Laura Burns (DVM 2018), center, performs an ultrasound on a bottlenose dolphin at Dolphinaris in Cozumel, Mexico, as part of her experiential learning through the AQUAVET program. Photo provided by Laura Burns by Ali Peterson.
CVI launches with 4 teams

CVM-developed e-Learning tools

Where are they now: John McCormack

03 A MESSAGE FROM THE DEAN

04 COLLEGE NEWS
10 Active Learning
14 Pathogen’s motility triggers immune response
16 Drug-resistant superbugs

23 HOSPITAL NEWS
23 UGA Small Animal Hospital renamed to memorialize donor
24 Hospital now offers Interventional Radiology service
28 Hospital creates new CFO position

32 STUDENT NEWS
39 Welcome Class of 2020
41 Student Notes

42 FACULTY NEWS
44 Georgia poultry vet heads AAAP
48 Faculty Notes

50 ALUMNI NEWS
51 Alumni Notes
52 Alumni Profile: Dr. Marko Stejskal

54 WHY I GIVE
Dear Alumni and Friends of the College:

It is a distinct honor and privilege to serve as your interim dean during this time of transition as we undertake the task of finding a new dean to lead our College. I have been fortunate over my career to have worked for a number of outstanding leaders, and Dean Sheila Allen was one of the best. Under her leadership our College has taken great strides, evidenced by growth in enrollment, a significant increase in external research funding, and construction of our new state-of-the-art Veterinary Medical Center. These achievements are particularly amazing considering they occurred during the most significant downturn in the U.S. economy since the Great Depression. As Dean Allen would tell you, such achievements are a product of organizations composed of individuals with a shared vision and passion for excellence and the ability to embrace change, rather than as a result of luck or actions by an individual or small group. In Dean Allen’s view, her greatest legacy isn’t bricks and mortar, nor increased funding, but rather the people she brought to our CVM during her tenure.

My goal as interim dean is to maintain the upward trajectory she created and to ensure our new dean will hit the ground running; that we lose no momentum. A search committee, comprised of members of the CVM’s constituency, identified and conducted initial interviews with candidates for the position. Final candidates visited our campus in February for on-site interviews. Our goal is to announce a new dean this spring and tell you more about our new dean in the next issue of the Aesculapian.

In this issue of the Aesculapian, we continue our tradition of showcasing stories about our students’ learning experiences, as well as the achievements of our alumni, faculty and staff, and the translational role that veterinary medicine plays in One Health. Among the stories I encourage you to read:

- Ryan Peiffer (DVM 2019) and two other students share their experiences from AQUAVET®, a summer experiential learning opportunity open to DVM students interested in aquatic medicine. Programs like this expose our students to different aspects of our profession, often lighting a fire of passion for careers outside of traditional veterinary medicine.
- The Center for Vaccines and Immunology, which we introduced to our readers this time last year, is open for business. Meet the first four principal investigators to work in the facility and learn how their complementary research interests will help drive the research these teams will conduct in the coming years.

Thank you, as always, for your interest in and support of our College. I wish you all a peaceful and prosperous 2017 and look forward to seeing many of you at our upcoming Veterinary Conference and Alumni Weekend, as well as other events scheduled for this spring.

Best regards,

Keith

R. Keith Harris
Interim Dean

Photo by Whitney Mathisen.

About the Interim Dean

Richard Keith Harris, DVM, DACVP, became interim dean of the UGA College of Veterinary Medicine on Dec. 1, 2016. Dr. Harris also serves as head of the Department of Pathology and is the first holder of the Barry G. Harmon Professorship of Veterinary Pathology. He joined the College in 2008.

Dr. Harris earned both his undergraduate and his DVM degrees from Texas A&M University and completed a residency program in veterinary pathology at the Armed Forces Institute of Pathology.

To learn more about Dr. Harris, please visit vet.uga.edu/dean/about.
Colleges News

AS INAUGURAL RESEARCH PROJECTS GET UNDERWAY in the new Center for Vaccines Immunology, excitement amongst the researchers and lab staff is palpable throughout the state-of-the-art facility.

The open-concept lab space sprawls across a newly renovated corner of what was once the University of Georgia’s Veterinary Teaching Hospital. The “new lab smell” is distinct, and the broad research benches still house a few boxes of unpacked beakers and microscopes.

From Zika to seasonal and pandemic influenza, and HIV to whooping cough, the CVI’s mission is to understand basic immunology of infectious diseases and vaccine efficacy in order to build broader protection against emerging and re-emerging diseases.

CVI Director Ted Ross said finalizing the initial lab renovations and hiring the original faculty in 2016 were huge steps toward his 3-year goal of operating a translational vaccine development center.

Though also immersed in his own research, which includes a focus on adapting a universal flu vaccine, Ross fosters synchronization across the four teams and guides the CVI’s cohesive vision. “I help to get people in harmony and to reach their potential,” he said.

“We are reaching a critical mass with our immunology faculty working on infectious disease pathogens and vaccinations,” said Ross, who is also the Georgia Research Alliance Eminent Scholar in Infectious Diseases. “We started from scratch and are very new, but we have come together very quickly.” He plans to expand recruiting in 2017.

Karen Norris, who joined the CVI last fall as the GRA Eminent Scholar in Immunology and Translational Biomedical Research, agreed. “Today we start the science,” she said.

The CVI’s open-concept lab space stimulates collaboration within and across the research teams, which was a big inspiration for not only the facility design itself, but also the hiring of the
CVI faculty, who lead complementary immunology response research projects. The design concept helps with logistics like communication and flexibility, and inspires coordination, because researchers can see each other and move together as a unit, said Don Carter, CVI research director.

Carter helps Ross facilitate the CVI and says his focus is to develop core shared lab space that will foster research collaboration. “You don’t have to do this [research] internally if you find the right collaborators and supporters,” he said.

A spirit of collaboration

What unites the CVI faculty, other than commitment to their solo immunology research, is their commitment to each other and to the success of the Center. They all cite the potential for colleague collaboration at a flagship research institution as their draw to UGA. “It’s fun to come to work,” said Eric T. Harvill, the UGA Athletic Association Professor of Medical Microbiology, who joined the CVI team last summer.

Colleagues agreed, noting that the enthusiasm and energy in the CVI are infectious. “Meetings go long for a good reason, and people stop you in the hall and tell you about a research development,” said S. Mark Tompkins, a professor of infectious diseases known for his work in flu and high-containment research. Tompkins became an official member of the CVI team in July and has established a lab within the facility. He also maintains his high-containment laboratory in the Animal Health Research Center.

Not yet a year into the CVI’s official launch, the research teams are already finding innovative ways to merge their research interests. The CVI’s four faculty members find harmony across their immunology research, particularly in the realm of respiratory infection.

Ross and Norris are collaborating on respiratory syncytial virus. Norris and Harvill are combining research expertise to examine Bordetella pertussis transmission in animal models. And, Ross and Tompkins are using overlap within their influenza modeling to stabilize a live flu vaccine that won’t require continuous cold storage.

“It’s impossible to do things as a singular lab,” Tompkins said. “We need a multi-disciplinary approach to look at other immunology aspects.” He pointed to Harvill’s microbiome research as a vital addition to the others’ viral focus.

Initial CVI renovations were supported by the Georgia Research Alliance, the UGA Office of Research, the Office of the Provost, the College of Veterinary Medicine and the Department of Infectious Diseases. Second phase renovations, expected to be completed this winter, include knocking down more walls to open up room for more lab space.

Ross’ goal is that by 2020 the CVI will serve as a core facility for immunology investigators across the University to test their research. With plans to merge academic and private business models, the CVI will drive vaccine development from the bottom up by facilitating every stage along the way for both animal and human samples—from research through clinical trials and data analysis, to regulations and licensing. Ideally the CVI will be open to any researcher or private business that needs a one-stop shop to help transform their research into treatment, said Ross.

“When I learned about the science that was going on at the College of Veterinary Medicine and the amazing growth that is taking place at UGA with infectious diseases, it was very scientifically enticing,” said Norris, who moved her program from the University of Pittsburgh to join the team.

The CVI researchers all agree that the facility is a natural extension of the well-established collaboration between UGA and the GRA, and that having Ross at the helm of a new immunology program is a vital step towards advancing global health.
The first-round of CVI faculty hires were finalized in 2016. Though they all bring different expertise to the CVI, the complementary interests of the four researchers helps to foster organic collaboration opportunities that range from immunology and bacterial infection research to vaccine modeling and trials.

**Meet the CVI Team**

**TED ROSS, PHD**
Director of the Center for Vaccines and Immunology
GRA Eminent Scholar in Infectious Diseases

Ross’ research focuses on development of a broadly reactive flu vaccine—one that will protect people against multiple strains of seasonal and pandemic influenza, unlike the current seasonal vaccine that triggers individual immune response memory to fight against a predicted strain. With support from Sanofi Pasteur, the world’s largest manufacturer of influenza vaccines, Ross’ team developed a consensus-building tool that isolated the most prevalent strains and those likely to emerge in the future. Flu vaccines created using Ross’ Computationally Optimized Broadly Reactive Antigen, or COBRA, platform are expected to undergo clinical trials beginning in 2018, with collaboration from the Augusta University/University of Georgia Medical Partnership.

Those trials will bring long-term cohort trails to Athens, where Ross will test both conventional flu vaccines (containing one or two strains of flu) and universal flu vaccines built using his COBRA technology, which was licensed by Sanofi in 2013. The trials will be offered to adults ranging in ages 18 to 80, to help Ross and his colleagues better understand why the vaccines work well in some people, but not others.

Ross is also currently working with GeoVax Labs, Inc., an Atlanta-based vaccine development company, to create a Zika vaccine that prevents the virus infection.
Norris’ work focuses on infectious and chronic diseases, including HIV, pulmonary diseases, inflammatory diseases and diabetes. She is an expert in immunology and microbiology, and has built a collaborative lab full of veterinary, virology and cardiology experts who facilitate animal models that enable research to move from the bench to the bedside, she said.

