

**DR. ALLAN D. BASS (1910-2005)**

Allan D. Bass was Professor and Chairman of the Department of Pharmacology at Vanderbilt University School of Medicine from 1953 until 1973. He served as Associate Dean for Biomedical Sciences from 1973 until his retirement in 1975.

Dr. Bass was nationally recognized as an outstanding administrator, scientist, and educator. He participated actively in many national societies, including The American College of Physicians, American Society for Pharmacology and Experimental Therapeutics (President, 1967 to 1969) and the American Medical Association Council on Drugs (1962 to 1972).

Dr. Bass's own scientific research spanned more than four decades and included more than 66 articles and abstracts. Early on, he concentrated on developing new anthelmintics and on skin sterilizing agents. Later, he investigated the mechanisms of sulfonamide action and cellular mechanisms involved in endocrine pharmacology. Additional work focused on adrenal corticosteroids, hormones, and chemical transmitters.

Dr. Bass was responsible for the development of Vanderbilt's Department of Pharmacology from a relatively small entity to a program that has achieved national recognition. As an educator, Dr. Bass always made every effort to assist each student to reach his or her academic potential and to meet professional requirements. Predoctoral and postdoctoral students who trained in pharmacology during Dr. Bass' tenure as chairman now reside throughout the nation and several foreign countries and many have held leadership positions in academia, government and the pharmaceutical industry.

The Allan D. Bass Lectureship, established in 1977, celebrates scientific inquiry and communication. The program is made possible through the generosity of the Bass family, as well as colleagues in the scientific community, present and former students and faculty members at Vanderbilt University and the Vanderbilt Department of Pharmacology. Continuing support by alumni and friends is essential to the success and vitality of our training and research programs. If you would like to support this program, or others like it in the Department of Pharmacology, you can find on-line giving access on our web site, [www.vanderbilt.edu/pharmacology](http://www.vanderbilt.edu/pharmacology).

**PREVIOUS ALLAN D. BASS LECTURERS INCLUDE:**

1977 Avram Goldstein	1993 Roger A. Nicoll
1979 James R. Gillette	1995 David E. Clapham
1981 James A. Miller	1998 Phillip Needleman
1981 Elizabeth C. Miller	2003 Susan S. Taylor
1983 Norman Weiner	2005 Morgan Sheng
1985 Elliot S. Vesell	2007 Brian K. Kobilka
1987 Richard W. Tsien	2009 Xiaodong Wang
1989 John R. Blinks	2013 Thomas C. Südhof



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**PETER DOHERTY, Ph.D.**

THE KILLER DEFENCE

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OCTOBER 2, 2014

4:00 P.M.

208 LIGHT HALL

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DEPARTMENT OF PHARMACOLOGY

ALLAN D. BASS ENDOWED LECTURE SERIES

VANDERBILT  UNIVERSITY  
MEDICAL CENTER

## THE KILLER DEFENCE

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The human family is constantly challenged by viruses, with epidemic/pandemic pathogens either emerging from wildlife or domestic animal reservoirs, or as a consequence of “immune escape” mutations in strains that are circulating in us. Vaccines that promote long-term antibody mediated immunity to “mop-up” any invader can provide immediate protection though, of course, we have no such products when something new and unexpected hits. Our most intimate parasites, viruses grow only within living cells. As a consequence, part of the process of recovery requires the elimination of these cellular “factories” of pathogen production. The “hit man” of immunity that does this job is a circulating white blood cell, the virus-specific, CD8+ “killer” T cell, or cytotoxic T lymphocyte (CTL). We will discuss how this understanding came about, together with emerging evidence that the “recall” of cross-reactive CTL-mediated immunity can provide a measure of protection in the face of an influenza pandemic.

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## **PETER DOHERTY, Ph.D.**

**MICHAEL F. TAMER CHAIR,  
DEPARTMENT OF IMMUNOLOGY,  
ST. JUDE CHILDREN'S RESEARCH HOSPITAL**

**LAUREATE PROFESSOR, DEPARTMENT OF  
MICROBIOLOGY AND IMMUNOLOGY,  
THE UNIVERSITY OF MELBOURNE**

**NOBEL PRIZE IN PHYSIOLOGY OR MEDICINE, 1996**

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Peter Doherty shared the 1996 Nobel Medicine Prize for discovering the nature of the cellular immune defense. Based at the University of Melbourne and also spending part of his year at St. Jude Children's Research Hospital, Memphis, he continues to be involved in research directed at understanding and preventing the severe consequences of influenza virus infection. In addition, he goes in to bat for evidence-based reality, relating to areas as diverse as childhood vaccination, global hunger and anthropogenic climate change. In an effort to communicate more broadly, he has published 4 “lay” books, and has more in progress.

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