the veterinary page
NEWS FROM THE UNIVERSITY OF FLORIDA • COLLEGE OF VETERINARY MEDICINE

UNIVERSITY of FLORIDA

UF veterinary pathologist plays key role in sea turtle recovery effort

BY SARAH CAREY

When an unprecedented cold snap hit Florida in January and twice the number of sea turtle strandings occurred in 10 days that normally take place in a year, University of Florida clinical assistant professor Brian Stacy, D.V.M. Ph.D., took a lead role in supervising federal efforts to rescue and relocate large numbers of turtles back into the wild. Three months later, the Deep Horizon oil spill thrust Stacy, a veterinarian working under a collaborative agreement with NOAA's National Marine Fisheries' Service Office of Protected Resources, once again into crisis management mode.

"It's like the cold stun protracted out over months, with no end in sight," said Stacy, 35, a board-certified veterinary pathologist who has made several trips to the Gulf conducting live captures and performing necropsies on sea turtles found dead in or near the spill-affected area. "My technician and I have worked consistent 18-hour days under hot field conditions, away from home for weeks at a time, living in temporary housing. It's hard work, to say the least, and I've been going at it for more than 60 days now."

Biological scientist Jennifer Muller has accompanied Stacy on all of his trips to the Gulf, assisting in all aspects of animal necropsies and the handling of live animals.

"She is also invaluable in maintaining the necessary evidence documentation," said Stacy on June 23, back in Gainesville after his most recent trip to the Gulf. He worked offshore in Venice, La., where many of the clean-up operations are based out of for the primary spill site, within miles of the Deep Horizon wreck, and in Gulfport, Miss., where he performed 67 sea turtle necropsies at the Institute for Marine Mammal Studies.

"We'd been at it for three weeks, and we were at a stage where our objectives and logistics had to be reassessed," Stacy said. "The concern had been raised that the same habitat where we were recovering turtles was being targeted for some of the burn operations. Since most of us had been there for three weeks, it was a good time to transition."

Although the common public assumption might be that all sea turtles collected after the spill have died because of oil related causes, Stacy found that more than half of the animals examined had ocean-floor sediment in their lungs or airways, indicating that they may have died from drowning after being caught in fishing nets. His preliminary findings were reported June 25 in the New York Times, although additional test results are pending.

Stacy has also not yet completed examinations on the bulk of the turtles that have been found dead.

On June 25, approximately 300 dead turtles from Florida, Alabama, Mississippi and Louisiana arrived at UF for necropsy in various stages of decomposition. Each turtle was logged in and placed inside a 20-foot storage freezer and the chain of custody was transferred to Stacy, in compliance with federal requirements.

"All of the necessary information came with the animals," Stacy said. "We are just going to try to move through fairly efficiently and stay organized. Jennifer really is my right hand."

Biological samples from the turtles are sent to laboratories designated by the Unified Command, which consists of federal and state government as well as private entities, including BP, to respond to the spill.

Helen Golde, the deputy director of NOAA's Office of Protected Resources, said, "We are fortunate to have Dr. Stacy working as the primary sea turtle vet for NOAA's marine animal health team. He is invaluable as we work through the Unified Command to respond to the Deepwater Horizon spill. Dr. Stacy's experience in veterinary medicine and sea turtle pathology are unique and he is leading these critical elements of the overall effort."

Although Stacy's role is unique, he relies on expertise from the community of veterinarians he is able to tap into through his contacts at other state and federal agencies as well as colleges and universities.

"From top to bottom, there's a lot involved when it comes to animal welfare and the postmortem site," said Stacy, who received the UF College of Veterinary Medicine's most prestigious award for graduate research in 2008 just prior to receiving his Ph.D. degree.

