

*the* NEWS FROM THE UNIVERSITY OF FLORIDA • COLLEGE OF VETERINARY MEDICINE  
**veterinary**  
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Veterinary student Caty Love, class of '11, is shown with Dean Glen Hoffsis at the sophomore coating ceremony May 9. For more photos, see p. 4.

## UF pathologists, researchers play key role in determining cause of death of polo ponies

**P**ostmortem testing conducted by University of Florida College of Veterinary Medicine pathologists and toxicologists on a group of prized polo horses that collapsed and died April 19 in Wellington, Fla., drew international attention, with riveted members of the public and the press wanting answers about the mysterious cause of death.

Blood and tissue samples were gathered from 15 horses on which UF pathologists conducted necropsies. Six other horses had been sent to the Florida Department of Agriculture and Consumer Services' diagnostic laboratory in Kissimmee, Fla., for postmortem examinations. The necropsies of all 21 horses yielded no answers, nor did subsequent microscopic examinations. Even the UF Racing Laboratory, which routinely conducts toxicology screening tests of race horses in the state, revealed nothing initially that could explain the horses' sudden deaths.

Subsequent tests conducted by UF toxicologist David Barber, however, verified the presence of life-threatening concentrations of selenium in the horses' blood and liver. The concentrations were found to be 10 to 15 times higher than normal in the blood and 15 to 20 times higher than normal in the liver.

"Our role in testing was key, not only because we were able to verify the toxic levels of selenium found to be present in the blood and liver of these horses, but also because through additional testing conducted at our Racing Lab, we were able to rule out the presence of common performance-enhancing drugs," said Dr. John Harvey, the college's executive associate dean and a board-certified clinical pathologist.

"This is significant, because in ruling out other drugs that could have killed these horses, we essentially were able to corroborate the assessment that indeed these deaths were likely caused by an accidental overdose rather than due to malicious or criminal intent."

The 15 horses UF performed necropsies on arrived around 3 a.m. on Monday morning, April 20. The first group of six horses had been taken to the state diagnostic laboratory in Kissimmee, Fla., filling it to capacity.

An eight-person UF pathology team led by Dr. Lisa Farina and Dr. Jeff Abbott, both board-certified anatomic pathologists, immediately set to work conducting the necropsies of eight of the 15 horses. The task was completed at approximately 5 p.m. on Monday. Soon after, a request came to necropsy the remaining seven horses. All of the necropsies, including those performed at UF and those conducted at the state's diagnostic lab, were complete by day's end on Tuesday.

Wednesday morning, Farina and her colleague, Dr. Michael Dark, an assistant professor of anatomic pathology, began examining slides with tissue samples under the microscope while a CNN reporter videotaped them at work.

By this time, reports had surfaced that individuals associated with the polo team had admitted giving vitamin supplement shots to the horses shortly before they died. Speculation intensified as to what exactly had been administered and whether any of the ingredients in the supplement injections could have caused the horses' deaths.

Meanwhile, blood samples taken from some horses before they died had arrived at UF and were being tested at the UF Racing Lab, under the direction of Dr. Richard Sams. Pathologists and toxicologists remained puzzled, as nothing conclusive had yet emerged.

