

DEPARTMENT OF HEALTH AND HUMAN SERVICES
NATIONAL INSTITUTES OF HEALTH

Fiscal Year 2014 Budget Request

Statement for the Record

Senate Subcommittee on Labor-HHS-Education Appropriations

Anthony S. Fauci, M.D.

Director, National Institute of Allergy and Infectious Diseases

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Mr. Chairman and Members of the Committee:

I am pleased to present the President's Budget request for the National Institute of Allergy and Infectious Diseases (NIAID) of the National Institutes of Health (NIH). The fiscal year (FY) 2014 NIAID budget of \$4,578,813,000 includes an increase of \$96,444,000 over the comparable FY 2012 level of \$4,482,369,000.

NIAID conducts basic and clinical research with the ultimate goal of improving human health through the development of diagnostics, therapeutics, and vaccines for infectious diseases; and to increase our understanding of the immune system, how it protects us from infection and

transmitting HIV to the uninfected partner. Recently, based upon results of the NIAID-funded iPrEx study and other research, the Food and Drug Administration (FDA) approved the ART combination drug Truvada[®] as a prevention tool for uninfected adults at high risk of acquiring HIV. Ongoing NIAID studies of PrEP, microbicides, and PMTCT are exploring new strategies to limit HIV transmission in various populations; one study (TLC-Plus) is evaluating the feasibility of a community-level “testing, link to care, and treatment” strategy; and the new population-based ART study (PopART) will determine the effects of universal testing and immediate ART on HIV transmission.

NIAID continues

resistant TB, and FDA recently approved the first new TB drug (bedaquiline) in decades.

NIAID continues its work to combat malaria. To counter the emerging resistance to artemisinin, a first-line malaria drug, NIAID scientists have identified a region in the genome of the parasite linked to artemisinin resistance. NIAID is pursuing its promising efforts to develop candidate malaria vaccines, including studies conducted at the NIH Clinical Center.

Other Infectious Diseases of Domestic and Global Health Importance. Events in the news remind us almost on a daily basis of the global threat of emerging and re-emerging infectious diseases. Paramount among these are seasonal influenza and potential pandemic influenza threats, such as the H7N9 influenza emerging in China. NIAID conducts research on the pathogenesis and transmissibility of influenza, and the emergence of epidemics and pandemics, with the goal of furthering the development of influenza diagnostics, therapeutics, and vaccines. We have made

NIAID scientists have developed an animal model to study the novel coronavirus recently identified in Saudi Arabia, and to evaluate potential treatments and vaccines. They have shown recently that a combination of two antiviral drugs, ribavirin and interferon, can inhibit replication of the virus in cell culture.

Common microbial infections are increasingly becoming resistant to the drugs generally used to treat them. Methicillin-resistant *Staphylococcus aureus* (MRSA) has been a longstanding problem. Of particular concern is the recent emergence of other antibiotic-resistant organisms such as the carbapenem-resistant Enterobacteriaceae (CRE

the global threat of emerging and re-emerging diseases, including the development of vaccines for dengue fever and animal models to study West Nile virus.

RESEARCH ON IMMUNOLOGY AND IMMUNE-MEDIATED DISORDERS

NIAID remains committed to basic and clinical research on the immune system and immune-mediated diseases, including the development and testing of adjuvants to enhance the immune response to vaccination. NIAID also supports groundbreaking studies in the treatment of food allergy, a significant concern for many Americans. Recently, NIAID-funded scientists found that oral egg immunotherapy can reduce and even eliminate allergic responses for extended periods in certain children. Similarly promising results showed that peanut immunotherapy given under the tongue can reduce the allergic response in adolescents and adults.

CONCLUSION

NIAID conducts critical research on infectious and immune-mediated diseases that ultimately will enable interventions to improve health domestically and worldwide. Understanding and developing countermeasures against microbes that threaten our public health is central to NIAID's mission. NIAID will continue to fund meritorious basic and clinical research with the ultimate goal of translating these discoveries into global public health benefits.

Anthony S. Fauci, M.D.

Director, National Institute of Allergy and Infectious Diseases

Dr. Fauci was appointed Director of NIAID in 1984. He oversees an extensive research portfolio of basic and applied research to prevent, diagnose, and treat infectious diseases such as HIV/AIDS and other sexually transmitted infections, influenza, tuberculosis, malaria and illness from potential agents of bioterrorism. NIAID also supports research on transplantation and immune-related illnesses, including autoimmune disorders, asthma and allergies. The NIAID budget request for fiscal year 2014 is approximately \$4.6 billion. Dr. Fauci serves as one of the key advisors to the White House and Department of Health and Human Services on global AIDS issues, and on initiatives to bolster medical and public health preparedness against emerging infectious disease threats such as pandemic influenza. He was one of the principal architects of the President's Emergency Plan for AIDS Relief (PEPFAR), which has already been responsible for saving millions of lives throughout the developing world.

Dr. Fauci has made many contributions to basic and clinical research on the pathogenesis and treatment of immune-mediated and infectious diseases. He has 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. In addition, Dr. Fauci is widely recognized for delineating the precise mechanisms whereby immunosuppressive agents modulate the human immune response. He has developed effective therapies for formerly fatal inflammatory and immune-mediated diseases such as polyarteritis nodosa, Wegener's granulomatosis, and lymphomatoid granulomatosis. A 1985 Stanford University Arthritis Center Survey of the American Rheumatism Association membership ranked the work of Dr. Fauci on the treatment of polyarteritis nodosa and Wegener's granulomatosis as one of the most important advances in patient management in rheumatology over the previous 20 years.

Dr. Fauci has made seminal contributions to the understanding of how the AIDS virus destroys the body's defenses leading to its susceptibility to deadly infections. He