“The purpose of CVI is to understand immunity to infectious agents for the purpose of developing vaccine and preventing disease,” explained Norris. “In order to do that, we need to move our scientific findings up and out of the lab into clinical trials or to a company that will perform clinical trials.”

A lot of Norris’ work looks at co-infections that arise from HIV and respiratory infections, and an important part of tracking those over time involves having long-term cohort models that have controlled variables, in order to isolate an intervention target.

Norris was drawn to the CVI based on her previous research collaborations with Ross during their time together at the University of Pittsburgh, as well as the potential for further collaboration with new faculty. (Ross was on faculty at the University of Pittsburgh from 2003-2013.) “With the resources of UGA and the College of Veterinary Medicine, we were able to renovate a facility and bring in personnel and expertise to operate it as a core facility, so that another investigator who does not have the expertise or ability to set up models from scratch can do pilot studies with our expertise,” she said. “We can broaden the ability of other investigators to advance their research one more step.”
MEET THE CVI TEAM

ERIC T. Harvill, PHD
UGA Athletic Association Professor in Medical Microbiology

“Harvill’s research focuses on respiratory diseases and the various interactions that occur when invading pathogens overcome resident microbiota to colonize a host. The only initial CVI researcher to focus on bacterial rather than viral infection, Harvill has recently looked at the re-emerging and highly contagious whooping cough, caused by the bacterium Bordetella pertussis.

Because whooping cough incidence is increasing in highly vaccinated populations and remains high in developing nations, the disease demands a different approach, he said. So Harvill and his team are thinking outside of the conventional vaccinology wisdom.

“It’s absolutely necessary to start with basic biology here—not just vaccines, but immunology,” he said. Harvill’s team is looking at how the body’s naturally occurring microbiome react to invasions, and have isolated resident organisms that prevent B. pertussis from colonizing. Building upon this immunology interaction, his team can more effectively analyze how to manipulate resident bacteria to better prevent pathogen invasion, he said.

Harvill’s team also looks at the broader evolution of B. pertussis, as compared to similar organisms, and how immune responses vary accordingly.

Photo by Rick O’Quinn.
The only CVI faculty member hired from within UGA, Tompkins has been at the College of Veterinary Medicine since 2005. As a member of the Emory-UGA Center of Excellence for Influenza Research and Surveillance, funded by the National Institute for Allergy and Infectious Diseases, his work focuses mostly on human and zoonotic influenza. (The Emory-UGA Center is one of six nationwide that is funded by the NIH to help prevent pandemic flu.) Tracking influenza from emergence to treatment, his lab focuses on how varying species are susceptible to influenza, as well as the evolution of the virus.

Much of his research has direct agricultural application, as Tompkins tracks the spillovers across vectors, like that of the 2009 H1N1 influenza outbreak that evolved from avian, swine and human strains. He says predicting the next outbreak means thinking outside of the box to anticipate how the virus will mutate across populations. Understanding the viral fitness at each stage helps Tompkins develop targets for intervention.

“That outbreak reinforced what we knew as a research community, that swine is a classic mixing vessel, but it raised concern and research interest,” he said. “The more we know about what’s going on in swine populations, the better off we are in terms of public health and also the direct impact on swine productions.”

Tompkins also focuses on antiviral drug development and novel influenza vaccines that don’t require a continuous chain of cold storage for preservation—a major concern for sustainable vaccine development.
The cow is featured in The Abomasum, an iBook created by CVM faculty and the College’s Educational Resources Center to help teach veterinary students about digestive diseases in large animals. Artwork provided by the UGA College of Veterinary Medicine’s Educational Resources Center.
IN A FIELD WHERE DIDACTIC TEACHING METHODS PREDOMINATE, students at the UGA CVM are being provided a rare opportunity to take an active role in their education. Faculty throughout the College are developing and implementing dynamic, often case-based, educational tools for use in their classrooms, evolving the learning experience from one of passive observation to one filled with active investigation, interaction and choice; in short, an education that mimics real-life in a veterinary practice.

Brenton Credille, DVM, PhD, DACVIM, an assistant professor of beef production medicine, co-developed and recently debuted a “glass cow” iBook for third-year students studying large animal digestive diseases. Credille wanted his students to be able to visualize disease in real time before they encountered it on the job.

Credille worked closely with graphic designers and medical illustrators in the CVM’s Educational Resources Center (ERC) for three years to develop the tool. He debuted it as a downloadable iBook called The Abomasum, named after the cud-chewing animals’ fourth stomach, in September 2016. The tool works as an interactive text for his students and is free for them to download. The tool’s primary goal is to give students a better understanding of diseases that commonly affect a cow’s gastrointestinal tract.

“Students are often only exposed to drawings or our spoken word explanations when we describe these disorders and many don’t seem to have a solid grasp of what is truly happening,” he says. “This tool gives students an interactive means to explore these diseases so that they feel more comfortable when they encounter them in clinical practice.”

The iBook opens with basic abdomen anatomy—a subject in which most third-year veterinary students are well versed. Unlike their previous textbooks that discussed this topic, the images in The Abomasum expand and rotate to reveal all 360 degrees of the organ. But what really excites students, says Credille, is the next section of the book that explains—and better yet—shows common cattle digestive disease in real time. Animated videos show how diseases, like abomasal volvulus that can fatally restrict blood flow to the fourth stomach, affect organs over time. Credille says the 3-D imaging helps students mentally plan for what they will encounter in the field. The idea being, if they’re more familiar with the disease logistics and progression, they’ll be able to more efficiently approach treatment and prognosis in the future.
“The tool is extremely useful to visualize the internal movements of organs in different situations,” says Sloan Witherow (DVM 2018), whose area of interest is food animal medicine. Witherow anticipates that the visual aids from The Abomasum will come in handy for future coursework, tests and clinical rotations, and also help in future surgery, palpating and calving.

CVM faculty from multiple departments have helped develop a growing number of eLearning tools as a way to enhance veterinary students’ learning experiences in the classroom and better reflect the reality facing them after graduation. Though the tools have different focuses, formats and ultimate teaching goals, they are united by one overarching theme: a desire to increase understanding of complex material by presenting it in a more visual, realistic setting. Through collaboration with ERC’s skilled team of graphic design experts, and sometimes with help from colleagues at the colleges of Education and/or Engineering, these novel teaching modules were designed with recent advances in educational research and instructional systems in mind. Each tool was developed to present information to students as virtual re-creations of real patients the students could treat as practicing veterinarians.

Among the eLearning tools created so far: iBooks on Coagulation, Small Animal Dentistry, the Heartworm, and Standing Lumbosacral CSF Collection in the Horse. There’s also a web–based Critical Thinking Tool, aimed at helping students develop better diagnostic skills for working with small animal patients. And ERC worked with the cardiology faculty to develop an augmented reality heart. (ERC is led by James Moore, DVM, PhD, DACVS, a professor of large animal medicine well–known for his work in equine. In the late 1990s, Dr. Moore and two colleagues worked with ERC artists and animators over four years to produce The Glass Horse, which offered viewers a novel 3-D look inside a horse.)

One of the challenges of teaching and learning veterinary medicine is that students can be exposed to topics early in their veterinary curriculum, and perhaps briefly again a year or so later, but they may not need to put the skills together for diagnostic purposes until their clinical year of working with patients, in the months leading up to graduation. To help students connect these didactic dots on the topic of neurology, Simon Platt, BVM&S, MRCVS, DACVIM (Neurology), DECVN, a professor of neurology and neurosurgery, led the effort to create two neurology–focused learning tools released in November 2015. Platt’s educational tools were developed over a decade and were funded by grants from the UGA Center for Teaching and Learning and the Department of Small Animal Medicine and Surgery. The first of these web–based tools, Clinical Neurology & Functional Neuroanatomy, was developed with Allison Haley, DVM, MRCVS, DACVIM (Neurology), a former assistant professor of neurology and neurosurgery who is now in private practice; it illustrates the nervous system in a 3-D perspective through a series of animated videos.

Unlike a traditional textbook that provides information on complex systems in a one–dimensional and relatively fragmented manner, the animation in this module provides first–year veterinary students with the “big picture,” enabling them to better understand and retain the information. Platt intends for veterinary students to use this resource from their first year of classroom instruction through their final year in a clinical environment. “Typically students in the first year would learn neuroanatomy, but not really understand what relevance it has,” says Platt, “and then students in the junior year and senior year would learn about the neurological exam, but would have probably forgotten about the underlying neuroanatomy. We wanted to try to bring both together so that it would ultimately have clinical relevance.”

Dr. Simon Platt recently unveiled a new web-based tool to help students learn how to perform neurological evaluations and localize lesions. Our interactive neurological evaluation tool features an adorable virtual bulldog, but our dog needs a name!

ENTRY FORMS CAN BE FOUND AT: The Academic Affairs Office at both the CVM and VMC next to the entry boxes.

NAME THE DOG

CONTEST

ALL ENTRIES MUST BE RECEIVED BY

F R I D A Y

J A N U A R Y 1 6 ,

2016

To help introduce his educational tools to the students, Dr. Simon Platt held a contest in winter 2015–2016 and asked students to name the dog in the Nerve Dawg tool. Katarina Yi (DVM 2018) won the contest (and a gift card to a local coffee shop). Yi named the dog “GeNeRAL,” for Georgia Neurology Repository for Applied Learning. Nerve Dawg artwork and software created by Kyle Johnsen, director of the UGA Virtual Experiences Laboratory and an associate professor at the College of Engineering.
Though the Clinical Neurology & Functional Neuroanatomy website is a powerful visual learning tool, Platt also wanted to develop a more interactive learning module to complement students’ clinical rotations. “Initially, the motivation was to teach neuroanatomy and neurophysiology more visually using the animation capabilities available through the CVM’s Educational Resource Center,” says Platt, “but it then became apparent that it still was more of a didactic teaching site rather than an interactive site where they could learn based on abnormalities that were present.” Platt then teamed up with the Virtual Experiences Laboratory at the UGA College of Engineering to create a second web-based tool, dubbed Nerve Dawg, that would be a true interactive experience for veterinary students studying neurological abnormalities.