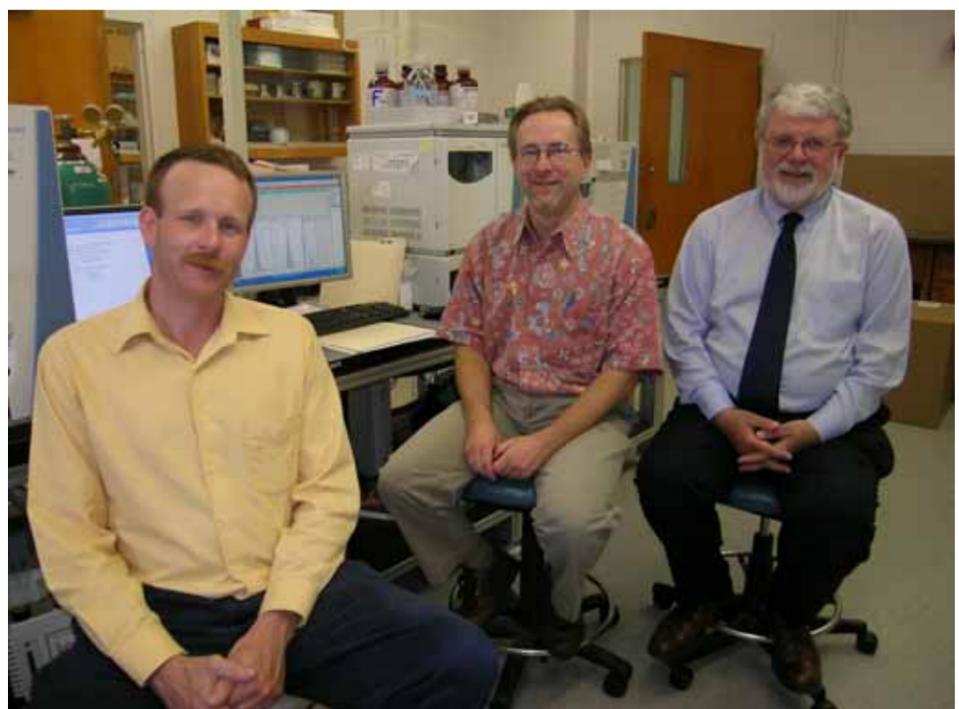
On Thursday, April 22, the focus of the story took a dramatic shift when a spokesperson for a private pharmacy said that the horses had received an incorrect dose of one of the ingredients used in a vitamin compound with which the horses had been injected. Because of ongoing law-enforcement and other investigations, the pharmacy did not initially release the name of the specific ingredient.

Based on this information, Dr. David Barber, an associate professor in the Center for Environmental and Human Toxicology in the college's department of physiological sciences, worked until late Thursday night conducting analysis of inorganic components of the vitamin supplement.

Testing was performed on the blood and livers of affected and unaffected horses and while Barber was not informed which horse was the "control" horse, he guessed the obvious after completing the testing. The unaffected horse was the only horse among those tested that showed normal levels of selenium in its blood, as compared to very elevated levels detected in the blood of other horses tested. A pharmacy spokesperson later confirmed that selenium was the mistaken ingredient.



UF's team of veterinary pathologists performed necropsies on 15 of the 21 polo ponies that died April 19 in Wellington, Fla. Members of the group are, in front row, seated, from left to right: Dr. Michael Dark, an assistant professor of anatomic pathology at UF; Dr. Linda Hayes, a first-year anatomic pathology resident; Dr. Debabrata Mahapatra, a second-year anatomic pathology resident; and Dr. Ken Conley, a first-year anatomic pathology resident. In back row, standing, from left to right, are: Dr. Jeff Abbott, an assistant professor of anatomic pathology; Dr. Nanny Wenslow, a clinical instructor of anatomic pathology; and Dr. Ian Hawkins, a second-year anatomic pathology resident. At far right, seated at the microscope, is Dr. Lisa Farina, necropsy service chief, who led the team. Not pictured is Dr. Barbara Sheppard, clinical associate professor of anatomic pathology, who also participated. (Photo by Sarah Carey)



Dr. David Barber, a UF toxicologist, is shown at left with UF College of Veterinary Medicine Racing Lab scientific manager David Hall and the lab's director, Dr. Richard Sams. Barber was able to verify life-threatening levels of selenium in the blood and livers of several of the horses that died suddenly in Wellington just prior to a tournament on April 19. Selenium was determined to be the probable cause of death. The UF College of Veterinary Medicine Racing Lab meanwhile had performed screening tests on samples from the animals in order to rule out the presence of any performance-enhancing drugs in the horses' systems. (Photo by Sarah Carey)

## *Congratulations to new advanced degree recipients*

Several UF CVM graduate students received their advanced degrees during commencement exercises held May 2.

Receiving her doctoral (Ph.D.) degree was Dr. Heather Wamsley. Receiving the thesis-based master of science degree was sophomore veterinary student Eric Johnson.

Recipients of the non-thesis, Web-based master of science degree in forensic toxicology were Mary Babos, Sabra Botch, Matthew Cook, Teri Freeman, William Lee, Suzy Russell, Amy Staub and Greta Wright. Congratulations to all!

