NSF, NIH Award Ecology of Infectious Diseases Grants（图）

http://www.freelight.cn 2006-11-10

[作者]The National Science Foundation
[译自]The National Science Foundation

[摘要]October 27, 2006. Over the past 20 years, unprecedented changes in biodiversity have coincided with the emergence and re-emergence of numerous infectious diseases around the world. To address this problem, the National Science Foundation (NSF) and the National Institutes of Health (NIH) have announced funding for eight projects under the Ecology of Infectious Diseases (EID) program, a multi-year, joint-agency effort now in its seventh year of funding.

[关键词]Ecology;Infectious Diseases

October 27, 2006.

Over the past 20 years, unprecedented changes in biodiversity have coincided with the emergence and re-emergence of numerous infectious diseases around the world. To address this problem, the National Science Foundation (NSF) and the National Institutes of Health (NIH) have announced funding for eight projects under the Ecology of Infectious Diseases (EID) program, a multi-year, joint-agency effort now in its seventh year of funding.

"Researchers supported in the EID program are advancing basic theory related to infectious diseases," said James Collins, NSF Assistant Director for Biological Sciences, "and applying that knowledge to improve our understanding of how pathogens spread through populations at a time of increasing global change."

Interdisciplinary projects funded through the EID program will study how large-scale environmental events --

such as habitat destruction, biological invasions and pollution, as well as a variety of interventions --

alter the risks of viral, parasitic and bacterial diseases emerging in humans and animals.

"The joint program supports efforts to create a predictive understanding of the ecological and biological mechanisms that govern relationships among human

-

induced environmental changes and transmission of infectious diseases," said Samuel Scheiner, program director in NSF's biological sciences directorate, which funds the EID program along with NSF's geosciences directorate.

These studies will contribute knowledge and analytical tools that will help public-

health officials, wildlife managers, farmers and others to control the spread of diseases among humans, domestic and wild animals, and crops, say EID scientists.

This year's awards include developing a better understanding of the effects of avian migration and human-

caused change on the distribution and risks of avian influenza; predicting variations in West Nile virus transmission in different regions; the changing dynamics of malaria and other diseases in Papua New Guinea; disease resistance in estuarine populations like oysters and the response to climate change; sudden oak death and links among pathogens, hosts and environments; the influence of environmental change on

The coincidence of broad-

scale environmental changes and the emergence of infectious diseases may point to underlying and predictable ecological relationships. Yet both basic and applied research in infectious disease ecology have been largely piecemeal, said Scheiner.

Potential benefits of the EID program include development of disease transmission theory; improved understanding of unintended health effects of development projects; increased capacity to forecast outbreaks; and improved understanding of how diseases emerge and re

-emerge. Previous research looked at diseases only after they had reached humans, or only at non-

human animals, said EID program directors at NSF and NIH's Fogarty International Center. The EID program links those different components to produce a comprehensive understanding of disease transmission, said Joshua Rosenthal, NIH program director for EID.

北京富迪科技有限公司 Copyright © 2003-2008 Email: leisun@freelight.cn