Nerve Dawg not only reinforces material learned in the classroom, but also prepares students for real veterinary practice by giving them a wider breadth of experiences while still in school. This online resource presents students with a virtual dog that can be given an important, relevant neurological disorder the students may not encounter during a short three-week clinical rotation. Students examine the dog, then order and interpret tests to decide their next course of action in the animal’s diagnosis and treatment. Platt says that Nerve Dawg can be used as both a teaching and a testing tool in the classroom. “We can give the dog a lesion and show the first-year DVM students how we would examine it, and, try to reinforce what they’ve learned,” explains Platt. “Then, when the seniors are in clinics, we use that more as a case challenge basis. I could previously give them a question that’s text-based, multiple choice and they could work it out, but now that they’re given a (virtual) dog in front of them, they need to think on their feet quickly; they have to work out, ‘What does each test tell me and how do the results of all of the tests add up to the final answer?’” This opportunity for students to not only be exposed to common neurological presentations but also to lead the decision-making process guiding its management renders Nerve Dawg a unique experience that veterinary students are unlikely to encounter outside the CVM.

These joint instructional efforts between CVM faculty and colleagues around UGA highlight not only the broad expertise available on campus, but also the collaborative environment in which the CVM has thrived as a challenging and engaging educational institution for the next generation of veterinarians.

“There’s nothing like it that I’m aware of that is available anywhere else,” says Platt of his eLearning tools. “They'll get out into practice and see a dog with a neurological problem that they’ve never seen on their clinical rotations, and, this aids them in trying to back up that fact-based learning that they have in class.”

Credille, who paid for the “glass cow” by tapping funds made available to him to support his teaching efforts, agrees that these tools offer a unique opportunity to UGA veterinary students. “It helps visually correct students’ preconceived notions in real time before they get to the clinicals,” he notes. “I haven’t seen other institutions do anything similar to this.”

“I’ve never had a study tool like this,” says Witherow. “It helps you visualize what’s actually going on so you don’t have to go in blind.” She says the glass cow tool will be vital for not only her success as a student, but also will help her be a successful veterinarian.
By Erica Hensley

UGA-led research team discovers a pathogen’s motility triggers immune response

In the study, wild-type Pseudomonas aeruginosa triggered the release of neutrophil extracellular traps, or NETs, which are web-like structures of DNA that trap and kill microbes. In this image, NETs were detected by immunoflorescence staining after four hours. Image provided by the Rada Lab by Madison Floyd.

By contrast, this mutant strain of P. aeruginosa expresses a paralyzed flagellin. Due to lack of motility, this strain did not induce NET formation. Image provided by the Rada Lab by Madison Floyd.
UNTIL NOW, a pathogen’s ability to move through the body has been overlooked as a possible trigger of immune response, but new research from the University of Georgia College of Veterinary Medicine found that motility will indeed alarm the host and activate an immune response.

The team, led by Balázs Rada, an assistant professor in the Department of Infectious Diseases, studied Pseudomonas aeruginosa, an opportunistic gram-negative bacterium that can wreak havoc on immunocompromised patients—like burn patients or those who battle HIV, cystic fibrosis (CF), cancer or pneumonia.

The study challenges the idea that bacteria binding to immune cells alone trigger protection. The data suggest that motility, or swimming, is an important factor to certain opportunistic pathogens, like P. aeruginosa. The team identified the flagellum—a whip-like appendage on many gram-negative bacteria that works like a propeller to move the microbe—as the main P. aeruginosa component that triggers the immune system to release neutrophil extracellular traps, or NETs. NETs are web-like structures of DNA associated with antimicrobial molecules that trap and kill microbes. The study is the first to show that flagellar motility induces activation of neutrophils, which are the most abundant type of white blood cell in most mammals and the first line of defense against infection.

This finding was a surprise to the Rada team. “It’s a step along the way to direct [research] attention toward bacterial motility,” Rada said. “It’s an important feature of the bacterium that has been neglected in the past.”

The data isolated the immune response trigger to motility by testing bacteria with immotile flagella, which failed to activate neutrophil response. Forced contact between P. aeruginosa bacilli with paralyzed flagella and neutrophils, however, did trigger a maximal immune response. Purified bacterial flagellin—the protein that makes up flagella—did not activate neutrophils to release NETs. This suggests that while the cell-to-cell contact is key to spark the body’s immune response, the actual motorized bacterial movement catalyzes the chain of events that leads to binding and subsequent immune reaction.

Most CF patients are infected with P. aeruginosa that complicates their lung disease. Pseudomonas aeruginosa is known to lose its motility early on in the lung of a CF patient. This study offers a potential new explanation for why this happens. The Rada team suggests that the bacterium suppresses flagellin synthesis over time to avoid recognition by neutrophils and triggering immune responses. Understanding this mechanism in CF patients with P. aeruginosa infections can help develop motility-targeting therapies, said Rada.

This study also highlights the importance of focusing on neutrophils as the bacteria-binding target. “It’s the most powerful branch of the immune system to fight P. aeruginosa and our study shows how the bacteria and neutrophils interact,” Rada said. This previously uncharted territory suggests not only the importance of bacterial motility, but also that neutrophils are a key cell type to study with regards to P. aeruginosa infections, he said.

Rada says clinical research is needed to track the bacteria’s motility mechanism in CF and other immunocompromised patients, and that this study is useful to understand the early pathogenicity of P. aeruginosa infections.

Though this study focuses specifically on P. aeruginosa’s motility, Rada says the data also provide insight into the mechanism of neutrophil activation elicited by other flagellated bacteria.

Other members of the research team include Madison Floyd, Matthew Winn, Christian Cullen, Payel Sil, and Dae-gooin Yoo, all from the Department of Infectious Diseases; Benoit Chassaing and Andrew T. Gewirtz, from Georgia State University’s Institute for Biomedical Sciences; Joanna B. Goldberg, from the Department of Pediatrics at the Emory University School of Medicine; and Linda L. McCarter from the Department of Microbiology at the Carver College of Medicine at the University of Iowa.

Their study, “Swimming Motility Mediates the Formation of Neutrophil Extracellular Traps Induced by Flagellated Pseudomonas aeruginosa,” was published in PLOS Pathogens on Nov. 17 and can be found here: tinyurl.com/h5k9zhh.
DRUG-RESISTANT ORGANISMS, or so-called “superbugs,” are a growing public health threat because “last-resort” therapeutics—employed only when other drugs fail to kill an infection—are failing. A University of Georgia–led research team is the first to examine multiple strains of one of the most dangerous superbugs known to science and a last-resort antibiotic used to treat it. The team’s discovery deepens the understanding of how pathogens adapt to protect themselves from antibiotics and will enable researchers to develop therapeutics aimed at evading this mechanism.

M. Stephen Trent, in the College of Veterinary Medicine’s Department of Infectious Diseases, and his team found that several strains of the Gram-negative bacterium Acinetobacter baumannii are mutating into drug-resistant bacteria by shedding a layer of their outermost membrane in response to exposure to colistin, also known as polymyxin E, a decades-old antibiotic. The bacterium inactivates production of an essential molecule that colistin is designed to bind to, which then prevents the drug from entering the cell to neutralize the infection—suggesting that the bacterium adapted a novel mechanism to protect itself.

Previous research isolated this behavior to a single strain of A. baumannii, but this study is the first to track multiple strains and determine that colistin–resistance is a response to treatment. Trent and his team chose colistin for the study not only because it represents the end of the line for bacterial infection treatment options, but also to understand how Gram-negative bacteria like A. baumannii survive without that essential cell wall molecule—called lipopolysaccharides, or LPS.

“Bacteria are phenomenally adaptive, and if the antibiotic can’t bind to or enter the bacterium, it is not effective,” said Trent, the UGA Foundation Distinguished Professor of Infectious Diseases. The theory is, if scientists better understand how bacteria become superbugs, scientists can develop effective antibiotics to combat the bugs’ resistant mechanisms.

A. baumannii, also known as “Iraqibacter” because soldiers acquired infections from the organism in Iraq and brought them back to the U.S., is particularly hard to kill due to its ability to quickly acquire multidrug resistance. It often wreaks havoc in hospitals where it jumps quickly between patients and hospital personnel in close proximity.

Colistin resistance was rare, but has become more prevalent. Colistin has been used since the 1950s, but because of its adverse side effects, is only used as a last-resort option. Because its use is not widespread, most bacteria are susceptible to colistin. Therefore, when colistin proves ineffective in treating an infection, healthcare providers are out of options.

Data from the Trent team’s study suggest that half of the strains exposed to colistin shed their protective LPS layer. The researchers also found that not all A. baumannii can survive without that protective LPS layer. While some strains thrived without that armor and successfully resisted treatment with the antibiotic, other strains could not. For those strains that did survive without LPS, after
the antibiotic was removed from the system, the bacterium produced a new protective layer.

“In effect, the bacteria can quickly adapt to any situation making them even more dangerous,” Trent said.

Other members of the research team include Joseph Boll, in the UGA College of Veterinary Medicine and the University of Texas at Austin; Alexander A. Crofts and Bryan W. Davies, at the University of Texas at Austin; Katharina Peters and Waldemar Vollmer, at Newcastle University; and Vincent Cattoir, at Centre Hospitalier Universitaire de Caen, in France.

The study, “A penicillin-binding protein inhibits selection of colistin-resistant, lipooligosaccharide-deficient Acinetobacter baumannii” was published in Proceedings of the National Academy of Sciences (www.pnas.org) on Sept. 26 and can be found at tinyurl.com/janpu7l.

A NATIONAL SEARCH is currently underway to fill the position of dean of the College of Veterinary Medicine. The search is led by the UGA Office of the Senior Vice President for Academic Affairs and Provost, and is conducted by a committee that represents the various constituencies of the CVM, including its faculty, staff, students, alumni, the agricultural community, the CVM’s diagnostic laboratories, and veterinary practitioners. The committee is chaired by Dale Greene, dean of the Warnell School of Forestry and Natural Resources.