## *UF's role in investigating cause of polo horse deaths draws international press coverage*

Print, broadcast and Internet news outlets in the United States and abroad provided broad press coverage of the April 19 deaths of 21 polo horses in Wellington, Fla. The role of the University of Florida College of Veterinary Medicine in testing to determine the cause of these deaths was mentioned in many of these outlets.

Below is a list of known media outlets who provided a UF mention:

### **Print, On-line and Broadcast Outlets:**

CNN; New York Times; USA Today; Washington Post; Los Angeles Times; Scientific American; Orlando Sentinel; Miami Herald; Sun-Sentinel; Palm Beach Post; Gainesville Sun; Ocala Star Banner; The Horse; WCJB Gainesville; WESH Orlando, Augusts Chronicle, Tucson Citizen, The Times Leader, Halifax Daily News, Metro News Ottawa, Chattanooga Times, Canton Repository, San Jose Mercury News, USA Today, National Post, Washington Observer Reporter, WFTS-TV (Tampa), WPTV, WPBF, Sun-Journal (Maine), Victoria Advocate (Texas), New London Day (Connecticut), Farm Weekly (Australia), Augusta Chronicle (Georgia), Tucson Citizen (Arizona), The Times Leader (Pennsylvania), Palm Beach Post, Halifax Daily News (Nova Scotia), Metro News-Ottawa (Ontario), Metro News-(Calgary); Chattanooga Times & Free Press (TN), Canton Repository (Ohio); San Jose Mercury News (California); York Daily Record (Pennsylvania); Connecticut Post (Connecticut); El Paso Times, Metro News-(Edmonton); Danbury News-Times (Connecticut); York Dispatch (Pennsylvania); Oakland Tribune & Inside Bay Area (CA); Marin Independent Journal (California); Stamford Advocate (Connecticut); Greenwich Time (Connecticut); USA Today, National Post & Financial Post (Ontario); WSFL (South Florida); WSYR-TV (Syracuse) DVM Magazine (DVM360); Guardian.co.uk; Newsday.com; MSNBC.com; NBC Sports

### **Blogs:**

InjuryBoard.com; ScienceBlogs

## *UF CVM Racing Lab tests samples from Kentucky Derby horses*



Shiro Curtis, left, and Erin Funk, right, both technicians at the University of Florida College of Veterinary Medicine Racing Lab, perform a solid phase extraction of urine samples from horses that ran in the Kentucky Derby May 2 in Louisville. The UF Racing Lab, under contract for the first time this year by the Kentucky Horse Racing Commission, tested multiple samples from each race for the presence of performance-enhancing drugs. All analyses are expected to be complete by Wednesday. (UF photo by Ray Carson)

## *Kudos for UF participants in right-whale sedation*



Dr. Mike Walsh, left, and Dr. James Bailey, right, pose with awards they were given by the National Oceanic and Atmospheric Association for their parts in the recent first-ever sedation of a right whale in the Atlantic Ocean. Walsh, associate director of UF's Aquatic Animal Health program, helped determine the correct dosage of drug to administer to the whale. Bailey, a CVM anesthesiologist, assisted in monitoring anesthesia efforts. (Photo by Mark Hoffenberg)

## 2009 Alumni Council Distinguished Award recipients to be honored at commencement ceremony May 23

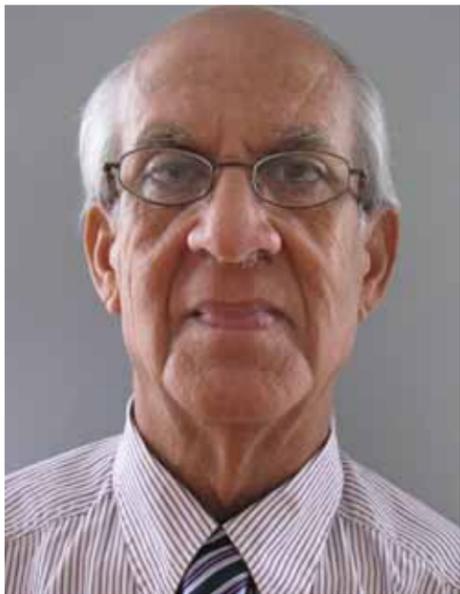
*The UF College of Veterinary Medicine's Alumni Council created the Distinguished Award Program in 2001 to honor alumni, faculty and special friends of the college who have contributed meaningfully to college life. For more information, please contact Jo Ann Winn at (352) 392-2213, ext. 5013.*



