

HONOR A SPECIAL PERSON OR PET

"TAKE A SEAT" IN A NEW SCHOOL CLASSROOM

"Take a Seat" and make a gift in support of the new Veterinary Medicine Instructional Facility!

The 36,000 sq/ft structure, to be dedicated in June as Gladys Valley Hall, will become the instructional heart of the school, providing auditoriums, classrooms, meeting and seminar spaces and study areas.

For a contribution of \$1,000 you can have a nameplate permanently placed on a desk in one of two 174-seat auditoriums. It's a great way to leave your mark (without being accused of vandalism).

- * Honor a special family member, friend, professional colleague or mentor
- * Memorialize a beloved pet
- * Demonstrate appreciation of a UC Davis education
- * Invest in the future of veterinary medicine
- * Inspire others

"Forty-four of the original 174 seats are still available," says the assistant dean for development, Kelly Nintz. "For some reason, the back row is extremely popular among alumni—the back row seats are all named."

In addition to individuals and Veterinary Medical Association chapters, several alumni classes have mounted group efforts to put their names on one or more seats—the class of 1987 will name a five-seat section as a tribute to "Back Row Bingo," a unique game several classmates created as students.

For more information, contact the school's development office at (530) 752-7024.



Nearing completion: the school's first new classrooms since Haring Hall was dedicated in 1950.

Gene Identification Leads to Screening Test for PKD in Cats

Cystic kidneys can sporadically occur in both cats and humans, but multiple cysts that develop early and on both kidneys are likely due to the hereditary form of polycystic kidney disease (PKD).

In a cat affected by PKD, cysts tend to become larger and more abundant with age, leading to eventual renal failure. The average age for cats to exhibit renal dysfunction due to the progression of cysts is 7 years.

The genetic mutation that causes PKD in Persian cats was identified in 2004 in the feline genetics laboratory of associate professor Leslie Lyons.

A search for the mutation among more than 800 normal and affected cats implicated PKD1, a gene already known to cause PKD in humans.

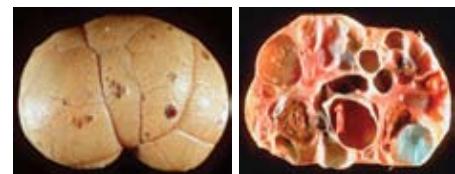
Success was due in large part to cat breeders and veterinarians who participated in PKD ultrasound screening clinics. Collaborators in the research included veterinary radiologists David Biller of Kansas State University, who first proved that PKD is inherited, and Eric Herrgesell of UC Davis.

PKD in cats is most common in Persians and other breeds that have Persians in their breeding. In the fancy cat breeds, of which Persians make up nearly 80 percent, it appears that just one copy of the gene is required to produce PKD, although the entire genetic make-up of the cat has influence on clinical signs and disease severity.

Clinical signs common to cats experiencing PKD or any type of renal dysfunction include depression, frequent drinking and urination, reduced appetite, and weight loss.

No cure is available for PKD. Clinical management is designed to prevent or minimize kidney failure and secondary conditions arising from poor kidney function.

The presence of cystic kidneys can be determined as early as 6 to 8 months of age. Diagnosis of PKD is generally certain by one to two years using ultrasonic techniques. Unfortunately, by the time cats with PKD have strong clinical presentations, they are old enough



Courtesy of Stephen DiBartola, DVM, The Ohio State University

Exterior of kidney with moderate PKD (left), and cross section of kidney with advanced PKD.

to have bred and already contributed PKD1 to the gene pool.

Generally, 50 percent of the offspring of an affected cat will inherit PKD. It is not yet known why some cats are more severely affected than others, or why mildly affected cats can produce severely affected cats and vice versa.

Now that the gene is identified, a test for the gene PKD1 is available for cats as young as 8-10 weeks of age—swabs are used by cat owners or veterinarians to collect DNA from the cat's cheek and gums.

The Veterinary Genetics Laboratory (VGL)—a non-profit School of Veterinary Medicine laboratory for DNA parentage analysis, disease and diagnostic testing, and research—offers the test, which includes a DNA fingerprint for each cat along with test results. Genetic counseling is also available through the VGL to help with breeding decisions.

The test for PKD1 is highly accurate. It does not indicate how severely the animal will be affected by PKD, and a negative test for PKD doesn't rule out other causes of renal failure. Cats exhibit a wide range of severity—many cats that test positive for PKD can lead normal and long lives.

Testing for PKD1 is currently recommended for British Shorthair, Persians, Exotics, Himalayans and Persian out-crosses. Breeders with positive cats are strongly encouraged to continue to interact closely with their veterinarians to evaluate disease severity and monitor renal function.

For more information about PKD testing, visit the Veterinary Genetics Laboratory Web site (<http://www.vgl.ucdavis.edu>).