Dr. Sheila W. Allen served as dean of the CVM for 11 years and left her position on Dec. 1 to become the senior accreditation advisor for the Association of American Veterinary Medical Colleges.
Study: Limited food triggers tradeoff between immunity and fitness in butterflies

By Erica Hensley

NEW RESEARCH that studied life-long health patterns of monarch butterflies further linked adverse health to limited food resources. Researchers from the University of Georgia studied how resource limitation, like lack of access to food, affects monarch butterflies’ immune defenses and overall fitness.

The study tracked the tradeoffs that monarchs employ throughout their life—essentially sacrificing one health trait in favor of another—under different stress triggers. In addition to food restriction, researchers also introduced the butterflies to parasite infection to see how the infection further influenced tradeoffs. The data suggested that premature monarchs sacrificed immune cell defenses in favor of increased body weight. The study charted the same tradeoff in parasite infected adult females, who retained lower immune cell production in favor of longer lifespan.

The data indicate that food restriction may influence wildlife to reduce immune responses in favor of fitness traits, like lifespan. The researchers suggested that abundant resources, which could allow

Study: Zika-infected chick embryos mimic human microcephaly

CHICKEN EMBRYOS INFECTED WITH ZIKA developed microcephaly–like birth defects and could serve as a model to better understand the virus, new research suggests.

The data suggest that chicks could give inexpensive insight into Zika’s virology and the subsequent brain damage seen after infection. Microcephaly—the rare birth defect that causes brain development deficits and is characterized by a small head—has been linked to the Central and South American Zika outbreaks.

The team, led by Forrest Goodfellow, a graduate student in the UGA College of Agricultural and Environmental Sciences’ Regenerative Bioscience Center, developed a neurodevelopmental chick model to infect the chicks early in the incubation stage, mimicking the human first trimester. Data showed that high infection doses caused embryo death, and lower doses resulted in nervous system damage similar to microcephaly. Researchers merged stem cell biology and MRI technology to create the model and track the data over time.

The data will be helpful to begin looking at the timing and mechanics of Zika infection, and eventually therapeutic options, according to the team. “Now we can look quickly, at greater numbers, to take a closer look at a multitude of different strains and possibly identify the critical window of susceptibility for Zika virus–induced birth defects,” said Melinda Brindley, a co-author on the study who is an assistant professor of virology, jointly appointed to the CVM’s departments of Infectious Diseases and Population Health. “With this approach, we can continue to further design and test therapeutic efficacy.”

Researchers also included: Blanka Tesla, a graduate research assistant in the CVM’s Department of Infectious Diseases; Gregory Simchick, a graduate student in Franklin College of Arts and Sciences’ Department of Physics and Astronomy; Qun Zhao, associate professor of physics in the Franklin College of Arts and Sciences; Thomas Hodge, a senior research scientist in the Department of Infectious Diseases; and Steven L. Stice, Georgia Research Alliance Eminent Scholar and director of the Regenerative Bioscience Center.

The study, “Zika Virus Induced Mortality and Microcephaly in Chicken Embryos,” is available at tinyurl.com/z62sr7.

This work was supported in part by U.S. Environmental Protection Agency STAR grant (83555101), National Science Foundation under the Science and Technology Center, and grant S10RR023706 from the National Center for Research Resources.
for the monarchs to invest more heavily in immune defenses, might eliminate the need for this tradeoff.

The study controlled for food restriction at both the larval and adult stages, and found that food restriction altered fitness (measured by body mass and lifespan) and immunity (measured by blood cell count and levels of protective enzymes) across multiple life stages. While previous studies have linked insufficient food resources to lowered immunity and fitness, few have looked at monarch butterfly populations over time.

The research cited climate change and the subsequent effect on monarch migration as a potential reason that populations are seeing resource limitation due to a lowered access to nectar-producing plants. To compensate monarchs make fitness tradeoffs that lower their ability to fight off infection, according to the paper.

This research also suggests that conserving food resources, throughout their larval and migration periods, is vital for monarchs due to potential health consequences associated with resource loss.

The study, by researchers Alexa Fritzche McKay and Sonia Altizer of UGA’s Odum School of Ecology, and Vanessa O. Ezenwa of both Odum and the College of Veterinary Medicine’s Department of Infectious Diseases, titled “Consequences of Food Restriction for Immune Defense, Parasite Infection, and Fitness in Monarch Butterflies,” was published in Physiological and Biochemical Zoology and can be found here: tinyurl.com/ztvyaeg.
SINCE 2012, generous donors have contributed more than $680 million to advance the important work taking place on UGA campuses. Now, after a four-year quiet phase, the University is reaching out to the UGA family at-large for help in achieving an even greater goal: UGA’s commitment to raising $1.2 billion by 2020.

The “Commit to Georgia” campaign—the most ambitious fundraising campaign in UGA’s history—was announced in November. It is guided by three priorities:

- Eliminating financial barriers and opening doors for UGA students;
- Enhancing our learning environment;
- And, solving grand challenges for our state and the world.

All contributions you make to the College of Veterinary Medicine go directly to benefit the CVM and count toward UGA’s “Commit to Georgia” fundraising goal. Your gifts will help us provide more scholarships and experiential learning opportunities for our students, state-of-the-art facilities for teaching and research, and seed money to test new concepts that may lead to the therapeutics of tomorrow.

For more information about the Commit to Georgia Campaign, or to make a gift to our College, please contact the Office for Veterinary External Affairs at 706.542.1807 or give2vet@uga.edu.

**New annual giving officer in External Affairs**

GORDON THOMAS recently joined the CVM’s Office for Veterinary External Affairs as the coordinator for the College’s Annual Fund, which supports student scholarships and faculty development.

Thomas previously served in a marketing and constituent role at the Ina Dillard Russell Special Collections Library at Georgia College & State University, in Milledgeville. Georgia College is also Thomas’s alma mater.

In his spare time, the Macon native volunteers for the American Cancer Society’s Relay For Life and last served as the event chair in his former county. He also enjoys exploring Athens, baseball and traveling.

To contribute to the CVM’s Annual Fund, or to inquire about other ways to donate to the CVM, contact Thomas at 706.583.0154 or Gordon.Thomas@uga.edu.
Upping our game for a new age

**THE UNIVERSITY OF GEORGIA UNVEILED A NEW VISUAL IDENTITY** in September, marking the first significant design update to official UGA mark since 1989.

The UGA Division of Marketing and Communications spent months talking to faculty, staff, students and alumni to gather feedback about how the official UGA mark is used and what it symbolizes to the UGA community. The discussions resulted in the University's first logo identity system that showcases both our iconic arch as well as our founding year. (Athletics will continue to use the Power G for its athletic-related communications.)

All UGA units will migrate to the new identity system over the next two years. The identity system is designed to be screen-friendly and consistently reproduced across all social media and other digital formats, as well as to be reproduced consistently through traditional printing formats.

The goal is to enhance recognition of the UGA brand regionally, nationally and globally.

---

**NEW, STATE-OF-THE-ART HOSPITAL**
- Opened in March 2015

**NEW CLINICIANS**
- Several positions created to bolster many of our service areas

**NEW AND EXPANDED SERVICES**
- Interventional radiology
- Advanced radiation therapy
- Behavioral medicine
- Dermatology
- Small animal rehabilitation
- Nutrition
- Equine ophthalmology

**SAME GREAT CARE!**

2200 College Station Road, Athens GA 30602  vet.uga.edu/hospital  706.542.3221
**Savannah woman leaves UGA College of Veterinary Medicine nearly $1 million**

A **LIFE-LONG ANIMAL LOVER** has left a gift of nearly $900,000 to benefit the University of Georgia College of Veterinary Medicine.

Betty Lorraine Butler, a Savannah resident who retired from Union Camp in 1990, died at her home on Sept. 10, 2015. Friends say she owned dogs throughout her life and cared for stray animals near her home. She was always fascinated by the interface between animals and humans, in health and disease.

The gift will initiate an annual seminar that will be known as the Butler Seminar Series. Butler’s estate gift will be used to bring world-renowned scholars to the UGA campus to lead a discussion about the benefits and risks of human–animal interactions. The College also will establish the Betty Butler Scholarship Fund, which will be awarded annually to students dedicated to companion animal medicine.

“The College of Veterinary Medicine is grateful for this generous bequest from Ms. Betty Butler. We are honored to direct this wonderful gift toward the causes Ms. Butler was passionate about,” said Dr. Sheila Allen, who recently retired as dean of the College of Veterinary Medicine.

Butler was born in Savannah on Dec. 21, 1924. She graduated from Savannah High School and Armstrong Junior College before transferring to the University of North Carolina at Chapel Hill. She majored in dramatic arts and music and was also a member of Alpha Delta Pi Sorority. After graduating in 1946, she joined Union Camp Corporation in their Industrial Relations Employment Office for five years, where she tested and interviewed job applicants. In 1951, she moved to New York City, where she lived for four years and worked in personnel before transitioning to a position as a retail buyer. She returned to Savannah in 1955, following the death of her father, and a year later, resumed her former role at Union Camp.

By the early 1960s, Union Camp promoted her to its College Recruiting Staff, where she focused on recruiting both recent college graduates and also experienced personnel. She would later be promoted to manager of employment and recruiting, a position she held until her retirement.

Butler was generous in giving her time to her local community. She was active in the Savannah Little Theatre and she held leadership positions in the United Way, being the first woman to head up a division during an annual fundraising campaign. She was also a member of the Pilot Club, the area Republican Women’s Club and the First Baptist Church of Savannah.
The small animal side of the University of Georgia Veterinary Teaching Hospital was renamed on Nov. 3 as the Cora Nunnally Miller Small Animal Teaching Hospital, in honor of an animal lover and philanthropist who gave more than $13 million to the College of Veterinary Medicine. A portrait of Cora Nunnally Miller, which was bequeathed to the CVM and now hangs in the lobby of the hospital, was unveiled at the renaming ceremony. Pictured from left: Phoebe Booth, Peggy Weigle, Dean Sheila W. Allen, and Susan and Jim Bolduc. Booth, Weigle and the Bolducs, all close friends of Cora Miller, traveled to Athens for the ceremony. Photo by Dorothy Kozlowski.

