

florida **veterinarian**

THE UNIVERSITY OF FLORIDA COLLEGE OF VETERINARY MEDICINE MAGAZINE

FALL 2018

REBUILDING BETTER BONES

Veterinary surgeons using 3-D technology to help animals

THIS

02 **DEAN'S LETTER**

04 **GOOD MEDICINE IS GOOD BUSINESS**

Veterinary medical students at UF are honing their business skills through a program that is the only one of its kind in the U.S.

06 **STRANDING BEHAVIOR RELATED TO HEARING LOSS**

Behavior change is related to hearing loss in stranded animals, UF veterinarians say.

08 **FIGHTING MALARIA**

A \$3.2 million grant is funding development of new malaria vaccine.

10 **MINIATURE HORSE, MAXIMUM OUTCOME**

A miniature horse is thriving after rare surgery at UF Large Animal Hospital.

12 **ONE LUCKY DOG**

A dog hit by a golf cart defeats death three times after treatment at UF.

16 **REBUILDING BETTER BONES**

COVER STORY
A state-of-the-art 3-D printer has provided veterinary surgeons at UF with a new tool for improving patient outcomes.

22 **PUTTING A NAME ON KNOWLEDGE**

Endowed professorships at the college are having an impact on programs, people and animals.

24 **SMALL ANIMAL HOSPITAL EXPANDS**

A building expansion will improve facilities for emergency response and practice-ready teaching.

27 **CHEMOTHERAPY FOR SEA TURTLES**

UF veterinarians performed chemotherapy on two sea turtles in Key West in January.

28 **HONORS & AWARDS**



THIS



Dean's Letter

Greetings!

In case you're feeling like we've had an unusual flurry of activity at the college recently ... you are absolutely right. In addition to filling some key leadership positions, we have made progress in other key areas, including alumni affairs and our diversity/inclusion efforts. Here are just a few highlights as we begin the new academic year, full speed ahead.

Leadership

Thanks to the hard work of many different search committees — as well as faculty and staff who have made themselves available for so many interviews this year — I am pleased to report that we have filled four department chair positions in the past eight months.

In our last issue, we noted the hiring of Dr. Julie Moore as incoming chair of our department of infectious diseases and immunology. Dr. Moore joined us officially in May after having served as a faculty member at the University of Georgia since 1999. While at UGA, she was an associate vice president for research and a professor in the department of infectious diseases and at UGA's Center for Tropical and Emerging Global Diseases. We are so happy to have her on board. More recently, I announced the following appointments:

- Dr. Subhashinie Kariyawasam will become chair of the college's newest department, the department of comparative, diagnostic and population medicine. She currently serves as a clinical professor in the department of veterinary and biomedical science and as microbiology section head of the Animal Diagnostic Laboratory at Pennsylvania State University, where she has been a member of the faculty since 2008. Prior to that, she had faculty appointments at Iowa State University and at the University of Peradeniya, Sri Lanka. Dr. Kariyawasam will begin her new role at UF on Sept. 1.
- Dr. Chris Adin, formerly a member of the UFCVM faculty, will be rejoining the college family as the new chair of our department of small animal clinical sciences. Dr. Adin was an assistant professor of small animal surgery at UF between 2001 and 2006. He now serves as an associate professor of soft tissue and oncologic surgery in the North Carolina State University College of Veterinary Medicine's department of clinical sciences, a position he has held since 2015. Before that, he was as an associate professor at The Ohio State University College of Veterinary Medicine, having joined the faculty at OSU in 2008 after two years in private practice at a veterinary surgery specialty practice in Rochester, New York. Dr. Adin began his new role at UF on September 1.
- Dr. Guy Lester, another former UFCVM faculty member, will return to the college as chair of our department of large animal clinical sciences. He was an assistant professor of large animal medicine at UF between 1991 and 2001. In addition, Dr. Lester worked as a locum associate professor at the UFCVM for six months in 2016. He is currently an associate professor of equine medicine, head of the equine section and academic chair of the D.V.M. program at Murdoch University's College of Veterinary Medicine in Murdoch, Western Australia. He has been on faculty at Murdoch University since leaving UF in 2002, and will join us in his new role here on Nov. 15.

I would like to especially thank Drs. Dan Brown, Michael Schaer, David Whitley and Chris Sanchez for graciously stepping up to assist their respective departments as interim chairs during the search periods. Their leadership has made a huge difference in our ability to work through these key leadership transitions and we owe them all a huge debt of gratitude.

Alumni Affairs

It has been extremely important to me since I joined the college as dean in 2013 to address ways our college might enhance its alumni engagement. We've done many things already, such as our Nights in the Swamp continuing education talks at veterinary medical associations throughout the state, and increasing the number of alumni receptions and events we offer in different parts of the country. All of these are ways that we are actively making an effort to demonstrate our intention to reach our alumni, whenever possible, where they live and work, or at the very least, at professional meetings they may attend.

For several years we have been working to rewrite our Alumni Association bylaws, and I am pleased to say that this past March, we held our very first meeting of the new Executive Board of the college's Alumni Association. This board will serve as the dean's external advisory committee and will oversee the college's Alumni Council, Alumni Association and four standing committees aimed at specific areas in which we hope to expand alumni engagement. Our committees are hard at work, and we look forward to sharing more news with you as their ideas come to fruition in the future.

Diversity and Inclusion Efforts

We were pleased and proud to learn from *Diverse: Issues in Higher Education* magazine that UF ranks No. 3 for graduating Hispanic students with professional doctoral degrees in veterinary medicine. We continue to enhance our efforts on many fronts to attract a diverse group of future veterinary medical students, so it was wonderful to be acknowledged in this way.

This summer, we had 20 high school students participate in our inaugural Gator Vet Camp. These students come from a broad array of backgrounds and have expressed an interest in veterinary medicine. They were able to participate in a week of activities that included hands-on learning opportunities in our clinical skills lab and in histology; tours of our college and UF Veterinary Hospital; visits to the UF/IFAS Dairy Research Unit and the UF/IFAS Tropical Aquaculture Laboratory and a field trip to White Oak Conservation Center, among other things. Three individuals were key to this camp's success: Dr. Jaron Jones, our college's diversity and inclusion officer; Dr. Michael Bowie, director of community engagement and diversity outreach; and Dr. Lisa Farina, faculty advisor to the UF Diversity and Inclusion Veterinary Alliance.

As you can see, we've been busy! Thanks for all you do to support us at the college. We couldn't do what we do without you. Go Gators!

JAMES W. LLOYD, D.V.M., PH.D.
PROFESSOR AND DEAN
UF COLLEGE OF VETERINARY MEDICINE

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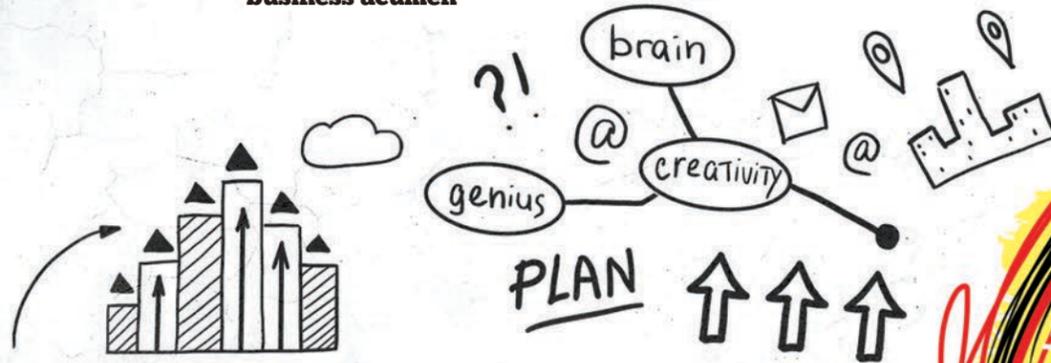
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How to grow a BUSINESS

Unique program at UF hones students' business acumen



Story by Sarah Carey

A UNIQUE PROGRAM OFFERED AT THE UF COLLEGE OF VETERINARY MEDICINE aims to develop its students' business-related skills, from contract negotiations to debt management as practice owners.

"Ours is the only college of veterinary medicine in the country that offers an academically credentialed business management certificate program," said Martha Mallicote, D.V.M., the program's director and a clinical assistant professor at the college.

Started in 2013, the UF Veterinary Business Management Certificate program is an offshoot of a business management course begun by Dana Zimmer, D.V.M., the associate dean for clinical services and chief medical officer for the UF Veterinary Hospitals. As of 2018, 109 students had earned a certificate and 38 veterinary practices had been evaluated through the practice management clerkship, a distinctive piece of the program.

Students must perform 10 hours of elective coursework, or six courses. This includes the clerkship, in which students provide the owner with a financial, fee and compliance analysis, along with feedback on inventory management and a strategic marketing assessment. They produce a report summarizing their findings and suggest improvements.

"Student evaluations are very positive," Mallicote said. "We also get good feedback about them finding employment, as well as from employers who have found value in the program. The practices we have worked with are overwhelmingly shocked, in a pleasant way, by the work that we are doing."

Mallicote said the program's emphasis on the business side of being a veterinarian can't be overstated. "You'll make more money as an owner than you ever will as an associate," she said. "That messaging, to me, has been a big part of this program from the start."