**Dr. Dale Kaplan-Stein**



**Dr. Julio Ibanez**



**Dr. Louis Archbald**



**Dr. Jerome Modell**

**T**wo small animal veterinary practice owners from Gainesville and Miami, the chief veterinarian at the Georgia Aquarium and two UF professors emeritus have been honored for their career accomplishments by the UF College of Veterinary Medicine.

Four awards were given through the 2009 Distinguished Award program, which is sponsored by the college's alumni council and offers recognition to deserving alumni, faculty and others who have contributed meaningfully to UF and/or to the veterinary profession.

Dale Kaplan-Stein, D.V.M., and Julio Ibanez, D.V.M. both received Alumni Achievement Awards this year.

Kaplan-Stein, a member of the college's class of 1981, owns Oaks Veterinary Hospital and Northwood Oaks Veterinary Hospital, both in Gainesville. She also helped establish Affiliated Pet Emergency Services in Gainesville in 1988. For more than 20 years, Kaplan-Stein has been a tireless volunteer for Gainesville Pet Rescue, Alachua County Animal Services and No More Homeless Pets, among other groups. In 2007, she founded the St. Francis House Pet Care Clinic, through which she has helped provide care to nearly 500 pets of homeless and disadvantaged people living in the Alachua County area.

Ibanez, a member of the college's charter class of 1980, owns Quail Roost Animal Hospital in Miami. He is a former president of the college's alumni council and has been actively involved in the Florida Veterinary Medical Association. He also has served on the executive boards of the South Florida Veterinary Medical Association and the South Florida Veterinary Foundation. Ibanez received the FVMA's Gold Star Award in 2003 for his outstanding contributions to veterinary medicine.

The Outstanding Young Alumnus Award was given to Tonya Clauss, D.V.M. Clauss, a 2003 graduate of the UF veterinary college, is chief veterinarian at the Georgia Aquarium, where she works with one of the world's largest collections of aquatic animals. Frequently featured in the national news whenever the Aquarium treats high-profile cases, Clauss is an active spokeswoman for the importance of aquatic animal health.

Louis Archbald, D.V.M., Ph.D., a professor emeritus of animal reproduction, has received the Distinguished Service Award. Archbald joined UF's faculty as a professor and assistant dean for clinical services/chief of staff of UF's Veterinary Medical Teaching Hospital in 1984. Until he retired in 2008, Archbald directed minority-oriented initiatives, later known as multicultural and special programs at the college. He received the 2001 Iverson Bell Award from the American Association of Veterinary Medical Colleges for his outstanding contributions in promoting opportunities for minority students in veterinary medical education. Even after retirement, Archbald has continued to advise and mentor minority students in the D.V.M. and graduate programs.

The college's Special Service Award went to Jerome Modell, M.D., a professor emeritus of anesthesiology at UF's College of Medicine who also holds a courtesy appointment in the College of Veterinary Medicine. For more than 20 years, Modell, always eager to draw parallels between animal and human patients, routinely invited UF veterinary faculty to lecture in his classes. In the 1980s, he helped create a human patient simulator to teach medical students. This tool was soon adapted to teach anesthesia to UF veterinary students.

The awards will be presented May 23 at the Phillips Center for the Performing Arts during college commencement exercises.