The UGA VETERINARY TEACHING HOSPITAL has renamed its Small Animal Hospital in honor of Cora Nunnally Miller, a donor who gave more than $13 million to the College of Veterinary Medicine.

The name change was made official Nov. 3 during a dedication ceremony that included the unveiling of a portrait of Miller that was painted when she was a teenager by Lamar Dodd. The portrait was donated to the College as part of Miller’s estate and now hangs in the Hospital’s small animal lobby.

“Cora Miller was a very distinguished woman who sought no recognition for her generosity, taking great satisfaction in simply learning about the impact of her philanthropy,” Dean Sheila W. Allen said during the ceremony. "We proudly honor her transformational gifts to the College by naming the Small Animal Hospital the Cora Nunnally Miller Small Animal Teaching Hospital.”

Miller, who passed away at her home in July 2015, loved horses, dogs and the field of veterinary medicine. Of her gifts, more than $7 million was designated for building the state-of-the-art teaching hospital, which opened in March 2015. The remainder of her contributions resulted in several endowed chairs and professorships for the college as well as the Service Animal Fund for animals devoted to serving people such as assistance dogs and military and police dogs.

“We continue to benefit from her incredible generosity to the College and to the University of Georgia as a whole,” Allen said. (Dean Allen retired on Dec. 1.)

Her gifts to UGA totaled more than $33 million throughout her lifetime, and included contributions to the Hugh Hodgson School of Music, the Honors Program and the Franklin College of Arts and Sciences. She granted permission for UGA to acknowledge her gifts only after her death.
Hospital now offers Intervventional Radiology service

THE UGA VETERINARY TEACHING HOSPITAL recently launched its new Intervventional Radiology (IR) service, and it is unlike any other in the region. Interventional radiology is an emerging field in veterinary medicine allowing for management and treatment of many diseases with minimally-invasive procedures.

The Veterinary Teaching Hospital’s IR service is well-equipped with advanced fluoroscopic imaging, high-definition endoscopy equipment, and both a diode and Holmium:YAG laser.

“Each laser type has its own advantages for certain procedures, so we can tailor treatment to each animal with the most appropriate laser type,” said Tracy Hill, DVM, PhD, DACVIM, MRCVS, DECVIM-CA. “We are also equipped with specialized fluoroscopy that has road mapping and digital subtraction features that, along with traditional fluoroscopy, allows us to better direct treatments.”

Dr. Hill is one of a handful of veterinarians in the world who has completed fellowship training in veterinary interventional radiology. She works with a team of veterinarians from multiple specialties within the Hospital.

“Our IR service includes a team of internists, soft-tissue surgeons, cardiologists, anesthesiologists and radiologists who each bring their own experience and expertise to the table,” said Joe Bartges, DVM, PhD, DACVIM, DACVN. “Our combined knowledge base and team approach allows us to provide the best patient and client care possible.”

The team’s expertise and state-of-the-art equipment allows for the provision of an extensive range of minimally invasive procedures. Referral to the IR service is a perfect option for clients that are seeking the least invasive treatment option for management of traditionally surgical diseases, such as urinary bladder and urethral stones, ectopic ureters, and intrahepatic portosystemic shunts, among others. Additionally, the IR service can offer palliative treatment of diseases that were previously unmanageable, such as obstructive prostatic or urethral cancer or tracheal collapse.

“Minimally-invasive procedures provided by the IR service have quicker recovery times and require less hospitalization,” Dr. Bartges
said. “In some cases, the procedures are more effective and carry a lower mortality risk. In other situations, an IR procedure may be the only viable treatment option.”

**Selected treatment options currently offered by the IR service include:**

- Nonsurgical (laser) correction of ectopic ureters
- Laser lithotripsy of urinary bladder and urethral stones
- Urinary diversion procedures for managing patients with cancer of the urinary tract
- Non-surgical management of feline lower urinary tract obstruction (when a urinary catheter is not passable by traditional means)
- Alternative treatment for dogs with urinary incontinence not controlled with medical therapy
- Stent placement for collapsed trachea or nasopharyngeal stenosis
- Vascular procedures such as correction of liver blood vessel shunting and palliative treatment of vascular obstructions

For a complete list of available procedures, please visit vet.uga.edu/hospital/IR.

“Our team is excited about helping pets in a whole new way,” Hill said. “Veterinarians can be assured that any patients and clients that they refer to us will receive personalized attention and care in addition to benefiting from the advanced technology we will be offering.”

Veterinarians interested in learning more about this service can contact Drs. Hill or Bartges by calling 706.542.3221.
THIS PAST SUMMER, the Veterinary Teaching Hospital conducted a survey of its small animal referring veterinarians to learn what they think the Hospital is doing well and what areas can be improved upon. The Hospital conducted a similar survey in 2013.

It was great to see that our RDVMs feel the overall client experience at the Hospital has improved since our 2013 survey. This was one of the goals for our new facility, and it is encouraging to know that the changes we have made are having a positive impact.

We are also pleased to report that they once again identified the quality of our medicine as our greatest strength. We also scored above the median for all referral hospitals across the nation (university and private) in the categories of “level of compassion” and “value for fees paid by clients.” (See Table 1.)

Areas that our RDVMs would like to see us improve upon include “communication of specialists” and “updates on patient health/case progress.” Several also mentioned in the comments field that the ability to get cases into a desired service quickly can be frustrating and that sometimes they aren’t sure what services we offer or what the costs are. (See Table 2.)

The Hospital administration is currently evaluating how we can improve in these areas. We are working on streamlining our discharge instruction process, looking into additional ways to provide timely updates, and are hoping to launch an RDVM portal within the next year that should permit our RDVMs easier access to patient medical information.

Additionally, we are working to reduce the referral times in our busy services by adding faculty and staff in those areas and are looking into better ways to keep our RDVMs up-to-date on our pricing information and service offerings.

For those of you who do refer to the Teaching Hospital, please know that we appreciate your support and are thankful for the cases that you allow us to partner with you on. We value your feedback and want to make sure that we are doing all we can to offer the best care possible to you, your clients and your patients.

If you have any questions about the survey, or would like more information about the findings, please contact Cindy Rice, our hospital communications director, at 706.542.3079 or cindyh@uga.edu.
Table 1. Areas where the UGA Veterinary Teaching Hospital leads or is within five points of the average scores for both CVMs and private referral hospitals nationwide. Information based on June 2016 CalPro survey of UGA VTH small animal referring veterinarians.

Table 2. Areas where the average private referral hospital scores were more than 20 points higher than the UGA Veterinary Teaching Hospital’s score. Information based on June 2016 CalPro survey of UGA VTH small animal referring veterinarians.
Hospital creates new CFO position

KYLE MARSHALL joined the UGA Veterinary Teaching Hospital in November to serve as its first chief financial officer. Marshall is responsible for the management of finances and inventory, freeing up the person who previously oversaw those tasks to focus on the Hospital’s operations and personnel.

“The Hospital has grown over the last several years and one person can no longer effectively oversee both the finances and the day-to-day operations of the Hospital,” said Gary M. Baxter, hospital director and associate dean for clinical services. “This new position will enable improved management of both Hospital finances and Hospital operations and personnel, which should equate to improved patient care and client service.”

Marshall joined UGA from Hanger Clinic, formerly known as Atlanta Prosthetics & Orthotics. He started at the company in 2009 as a financial/business analyst and held several roles during his career there, including serving as their associate director of operations. He has extensive experience in contracts, vendor agreements and budgeting.

“We are excited to have Kyle onboard,” Baxter said. “His medical background and financial experience make him a great fit to serve as our CFO.”

AVMA launches clinical trials database for pets, practitioners, investigators

THE AMERICAN VETERINARY MEDICAL ASSOCIATION recently launched a free database to archive nationwide clinical trials across all species and veterinary disciplines. The AVMA’s goal to increase awareness of research is twofold: veterinarians and pet owners can search the database for trials and treatments that might help an ailing animal patient that fits a certain research profile, and researchers can quickly expose their study to a national source of potential clinical trial enrollees.

Dr. Benjamin Brainard, a professor of small animal emergency and critical care medicine at the UGA CVM, helps curate the database by reviewing submitted studies for accuracy before they are published on the site. He says the database will play a crucial role for owners and practitioners looking for innovative treatments and therapies. “Previously, if a study was based at a certain location or university, an owner might not be aware of the study if they did not know to specifically search that location’s website,” said Dr. Brainard. “Using the AVMA database, pet owners and veterinarians can search keywords for a specific species or condition and immediately generate a list of all uploaded studies across the U.S.”

In increasing awareness of clinical trials to potential patients and helping researchers fill study slots, AVMA aims to further promote one of its overarching goals of promoting evidence-based veterinary medicine that improves health and well-being of animals and humans.

AVMA Animal Health Studies Database can be found here: https://ebusiness.avma.org/aahsd/study_search.aspx
HEATHER LINDELL, the assistant manager of the pharmacy at the UGA Veterinary Teaching Hospital, was recently honored by her alma mater, the UGA College of Pharmacy, with a Distinguished Alumna Award.

Lindell has been on staff at the VTH Pharmacy since 1994. She provides pharmaceutical services to clients and teaches continuing education courses to faculty, interns, residents and technicians. She teaches veterinary students about drug information resources, drug regulations and pharmaceutical math.

She also provides educational programming throughout the U.S.—in 2016, she spoke to veterinarians, veterinary technicians, pharmacists and pharmacy technicians in six states. For students enrolled at the UGA COP, she developed an online elective in veterinary pharmacy and an online continuing education certificate class for pharmacists. She teaches other courses at the COP, and she founded the Harold B. “Doc” Hodgson Award to provide scholarship support to pharmacy students at the UGA COP.