That philosophy has found its way into the curriculum,

Key facts to date

109
certificates
awarded to
date

38
veterinary
practices
evaluated

she said.

"I make that argument to every one of our junior and senior students, that the way to go is practice ownership," she added. "These are the graduates who are going to buy a practice in five years."

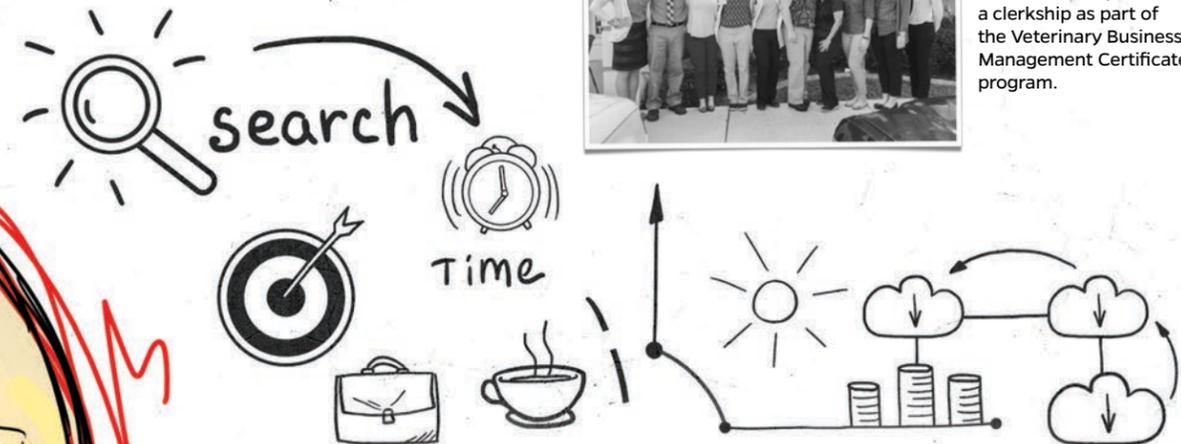
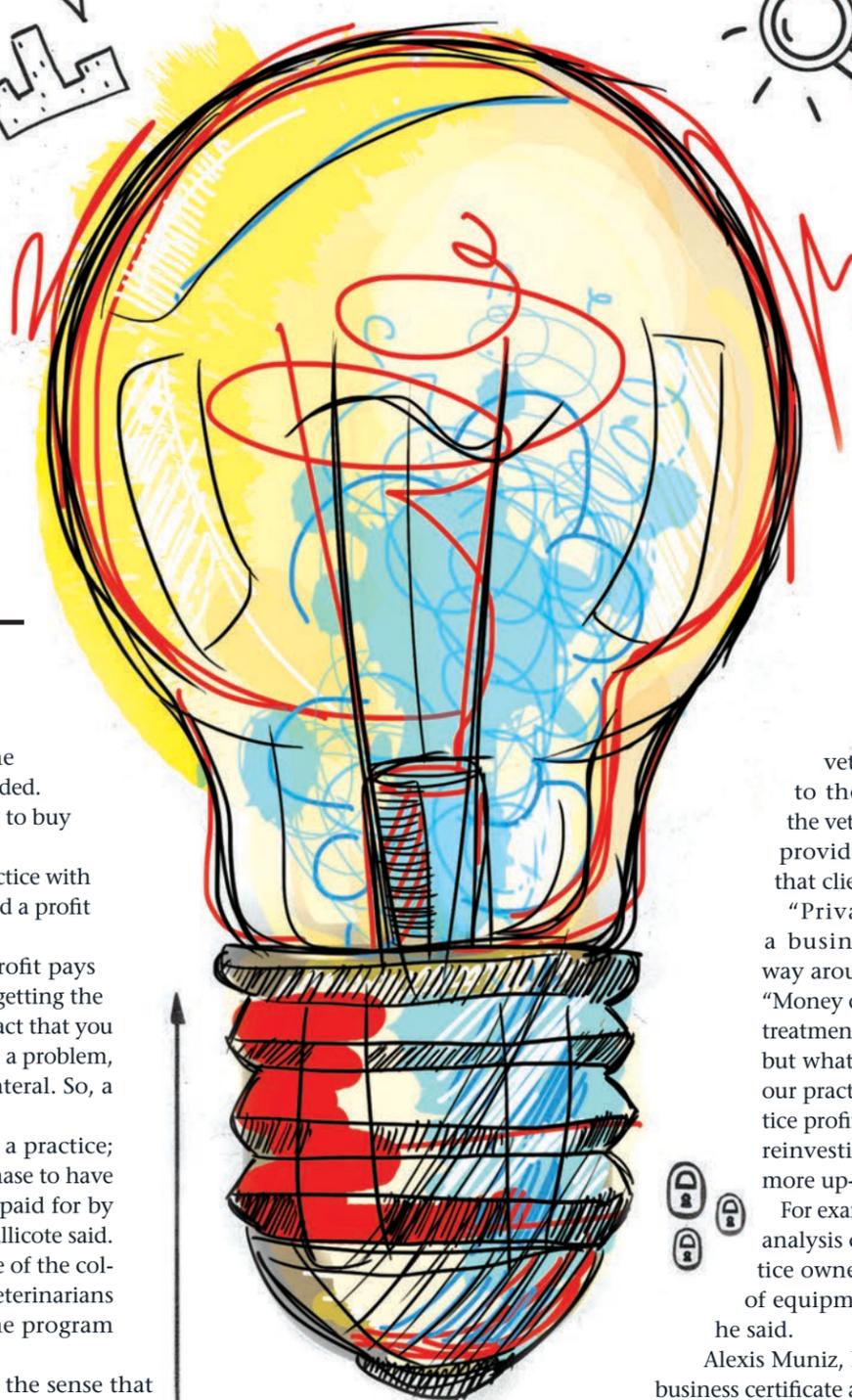
Mallicote offered the example of a practice with a gross annual revenue of \$2 million and a profit of \$350,000.

"If you finance over 10 years, the profit pays the loan down," she said. "But you are getting the loan on the value of that practice. The fact that you don't have \$500,000 to put down is not a problem, because you have the practice as collateral. So, a well-run practice buys itself."

The same holds true of buying into a practice; the small amounts new associates purchase to have a "piece of the business" are basically paid for by the profit generated by the business, Mallicote said.

Chris Ziegler, D.V.M., a 2015 graduate of the college who works for Town & Country Veterinarians and Pet Resort in Gainesville, said the program equipped him well for private practice.

"Throughout our education, we get the sense that



Dr. Martha Mallicote, fifth from right, stands with a group of students outside of Orchid Springs Animal Hospital, where the students were performing a clerkship as part of the Veterinary Business Management Certificate program.

our job as veterinarians is to practice medicine at the 'ivory tower' standard, and to a great extent, that is true," Ziegler said. "What we don't always learn is that there is a side of veterinary medicine — cost — that we aren't truly introduced to until we graduate."

Ziegler said he was referring not just to the cost of veterinary services to the client but to the veterinary hospital providing services to that client.

"Private practice is a business, there's no way around that," he said. "Money dictates not just what treatments our clients can afford, but what treatments and equipment our practice can afford to offer. Making a practice profitable is not a selfish endeavor, because reinvesting that money allows us to perform more up-to-date medicine."

For example, knowing how to do a cost-benefit analysis could help determine whether a practice owner can afford to purchase a new piece of equipment such as an ultrasound machine, he said.

Alexis Muniz, D.V.M., a 2017 graduate, received her business certificate and now practices at Keystone Heights

Animal Hospital. She feels she can better serve her clients and the company she works for because of what she learned in the program.

"I can't stress enough how crucial it is for young veterinarians to know what it takes to run a practice," she said. "Even for those with no interest in ever owning one, knowing how and where practices survive is of utmost importance, even when trying to be a good employee, let alone an owner."

The program's emphasis on core values, and on finding compatibility with the practice you choose to work for, stood out for Muniz.

"One of the first lessons with the business certificate isn't showing you what everything costs, or how much money you should make. It's a lesson in core values, and I think that speaks volumes to what this certificate is about," she said.

Heidi Tomlin works as manager of Ziegler's employer, Town & Country Veterinarians, which she co-owns with her

husband, Terry Tomlin, D.V.M. Their practice participated in the UF business certificate program a few years ago.

"It's always nice to get an outside view of how others think you are doing," she said. "The students put together a nice little book. Each student took a turn at presenting their findings and made suggestions as to what they felt we might be able to make some improvement in."

She said the group had one suggestion related to how the practice could monitor patients' recuperation from surgery even more closely than they already did.

"We put their suggestion into practice right away and still use the process they suggested today," Tomlin said.

"You'll make more money as an owner than you ever will as an associate."
— Martha Mallicote, D.V.M.

UF VETERINARIANS SAY BEHAVIOR CHANGE IS RELATED TO HEARING LOSS IN STRANDED ANIMALS

PHOTOS COURTESY OF DOLPHIN RESEARCH CENTER AND SEAWORLD

Story by SARAH CAREY

SEVERAL YEARS AGO, University of Florida aquatic animal veterinarian Michael Walsh, D.V.M., noticed a concerning pattern among some stranded dolphins after they had been rescued. Both of the dolphins returned to the beach again once they had been released back into the wild.

