

# First Human Lyme Disease Vaccine Receives FDA Approval

Until recently, the only way to prevent Lyme disease was to avoid being bitten by ticks that carry the disease-causing bacterium from animals to humans. (Hikers could tuck long trousers into boots or socks, and wear light-colored clothing to better see ticks.)

Lyme disease, which usually begins with a rash and fever, is a serious infectious disease in both humans and animals. Once diagnosed, the disease can be treated effectively with antibiotics, but about 25 percent of people infected with Lyme disease show no symptoms. If left untreated, the disease can progress to infect the heart and brain.

Now people moving about outdoors or living in areas where Lyme disease is

common have a new defense option—the first vaccine against Lyme disease was approved by the Food and Drug Administration last December.

SmithKline Beecham Biologicals, Rixensart, Belgium, is licensed to produce and market the vaccine, called LYMERix. No vaccine is 100 percent effective, but LYMERix has been shown to prevent infection in 78 percent of vaccine recipients 15–70 years old. The vaccine is not approved for children younger than 15 years old.

In order to be effective, three doses of LYMERix are required over a period of at least one month and up to one year. It is unknown how long protection against the disease will last.

The Lyme disease vaccine (OspA) was developed by Dr. Stephen Barthold, director of the Center for Comparative Medicine at UC Davis, and his colleagues Drs. Flavell, Kantor and Fikrig at Yale University.

Dr. Barthold continues his work on second-generation Lyme disease vaccines at the Center for Comparative Medicine at UC Davis. The center, uniquely served by faculty and staff from both the School of Medicine and School of Veterinary Medicine, is devoted to investigation of persistent infectious diseases common to humans and animals.

For more information, contact the Center for Comparative Medicine, (530) 752-7913.

# New Center for Comparative Medicine Inaugural Includes Symposium and Open House

UC Davis celebrated the opening of the Center for Comparative Medicine last June with a symposium, opening ceremony, and tours of the new facility.

An inaugural symposium featured the work of UC Davis and visiting scientists who are conducting research on viruses, bacteria and fungi that infect both humans and animals.

During the opening ceremony, the center's director, Stephen Barthold, welcomed visitors, distinguished guests and speakers including Judith L. Vaitukaitis, MD, of the National Institutes of Health, who gave the keynote address, and former California State Senator John Garamendi, author of the bond act that helped establish funding for construction of the center.

The Center for Comparative Medicine is a collaborative research and teaching facility co-sponsored by the School of Veterinary Medicine and the School of Medicine to further understanding of and intervention strategies against persistent (viral, bacterial and parasitic) infectious diseases common to humans and animals.



Visitors tour the new UC Davis Center for Comparative Medicine, a collaborative biomedical research and teaching facility co-sponsored by the School of Veterinary Medicine and the School of Medicine. Funding for the \$15 million building, which houses laboratories and core facilities for a campuswide mouse biology program, was provided by a \$1.6 million grant from the Lucille P. Markey Charitable Trust and through provisions of the Garamendi Act.