

**Cover illustration:** One of seven medieval tapestries (ca. 1495-1505) in a series known as *The Hunt of the Unicorn*. The mythical creature is restoring poisoned water by dipping his magical horn into the fountain. The original tapestries are displayed in The Cloisters, The Metropolitan Museum of Art, New York.

## Destruction and Renewal in Biological Systems



The Sixth Annual  
Skirball Institute Symposium

April 30, 2004  
9:30 am - 6:00 pm

Farkas Auditorium  
New York University School of Medicine  
540 First Avenue, New York, NY

## The Sixth Annual Skirball Symposium, 2004

Destruction and renewal form a leitmotif throughout human literature, art, politics, culture—and biology. Under the aegis of this distinctly expansive theme, this year's Skirball Symposium provides a forum for examining degradation, repair, remodeling, and regeneration at the molecular, cellular, and organismal levels. The talks range widely over such remarkable processes as DNA repair, aging, cellular matrix remodeling, and limb regeneration.

Of special note is this year's Severo Ochoa lecture, presented by Dr. Alfred Goldberg on the topic of protein turnover. The Ochoa lectureship was established by Drs. Bernard Levine and Joseph Schlessinger in 1998 to honor Severo Ochoa, Chairman of the Department of Pharmacology and then of Biochemistry at New York University School of Medicine. Dr. Ochoa shared the 1959 Nobel Prize in Physiology or Medicine with Arthur Kornberg of Stanford University for unraveling the mechanisms of the biological synthesis of ribonucleic acid and deoxyribonucleic acid.

This year's Skirball Symposium was organized by David Ron and David Roth, both members of the Skirball Institute's Program in Molecular Pathogenesis. The organizers thank Annie Angell, Luis Grullon, and all the members of Skirball Administration for their capable support.

## Program

- 9:30 am Introduction
- 9:45 **The Severo Ochoa Lecture:**  
*Alfred Goldberg, Harvard Medical School*  
The proteasome in protein turnover and antigen presentation to the immune system
- 10:35 *Stephen West, Clare Hall, Cancer Research UK*  
Making ends meet: double-strand break repair in human cells
- 11:25 *Daniel Klionsky, University of Michigan*  
Autophagy as a regulated pathway of cellular degradation
- 12:30 pm Lunch
- 2:00 *Zena Werb, University of California, San Francisco*  
The dynamic extracellular microenvironment in development and neoplasia
- 2:50 *Monica Driscoll, Rutgers University*  
Mechanisms of aging and neurodegeneration in *C. elegans*: lessons from simple old animals
- 3:40 *Coffee Break*
- 4:00 *Stephen Strittmatter, Yale University School of Medicine*  
Axonal plasticity and regeneration in the adult CNS: role of the Nogo receptor
- 4:50 *Jeremy Brockes, University College London*  
New limbs for old: lessons from the newt
- 5:45 Reception