“I worked with two animals, one directly, that showed numerous behavioral problems while in rehab,” said Walsh, a clinical associate professor of aquatic animal health at the UF College of Veterinary Medicine.

“We weren’t able to test the first dolphin’s hearing, but the second animal was tested at Mote Marine Laboratory and found to be totally deaf. This suggested that the problem of adapting to new environments might be hearing-related and might be more common than we had initially thought,” he said.

When Megan Strobel, D.V.M., ('17) then a first-year veterinary medical student at UF, went to Walsh, her faculty mentor, in 2013 to discuss a possible research project, he suggested that she might compare hearing capacity and behavior changes in wild and facility-housed dolphins. The result of their collaboration, which also



involved numerous other individuals and organizations, was a study that appeared in December in the *Journal of Zoo and Wildlife Medicine*.

The study found that stranded animals with hearing deficits showed markedly different behaviors than their counterparts with normal hearing and concluded that hearing assessments should be routinely administered as part of regular health examinations in all animals under human care.

Hearing is the primary sense of odontocete cetaceans, also known as toothed whales, which include dolphins, porpoises and all other whales possessing teeth. Currently, little empirical information on the relationship between odontocetes and hearing loss reaches those taking care of the animals, the researchers said.

Hearing loss in odontocetes can be caused by loud noises, parasites, trauma and medical issues such as infection, just as it can in humans. But the loss of sonar capability, which relies on hearing, is especially difficult and traumatic for the wild individual, Strobel said.

“How often when you go to the doctor do you have your hearing tested? You have to do that separately,” Walsh said. “If we recognize that all animals will lose hearing over time, then putting technology such as the auditory evoked potential test we used into their health



exams as they get older will help everyone understand how their sensory systems are doing.”

For animals that have grown up in facilities, the environment is known and their daily lives are somewhat predictable, Walsh said.

“But if you change the environment on a deaf animal, it’s similar to changing the environment on a human individual,” he said. “They have to give more effort to understanding the new environment and what it means.”

The researchers felt it was important to educate caretakers about challenges the animals face in situations where hearing deficits in older animals or deafness may result in behavior that is misunderstood. This knowledge should create a level of empathy with the animals, improving their welfare with the human interaction needed, they said.

Just like people, all animals as they age can potentially lose some of their senses, like hearing and sight. The long-term health and wellness assessments of those creatures should include the same considerations as would be applied to an older

“... we need to understand the implications of hearing loss so we can approach those animals differently ...”

— Michael Walsh, D.V.M.

human being, the researchers said.

“And for their cohorts in the wild, we need to understand the implications of hearing loss so we can approach those animals differently at a time they are trying to adapt to a rehabilitative environment with the loss of their most important sense,” Walsh said.

Walsh said Strobel’s ability to focus on this particular project as part of her curriculum requirements meant she was able to efficiently complete necessary tasks, no matter what the challenge.

“Dr. Strobel made a big difference in spreading the knowledge of our understanding of what these animals may need in many situations,” Walsh said.



Top: Dr. Dorian Houser of the Marine Mammal Foundation explains the audiogram findings to Megan Strobel and Dr. Michael T. Walsh of UF.

Bottom: Katie Moore of the International Fund for Animal Welfare and Megan Strobel of UF conduct a hearing test on a dolphin at the Dolphin Research Center in Grassy Key, Florida.

Opposite: Dolphin trainers gently restrain an animal during a hearing test while a sound plays to the lower jaw at different frequencies. The suction cups on the animal’s backside pick up changes in the brain that indicate the animal has heard a sound.

Fighting Malaria

**\$3.2 MILLION GRANT FUNDS
DEVELOPMENT OF NEW
MALARIA VACCINE**

Story by
JOE KAYS

The Global Health Innovative Technology Fund has awarded the University of Florida and partners in the United States and Japan \$3.2 million to advance a promising vaccine to prevent transmission of malaria.

RHOEL DINGLASAN, PH.D., an associate professor of infectious diseases in UF's College of Veterinary Medicine and the university's Emerging Pathogens Institute, has spent years developing a malaria transmission blocking vaccine, or TBV. The blood mosquitoes get from immunized humans would prevent the insects from becoming infected by the Plasmodium parasite that causes malaria, thus breaking

the cycle of disease transmission.

Female Anopheles mosquitoes pick up the Plasmodium parasite when they bite an infected human, then spread the parasite when they bite other people.

After Dinglasan and his colleagues identified a protein in the mosquito gut that Plasmodium needs to infect the Anopheles mosquito, called alanyl aminopeptidase N, or AnAPN1, they saw a path to preventing

transmission of the disease by creating a vaccine to generate antibodies to AnAPN1 in humans.

Initial vaccine testing in mice stalled because the animals primarily generated antibodies to a less-crucial fragment of AnAPN1, so Dinglasan and his team refocused their efforts on solving the structure of the protein, which allowed them to more precisely map the relevant transmission-blocking regions of the protein to target. When they tested the antibodies to the redesigned vaccine target using infected blood samples from children in Cameroon, a country hard hit by malaria, they found that minute amounts of the antibody completely prevented transmission of the parasite to the mosquito.

The new grant from the Global Health

Innovative Technology, or GHIT, Fund will further development of processes to move the vaccine from the experimental stage to human trials and, ultimately, a clinical treatment. The GHIT Fund is an international public-private partnership spearheaded by the Government of Japan, the Bill and Melinda Gates Foundation, Wellcome Trust and a group of pharmaceutical companies.

"AnAPN1 is a great pan-malaria transmission-blocking vaccine and we have made it even better," said Dinglasan, who was recruited to Gainesville under the UF preeminence initiative. "This funding support puts the vaccine back in the process development and vaccine production pipeline with an eye on getting to first-in-human trials in a few more years."



"AnAPN1 is a great pan-malaria transmission-blocking vaccine and we have made it even better."

— Rhoel Dinglasan, Ph.D.

Dr. Rhoel Dinglasan poses at his lab at the University of Florida medical research center in Gainesville, Florida.



Photos by Lyon Duong



Miniature Horse Maximum Outcome

MINIATURE HORSE THRIVING AFTER RARE SURGERY AT
UF LARGE ANIMAL HOSPITAL

Story by
SARAH CAREY

A year after a rare procedure at the University of Florida Large Animal Hospital and support from an internal fund tapped to assist in certain hardship cases, a miniature horse named Rico is thriving and back to his normal routine.

“Rico was found down and non-weight bearing lame last spring in a field,” said Taralyn McCarrel, D.V.M., an assistant professor of equine surgery at UF’s College of Veterinary Medicine. “His veterinarian diagnosed a dislocated right hip and contacted us to see what we would do and what it might cost.”

Although it was unclear what had caused Rico’s injury, trauma of some kind was suspected, McCarrel said.

Rico’s veterinarian, Jennifer Miller, D.V.M., said his injury was not one she’d seen often, and “certainly not in a full-sized horse.”

“The only horse that might have a surgical option would be a mini, so he had an opportunity that another horse might not have had, as surgery would just be too difficult,” Miller said. A larger horse’s weight would make even obtaining a

diagnosis problematic, but she was able to get “pretty good” images of Rico’s leg, she said, aiding in his diagnosis.

At the time Miller responded to Rico’s owner’s call, she had a UF veterinary medical student working with her on a clinical rotation. The student was aware of an internal fund that was sometimes used to offset the cost of veterinary care in certain equine cases for teaching purposes and in cases of financial hardship on the part of the owner.