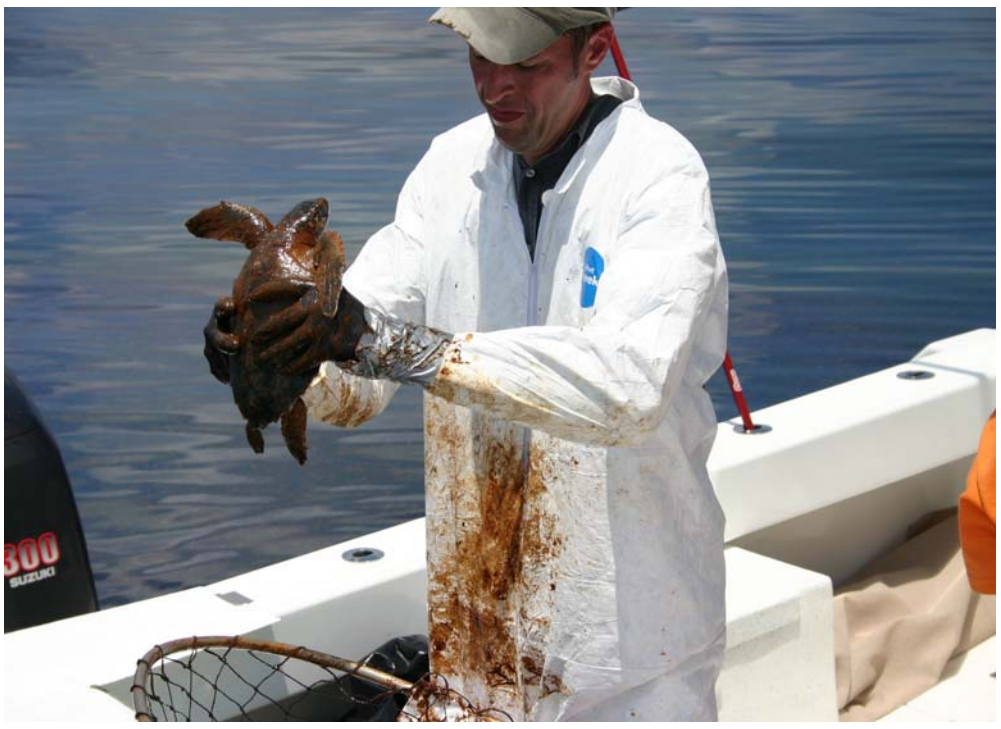
He added that the two most distressing things about his experience so far have been experiencing the scale of the spill and seeing animals completely mired in hot oil.

"It's a terrible way for an animal to die," Stacy said.

There was a bit of good news. Of approximately 60 sea turtles Stacy and his team were able to rescue, most survived.

"All are still in rehabilitation facilities, and eventually will be released," Stacy said. "We're still in the learning process of determining how the oil will affect them, both in this key interval and longer term. There is a lot of ongoing effort to identify release sites that are biologically appropriate and that are out of harm's way."

As for Stacy, who knows his work will continue indefinitely, he is doing his best to stay focused on the job at hand.



Dr. Brian Stacy with an oiled sea turtle in the Gulf of Mexico during one of his recent trips.
(Photo courtesy of the National Oceanic and Atmospheric Association)

"What keeps me going is helping animals, and the fact that the attention this situation is getting right now is an opportunity to shed light on some of the important concerns in the Gulf of Mexico for sea turtles," Stacy said. "You just try to find the hours here and there when you can compartmentalize and put it out of your mind. My wife and family are very supportive, and that is critical."

CVM offers planning, hands-on assistance to governmental agencies in wake of oil spill

Members of the University of Florida College of Veterinary Medicine faculty, under the administration of UF's Institute of Food and Agricultural Sciences, are providing assistance through contracts with the National Marine Fisheries Service's Office of Protected Resources.

A Unified Area Command structure links the organizations responding to specific incidents, and teams have been assigned to deal with each species. Right now there are four people from the UF CVM who are associated with different teams. These individuals are involved in the teams dealing with sea turtles, manatees, dolphins and large whales. The only species we are not actively involved in dealing with at this point is birds.

College administration is working to prepare a short-term animal rescue and rehabilitation plan. Thus far, the short-term plan has involved assisting the federal government in identifying additional qualified veterinarians who will supplement existing staff support at the Audubon Zoo in New Orleans and Gulf World Marine Park in Panama City. As part of this effort, a full-time contract veterinarian has been provided to the Audubon Zoo. The college also provides veterinary services for Clearwater Marine Aquarium, which has received a handful of sea turtles with medical problems that could be related to the oil spill. At the Lowry Park Zoo, assistance is being provided to aid in the care of critically ill manatees in preparation for the possible influx of manatees affected by the spill.

Longer term, college researchers will be analyzing the toxicological risks associated with both swimming in potentially contaminated water and the consumption of seafood. College administrators also will be investigating other opportunities to conduct research relating to possible new diseases of humans and animals that could emerge as the result of the oil spill.

(For more information, see p.2)

Oil spill response

Who's doing what within the college

■ **Dr. Brian Stacy**, clinical assistant professor with the Aquatic Animal Health program, works with sea turtles as a contract veterinarian with the Office of Protected Resources (National Marine Fisheries Service.) Dr. Stacy, a board-certified veterinary pathologist, is the medical and necropsy lead for sea turtles under the oil spill response efforts. He and his associate, biological scientist Jennifer Muller of UF's Marine Animal Disease Laboratory, have made multiple trips to the Gulf, most recently they were involved in performing open water captures, traveling by boat into areas affected by oil to survey and rescue pelagic juvenile sea turtles. The Gulf of Mexico is important habitat for multiple life stages of five sea turtle species, all of which are threatened or endangered.

