Mary Catherine “Mary Kay” Pelias, a geneticist who not only studied hereditary disorders but also made sure students understood the ethical issues related to their discoveries, died June 29 at her New Orleans home of complications from strokes. She was 70.

Dr. Pelias, who taught for 26 years at LSU Health Sciences Center, held degrees in biology and law. She fused those interests when she taught ethics.

She was particularly interested in genetic problems that may be rare elsewhere but are prevalent in southwest Louisiana, where the population is relatively stable and marriages between cousins are common.

Dr. Pelias traveled throughout the region to visit with families whose relatives had been stricken with conditions that, for example, could destroy their sight, retard bone growth or sabotage nervous systems. Although she was determined to find information, Dr. Pelias managed to do so while being consoling and supportive.

“She was brilliant,” New Orleans City Councilwoman Jackie Clarkson said. “She had a sense of consciousness about other people that other people with her education just don’t have. She had a tremendous awareness of the importance of helping people.”

Although she was at home in a laboratory and with technology, Dr. Pelias was practical and down-to-earth. When she did a family interview, she carried a roll of butcher paper that she spread across a table so she could construct a family tree to help her find the origin of a particular condition, said Bronya Keats, a former colleague.

Based on that example, “I always used butcher paper when tracing (family) pedigrees,” said Keats, a professor of biochemistry and biomedical science at the Australian National University in Canberra.

Dr. Pelias was “very concerned, very passionate,” said Barry Potter, a physiology professor at LSU Health Sciences Center who taught ethics courses with her.

A lifelong New Orleanian, Dr. Pelias earned an undergraduate degree in biology at Newcomb College and master’s and doctoral degrees in the subject at Tulane University. She was elected to Phi Beta Kappa, the nation’s oldest scholastic honorary society.

Dr. Pelias started teaching at LSU Health Sciences Center in 1976 and retired in 2002.

In 1989, 19 years after receiving her Ph.D., Dr. Pelias earned a law degree at Loyola University.

One factor that motivated her to enroll was the host of legal and ethical questions that arose from genetic testing, said Terry Fontham, dean of LSU’s School of Public Health, who had a nearby office.

“She was interested in it, she was worried about it, and she wanted to make sure that things were done correctly,” Fontham said.

This was vital to her, Potter said. “She wanted to be sure that our graduate students understood the ramifications of all the ethical ins and outs. With the newer molecular-
biology techniques, the boundaries were becoming increasingly blurred. She was concerned that the next generation of scientists be ethically informed.”

In 1996 and 1997, she was a congressional fellow in the Washington office of U.S. Sen. Pete Domenici, a New Mexico Republican who served from 1973 to 2009. She drafted and promoted legislation promoting the confidentiality of genetic information and opposing discrimination based on those data.

She also worked with Clarkson, then a Louisiana legislator, to draft a law prohibiting discrimination on the basis of one’s genetic profile.

That bill, one of the first such measures in the nation, “was my greatest accomplishment in the Legislature,” Clarkson said.

It was the first of 12 health-related bills on which the two collaborated. Among the others, Clarkson said, were measures that let women get mammograms without a doctor’s referral and required insurance to cover reconstructive surgery after mastectomies.

“She and I never lost,” Clarkson said. “Never.”

Survivors include her husband, Richard Tracy; two sons, Gus M. Pelias III and Andrew Pelias; a brother, Fred Zengel; a sister, Jane Scharber; and a step-grandson.

No memorial service will be held.