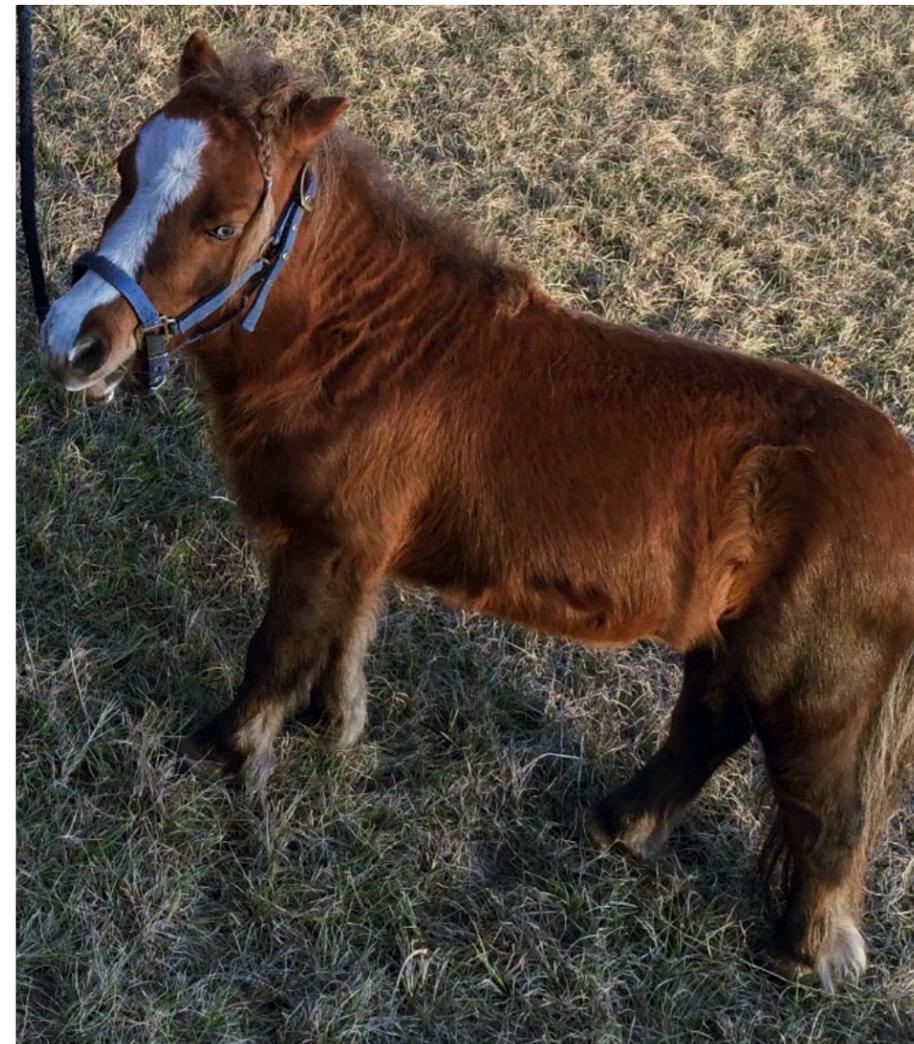
Miller knew that Rico’s owner, Shelby Lewis, a college student from Lake City, had limited funds, and that the type of surgery that might typically be conducted to fix the hip joint and hold it in place in foals with similar injuries would have been cost-prohibitive. She relayed the situation to McCarrel, who was able to obtain permission from UF Veterinary Hospital

administrators to offset some of Lewis’ costs through the Boone Memorial Fund.

McCarrel then researched her approach, delving into the small animal literature and limited equine literature to prepare for a femoral head ostectomy in Rico. The procedure is a well-known surgical option in certain circumstances in dogs with hip dysplasia or a dislocated hip that will not stay in the socket on its own, similar to Rico’s case. However, femoral head ostectomies are seldom performed in horses.

“I’d never done one before, but I got as much information as possible about the different aspects of the procedure,” McCarrel said. “One of the important things that was emphasized was that if an animal has good muscle mass, that’s a positive. So that boded well for him.”

The reason Rico still had good muscle



Rico, a miniature horse treated successfully at UF for a limb deformity, is shown at his home in Lake City in May.

Photo courtesy of Dr. Taralyn McCarrel

“Due to the depth of the joint and the approach needed to access the area, there is a risk of the incision falling apart after surgery due to fluid accumulation,” McCarrel said. “Therefore, Rico had a drain placed at surgery to remove excess fluid from the incision.”

The drain was removed several days later and Rico’s incision healed without complication. Rico went home approximately one week after his surgery, which was conducted April 6, 2017, with instructions for his owners to conduct physical therapy on him daily.

“We showed them how to make him flex and extend his leg, which is called passive range of motion exercise, and told them to do that for two weeks, followed by forced walking and continued passive range of motion exercises until he could be turned out into a small area daily,” McCarrel said.

The rehabilitation program takes a lot of commitment on the owner’s part, but is essential to the success of the surgery, she said.

Lewis admits the process of recovery was not easy, for her or for Rico.

“When he first came back, I wasn’t sure I’d have enough time, but I had a friend who helped me work with him,” Lewis said. “About six months ago, I started taking him swimming, and that has also helped him.”

Just over a year after his procedure, he shows little sign of the trauma he endured.

“He’s just my little angel,” she added.

mass was because he came in for surgery soon after his injury, she said, adding that in long-standing cases, the muscles become small and weak due to lack of use from pain, thus there is little muscle to support the limb after surgery.

McCarrel was mostly concerned about accessing Rico’s hip joint with minimal trauma, as the joint in a mini-horse is much deeper than in a dog due to the very muscle mass that would help him retain strength in his recovery.

“As equine surgeons, we don’t typically approach the hip joint,” McCarrel said.

The femoral head ostectomy involves cutting and removing the top part of the femur, or thigh bone. This eliminates the hip joint, and transfers weight bearing to the muscles of the limb until a false joint, known as a pseudoarthrosis, forms through extensive physiotherapy, she said.



Rico, a miniature horse owned by Shelby Lewis of Lake City, received an unusual surgical procedure at UF last year to treat a traumatic injury, but has recuperated well.

One Lucky Dog.

Dog hit by golf cart defeats death three times after treatment at UF

Story by Sarah Carey

PHOTOGRAPHS BY JESSE JONES

A young dachshund named Rupert, run over by a golf cart in Ocala on Feb. 19, is now living a charmed life after being resuscitated three times by University of Florida veterinarians.

RUPERT WAS DISCHARGED FEB. 27 from UF's Small Animal Hospital after being treated for eight days in the hospital's intensive care unit. His owner, Jamie McAllister, who lives in Michigan but travels back and forth to Ocala during the winter months, could not be happier.

"To say Rupert is a miracle is an understatement," McAllister said. "If it weren't for the doctors and staff at UF, I don't know where we would be."

McAllister said Rupert had jumped off a friend's golf cart while she was driving and rolled under one of the vehicle's tires. She immediately took him to her veterinarian, who advised her that Rupert should be taken to the UF Small Animal Hospital due to the severity of his injuries.

"His veterinarian called me in Gainesville



Jamie McAllister holds her dog, Rupert, after his discharge from UF's Small Animal Hospital on Feb. 27.

to say Rupert's family wanted to bring him to UF for treatment of severe pulmonary contusions, but he was not stable enough for transport," said Ashley Allen, D.V.M., a clinical assistant professor of emergency and critical care at the UF College of Veterinary Medicine.

"So we teamed up: Dr. Gareth Buckley took over the intensive care unit, and Dr. Jennifer Martinez, student Denae Campanale and I loaded up the van we use to transport patients on oxygen, and drove to Ocala to get Rupert," she explained.

The group stopped at the UF Pet Emergency Treatment Services clinic in Ocala to pick up a ventilator and additional supplies. They then headed to the Town and Country Animal Hospital, where Rupert went into cardiac arrest soon after they

arrived. His heart had stopped beating due to internal bleeding and depletion of oxygen, the doctors said.

"We performed CPR and got him back, but he proceeded to code two more times in the hour we spent there trying to get him stable enough for transport," Allen said. "We brought him to UF by using the transport ventilator, as he was unable to maintain oxygenation on his own, and he stayed on a ventilator for five days."

Initially, Rupert had a severe lung injury, but he gradually improved and was taken off the ventilator on Feb. 24.

"He died three times, and the second and third time, the veterinarians called me to tell me he wasn't going to make it," said McAllister. "Then, they called right back to say he was alive and had a strong heartbeat."



Members of the UF emergency and critical care team are shown with Jamie McAllister, her daughter, Ella, and Rupert after his discharge from the UF Small Animal Hospital on Feb. 27.

I thought he was fighting so hard, we needed to give him every chance possible.

— Jamie McAllister, Rupert's owner

The veterinarians asked McAllister if she wanted them to continue to work on Rupert, she said.

McAllister, an equestrian competitor, said she was not ready to give up on the dog she got at a horse show in her home state of Michigan. A rescue group was trying to find homes for a litter of dachshund puppies and McAllister's daughter Ella told her about them.

"I thought he was fighting so hard, we needed to give him every chance possible," she said.

McAllister was told Rupert had a 20 percent chance of survival once he was taken off the ventilator. She was able to visit him once he was removed from the machine.

"When I put my head next to him, he actually stood up and started licking my face," she said. "It was amazing. Every day thereafter, he just got stronger and stronger until I could finally take him home."

Allen said several of UF's intensive care technicians and many different doctors were involved in Rupert's extensive care.

"All in all, Rupert spent a little over a week in the hospital and was discharged, wagging his tail, to a family that loves him unconditionally," Allen said. "His story is a great reminder to all of us who work daily with the sickest of emergency pets that the collaborative team effort and excellent patient care these animals require can sometimes have an excellent outcome."

LEARNING THE BUSINESS OF VETERINARY MEDICINE LEADS TO A HIGHER LEVEL OF CARE.



Our business management certificate program is the only academically-credentialed program of its type in the nation. We help sharpen our students' understanding of veterinary practice by teaching them that good medicine is good business. By graduating more veterinarians who are prepared to accept the challenges of practice ownership, we improve animal welfare across the state.

To get the full story, visit vetmed.ufl.edu and watch our Challenge Accepted video.

UF College of Veterinary Medicine
UNIVERSITY of FLORIDA

vetmed.ufl.edu



REBUILDING BETTER
BONES

Veterinary surgeons using 3-D technology to help animals

Story by Sarah Carey
PHOTOGRAPHS BY MINDY C. MILLER

A GREATER SWISS MOUNTAIN DOG NAMED CHANCE, RESCUED IN CANADA AFTER BEING ABANDONED AND SUBSEQUENTLY DIAGNOSED WITH A SEVERE LIMB DEFORMITY, IS WALKING MORE NORMALLY AGAIN, THANKS TO VETERINARIANS AT THE UNIVERSITY OF FLORIDA WHO OPERATED ON HIM IN FEBRUARY, AIDED BY THE USE OF ADVANCED 3-D PRINTING TECHNOLOGY.