Stacy is the lead pathologist for postmortem examination of dead sea turtles recovered within the response area. There have been significantly increased numbers of sea turtle strandings in the northern Gulf, especially Mississippi. The investigation includes consideration of other mortality factors, such as fisheries interactions, in addition to concerns directly related to the oil spill. Most of the sea turtle necropsies will be performed at the UF CVM.

■ **Dr. Mike Walsh,** associate director of UF's Aquatic Animal Health program, is one of two people under contract with BP (through the U.S. Fish and Wildlife Service, which is the team in charge of manatees) to respond to manatees in the Gulf. In addition, Walsh and one of our graduate students, **Alex Costidis** have been contracted with by the National Marine Fisheries Service (the team for whales, dolphins and sea turtles) to help with whale issues.

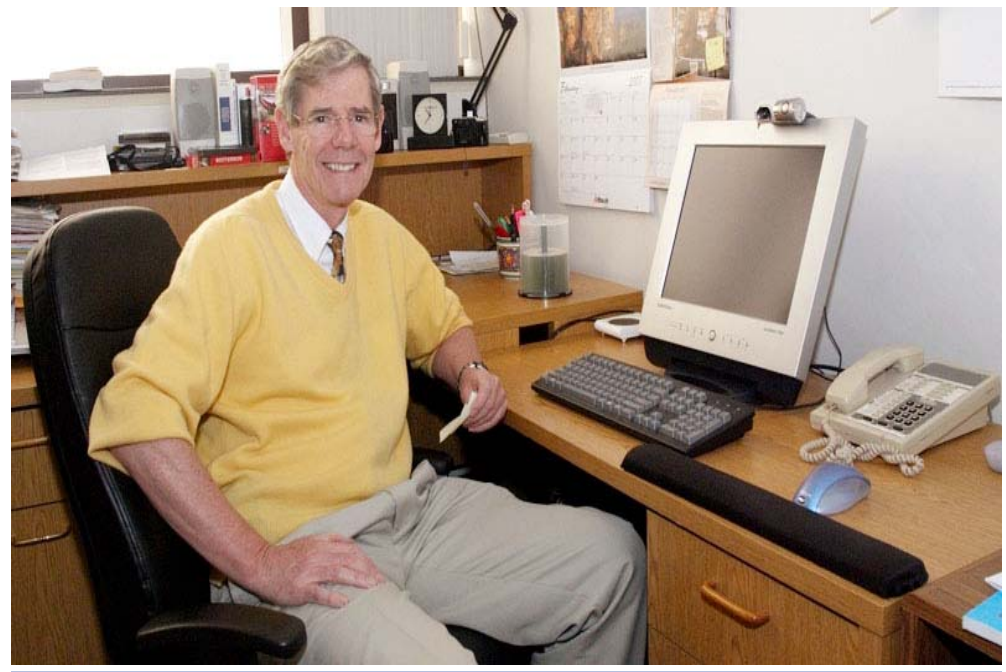
■ **Dr. Steve Roberts**, professor and director of UF's Center for Environmental and Human Toxicology, now has a contract with the Florida Department of Health to evaluate the toxicological risks of people swimming in seas with varying amounts of crude oil contamination and likewise for seafood contaminated with varying amounts of crude oil. Due to the toxic hazard from crude oil, very few unpaid volunteers are being accepted to help. The UF CVM has no positions or opportunities for volunteers at this time. For more information about state-specific volunteer opportunities, visit this link:
http://www.deepwaterhorizonresponse.com/go/page/2931/46359/

■ **Dr. Charlie Courtney**, associate dean for research and graduate studies, is coordinating all response activities for the UF CVM and is serving as the primary contact person for faculty with respect to possible funding proposals or any other questions relating to CVM involvement.

■ **UF VETS** (Veterinary Emergency Treatment Service) Team, led by **John Haven**, director of medical/health administration for the college and an Incident Command System instructor, has been providing animal transport, specifically to birds, in the Gulf of Mexico through a contract with Sumter County's Disaster Animal Response Team. Sumter DART is one of the state's leading animal response organizations. With financial assistance from Banfield Charitable Trust, the American Kennel Club, Florida Farm Bureau, Florida Veterinary Technician Association and others, a VETS equipment trailer has been converted to safely transport animals. The first trailer was deployed to the Panhandle area July 5 with **Joshua Fleming** and is under contract until August 5, a timeline which may be extended. **David John** subsequently relieved **Fleming**. A second trailer is being retrofitted to perform a similar function.