“I do this because I think education is important and interprofessional education is important," she said.

Lindell keeps current in her knowledge about medicines for people by working part-time at Northside Hospital Forsyth in Cumming, where she has worked since 1998. She also serves her profession as a Fellow of the Society of Veterinary Hospital Pharmacists, for which she is currently president-elect.

A life-long horse lover and accomplished rider who stays active in the equestrian community, Lindell founded the UGA NCAA Equestrian Booster Club and served as its first president. She also volunteers her time and contributes to support the Cystic Fibrosis Foundation, March of Dimes, Children’s Healthcare of Atlanta, and many other charitable organizations.

Lindell graduated from the UGA College of Pharmacy with a bachelor of science degree in August 1993; in March 1994, she graduated with her doctor of pharmacy degree. She is also a diplomate of the International College of Veterinary Pharmacy.

UGA VTH Pharmacist receives Distinguished Alumna Award

LISA RENO is the CVM’s new clinical research coordinator—a newly created position that launched on Dec. 1.

In her new role, Reno will work to streamline the integration of clinical trials within the day-to-day operations of the UGA Veterinary Teaching Hospital and to facilitate the research needs of the faculty. She will communicate with potential sponsors, referral DVMs and clients in an effort to promote clinical trials at the VTH and to further develop a successful clinical research program.

Reno began working for the CVM in 1996 in the Department of Small Animal Medicine and Surgery, where she was a research technician for Dr. Steve Budsberg for 16 years. In 2012 she transferred roles and became a departmental research technician for the small animal faculty. During her service to the CVM, she has been involved in all facets of research including project planning and organization, data collection and management, and manuscript preparation, for both lab animal research and clinical trials. Since 2005, she has also served as the administrator for the College’s Clinical Research Committee.
UGA VTH now has small animal client care teams

**THE SMALL ANIMAL SIDE** of the UGA Veterinary Teaching Hospital recently switched over to a “client care team” model to handle incoming calls. Our small animal client service representatives are now divided into teams of two that are responsible for all aspects of a patient’s visit based on which service the animal is seeing. This includes taking the referral, scheduling the appointment and acting as a liaison with that service for any follow-up questions or inquiries.

This change has benefited our referring veterinarian community, our clients and our small animal service areas by allowing us to better handle the more than 1,000 calls received weekly, responding to incoming requests more efficiently and quickly. It also allows us to provide continuity of service from the initial referral to the discharge and beyond.

Veterinarians should call 706.542.5362 to make a small animal referral. This will connect them to a directory of services from which they can then select what area of the hospital they are trying to reach. To bypass the directory, please use the below shortcuts.

If you have any questions regarding our new client care teams, or feedback that you would like to share, please contact our hospital communications director Cindy Rice at 706.542.3079 or cindyh@uga.edu.

**Small Animal Hospital Referral Line Shortcuts**

Dial 800.861.7456 or 706.542.5362

If you have an emergency referral, press 1.
For soft tissue surgery, oncology or anesthesia, press 2.
For orthopedics, neurology or rehab, press 3.
For cardiology, internal medicine or ophthalmology, press 4.
For dermatology, exotics or wildlife, press 5.
For medical records, press 6.
For all other inquiries, press 7.
Current clinical trials

THE COLLEGE IS CURRENTLY SEEKING PARTICIPANTS for the clinical trials listed below. If you know of an animal that would be a good fit, please contact us at 706.542.3221. For more information about these trials, visit vet.uga.edu/clinical-trials.

<table>
<thead>
<tr>
<th>What we are looking for</th>
<th>Study description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cats diagnosed with diabetes mellitus for less than 1 week</td>
<td>Study to determine if computed tomography (CT) imaging can predict which cats with diabetes will go into remission</td>
</tr>
<tr>
<td>Cats diagnosed with thromboembolism (blood clot) due to cardiac disease</td>
<td>Study to compare the effectiveness of two different medications for preventing recurrent blood clots in cats</td>
</tr>
<tr>
<td>Cats with cancerous tumors</td>
<td>Study to determine the effectiveness of an adjunct therapy in cats with fibrosarcoma</td>
</tr>
<tr>
<td>Dogs with proteinuria due to chronic kidney disease</td>
<td>Study to determine the effectiveness of a new treatment to reduce urine protein loss in dogs</td>
</tr>
<tr>
<td>Dogs with arthritis of the elbow or knee</td>
<td>Study to assess effectiveness of Tramadol in dogs with naturally occurring arthritis of the elbow or knee</td>
</tr>
<tr>
<td>Dogs with mast cell tumors</td>
<td>Study to evaluate the safety and effectiveness of a new immunotherapy for treatment of cutaneous mast cell tumors in dogs</td>
</tr>
<tr>
<td>Dogs with epileptic seizures</td>
<td>Study evaluating a handheld nerve stimulator for the treatment of refractory seizure activity associated with a diagnosis of canine epilepsy</td>
</tr>
<tr>
<td>Cats with lymphoma</td>
<td>Study to determine the safety and effectiveness of TANOVEA™ for the treatment of cats with lymphoma</td>
</tr>
<tr>
<td>Dogs with glial cell brain tumors</td>
<td>Pilot study to determine the effectiveness of a nano-fiber lined catheter for the reduction of glial cell brain tumors in dogs</td>
</tr>
<tr>
<td>Dogs with brain tumors</td>
<td>Study to determine the effectiveness of a novel chemotherapy delivery system to canine brain tumors</td>
</tr>
<tr>
<td>Horses undergoing surgery for colic</td>
<td>Study to investigate timing of antimicrobial therapy in horses undergoing surgery for colic</td>
</tr>
</tbody>
</table>
I am standing lab-coated, scalpel in hand, staring at an esophagus covered in spikes. They look designed to eviscerate, like accessory teeth that might belong in the terrible maw of a creature from another planet in a science fiction movie. But the animal before me doesn’t have any teeth, just a beak; it is a Kemp’s Ridley sea turtle, and the odd looking papillae that line its esophagus allow it to eject ingested seawater without losing its lunch of mollusks and jellyfish.

Learning the anatomy of the dog and horse leave one only remotely prepared to understand the architecture of marine turtles and the myriad of other aquatic species. The AQUAVET® program is designed to bridge the chasm between terrestrial and aquatic medicine, and to impart in a few weeks what amounts to four semesters worth of information in the veterinary school curriculum.

I arrived in Bristol, Rhode Island, on the irriguous campus of Roger Williams University at the end of May along with 24 other veterinary students and veterinarians from around the world. When I signed up for the summer course known as AQUAVET® I, I had envisioned a camp-like experience. In reality it turned out to be something of a mix between summer camp and boot camp.

Lectures ran from 8 a.m. until 8 or 9 p.m., with brief interludes for meals. And time was still pressed to cover the anatomy and physiology of aquatic phyla, from veligers—the ciliated larvae of bivalves, like oysters—to fish and marine mammals, as well as the etiology, pathology and treatment of their corresponding diseases. This information was presented from a number of perspectives, including the aquaculture of invertebrate and fish species for consumption and the commercial aquarium trade, the maintenance of animals on exhibit in public aquaria, the rescuing and rehabilitation of wildlife, and the care of client-owned animals.
The time in the classroom was punctuated by laboratory time, during which birds, snakes, turtles, fish, squid and caiman were dissected, among other aquatic animals. Fish were also surgerized with the use of apparatuses specially designed to deliver anesthetic-laden water to their gills during the procedure.

More exciting still were the field trips: from jaunts down to Mount Hope Bay to collect invertebrates from the intertidal zone to visits to research institutions and aquaria throughout New England. At the Woods Whole Oceanographic Institution’s Village Campus, on Cape Cod, we necropsied porpoises, dolphins and seals that had stranded on the beaches there the previous season. At the Long Island Aquarium and neighboring Riverhead Foundation for Marine Research & Preservation, we examined penguins under human care, as well as rescued seals that were subsequently released back into the wild. And at the New England and Mystic Aquariums we learned about managing the health of their extensive collections.

For all of the knowledge conveyed, one of the most informative parts of the program for me was to be able to socialize with a cohort of veterinarians who have forged somewhat alternative, yet infinitely interesting careers. The AQUAVET® program employs a constantly changing roster of instructors who are experts in their respective fields, and who are as happy to share the details of their career journeys as they are to share the technical information that they have gained, often over a hard-earned pint at the end of a long day.

As it always does, the time flew by. When the month-long didactic course ended, I bid farewell to my colleagues but remained in Bristol, trading the classroom for the laboratory—the Aquatic Diagnostic Laboratory at Roger Williams. Through research and diagnostic services, the lab supports both Rhode Island’s economically important shellfish fisheries and aquaculture programs, as well as the burgeoning tropical aquaculture program at the university.

Anecdotal data from fishermen, corroborated by scientific dredge surveys, had recently demonstrated an increased frequency of brown, track-like lesions in the ivory adductor muscle of scallops. Scallops—pronounced with an ‘aw’ sound from the back of the mouth in New England (you will be corrected with a sidelong glance for pronouncing it otherwise)—are an important revenue source for the region, and these blemishes made the meat less aesthetically pleasing, although not unsafe for consumption.

Initial studies had discovered larval nematode parasites in the muscle, and it became my task to identify these worms, both morphologically and molecularly. The primary suspect was a species of nematode that spends its larval stages in bivalves and other mollusks before they are consumed by sea turtles. The larvae then attach
AQUAVET® I students enjoy a bike ride along the Shining Sea Bikeway in Falmouth, Mass., during a break from their course work. From left: Lacey Benefiel, from St. George's University School of Veterinary Medicine; Ryan Peiffer, from the UGA College of Veterinary Medicine; Erica Feldman, from Cornell University College of Veterinary Medicine; Renee Lampkin, from the University of Illinois College of Veterinary Medicine; and Eduardo Zappia, from the Università Magna Graecia di Catanzaro Department of Veterinary Medicine, Italy. Photo by Erica Feldman.