Dr. Stan Kim and Dr. Adam Biedrzycki have collaborated to learn more about how 3-D printing technology can benefit small and large animal surgical patients.



Dr. Adam Biedrzycki recently used 3-D printing technology to treat a rare benign tumor known as a keratoma in a horse's hoof.



A 3-D printed face mask of a horse that presented for a skull fracture and an equine radius and ulna with a fracture repaired using a metallic implant for resident training purposes.

A POT-BELLIED PIG NAMED BEBOP, who also received limb-corrective surgery at UF last November with 3-D printing help, is back to rooting in his yard in Port St. Lucie, Florida, which he'd stopped doing after the shoulder injury that caused him severe pain.

Chance and Bebop are the first two clinical cases treated over the past six months at UF through the use of a state-of-the-art printer that uses high performance plastics and offers numerous opportunities for advances in patient care, teaching and research, UF veterinarians say.

Among the printer's capabilities: the ability to create bone models with which veterinarians can 'practice' a surgical procedure prior to the real thing, and the ability to create patient-specific surgical guides that improve accuracy and reduce surgery time.

"We have the Rolls Royce of 3-D printers," said Adam Biedrzycki, BV.Sc., Ph.D., an assistant professor of large animal surgery at UF, who purchased the printer with start-up funds when he was hired by the UF College of Veterinary Medicine three years ago. "It can not only print parts that are approved in the aerospace industry to go into aircraft, but also parts that are biocompatible for medical applications, that is, can be used in live tissues."

This is important, he said, because he and UF small animal surgeons, including Stanley Kim, BV.Sc., an associate professor of small animal surgery who sought out collaborations with the Biedrzycki lab and subsequently operated on Chance, wanted bone models that "actually feel and handle like the real thing" during presurgery practice.

"If you use cheap plastic, when you drill it or cut it, it tends to melt, so it does not perform like the real thing," Biedrzycki said. "So for practicing surgeries or for teaching, it is not the best thing."

Although 3-D technology is being used in surgery at a handful of veterinary teaching hospitals in the United States, UF's printing capabilities are unique due to the quality of the printer, the materials it uses and the fact that it is located in-house at the college, allowing for a quick turnaround time. Another unique aspect is the state-of-the-art human medical grade surgical simulation software the technology makes use of.

"We can first make the cuts and simulate the repair and unite the bones virtually with plates and screws in the 3-D computer environment, then print them out and complete the surgery using the printed models," Biedrzycki said. "This means time spent on the front end leads to time saved in the operating room, greater patient safety due to reduced risk and enhancement of surgical accuracy."

The process begins with the inputting of diagnostic CT scans into specialized software that the veterinarians use to plan a specific surgical procedure. Then, a model of the patient's bone is printed, to which a customized 3-D printed surgical guide is affixed.

"We affix the guide with a couple of pins, and like Cinderella's shoe, it fits absolutely perfectly and only fits that bone," Kim said. "It's matched to the contour of the bone, then we know just where to cut."

He said the printer's primary usefulness clinically right now at UF, both in large and small animal surgery, is the ability to create the customized printed guides.

Thus far, Biedrzycki has used the technology clinically on Bebop, the pot-bellied pig who had a chronic shoulder luxation that required a complicated surgery to correct, and to treat a rare benign tumor known as a keratoma that forms inside a horse's foot.

"We didn't use the guide in Bebop's case, but we eyeballed where we'd make the cut on the bones, then contoured bone plates to fit the model so we'd know where to put the plates in surgery. The procedure went much more rapidly because we did a lot of the hard work beforehand."

Biedrzycki is currently investigating the technology's potential for surgery on the horse hoof. He also is excited about the potential use of 3D printing in teaching and research.

"We are doing and trying things with the 3-D printer in the veterinary medical field that people haven't done before, particularly if you look at the implantable high performance plastics," Biedrzycki said. "What is key for us is that the printer is in a surgeon-friendly lab rather than locked away in some engineering department on campus printing one-off examples. The guides and work we are doing are changing the way we approach cases. We hope that the knowledge and expertise we have will allow this to become routine, benefitting many more patients."

WE HAVE THE ROLLS ROYCE OF 3-D PRINTERS

— Adam Biedrzycki, BVSC, Ph.D.



Kristin Campbell of Port St. Lucie, Bebop's owner, said the 2-year-old pig is doing well and that his recovery exceeded their expectations.

As for Chance, who was found tied to a pole with a note asking that someone please find a new home for him, life has taken a huge turn for the better, as the result of the Greater Swiss Mountain Dog Rescue Foundation, which facilitated his transport to UF — and the procedure Kim conducted to help him.

"Chance was found tied to a pole with a note asking that someone please find a new home for him," said Pat Saxon, who is president and chair of the Greater Swiss Mountain Dog rescue group based in Bradenton. "He was then taken to a shelter in Canada and we were contacted to see if we could help."

A veterinarian in Canada diagnosed the dog with a bilateral patellar luxation due to limb deformities, with the right hind leg being the most severely affected. Aware of the 3-D technology, the veterinarian believed it could help Chance, although he felt the prognosis was guarded at best, Saxon said.

"Thankfully, Dr. (Stanley) Kim's expertise proved that theory incorrect," she said. "He was so gracious in answering any question I had prior to seeing Chance that we decided to take him to UF."

During his recuperation period, Chance received water treadmill therapy in Sarasota and has continued to recuperate well. Although he may still need surgery on his other leg, Saxon plans to see how Chance does over the summer.

"We are so happy to see him be able to walk, run and play more normally," she said.



... THEN WE KNOW JUST WHERE TO CUT

— Adam Biedrzycki, BV.Sc., Ph.D.



FROM SIMULATION TO SURGERY

In top photo, Dr. Stan Kim removes a 3-D printed surgical guide for use in a surgical procedure on a dog on July 24 at UF's Small Animal Hospital. Additional photos from that procedure are shown at right.

In photo above, Kim shows a 3-D printed forearm of a dog with a significant limb deformity. In photo above right, Kim and Dr. Adam Biedrzycki review diagnostic images of fractured bone while holding up a 3-D model of that bone.



Putting a name ON KNOWLEDGE

WAYS ENDOWED PROFESSORSHIPS ARE MAKING A DIFFERENCE

Faculty members who teach and conduct research at the University of Florida College of Veterinary Medicine have devoted their careers to enhancing knowledge, teaching students and serving communities for the betterment of animal and human lives. Endowed professorships provide lasting support for diverse areas of research and clinical practice at the college.

THESE SEVEN AREAS OF ENDOWMENT, through realized estate gifts and cash gifts of \$1 to \$5 million, show a commitment by individuals and organizations who have added their names to support biomedical and clinical knowledge, thus enriching the veterinary medical student learning experience and enabling faculty to make new discoveries.

Martha and Arthur Appleton Endowed Professorship in Equine Studies

Established to attract surgeons in equine research to the horse racing industry. Arthur Appleton was an Ocala businessman and horse breeder. The couple founded the Appleton Museum of Art in Ocala.

Recipient: David Freeman, M.V.B., Ph.D.

A professor of large animal clinical sciences and a board-certified equine surgeon, Freeman also directs the Island Whirl Equine Colic Research Laboratory. Under the professorship, he leads a progressive graduate training program, recruiting and advising students as they conduct research relating to horses with colic.

Jerry and Lolaz Collins Eminent Scholar Chair in Veterinary Medicine

Established in 1987 to enhance the research and treatment of orthopaedic injuries in dogs. Jerry and Lola Collins owned two greyhound racetracks in Central Florida. Jerry Collins was also a former state legislator.

Recipient: Daniel D. Lewis, D.V.M.

An associate chair of Small Animal Clinical Sciences, Lewis is a recognized international authority on comparative orthopaedics and biomechanics. Lewis is board-certified in small animal surgery and is a former president of the Veterinary Orthopaedic Society. His work includes musculoskeletal trauma, fracture management and reconstructive orthopaedic surgery.

Fern Audette Professor of Equine Studies

Created by Joan Audette to honor her late husband, Fern, a magazine publisher who devoted his life and resources to the horse industry. The Audettes were longtime clients of the college's Alec P. and Louise H. Courtelis Equine Teaching Hospital.

Recipient: Maureen Long, D.V.M., Ph.D.

A professor of microbiology and large animal medicine, Long is a nationally respected expert in the field of veterinary internal medicine and infectious diseases. Her role in the development of a vaccine against the West Nile virus has led to UF becoming a leader in the field of zoonotic and mosquito-borne diseases of humans and animals.

Hill's Professor of Oncology

Established in 2006 by Hill's Pet Nutrition Inc. to ensure the growth and enhancement of a newly established oncology service. Since the inception of the service with one faculty member, the oncology service has grown to include seven faculty members, five residents, one fellow and one intern, becoming one of the busiest services in the Small Animal Hospital.

Recipient: Rowan Milner, BVSc., Ph.D.

