



Dr. David Russell

# gift supports professorship in Infection Biology

Dr. David Russell has been named the William Kaplan Professor of Infection Biology. The endowment was made possible through the estate of veterinarian Dr. William Kaplan, who was a 1946 graduate of Cornell's College of Veterinary Medicine and had a distinguished career as a medical mycologist with the Centers for Disease Control and Prevention in Atlanta.

"Endowed professorships are established as a special way to recognize individuals of distinction, people who are pioneers in knowledge creation and who challenge conventional thinking in ways that inspire innovation," said Michael Kotlikoff, Austin O. Hooey Dean of Veterinary Medicine. "Dr. Russell is a superior example of re-imagining our approach to solving problems, a characteristic that permits Cornell to advance research that improves the quality of life in communities across the state and around the world. We are most grateful to Dr. Kaplan's farsightedness in supporting the College and this important area of research."

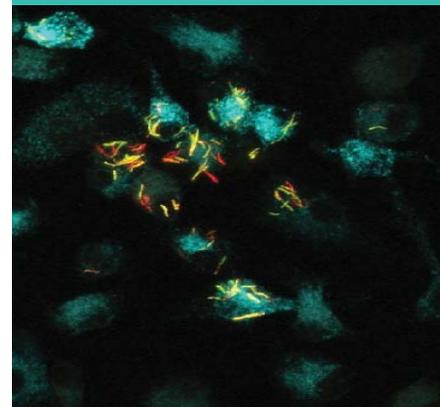
In addition to his work with the Centers for Disease Control and Prevention, Kaplan was also an associate professor at both the University of North Carolina and Georgia State University. A diplomate of the American College of Laboratory Animal Medicine and the American Board of Medical Microbiology, he was known for his expertise in fungal histopathology and the diagnosis of a variety of infections.

"I find a great deal of encouragement in the University's and College's decision

to establish the William Kaplan Professorship, a position that will forever recognize the importance of infectious disease research to this Institution," said Dr. Russell, who is a professor in the Department of Microbiology and Immunology in the College of Veterinary Medicine. "It is through this focused scientific investigation that we will better understand the complex relationships between hosts and pathogens, knowledge that is essential if we are to design better vaccines and drugs capable of fighting human and animal diseases."

Dr. Russell has dedicated his career to doing just that. In research that spans three continents, he aims to discover drugs to treat disease in people with pulmonary tuberculosis (TB), sometimes in conjunction with human immunodeficiency virus (HIV). This work has taken him to Malawi, where he works with collaborators from the University of Massachusetts, the College of Medicine in Malawi, and the Liverpool School of Tropical Medicine, to study macrophages, white blood cells within tissues that eat bacteria and, Dr. Russell says, are the key to treating TB.

His work focuses on the development of new approaches to combat TB in the macrophage. Dr. Russell and his team have formed a collaboration with the biotechnology company Vertex Pharmaceuticals and performed a high-throughput screen to identify small molecules that kill the bacterium within the macrophage. These molecules have potential as lead compounds for future drug development.



The image above shows *Mycobacterium tuberculosis* transformed to express mCherry (red) constitutively, and GFP (green) under regulation of a pH-sensitive promoter. The picture was taken by Robert Abramovitch.