**Dr. Tonya Clauss**

## Coating ceremony marks key transition to clinics for class of 2011

*...for more photos, turn to p.4. See also Dr. William Castleman's Web site, at: [http://www.wlcastleman.com/ufvetmed/cvmcoat\\_09/index.htm](http://www.wlcastleman.com/ufvetmed/cvmcoat_09/index.htm)*



Student helpers Alex Alvarez, '12, and Jordan Taheri, '10, assembled the 87 gift bags containing goodies from various sponsors. Each member of the class of 2011 received a bag when they exited the stage after receiving their new white coat. (Photo by Sarah Carey)



Dr. Corrina Blackmore, state public health veterinarian, and Dr. Scott Terrell, '97, a veterinary pathologist who works with Disney's Animal Kingdom, were among the coat presenters. (Photo by Sarah Carey)

# Ceremony draws CVM faculty, alumni, and fellow students and families of 80 veterinary students to University Auditorium May 9



Meghan Tibbs, class of '11, center, with her parents, Gary and Julie Tibbs, after the coating ceremony. Meghan was coated by Dr. Terry Curtis, a veterinary behavior specialist and UF CVM alumna from the class of '97. (Photo by Sarah Carey)



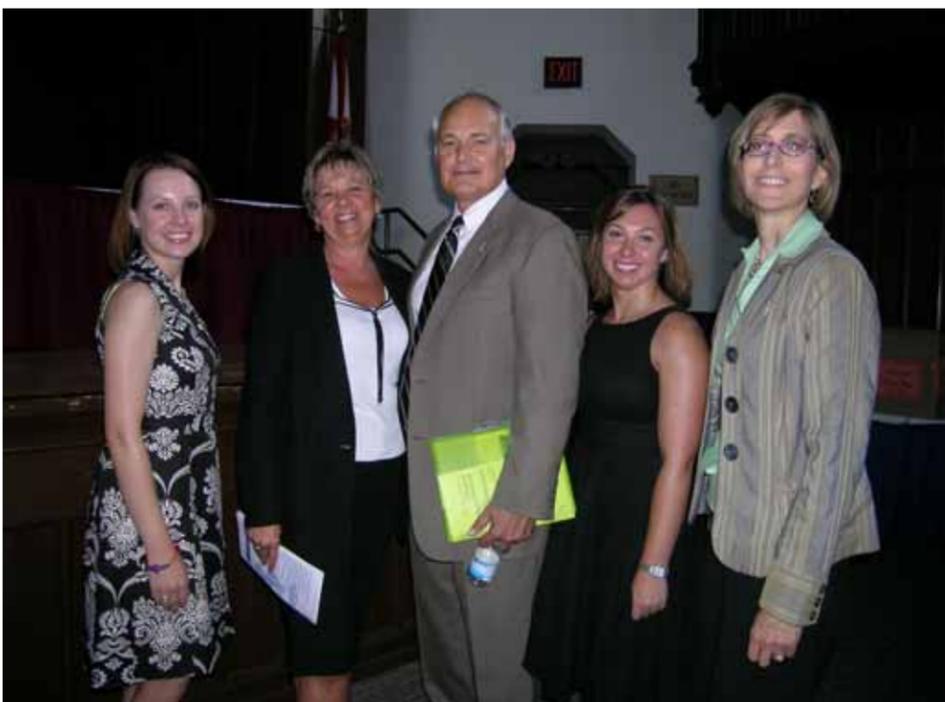
Dr. Dale Kaplan-Stein, left, a UF CVM alumna from the class of 1981, is shown with her daughter, Sara Kaplan-Stein, center, whom she coated during the ceremony, and Dean Glen Hoffsis. (Photo by Sarah Carey)



Tiffini Vaughan, class of '11, and her boyfriend. (Photo by Sarah Carey)



Dr. Darryl Heard, professor of zoological medicine, and Dr. April Romagnano, class of '92, director of animal resources and attending veterinarian for Scripps Florida, were coat presenters. (Photo by Sarah Carey)



From left to right are Meredith Woods, representing Taylors Pharmacy, a coating ceremony sponsor; Karen Legato, senior director of development and alumni affairs for the UF CVM; Dr. Glen Hoffsis, dean of the college; Carrie Rhodes, also representing Taylor's Pharmacy; and Patricia Wlasuk, development associate. (Photo by Sarah Carey)



Dr. Jan Hasse, FVMA president-elect and guest speaker, left, and Phil Hinkle, FVMA's executive director, far right, are shown with sophomore students Caty Love and Leonel Londono, both from the class of '11. Both Love and Londono received FVMA scholarship awards during the coating ceremony. (Photo by Sarah Carey)