A professor of small animal clinical sciences who is dually board-certified in veterinary internal medicine and veterinary oncology, Milner also serves as the college's interim director of clinical and translational research. His research interests include osteosarcoma and melanoma vaccinology and comparative medicine.

Fran Marino Endowed Professor of Shelter Medicine Education

Created to help train the next generation of veterinary medicine practitioners who will transform the culture of sheltering for the future. Educating students in shelter management, disease outbreak, population control, forensics and disaster response will help our communities reach new levels of life-saving goals for all shelter animals. As a passionate supporter for animal welfare, Fran's gift will help to save thousands of lives of homeless pets.

Recipient: Julie Levy, D.V.M., Ph.D.

A professor of shelter medicine, Levy's research and clinical interests center on the health and welfare of animals in shelters, feline infectious diseases, humane alternatives for cat population control, and contraceptive vaccines for cats. In 2008, Levy co-founded Maddie's Shelter Medicine Program at UF, an initiative with a global impact on the care of homeless animals. In 2014, she co-founded the Million Cat Challenge, a shelter-based campaign to save a million cats across North America.

Harriet B. Weeks Professorship in Bovine Medicine

Supports a professor focusing on teaching, research, technology enhancements and academic programs in the area of bovine research within the UF College of Veterinary Medicine. Harriet Weeks and her daughter, Robin Weeks, as school teachers, understood the importance of education. As members of a family of cattle ranchers in Glades County, their gifts reflect their commitment to Florida agriculture and desire to help veterinary students.

Recipient: Dr. Ricardo Chebel, D.V.M.

An associate professor of large animal clinical sciences, Chebel's area of expertise lies in dairy cattle health, management and welfare. He works closely with the UF Institute of Food and Agricultural Sciences as the faculty coordinator for the dairy veterinary extension program.

Robin Weeks Excellence in Veterinary Medicine

Supports a faculty member who demonstrates exemplary success in teaching as an innovator and scholar, and models collaboration, teamwork and faculty citizenship as a mentor and educational leader.

Recipient: Martha Mallicote, D.V.M.

A clinical assistant professor of large animal clinical sciences and board-certified equine internal medicine specialist, Mallicote holds an M.B.A. degree from the College of Charleston's School of Business and Economics. Mallicote teaches veterinary medical students in the classroom at UF's Large Animal Hospital, and in the veterinary business curriculum as director of the business management certificate program.

Professorships help recruit and retain talented faculty.

Contact advancement@vetmed.ufl.edu, 352-294-4256, to learn more about endowed professorships and other ways to support the UF College of Veterinary Medicine. There are many ways you can "Put Your Name on Knowledge," no matter the size of your gift.

Story by
LINDA HOMEWOOD

UF Small Animal Hospital Expansion

Building on Emergency Response
and Practice-Ready Teaching

APPROACHING ITS 10-YEAR ANNIVERSARY IN 2020, the University of Florida Small Animal Hospital is experiencing the inevitable growing pains that come from a practice-ready teaching hospital being named as a statewide critical care facility.

This year's expansion creates much-needed space for training veterinary students in emergency and specialty care to meet profession demands, said Dana Zimmer, D.V.M., an associate dean for clinical services and chief medical officer for UF Veterinary Hospitals.

"As a community veterinary practice partner, the small animal hospital is a teaching model that trains future veterinarians in real time. The College of Veterinary Medicine and the university are proud that we provide the highest level of emergency care as well as basic care," Zimmer said. "Our students can experience a broad range of veterinary care and specializations, from skin allergies and dentistry to emergency surgery and oncology."

Named a Level One emergency and critical care facility in 2015 by the Veterinary Emergency and Critical Care Society, the

UF Small Animal Hospital is the only one in the state to hold the certification. The college's former executive director, John Haven, who oversaw construction of the facility, said the designation recognizes the hospital's capabilities, driven by UF faculty research, knowledge and expertise, combined with high-end equipment and technology.

According to Haven, the nearly \$6 million construction project adds a total area of just under 12,000 square feet to the existing 100,000-square-foot building and is expected to be completed in January 2019.

The new construction makes room for expanded emergency services and critical care needs. Extending the building's footprint, or in this case — pawprint — the two-story addition will now house primary care and dentistry services. The second floor provides needed faculty offices for

An architect's rendering shows what the completed expansion of the UF Small Animal Hospital will look like once completed.

Rendering courtesy of Walker Architects

the college's department of small animal clinical sciences.

Emergency care and primary care shared common spaces before the expansion project, but the renovation allows for segmenting these distinct areas of care and patient needs. A designated emergency entrance also will direct pet owners seeking urgent care, which now will be separated from routine care.

The original ground-floor space is being remodeled for efficiency and expanded emergency and critical care services to better accommodate emergency referrals from

local and statewide veterinary clinicians and agencies. Pet patients, once stabilized, also can be seamlessly transferred to the appropriate service as required.

Creating new space for primary care and growing services such as dental care, serves a dual purpose, according to Amy Stone, D.V.M., Ph.D., service chief of primary care and dentistry at the UF Small Animal Hospital. It provides dedicated space for cats and dogs in a primary care setting that's separated from emergencies, and at the same time, it creates an improved learning model for veterinary medical students.

The college admits 120 students each fall, supported by about 130 faculty. Practice-based clerkships with local community veterinarians are a part of the student clinical experience.

The UF Small Animal Hospital's primary goal is to create a hospital environment

that models the same services offered by its community partners who provide needed clerkships that help prepare UF veterinary students to become practice-ready graduates. Stone's training objective for primary care students is to gain an integrated knowledge in a practice setting.

"I want students to be able to learn everything from the front reception to inventory, to clinical care — to fully understand the way a general practice should function," Stone said. "As a clinical educator, the college's mission is to prepare practice-ready graduates, many of whom will start their careers as primary care clinicians."

With the new and remodeled space, the college anticipates a budgeting need for the SAH approaching \$900,000 for additional equipment and furnishing. The college hopes to inspire its supporters to help raise additional funding through new

naming opportunities. Donations starting at \$25,000 or more will allow supporters to create a lasting legacy by naming a new space or service area for cats or dogs, such as waiting, treatment or surgery rooms.

Contact advancement@vetmed.ufl.edu, 352-294-4256, for more information about naming options.



Story by
SARAH CAREY

Dr. Ruth Francis-Floyd, right, is shown with Tameila Biro of Florida Exotic Fish Sales, a family-run fish farm in Homestead that produces African cichlids for the ornamental trade.

New federal grant will provide fellowships in aquaculture training to rural veterinarians

WITH A NEW FEDERAL GRANT IN HAND, the University of Florida is now offering a two-year training program to eight veterinarians working in rural areas to enhance their skill set in the area of aquaculture — the farming of fish and other aquatic species for food, ornamental trade and research.

The \$225,643 grant is one of 13 grants approved by the U.S. Department of Agriculture in November 2017. All of the grants are aimed at supporting rural veterinary services and relieving the shortages of veterinarians in certain parts of the United States.

The UF grant provides eight veterinary fellowships to individuals who are willing to work in communities where agriculture, including aquaculture, exist.

“The program began this fall semester, with eight new fellows we have recruited from different geographic areas in the country,” said Ruth Francis-Floyd, D.V.M., ('83), a professor at UF's College of Veterinary Medicine and UF/IFAS aquaculture extension veterinarian. “Applicants were not expected, nor did we desire for them, to move to Florida. We wanted to recruit working professionals”

The success of private, rural veterinary practices often requires a business model that includes diversification of veterinary expertise in animals beyond traditional farm species, such as ruminants, poultry, swine and equine, Francis-Floyd said.

“One of the challenges with aquaculture is that it's diverse geographically as well as in the species produced and types of production systems,” she said. “Veterinarians that have had full-time aquaculture practices tend to work in multistate areas, and all that travel can tend to grind you down.”

This program aims to diversify the expertise of the participating veterinarians, which could result in additional income through new clients, while also benefiting aquaculture businesses that currently do not have adequate veterinary medical expertise available to them, Francis-Floyd added.

Training will consist of online and field instruction, with time spent working with Francis-Floyd and/or a mentor at the UF/IFAS Tropical Aquaculture Laboratory, including veterinarians with the USDA Animal and Plant Inspection Service's Veterinary Service stationed there, she said.

“We've gotten interest from all over the country,” Francis-Floyd said.



Photo by Bob Carey, Florida Keys News Bureau

UF veterinarians perform groundbreaking electrochemotherapy on two Florida sea turtles

Story by
SARAH CAREY

IN A COLLABORATION made possible through public and private support, University of Florida veterinarians recently performed electrochemotherapy to treat two sea turtles with debilitating tumors in the Florida Keys, the first time the procedure has been performed on the species in the U.S.

The juvenile green sea turtles, named Percy and Daley, have a viral disease known as fibropapillomatosis, which is chronic in their species worldwide. The condition causes tumors that form on the surface of their tissues and can grow to impede the turtles' ability to see, eat and move.

Percy and Daley were being cared for at the Turtle Hospital in Marathon, where they received the second of two treatments on Jan. 20 as the result of an effort spearheaded by Kyle Donnelly, D.V.M. ('14), a second-year zoological medicine resident at the UF College of Veterinary Medicine. Donnelly conceived of the project over a year ago and organized the collaborations needed to bring it to fruition.

