mechanisms of antibody diversity
- Defined humoral and cell-mediated immunity
- Defined the role of the thymus in immunologic processes
- Discovered genes for many primary immunodeficiency diseases and developed highly effective therapies for their treatment

» Allergy and Asthma Research

- Defined the role of inflammation and viral infections in asthma
- Delineated the molecular mechanisms of the allergic response, including the role of IgE antibodies, the characterization of the IgE receptor, and the discovery of leukotrienes

» Transplantation and Immune Tolerance Research

- Improved kidney allograft survival with new immunosuppressive therapies to enable transplantation of major organs, tissues, and cells
- Demonstrated the utility of intragraft gene expression as a potential early indicator of acute kidney allograft rejection

» Autoimmunity Research

- Discovered the role of major histocompatibility complex (MHC) and other genes in disease susceptibility
- Defined the role of regulatory T-cell networks in controlling self-reactive cells
- Discovered the interaction of the T-cell receptor and MHC with multiple nonhomologous antigens
- Demonstrated the role of molecular mimicry of self-antigens by pathogens
- Developed promising tolerogenic and immunomodulatory approaches to prevent and treat many immune-mediated diseases, such as asthma and type 1 diabetes

Working for NIAID

Employment Benefits

As a federal employee at the NIAID, you receive a comprehensive program of benefits intended to assure financial security and protection during your working career and into retirement.

COMPENSATION

Full-time employees earn competitive pay, and are paid biweekly with 26 pay periods in a calendar year. Certain positions allow premium pay rates for night, Sunday, and holiday hours.

Ph.D. and M.D. employees also receive compensation salary and may be eligible for special pay bonuses.

RETIREMENT PLAN

New Federal employees are covered by the Federal Employees' Retirement System (FERS), which is a 3-tiered system. Employees participate in both a mandatory defined benefit program and an elective 401(k)-style tax-deferred defined contribution plan. The mandatory Basic Annuity program is based on years of service and salary, and contributions are made by the NIAID. The most significant component of the FERS is the Thrift Savings Plan (TSP), where employees can currently contribute a percentage of their basic pay, plus earn agency-matching contributions; details are available at: www.tsp.gov. The third component is Social Security.

HOSPITAL INSURANCE TAX/MEDICARE

As a FERS employee, you pay 1.45 percent of your annual salary for Medicare, which becomes available when you reach age 65.

HEALTH BENEFITS

NIAID employees can choose from a wide variety of health insurance plans, including well-known national plans, prepaid health maintenance organizations, and plans sponsored by unions and associations. The Government pays approximately 75 percent of health insurance premiums for full-time employees. Extensive information regarding health insurance is available at www.opm.gov/insure.

LIFE INSURANCE

NIAID employees are eligible to participate in the Federal Employees' Group Life Insurance Program. The cost of basic life insurance is shared (you pay two-thirds, and the government pays one-third). You may also opt for additional coverage. Additional information is available at www.opm.gov/insure.

LONG TERM CARE INSURANCE

The Federal Long Term Care Insurance Program is an important new benefit for the Federal Family. Long term care is the kind of care you need to help perform daily activities if you had an ongoing illness or disability. It includes home care, care in a nursing home, or assisted living. Additional information is available at www.opm/gov/insure.

DISABILITY RETIREMENT

Federal employees who meet time in service requirements and who have a serious, long-term medical condition that prevents them from working, may be considered for the disability retirement program by the Office of Personnel Management. Such retirees receive 60 percent of their salary the first year, and 40 percent of salary for subsequent years.

HOLIDAY LEAVE

Federal employees are granted 10 Federally designated paid holidays each calendar year.

ANNUAL LEAVE

New full-time employees earn 13 days of paid leave per year for the first three years. The rate of annual leave accrual increases over time.

SICK LEAVE

Full time employees earn 4 hours of paid sick leave every two weeks, or 13 days per year.

FAMILY MEDICAL LEAVE ACT

If you or a family member is ill, or have a medical emergency, you may be entitled to use leave under the Family Medical Leave Act (FMLA), or through sick leave regulations.

Joining the NIAID Team

How to Apply

We invite you to consider the opportunities at the NIAID, NIH. For faster consideration, we encourage candidates to submit their resumes for the numerous NIAID positions through the online method. All resumes we receive from one of the options below will be forwarded to our resume database, for ready searching by our managers. The database accepts one resume per candidate, so if you have supplemental information for additional positions, you may mail that additional information to the postal address below under the postal service section; this additional information will then be linked with your resume.

Options for resume submission include:

ONLINE (THE PREFERRED METHOD)

The following URL takes you to the page that NIAID hosts for all vacancies within NIAID:

http://healthresearch.niaid.nih.gov

This site prompts you to submit your resume into either the doctoral or non-doctoral resume database for particular jobs in the NIAID. This page also has an option so that you may submit your resume into the general resume pool, rather than linking it to a specific job posting.

E-MAIL

Secondarily, you may e-mail your resume to the NIAID at e-mail: **BioT@niaid.nih.gov**

If you submit a resume via e-mail, please state the "source," which is where you learned of the job opportunity, in the subject line of your e-mail.

POSTAL SERVICE

Certain attachments, periodicals, and charts are not readily scannable into our database. If your resume has such items, you may alternatively mail your resume, along with any attachments, through regular mail to:

NIAID-NIH-OMNI
6707 Democracy Boulevard, Suite 880
Bethesda, MD 20892-5473

To see what types of information your resume should include, please click to:

www.niaid.nih.gov/ohrm/attacha.htm

We are happy to respond to your questions, and you may contact us at our toll-free number 888-798-4991.

NIAID seeks the best, brightest, most capable individuals to address health issues in our changing world. We invite you to consider joining the NIAID team.

DHHS and NIH are Equal Opportunity Employers

Learn More through

NIH Internet Sites

Various NIAID/NIH Web addresses provide an abundance of reference material for prospective job candidates. Some of these include:

NIAID HOME PAGE

www.niaid.nih.gov

(For individual NIAID division home pages, please see references on initial pages of this brochure.)

NIAID STRATEGIC PLAN

www.niaid.nih.gov/strategicplan2000

BIODEFENSE RESEARCH AGENDA

www.niaid.nih.gov/dmid/pdf/biotresearchagenda.pdf

NIAID PROFILE BOOK

www.niaid.nih.gov/publications/NIAIDProfile/default.htm

50 YEAR ANNIVERSARY OF NIAID 1948-1998

www.niaid.nih.gov/final/index.htm

INSTITUTE FACTS

www.niaid.nih.gov/facts/facts.htm

NIAID BIODEFENSE VACANCIES

http://healthresearch.niaid.nih.gov

POSITION VACANCIES AT NIH (27 INSTITUTES AND CENTERS)

http://careerhere.nih.gov

Healthy Work Life

At NIAID, we recognize the importance of balancing a healthy work life with your personal responsibilities. Campus benefits vary from site to site but include:

- Fitness centers
- Work and Family Life Support Center and services
- Child care and elder care referral services
- On-site child care centers
- Clubs and other activities
- Recreation and Welfare Association
- Federal Credit Union
- NIH Federal Police Force
- Employee Assistance Program
- Occupational Health Service
- Tuition reimbursement

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health

National Institute of Allergy and Infectious Diseases

NIH Publication no. 02-5184
November 2002