Ryan Peiffer performs surgery on a striped bass at Roger Williams University in Bristol, R.I., host site for the AQUAVET® I program. Photo provided by AQUAVET®/by Donald Stremme.

to the esophagus of the turtles between the spiky papillae, where they develop further and migrate down the digestive tract.

I count it as a point of pride that until this point in my academic career, I had been able to avoid almost entirely research that was even remotely molecular. And yet I found myself in possession of nematodes that had been plucked from cold-stranded sea turtles, ill-prepared to identify them and amplify and sequence their DNA. Two months being scant room for a research project of any sort, I spent much of my time learning the taxonomy of nematodes and gaining a practical and technical understanding of polymerase chain reactions (PCR).

The results of my work hold some promise for the development of a quantitative PCR to detect nematode DNA in scallops, although I suspect that the sum of it will prove more valuable to me than the output will to others and to future work. My research, along with the AQUAVET® course, served to reaffirm and deepen my abiding interest in the watery part of the world and the animals that inhabit it, and it is my hope that the program will serve as a foundation upon which to build a career in pursuit of those interests, as it has for so many others.
Laura Burns (DVM 2018), AQUAVET® III

Laura Burns split her 5-week AQUAVET® III course between Atlanta, Athens and Cancun, Mexico.

From the course introduction presented at the Georgia Aquarium, to fish and reptile endoscopy and surgery courses taught at the UGA College of Veterinary Medicine, and down south to Dolphinaris®—the interactive dolphinarium—in Cancun, AQUAVET® III teaches hands-on, collaborative aquatic medicine skills to vet students.

In 2015, Burns founded the UGA student chapter of the World Aquatic Veterinary Medicine Association, so she already had a deep interest in aquatic medicine. Nonetheless, Burns said her 2016 summer experience confirmed her interest in pursuing aquatic medicine and gave her the hands-on experience that is hard to get in other veterinary training settings. This competitive course accepts, on average, only 6 out of 30 applicants.
Laura Burns performs an ultrasound on a bottlenose dolphin at Dolphinaris® in Cozumel, Mexico, as part of her experiential learning through the AQUAVET® program. Photo provided by Laura Burns by Alli Peterson.

Laura Burns scuba dives with a bottlenose dolphin at Dolphinaris® in Cancun, Mexico. Photo provided by Laura Burns.

Laura Burns performs an eye examination on a penguin at the Georgia Aquarium. Photo provided by Donald Stremme by Aquavet®.

Laura Burns participates in behavior training with a beluga whale at the Georgia Aquarium. Photo provided by Aquavet® by Donald Stremme.

Laura Burns performs a physical examination on an eastern river cooter at the Georgia Aquarium. Photo provided by the Georgia Aquarium by Gina Houlditch.
Amanda Morvai (DVM 2018), AQUAVET® I

Amanda Morvai spent AQUAVET® I at Roger Williams University with her UGA classmate Ryan Peiffer.

Most of the month-long course was spent in the classroom learning about aquatic anatomy and common diseases, environmental threats to water-based populations and economics of coastal food animals.

For Morvai, the best part was the hands-on penguin and seal examinations and rescue-sea turtle rehabilitation observation, she said. Though free time was limited in the demanding introductory aquatic veterinary medicine course, students spent spare hours touring New England aquariums and fisheries.
Ryan Peiffer and Amanda Morvai, both students at the UGA CVM, take a ferry to Long Island, N.Y., to visit the Long Island Aquarium, and the Riverhead Foundation for Marine Research & Preservation. Photo provided by Amanda Morvai.

Colorful fish on display at the Long Island Aquarium in a world-renowned reef tank by Joe Yaiullo. Photo by Amanda Morvai.

Katharine Llop, from the University of Minnesota College of Veterinary Medicine, and Amanda Morvai inside the lab at Roger Williams University in Bristol, R.I., host site for AQUAVET® I. Photo provided by Amanda Morvai.
UGA welcomes 114 incoming veterinary students in White Coat Ceremony

THE CVM WELCOMED THE CLASS OF 2020 during its annual White Coat Ceremony held Sunday, Aug. 14. Sponsored by the Georgia Veterinary Medical Association (GVMA) and the South Carolina Association of Veterinarians, this event officially recognized 114 members of the incoming class by donning them in lab coats to be worn during their veterinary education.

The hour-long ceremony was held in the Hodgson Concert Hall at the UGA Performing Arts Center. It was followed by a reception with the students’ families and members of the College’s faculty and staff at the new UGA Veterinary Medical Center.

This class features a wide variety of interests, including: 17 percent interested in small animal medicine; 40 percent interested in mixed-animal medicine; 9 percent interested in zoo animal and wildlife medicine; 11 percent in food animal medicine; 18 percent in public health; 4 percent in equine medicine.

“The white coat ceremony is an academic custom that symbolizes the transition from student to healthcare professional. For us, the white coat itself represents the purity and dedication of veterinarians, one of the world’s most respected professions. Recitation of the Veterinarian’s Oath denotes the beginning of this official journey and is an affirmation by these individuals that they can be trusted to honor the principled traditions of our profession.” said Dr. Scott Brown, the College’s associate dean for academic affairs.
**STUDENT NOTES**

**Mauricio Sequel**, DVM, DACVP received a 2-year grant from the Morris Animal Foundation for his project, “Examining factors driving hookworm deaths in fur seal pups.” Sequel is pursuing a PhD in the Department of Pathology.

**Shawn M. Zimmerman**, DVM, (PhD ’15), DACVP, received a 2-year grant from the Morris Animal Foundation for her project, “Immunity and Pathogenesis of Canine Influenza Virus.” Zimmerman is a postdoctoral research associate in the Department of Infectious Diseases.

**Emily Aston**, DVM, received the Best Student Poster award at the 2016 annual meeting of the American Association of Avian Pathologists. Aston is a PhD student in the Poultry Diagnostic and Research Center.

**Silvia Carnaccini**, DVM, received the Reed Rumsey Award at the 2016 annual meeting of the American Association of Avian Pathologists. Carnaccini is a PhD student in the Poultry Diagnostic and Research Center.

---

**RESIDENTS WHO RECENTLY PASSED SPECIALTY BOARDS**

The following veterinarians recently passed specialty board certification exams. All have served, or currently serve, as residents at our Veterinary Teaching Hospital or studied in specialty areas at the CVM.

- **Andrew Fox**, by the American College of Veterinary Radiology
- **Jarred Williams** (MS ’02, DVM ’06), by the American College of Veterinary Emergency and Critical Care (Large Animal)
- **Rachel Reed**, by the American College of Veterinary Anesthesia and Analgesia
- **Bianca Lourenco**, by the American College of Veterinary Internal Medicine (Small Animal)
- **Selena Lane**, by the American College of Veterinary Emergency and Critical Care
- **Brian Cichocki**, by the American College of Veterinary Ophthalmologists
- **Stephanie Kleine** (DVM ’10), by the American College of Veterinary Anesthesia and Analgesia
- **Rodney Schnellbacher**, by the American College of Zoological Medicine
- **Jessica Mobley Thiman** (DVM ’12), by the American College of Veterinary Internal Medicine (Oncology)
- **Jill Hicks**, by the American College of Veterinary Internal Medicine (Neurology)
- **Lisa Kelly** (DVM ’08), by the American College of Veterinary Pathologists (Clinical Pathology)
- **Lorelei Clarke**, by the American College of Veterinary Pathologists (Anatomic Pathology)
- **Wilson Yau**, by the American College of Veterinary Pathologists (Anatomic Pathology)
- **Betsy Elsmo**, by the American College of Veterinary Pathologists (Anatomic Pathology)
12 recognized for outstanding research at Science of Veterinary Medicine Symposium

THE ANNUAL SCIENCE OF VETERINARY MEDICINE SYMPOSIUM, held in October, featured emerging fields lectures by CVM faculty and a keynote address by Elaine Ostrander, PhD, who is chief of the Cancer Genetics and Comparative Genomics Branch at the National Human Genome Research Institute and an NIH Distinguished Investigator. The highlights of the symposium were the workshop and poster presentations throughout the day by UGA undergraduate students, veterinary students, graduate students, interns and residents. At the close of the symposium, awards were given for the best presentations. (See below for winners.)

The top presenters are featured in our photo. Front row, from left: Harry Dickerson, associate dean for research and graduate affairs; Brina Gorham; Molly Savadelis; Jacqueline Marinoff; Christina Leyson; S. Mark Tompkins, a professor of infectious diseases and the 2017 SVMS faculty director. Back row, from left: Rodrigo Abreu; Allison Haspel; Wendi Bao; Ana Villegas; Emily Aston. Not pictured: Zachary Turner, Anastacia Davis, Silvia Pryor. Photo by Christopher B. Herron.

Best Graduate Student Workshop Presentations
Brina Gorham, resident in large animal internal medicine
Molly Savadelis, PhD student in infectious diseases

Best Intern & Resident Workshop Presentation
Silvia Pryor, resident in ophthalmology

Best Undergraduate & Veterinary Student Workshop Presentations
Allison Haspel, DVM 2019
Zachary Turner, DVM 2018

Best Postdoctoral Fellow Workshop Presentation
Christina Leyson, a PhD student at the Poultry Diagnostic and Research Center

Best Graduate Student Poster Presentations
Rodrigo Abreu, PhD student in infectious diseases
Emily Aston, a PhD student at the Poultry Diagnostic and Research Center
Ana Villegas, an MS student at the Poultry Diagnostic and Research Center

Best Intern, Resident & Postdoctoral Fellow Poster Presentation
Anastacia Davis, postdoctoral research and teaching associate in the Department of Small Animal Medicine and Surgery

Best Undergraduate & Veterinary Student Poster Presentations
Wendi Bao, undergraduate
Jacqueline Marinoff, DVM 2018
WHEN DR. JOHN MCCORMACK RETIRED from UGA in 1996, the major life event opened the door to a new career. Instead of being a full-time large animal veterinarian and academic who enjoyed writing columns on the side, McCormack became a novelist who drew upon his experiences as a veterinarian to pen longer tales for his growing legion of fans.