“The results we are seeing seem promising so far,” Donnelly said.

In electrochemotherapy, a machine is used to deliver an electrical pulse, opening cells within a tumor and allowing for the injection of chemotherapy drugs directly into the tumor site.

Among those who contributed their expertise to the project were Joseph Impellizeri, D.V.M., a veterinary oncology specialist in private practice in New York with significant experience in electrochemotherapy in other species, and Anna Szivek, D.V.M., an assistant clinical professor and veterinary oncology specialist at UF.

Treating fibropapillomatosis in sea turtles is “very frustrating,” Donnelly

said, adding that electrochemotherapy, which has been used occasionally in other species but never previously in sea turtles in the U.S., is a potentially positive alternative.

“Surgery is the treatment of choice for these tumors, but that can be challenging,” Donnelly said. “When you remove all of that tissue, there remains a wound that sometimes can't be closed and creates other challenges to manage. Electrochemotherapy is less invasive, as it allows the tumor to be killed from within without damage to the nearby tissue.”

Szivek, who traveled to the Keys with Donnelly to perform the Jan. 20 treatment on Percy and Daley, noted, “After the drug injection, the tumor initially shrinks and then falls off.”

One tumor on each turtle was treated as part of the pilot study.

Impellizeri performed the first treatment with Donnelly in December using equipment he owns. The UF team arranged for Szivek to assist with the second treatment and borrowed another electrochemotherapy machine to complete the treatment protocol.

“One of the reasons we wanted to partner with Dr. Impellizeri was his experience and the fact that he owns this machine, which he agreed to allow us to use,” Donnelly said.

Donnelly said she felt the project, which she began “for fun” soon after starting her residency, would be a good way to highlight the strengths of UF's zoological medicine and aquatic animal health programs in a way that would specifically benefit sea turtles.

“Our team at UF brought the pieces together for the permits we needed, and the Turtle Hospital provided the funding,” Donnelly said, adding that she was especially grateful to her mentor, Nicole Stacy, D.V.M., a clinical pathologist associated with UF's aquatic animal health program.

“Treating these turtles was only possible because of all the awesome collaboration I've been lucky to get,” she said. “Everyone wants to save the sea turtles.”

Above: Drs. Kyle Donnelly and Anna Szivek performed electrochemotherapy on two sea turtles at The Turtle Hospital in Key West on Jan. 20 as part of a project exploring the use of the technique to noninvasively target life-threatening tumors that commonly afflict this species.



Members of the Executive Board of the UF College of Veterinary Medicine Alumni Association are shown with Dean Jim Lloyd during the group's inaugural meeting at the college on March 17. The Executive Board will oversee the Alumni Council, Alumni Association and four standing committees to create greater alumni engagement with the college.

College names 2018 Distinguished Award winners

Alumni with backgrounds ranging from specialty care in radiology and small animal surgery to primary care, exotic animal medicine and wildlife ecology have received the UF College of Veterinary Medicine's 2018 Distinguished Awards.

The program recognizes outstanding alumni and friends of the college in various categories.

Clifford "Kip" Berry, D.V.M., a 1984 graduate and a board-certified radiologist, received the Alumni Achievement Award in the D.V.M. program category. Currently a staff radiologist at Veterinary Specialty Hospital of the Carolinas in Cary, North Carolina, Berry has served on the faculty at UF, as well as at North Carolina State University and the University of Missouri.



The recipients of the college's 2018 Distinguished Awards are, from left to right, Dr. Renee Carleton, Dr. Santiago Diaz, Dr. Amy Stone, Dr. Stanley Kim and Dr. Clifford Berry.

He worked in private practice in Orlando prior to joining UF's veterinary radiology faculty, on which he served from 2008 to 2017.

Berry has received numerous honors for his teaching, clinical service and research in the area of diagnostic imaging. His innovative approaches to teaching led to changes in how this discipline is now taught in the UF veterinary college curriculum.

He has served in leadership roles in many professional organizations and is a past president of the Society of Veterinary Nuclear Medicine and the American College of Veterinary Radiology.

Stanley Kim, BV.Sc., M.S., a board-certified small animal surgeon, received his veterinary medical degree from the University of Sydney in Australia in 2003. He came to UF in 2007 and completed a master's degree in veterinary medical sciences concurrently with a residency in small animal surgery,

which he completed in 2010.

His clinically focused graduate research earned him the college's Excellence in Master's Studies Award. Following completion of his residency, he accepted a faculty position at UF, where he currently is an associate professor in the department of small animal clinical sciences.

Kim has directed the summer Florida Veterinary Scholars program, and also coordinates the advanced small animal surgery laboratory course. He played a key role in introducing life-like cadaver models to teach students various abdominal procedures, working with a private company to optimize the realism of the simulated surgical experience. In recognition of his efforts, he received the college's 2017 Zoetis Distinguished Teacher Award.

Renee Carleton, D.V.M., Ph.D., a 1993 graduate, received the Distinguished Service Award. She is currently an associate professor of biology at Berry College in Mount Berry, Georgia. After graduation from veterinary school, Carleton worked in private practice prior to joining the faculty in biological sciences at Florida Atlantic University. Subsequently, she earned a Ph.D. in wildlife ecology and management at the University of Georgia in 2007.

At Berry College, Carleton teaches courses that draw on her background in veterinary medicine and serves as a role model and career advisor for pre-veterinary and biology students. Her research focuses on the study of avian parasites. She is president of the Northwest Georgia Veterinary Medical Association, editor of the Georgia Ornithological Society's scientific journal, *The Oriole*, and secretary/treasurer of the Southeastern Society of Parasitologists.

Additionally, Carleton has been recognized for her community service and for her frequent public presentations on bluebirds, bald eagles and general ornithology.

Amy Stone, D.V.M., Ph.D., received the Special Service Award. A 1999 graduate,

Stone subsequently completed a Ph.D. in veterinary immunology from UF in 2002. Currently she is a clinical assistant professor in the department of small animal clinical sciences and chief of the primary care and dentistry service.

A co-founder of the college's clinical skills laboratory, Stone has received accolades from her colleagues for her teaching and mentoring skills. She has served as the faculty sponsor for five student clubs and incorporates a variety of teaching methods to engage students.

Another initiative Stone led provides primary care services to the pets of residents of Oak Hammock, a retirement community in Gainesville. She also leads a program through which UF-affiliated veterinarians and veterinary students visit Roatan, Honduras, to provide no-cost, high-quality veterinary care for animals on the island.

Santiago Diaz, D.V.M., a 2011 graduate, received the Outstanding Young Alumni Award. Diaz is a private practitioner and owns Exotic Animal Hospital in Orlando.

While a veterinary student, Diaz received funding from the Morris Animal Foundation, with which, in collaboration with his faculty mentor, he developed an award-winning serology test to detect tuberculosis in captive Asian elephants.

Originally from Colombia, Diaz aims to help his local community and the international veterinary community by sharing his skills and knowledge. Fluent in both English and Spanish, he has worked to ensure that up-to-date information about veterinary medicine is available worldwide. Working with a major pet food company on his personal time, Diaz has translated 240 documents relating to the care of exotic animals into Spanish in just two years so that veterinarians in Spanish-speaking countries could have access to them.

Honored as an honorary member of the Association of UF College of Veterinary Medicine Alumni was Bern Levine, D.V.M. of Miami. A longtime supporter of the college, Levine has supported scholarships for UF veterinary medical students and has worked to expand the college's outreach not only in Miami, but throughout the state.

The awards were presented May 26 at the UF Phillips Center for the Performing Arts during college commencement exercises.

Former resident honored by national group

Alex Fox-Alvarez, D.V.M. ('12),

who recently completed his third year of residency in small animal surgery at UF, was honored in April by the American Association of Veterinary Clinicians with its annual Resident's Award for his achievements in the clinical, educational and scholarly arenas.

After finishing veterinary school at UF, Fox-Alvarez completed an internship in small, exotic and zoo animal medicine at Valley Animal Hospital in Tucson, Arizona. He returned to UF for a surgical internship in 2013, then began a combined surgical residency and master's degree in veterinary medical science, which he completed in 2017.

His thesis research focused on the development of a new technique for continuous gastric decompression in dogs with gastric dilatation and volvulus syndrome, a condition known commonly as bloat. In addition to his graduate work, Fox-Alvarez has published four other first-author papers, and contributed to three other large multi-institutional studies.

His achievements include several awards and initiatives. In 2017, Fox-Alvarez received the Excellence in Clinical Science Research Graduate Student Award, along with first place in the Phil Zeta Veterinary Honor Society Research Poster competition and second place in the campuswide graduate



student research competition.

In 2016, he received first place in the American College of Veterinary Surgeons' public outreach video competition. That same year, he received second place in the Small Animal Clinical Sciences' "Best in Show" research competition. He was also elected to serve as chief resident of the UF Veterinary Hospitals by his resident peers.

Faculty member named Weeks Endowed Professor

Martha Mallicote, D.V.M., grew up riding and showing horses, so her decision to study veterinary medicine as a way to manage horses was hardly a surprise to those who know her.

The shock, at least to her, came when she recently was appointed to the Weeks Endowed Professorship in Veterinary Medicine at the University of Florida College of Veterinary Medicine.