Scientist Jennifer Muller assists Dr. Brian Stacy in performing a necropsy on a sea turtle at UF in the aftermath of the Gulf Oil Spill.

Gibbs named associate dean for students and instruction



Dr. Paul Gibbs at his desk.

Paul Gibbs, B.V.Sc., Ph.D., a veterinarian and virologist in the University of Florida College of Veterinary Medicine's department of infectious diseases and pathology, has been named associate dean for students and instruction at the college.

Gibbs has had a long and distinguished career as a member of UF's veterinary faculty, on which he has served since 1979, when he became a founding faculty member. He has been a full professor in the college since 1981 and also holds joints appointment with the College of Medicine's department of molecular genetics and microbiology as well as with the College of Public Health and Health Professions' department of environmental and global health.

He was instrumental in the establishment of a joint Doctor of Veterinary Medicine/Master's of Public Health degree program offered by the Colleges of Veterinary Medicine and Public Health and Health Professions in 2007. Between five and 10 students enroll in this program every year during their freshman year.

Gibbs has been very involved in student curriculum issues as previous past chairman of the college's curriculum committee, and has regularly worked with state and other governmental agencies to aid in the identification of foreign animal diseases. Gibbs helped to develop an on-line training course in this topic that can be taken as continuing education by veterinarians practicing in the state of Florida.

Gibbs also has developed a course in International Animal Health aimed at veterinarians practicing in the developing world. In addition, he has helped Florida middle and high-school students learn more about emerging diseases by partnering with science teachers throughout the state to provide them with training tools on emerging diseases

From 1994-1999, Gibbs directed UF's International Center, a position in which he served as the university's chief international officer. As a virologist, his career focus continues on the international control and eradication of emerging viral diseases having epidemic potential.

Gibbs said it was a "great privilege" to accept his new position at such an exciting and pivotal time.

"In the 31 years since I was appointed as one of the founding faculty of the college in 1979, I have seen the college mature and the university grow in stature and size," Gibbs said. "Now, with the new state-of-the-art UF Small Animal Hospital opening soon and an increased student enrollment to 100 students per year, the college is entering a new phase of its history."

He said the changing world we live in and particularly the past 10 years have been particularly challenging.

"The events of 9/11, the spate of emerging diseases, increasing concern over the environment, the exponential increase in computerized information and the recent economic crisis have changed the role of the veterinary profession here in the United States and indeed worldwide," Gibbs said. "Veterinarians are now involved in protecting and promoting animal and human health in so many more ways than just a decade ago."

He added that the sophistication of modern surgery and medicine continues to grow, along with the number of veterinary graduates who choose to specialize further after receiving their D.V.M. degrees.

"While many of our graduates continue to enter practice in the U.S., a surprisingly large number are serving in the military, the pharmaceutical industry, state and federal government and other less traditional roles," he said. "Our graduates span the globe. The nation expects much of our veterinary students, but they have much to offer."

Gibbs added, "I hope that in some small way, I can help them be better prepared to meet the myriad challenges of the 21st century and to become 'citizens of the world.'"

The Veterinary Page is the UF College of Veterinary Medicine's monthly electronic internal newsletter. Please send stories to Sarah Carey at careysk@vetmed.ufl.edu.

Scholar, teacher, friend: Dr. Kevin Anderson dies after valiant battle with brain cancer

Dr. Kevin Anderson

Dr. Kevin J. Anderson, 54, an associate professor of anatomy and neurobiology at the University of Florida College of Veterinary Medicine, died June 15, 2010 after a long and courageous fight with brain cancer.

Anderson had been a member of the UF CVM faculty since 1988, and taught gross anatomy to every veterinary student class since then. UF veterinary students chose him several times to receive their top teaching awards, given by individual classes and also by the Student Chapter of the American Veterinary Medical Association.

This past spring, he was named the college's College Council 2010 Teacher of the Year, the highest teaching honor bestowed by the council based on criteria including knowledge of subject matter, clarity of presentation, concern for students' mastery of subject, fairness, enthusiasm for teaching and overall interest in student welfare. Anderson also received the award in 1990.

In 1994, the college awarded Anderson its prestigious C.E. Cornelius Young Investigator Award for his research. His most recent research focused on the biomarkers of traumatic brain injury, and he had received funding support from the Veteran's Administration and other sources.

