LSUHSC’S KOLLS EARNNS NIH MERIT AWARD RECOGNIZING BEST OF THE BEST

New Orleans, LA - Dr. Jay Kolls, Professor and Chairman of Genetics at the LSU Health Sciences Center New Orleans School of Medicine, is one of the few scientists in the United States selected to receive the prestigious Method to Extend Research in Time (MERIT) Award by the National Institutes of Health's National Heart, Lung and Blood Institute. Through the MERIT Award, a principal investigator may receive up to ten years of research support in two five-year segments without the need to prepare a renewal application after five years of support.

The overall objective of the MERIT Award program is to provide productive investigators with a history of exceptional talent, imagination, and with a record of preeminent scientific achievements the opportunity to continue making fundamental contributions of lasting scientific value. The MERIT Award provides long-term, stable support to investigators whose research competence and productivity are likely to continue in the future and is intended to foster their continued creativity and lessen the administrative burdens associated with the preparation and submission of research grant applications.

Investigators may not apply for a MERIT Award. Eligible nominees are selected from a pool of highly meritorious and established investigators whose new or renewal competing grant applications have recently undergone peer review. In order to be considered for a MERIT Award, these investigators must meet demanding criteria, such as continuity of grant support, recognition within the scientific community, and contributions to the NHLBI mission. Nominations are reviewed and discussed by the National Heart, Lung, and Blood Advisory Council and approved by the NHLBI Director.

"The leading research agency in the United States has recognized Dr. Jay Kolls as a preeminent scientist working to advance treatment of lung infections that affect millions of people worldwide," notes Dr. Steve Nelson, Dean of the School of Medicine at LSU Health Sciences Center New Orleans who is himself a pulmonologist. "Dr. Kolls is in an elite group of researchers whose work is deemed of such high value that they do not have to compete for grant support. This award is further evidence of the quality of the faculty at LSU and their success in discovering and contributing new knowledge that saves lives."

Dr. Kolls was selected as a MERIT awardee for his recent grant to further his work on a discovery that plays a critical role in the body's defense against pneumonia.

Bacterial pneumonia is an important clinical problem and defense mechanisms against it are not fully understood. Dr. Kolls and his research team have identified a unique group of white blood cells that play a critical role in defense against pneumonia. These cells rapidly produce two new cytokines (small proteins in the immune system that affect how cells communicate and function) to increase resistance to infection in the lung. The first is interleukin-17 which helps recruit white blood cells into the sight of infection. The second is interleukin-22 which increases the barrier function of the epithelium (tissue lining the lungs). The research funded under this grant uses genetically engineered mice to see which cells need to receive these cytokine signals. Specifically, Dr. Kolls is investigating the role of the lung epithelium itself as the primary recipient of these signals. His group is also exploring how these cells are generated and how they control infection defense in the lung.

"This award, which intends to foster continued creativity in research, will allow my research program to continue to be on the cutting edge of discovery of mechanisms of lung immunity and inflammation," said Dr. Kolls.

This research will help advance prevention and treatment of pneumonia and also advance vaccine development against lung infections. It will have broader application as well because mucous tissues like the lung are also the primary sites of emerging infections such as new strains of influenza and MRSA (Methicillin-Resistant Staphylococcus aureus).
According to the Centers for Disease Control and Prevention, in 2006, 1.2 million people in the U.S. were hospitalized with pneumonia and 55,477 people died from the disease.

Globally, pneumonia kills more than 4 million people every year - half of these deaths occur among children less than 5 years of age. This is greater than the number of deaths from any other infectious disease, such as AIDS, malaria or tuberculosis. The CDC also reports that recent data show that Americans visit the doctor approximately 12 million times each year to get checked for suspected Staph or MRSA skin infection. A study of the first population-based nationwide estimates of the burden of invasive MSRA disease from active cases published in 2007 found the incidence in 2005 was 31.8 cases per 100,000 persons, with a mortality rate of about 20%.

LSU Health Sciences Center New Orleans educates Louisiana's health care professionals. The state's academic health leader, LSUHSC comprises a School of Medicine, the state's only School of Dentistry, Louisiana's only public School of Public Health, and Schools of Allied Health Professions, Nursing, and Graduate Studies. LSUHSC faculty take care of patients in public and private hospitals and clinics throughout the region. In the vanguard of biosciences research in a number of areas in a worldwide arena, the LSUHSC research enterprise generates jobs and enormous economic impact, LSUHSC faculty have made lifesaving discoveries and continue to work to prevent, advance treatment, or cure disease. To learn more, visit http://www.lsuhsc.edu and http://www.twitter.com/LSUHSCHealth.