

**Vance C. Mosher** '62S,  
February 2011

**Ronald A. Ramos** '62,  
December 2011

**Charles E. Boyer** '63,  
January 2012

**John Brychey** '63S,  
December 2011

**John C. Kincaid** '63,  
January 2012

**Carolyn Lipp** '65E,  
September 2011

**Jorge M. Davila** '69M (Pdc), '72M (MS),  
January 2012

**H. Jayne Vogan** '69W (EdD),  
December 2011

**Virginia Schmidt Brougham** '70,  
December 2011

**Robert W. Moorhusen** '70 (MS),  
January 2012

**Dorothea Maibaum** '71,  
December 2011

**Keith F. Neal** '71W (MA),  
January 2012

**Jacques Domey** '72 (MS),  
December 2011

**John R. Slattery** '72,  
December 2011

**Michael N. Stanton** '72 (PhD),  
December 2011

**Eugene F. Gartland** '73 (MS),  
January 2012

**David M. Rittenhouse** '73,  
January 2012

**Peter A. de Sherbinin** '74S (MBA),  
June 2011

**Eldon L. Krantz** '74E (DMA),  
December 2011

**Alan W. Cross** '75M (Res),  
January 2012

**Michael F. Damico** '76,  
January 2012

**Lyn Lawrence Labarre** '77N,  
December 2011

**Nazzareno Ballatori** '80, '84 (PhD),  
December 2011

**David S. Anderson** '82,  
December 2011

**Gail Ingersoll** '83N (MS), '87W (EdD),  
December 2011

**Jacqueline Maxwell** '83N (MS),  
December 2011

**Linda Kirkwood** '89E (MM),  
January 2012

**Mary Irene Burkwit** '91,  
January 2012

**Sydney Duncan Thomas** '93W (PhD),  
December 2011

**Antonia Caramico-Marotta** '02, '03 (MA),  
January 2012

**Joseph L. Wilgenbusch** '08E (MM),  
December 2011

## TRIBUTE

## Robert Ader: Medical Pioneer

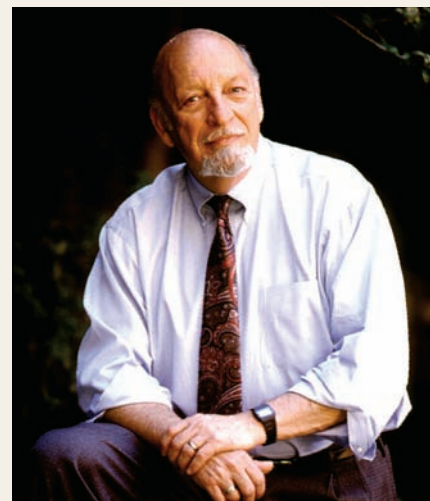
Robert Ader, who first joined the Medical Center faculty in 1957, was among the University's most famous and distinguished scientists. Bob pioneered an entirely new field—psychoneuroimmunology—which, by the time it gained wide acceptance, signified a paradigm shift in our understanding of the immune system.

Thirty-five years ago, the immune system was viewed as a self-regulating, autonomous agency of defense. In the mid-1970s and early 1980s, however, Bob and his colleagues (I'm gratified that for 37 years, I was one of them) convincingly and reproducibly demonstrated that different immune responses could be regulated by classical—that is, Pavlovian—conditioning. In other words, since conditioning is learning that involves higher centers of the brain, conditioned immune modulation meant that there must be connections between the brain and the immune system.

The first publications of conditioned immunosuppression studies from the Ader lab were readily accepted by experimental psychologists who knew of Bob's outstanding reputation in other areas of behavioral animal research. These same papers, however, were received by immunologists with skepticism if not outright disbelief; the dogma of an autonomous immune system was too well entrenched to be easily discarded. This, and the attendant difficulties of obtaining funding from the National Institutes of Health for new and suspect interdisciplinary research might have led a lesser scientist to abandon this new line of inquiry. Bob, however, persevered, and he and his colleagues continued to share their research results with the scientific community at national and international conferences and in leading peer-reviewed journals.

In 1981, Bob collected, edited, and published a set of chapters by scientists whose research was unified by the theme of nervous-immune system interactions. This first edition of *Psychoneuroimmunology* coalesced the young field and its contributors. Moreover, it added psychoneuroimmunology to the lexicon of science.

In 1987, he founded the journal *Brain, Behavior and Immunity* and served as its editor-in-chief for 15 years. In 1993 he



**PATHBREAKER:** Ader pioneered the field of psychoneuroimmunology with work that he began 35 years ago.

assumed a leadership role in forming the Psychoneuroimmunology Research Society and served as its president and visionary during its early years.

Psychoneuroimmunology is now firmly accepted by basic scientists, and its place in medicine is becoming widely recognized. For example, clinicians now appreciate the important role that stress can play in diseases such as multiple sclerosis, lupus, and coronary artery disease that involve autoimmune or inflammatory processes. Knowledge of the connection between the brain and the immune system is also relevant for a better understanding of mood disorders. Finally, in recent years Bob was extending the conditioned immunosuppression model to the clinic to help reduce the total quantity of active drugs a patient needs for effective treatment.

Bob died last December at the age of 79. Thanks in large part to his pioneering research and strong leadership, the complexities of neural-immune system communication are now being explored at the organismic, cellular, and molecular levels by a critical mass of interdisciplinary scientists. Bob Ader will be missed, but his legacy will endure.

—Nicholas Cohen '66 (PhD)

*Cohen is a professor emeritus of microbiology and immunology and of psychiatry at the Medical Center.*