Anderson received his undergraduate degree in biology and subsequently a master's degree in zoology, both from Washington State University. His devotion to and interest in anatomy took him to the University of Kentucky, where he completed a Ph.D. in anatomy in 1984. Subsequently, Anderson conducted four years of postdoctoral research at the University of California, Irvine.

Anderson served for many years as the faculty advisor and ride team leader for Team Vet Med, a group of cyclists that ride regularly throughout the year and also raise money for student scholarships. In recognition of Anderson's contributions to the group, the Class of 2009 donated money to start a scholarship, the Dr. Kevin Anderson Team Vet Med Scholarship, in his name.

A celebration of Anderson's life will be held sometime in September when many of UF's veterinary students will return to Gainesville. In lieu of flowers, donations can be made to the Kevin Anderson Team Vet Med Scholarship at the UF veterinary college; to UF; to Haven Hospice; or to a memorial of your choice.

CVM Certificate Program expands to include shelter medicine

Veterinary students at the University of Florida now have a new opportunity to embark upon an intensive course of study designed to address a shortage of veterinarians trained in the special needs of veterinary care in animal shelters.

The Certificate in Shelter Medicine will expose students to a cross-section of opportunities in the field, including care of sheltered animals, animal disaster management, cruelty investigations and forensics, shelter animal behavior and welfare, high-quality high-volume sterilization surgery, and research in shelter medicine. A Special Projects elective offers the opportunity for mentored participation in an in-depth topic, such as working with a shelter to perform a shelter population management analysis, an infectious disease outbreak intervention, or the creation and implementation of shelter medicine protocols.

"The certificate will identify students who have completed an intensive training program in this field, providing a valuable credential for those seeking a career in animal sheltering or competing for residency training," said Julie Levy, D.V.M., Ph.D., director of Maddie's Shelter Medicine Program at UF. "Our initial program will be conducted at UF, but it's our hope to develop on-line offerings so that students at other veterinary schools have access via distance learning."

Students can earn the certificate by completing 15 units of newly developed elective courses, clinical clerkships, and externships focusing on shelter medicine topics. Certificate course offerings span all four years of the veterinary curriculum. Each participating student will be mentored by one of UF's five shelter medicine faculty members who will work with the student to tailor a study plan that matches the student's particular interests.

"When I decided I wanted to be a veterinarian, I did so because I wanted to be a shelter veterinarian," said Lauren Unger, a junior veterinary student who is president of UF's Student Chapter of the Association of Shelter Veterinarians. "I couldn't have started veterinary school at a more appropriate time. The shelter medicine program at UF offers an internahip, a residency and now has options for a shelter medicine certificate, which credentials a specialty I am so passionate about."

Certificate programs are unique to the University of Florida. The Certificate in Shelter Medicine is the fourth such program, joining other intensive training programs in International Medicine, Food Animal Medicine, and Aquatic Animal Health.

Dr. Tara Anderson at work in Dr. Cynda Crawford's laroatory.

Graduate student honored as "Distinguished Alumnus" by College of Public Health and Health Professions

Tara Creel Anderson, D.V.M., M.P.H., a graduate student at the University of Florida College of Veterinary Medicine, has received the Outstanding Alumnus Award from the UF College of Public Health and Health Professions' department of epidemiology and biostatistics.

The award was made in honor of Anderson's professional practice and exceptional leadership in the advancement of the health professions. Anderson will be honored Oct. 16 during reunion activities at the College of Public Health and Health Professions.

Anderson is currently pursuing her Ph.D. at the UF College of Veterinary Medicine. She received her D.V.M. degree from the UF veterinary college in 2003 and her M.P.H. degree from the College of Public Health and Health Professions in 2007. Because of her interest in both the veterinary and public health fields, she was active in the creation of the joint D.V.M./M.P.H. program at UF that same year.

Anderson's research interests include emerging and zoonotic viral diseases, epidemiology and public health. She currently is studying canine influenza virus under the mentorship of Cynda Crawford, D.V.M., Ph.D., and Paul Gibbs, B.V.Sc., Ph.D. Her research focuses on diagnostic test development, epidemiology and mathematical modeling.

Anderson was a UF Alumni Fellow from 2005-2009 and a Morris Animal Foundation Fellow in 2008-2009. She also received two notable awards earlier this year, the Madelyn Lockhart Dissertation Fellowship Award from the Association for Academic Women and the Emerging Scholar Award from the Office of the President. After graduation, Anderson hopes to pursue a career in infectious disease research that will benefit both animal and public health.