"I was really excited to be recognized by my peers in this way," said Mallicote, a clinical assistant professor in the department of large animal clinical sciences.

"The Weeks Endowed Professorship is appointed to a faculty member who demonstrates exemplary success as an innovator and scholar in teaching, and who is a role model for collaboration, teamwork and faculty citizenship as a mentor and educational leader," said James W. Lloyd, D.V.M., Ph.D., a professor and dean of the college.

As a clinical assistant professor and equine medicine specialist, Mallicote teaches veterinary students in the classroom, the Large Animal Hospital and in the veterinary business curriculum.

After graduating from the College of Charleston's School of Business and Economics, Mallicote said she planned to go into the business world, but her love of horses pushed her to go back to school

and pursue veterinary medicine.

Since joining the faculty at UF nearly nine years ago, she has been able to combine both the business and veterinary worlds in her current work as the director of the Veterinary Business Certificate Program for D.V.M. students. This popular program has grown to include almost a quarter of the D.V.M. cohort, preparing them to own and operate their own veterinary practices.

Mallicote said she finds it interesting to see the intersection between being able to practice medicine and teaching the



veterinarians of the future. Though she did not expect that when entering this career field, she thinks it's fantastic.

"I find that opportunity to be really rewarding because you still are practicing medicine, but you're teaching at the same time," she said.

The Robin Weeks Excellence Endowment fund was created in 2009. Members of the Weeks family were cattle ranchers in Glades County, Florida. The family included the UF veterinary college in their estate plans because of their commitment to Florida agriculture as well as their desire to help veterinary students.

"Harriet Weeks and her daughter, Robin Weeks, had worked as school teachers," said Patricia Wlasuk, director of scholarship giving in the college's advancement office. "They understood the importance of an education and appreciated the expert veterinary care of our alumnus, Dr. Michael McNulty. The Weekses were inspired to include the college in their will by Dr. McNulty's own statement that he would give back to the college through his estate plans."

"I WAS REALLY EXCITED TO BE RECOGNIZED BY MY PEERS IN THIS WAY."

Veterinary behaviorist honored by alma mater



Terry Curtis, D.V.M. ('97) a clinical behaviorist in the UF College of Veterinary Medicine's department of small animal

clinical sciences, will receive the 2018 Professional Achievement Award from Keuka College, her alma mater.

Curtis, who graduated in 1980 from the college in Keuka Park, New York, was chosen for the award because of her exceptional achievements, honors and publications in the field of veterinary medicine, according to the college's Alumni Association. The Professional Achievement Award is one of five the organization bestows to recognize accomplished graduates.

Curtis will receive the award on Sept. 22, during the college's "Green and Gold Celebration Weekend."

As a clinical behaviorist, Curtis does house calls in Florida and South Georgia to aid people whose pets have behavioral issues, such as aggression or anxiety. She also teaches two classes at UF's College of

Veterinary Medicine.

After graduating with honors from UF's College of Veterinary Medicine in 1997, Curtis completed her residency at the University of Georgia, where she also earned her Master of Science degree in psychology. She returned to UF in August 2003 and began working at the UF Veterinary Hospitals.

Throughout her time at UF, Curtis' work has been published 34 times, and she has lectured across the globe, from Mexico to India.

Among her accomplishments, Curtis was featured on NBC's "Today Show" in July 2008, where she discussed fears and phobias in dogs. She was also featured on ABC's "Nightline," where she discussed her work with the Hemingway House cats in Key West.

NEW CHAIRS NAMED TO THREE DEPARTMENTS

Small Animal Clinical Sciences

The UF College of Veterinary Medicine has named Christopher Adin, D.V.M., chair of the college's department of small animal clinical sciences.

Adin previously served on the college faculty as an assistant professor of small animal surgery between 2001 and 2006. He now serves as an associate professor of soft tissue and oncologic surgery in the North Carolina State University College of Veterinary Medicine's department of clinical sciences, a position he has held since 2015. Before that, he was an associate professor at The Ohio State University College of Veterinary Medicine, having joined the faculty at OSU in 2008 after two years in private practice at a veterinary surgery specialty practice in Rochester, New York.

Adin will officially begin his new role at UF on Sept. 1.

A board-certified small animal surgeon, Adin received his D.V.M. from Cornell University in 1996. He completed his residency in small animal surgery at the University of California, Davis College



of Veterinary Medicine. Prior to that, he completed a fellowship in hemodialysis and renal medicine, also at UC Davis.

Adin has invented two surgical devices that are used in small animal surgery practices around the world. He also has trained more than 1,500 veterinary students in basic surgical skills over thousands of hours in laboratory teaching in the course of his academic career. He has served as president of the NC State College of Veterinary Medicine's teaching academy since 2017, and has occupied numerous leadership roles at NC State during his tenure there, as well as at OSU when he was on faculty there.

He received the OSU Class of 2015's Excellence in Teaching Award and was nominated for the Zoetis Teaching Award while at OSU. In addition, he has served as an associate editor of Veterinary Surgery since 2015.

Student honored for business aptitude

Cynthia Kathir, D.V.M. ('18), a new graduate of the UF College of Veterinary Medicine, has received the 2018 Simmons Educational Foundation's national Business Aptitude Award.

The foundation offers \$3,000 college-level awards to one student at all participating veterinary medical schools in North America through its Business Aptitude Program. A single \$15,000 national award is made among all of the winners to the student who submits what is judged to be the best response to a business case study.

The national award was presented to Kathir in January at the Veterinary Business Management Association's annual meeting.

Kathir was president of the Class of 2018 and graduated from the UF veterinary college in May. She plans to work as a small animal general practitioner after graduation, then to purchase a practice as soon as she is financially able.



Comparative, Diagnostic and Population Medicine



The UF College of Veterinary Medicine has named Subhashinie Kariyawasam, BVSc, Ph.D., chair of the department of comparative, diagnostic and population medicine.

Kariyawasam currently serves as a clinical professor in the department of veterinary and biomedical science and as microbiology section head of the Animal Diagnostic Laboratory at Pennsylvania State University, where she has been a member of the faculty since 2008. Prior to that, she had faculty appointments at Iowa State University and at the University of Peradeniya, Sri Lanka.

Kariyawasam began her new role at UF on Sept. 1.

Kariyawasam received her B.V.Sc. degree from the University of Peradeniya in 1992 and her Ph.D. in veterinary infectious diseases in 2002 from the Ontario Veterinary College, University of Guelph, Canada.

She has attained board certification

in three separate specialty colleges: the American College of Veterinary Microbiologists, with specialties in bacteriology/mycology and immunology; the American College of Poultry Veterinarians; and the American College of Veterinary Preventive Medicine. In addition, she is board eligible for the American Board of Medical Microbiology.

At the national level, Kariyawasam has been actively engaged over the past 10 years in a number of important committees with the American College of Veterinary Microbiologists, the American Association of Veterinary Laboratory Diagnosticians and the American Association of Avian Pathologists.

Formed last year, the department is the academic home for faculty members from a variety of different disciplines. It has been led on an interim basis since its formation by Michael Schaer, D.V.M., a professor emeritus of small animal medicine at UF.

Large Animal Clinical Sciences

The UF College of Veterinary Medicine has named Guy Lester, BVMS, Ph.D., as chair of the college's department of large animal clinical sciences.

Lester previously served on the department's faculty between 1991 and 2002 in the area of large animal medicine. He also completed a residency in large animal medicine in 1991, receiving board certification from the American College of Veterinary Internal Medicine in 1992. He also worked as a locum associate professor at the UF veterinary medical college for six months in 2016.

Lester presently serves as an associate

professor of equine medicine, head of the equine section and academic chair of the D.V.M. program at Murdoch University's College of Veterinary Medicine in Murdoch, Western Australia. He has been on faculty at Murdoch University since leaving UF in 2002.

He will begin his new position on Nov. 15.

Lester received his veterinary degree from Murdoch University in 1983. He worked in veterinary practice at different animal hospitals in the Northern Territory and Western Australia before completing his Ph.D. at Murdoch in 1989. Soon after, he moved to Florida to begin his residency.



**UPCOMING
EVENTS**

- SEPT. 29** Inaugural Practice Ownership Summit:
UFCVM
vetmed.ufl.edu/practiceownershipsummit
- OCT. 19** Florida Association of Equine Practitioners:
Alumni Reception, Naples
- NOV. 3** UF Homecoming: UFCVM Alumni tailgate
- NOV. 4** American College of Veterinary Pathology:
Alumni Reception, Washington
- DEC. 3** American Association of Equine
Practitioners: Alumni Reception, San
Francisco
- DEC. 7** Gulf Atlantic Veterinary Conference:
Alumni Reception, Boca Raton
- JAN. 20** VMX: Alumni Reception, Orlando
- FEB. 18** Western Veterinary Conference:
Alumni Reception, Las Vegas
- APRIL 13** Annual UF College of Veterinary Medicine
Open House: 10 a.m. to 4 p.m.
- MAY 10** Sophomore Professional Coating Ceremony
- MAY 17-19** Florida Veterinary Medical Association
Conference: Alumni Reception TBD, Tampa
- MAY 25** UFCVM Commencement

The University of Florida College of Veterinary Medicine
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