From writing about serving as the first veterinarian in Choctaw County, Alabama, to carting his kids up and down winding country roads in his pickup truck during farm calls, McCormack weaves tales of deep devotion to his craft and family, with strokes of humor and heart. He found his penchant for storytelling early on in his veterinary career and began writing humorous stories and columns for Hoard's Dairyman magazine and other livestock and veterinary journals. In the late 1980s, Hoard's released two paperback compilations of his popular columns: "Watch for a Cloud of Dust," volumes I and II. By 1995, McCormack was publishing his first hardback, "Fields and Pastures New."

That first novel, which tells of his first year as a country veterinarian in Choctaw County, was excerpted by Readers Digest and translated into 64 languages! And his other books, written at his home in Athens, where he still resides with his wife Jan, have been published outside the U.S. in the Netherlands, China, Russia and beyond.

Being a veterinarian "paid us in ways we didn't know possible," McCormack shared with us when we talked to him about his career for this story. "I was a loved, trusted, respected part of the community. The look on grateful clients' faces was just extraordinary."

His last novel was written in 2009, but remains unpublished. Now 81, McCormack writes poetry for fun and routinely shares his poems with friends and family. Even his poems resound the familiar themes that have inspired his writings for decades: fun tales of animals (especially cows), people, and life in general.
His narrations and tenure as a teacher pivot around the same point: sincerity, devotion to relationships and career, and a dash of humor will go a long way.

“Take it easy and don’t get riled all the time,” he advised, when we talked to him. “And get a sense of humor!” he added with a chuckle.

Alumni who studied under Dr. McCormack might recall him as the professor with a passion for moon pies. After he wrote an article about the art of eating a moon pie while driving, a distributor learned of his story and delivered cases of the graham cracker and marshmallow treats to his house. McCormack set up a cardboard gas station-style display case outside his office and kept it stocked for bleary-eyed students and colleagues in need of a snack. And if he caught you nodding off in his class, he’d throw a moon pie at you. Popular with students, McCormack was asked to give a few commencement addresses throughout his career—and would find himself showered in moon pies, tossed onstage by the graduating class, as he ascended the stage to give his address.

McCormack’s love of life and career has rewarded him over and over again through the years. He received “Most Outstanding Clinician” awards from both UGA (in 1992) and the University of California, Davis (in 1981), where he taught from 1980 through 1981. The Georgia Cattlemen’s Association named him “Veterinarian of the Year” for 1994. And Omega Tau Sigma’s UGA chapter presented him with the Fred Davison Award in 1995.

McCormack grew up on a small farm in Elkton, Tennessee, where he milked cows, raised hogs and chickens, and grew cotton, small grains and hay. Though he has traveled far and wide, given many speeches, trained many veterinarians, and made well a multitude of sick animals throughout his lifetime, he remains a humble and grateful man.

“I’m just an old country boy. I just got a break,” he told us. “The best thing we did was to come over here to Georgia. It was just what I wanted.”
HECTOR CERVANTES, DVM, DACPV, has big plans for his new role as president of the American Association of Avian Pathologists.

As a food animal veterinarian, he advocates for the specific needs of poultry producers and population health. As a teacher and researcher, he recognizes the importance of consumer education and production transparency. While great strides have been made in both the poultry medical and educational fields he says, more work is needed.

“The poultry veterinary community has done a great job in conducting basic and applied research to deal with emerging diseases,” he said, like infectious bronchitis that causes severe respiratory disease in chickens and variant strains of avian reovirus that cause severe lameness in chickens and turkeys resulting in significant mortality losses for poultry producers.

“... the poultry veterinary community has not done as great a job in addressing issues or misconceptions that consumers have about poultry production,” like hormone label confusion, he said. Even though hormones are banned from poultry production, consumers are often confused about marketing and labeling tactics that can mislead them, he said.

Cervantes added that poultry producers and AAAP experts need to work together to correct consumer misconceptions by providing clearer information to the public. Cervantes plans to expand the AAAP’s website (www.aaap.info) to include consumer resources and real-time poultry production video feeds that show current conditions.

Cervantes prides himself on his education and work, and on helping young veterinarians-in-training obtain the same level of expertise he worked hard to obtain and maintain. As an adjunct professor of population health at the University of Georgia’s College of Veterinary Medicine and honorary Master of Avian Medicine from the same college, he thinks it’s important to attract young veterinarians to poultry medicine and give them the tools to become innovators for poultry population health problems, like antibiotic resistance, and build trust with the public.

Serving as the 60th AAAP president, Cervantes is the first from a Spanish-speaking country. Born and raised in Mexico, he knows the importance of worldwide poultry medicine collaboration. Expanding AAAP partnerships across Latin America is an important goal of his presidency, he said.

“We live in a global health and trade world, including poultry,” he said. “By collaborating with poultry veterinary associations in other Latin American countries we will be able to more effectively communicate and monitor exotic diseases like highly pathogenic avian influenza and prevent or more quickly suppress outbreaks in the United States and other countries, which will be beneficial for everyone.”

Embodied by his roles that crisscross the private and public sectors—as an educator at UGA, AAAP president and Senior Manager of Poultry Veterinary Services Phibro Animal Health—Cervantes says devoting his life to veterinary population health is the best decision he ever made.
UGA Veterinarian receives highest honor from regional wildlife agencies

DR. JOHN R. FISCHER, director of the Southeastern Cooperative Wildlife Disease Study (SCWDS), recently received the 2016 C.W. Watson Award from fish and wildlife agencies in the Southeast. This is the highest award presented by the Southeastern Association of Fish and Wildlife Agencies (SEAFWA), which is a consortium of state agencies that have the primary responsibility for management and protection of the fish and wildlife resources in 15 states, Puerto Rico and the United States Virgin Islands.

“Dr. Fischer’s extensive research and associated wildlife disease experience, which spans more than 25 years, has been critical to informing state fish and wildlife agency conservation strategies for decades,” said Gordon Myers, SEAFWA president. “His knowledge, understanding of the state and federal wildlife management systems, and ability to bring people to consensus on often divisive issues have enabled him to contribute immensely to the conservation of fish and wildlife worldwide.”

Dr. Fischer has worked with SCWDS for 24 years and has led the group for more than 16 years. Founded in 1957 to help monitor the health of wildlife populations and provide expertise on diseases, SCWDS is based within the College of Veterinary Medicine’s Department of Population Health.

The C.W. Watson award is presented to the individual who, in the opinion of the Award Committee, has made the greatest contribution to wildlife or fish conservation during the previous year or years. It is presented jointly by the Southern Division of the American Fisheries Society, the Southeastern Section of the Wildlife Society, and the Southeastern Association of Fish and Wildlife Agencies.
Andrew R. Moorhead, DVM, MS, PhD, an associate research scientist and parasitologist at the University of Georgia College of Veterinary Medicine, was elected to the board of directors for the American Heartworm Society during the Society’s recent 2016 Triennial Symposium.

Dr. Moorhead serves as the director and principal investigator for the Filariasis Research Reagent Resource Center (FR3) (www.filariasiscenter.org), which is funded by the National Institute of Allergy and Infectious Diseases and housed at UGA. The FR3 provides filarial parasites to researchers throughout North America who are involved in the quest to further scientific understanding of heartworm disease.

The AHS, founded in 1974, aims to further scientific knowledge of heartworm disease, inform its members and the veterinary community of new developments, and to encourage and promote effective procedures for the diagnosis, treatment and prevention of heartworm disease.

In addition to his service as director and PI for the FR3, Dr. Moorhead teaches parasitology courses at the CVM. He joined the College in 2008 and is based in the Department of Infectious Diseases.
FOUR MEMBERS of the Poultry Diagnostic and Research Center faculty were recognized with awards or honors at the 2016 meeting of the American Association of Avian Pathologists.

Three were inducted into the AAAP’s newly formed Hall of Honor: Charles Hofacre, DVM, MS, (MAM ’85, PhD ’92); John R. Glisson (DVM ’80, MAM ’83, PhD ’85) and Stanley H. Kleven, DVM, PhD, DACVM, DACPV. Drs. Glisson and Kleven are retired.

Dr. Hofacre, a professor of avian medicine and director of clinical services for PDRC, also received the Phibro Animal Health Excellence in Poultry Research Award and was honored for his years of service as the association’s executive vice president, a role he will vacate later this year. Dr. Glisson, a professor emeritus, retired as head of PDRC and the Department of Population Health in 2011; he is currently the vice president of research programs for the U.S. Poultry & Egg Association. Dr. Kleven is a Regents’ Professor Emeritus on the PDRC faculty.

In addition, Brian Jordan, (PhD ’12) received the Bayer-Snoeyenbos New Investigator Award, presented to researchers whose careers began within the last seven years. Dr. Jordan is an assistant professor jointly appointed to PDRC and the Poultry Science Department in the College of Agriculture and Environmental Sciences.

John and Jeanne Capozzi, who retired to Savannah from New Jersey, are bequeathing a portion of their estate to the UGA College of Veterinary Medicine. Both animal lovers, the Capozzis have earmarked a good portion of their gift for scholarships to help educate future veterinarians. They have also been giving two annual scholarships since 2002. "Our relationship with UGA, and especially the College of Veterinary Medicine, has been such a positive one," the couple said. "All the staff and students are outstanding. It has been a very satisfying experience, one in which we feel we have received so much more than we have given."
**Doris Miller**, (DVM ’76, MS ’79, PhD ’81), DACVP, received the 2016 Dobbins Mahaffey Advocacy Award from the Georgia Veterinary Medical Association. Since 2007, Dr. Miller has served as the associate director of state government relations for the UGA CVM and works closely with the CVM leadership and state officials on matters involving state government. She also serves as a liaison with the Georgia Department of Agriculture and the GVMA and serves on the GVMA Advocacy Committee. Dr. Miller is a professor of anatomic pathology in the Department of Pathology and is based in the Athens Veterinary Diagnostic Laboratory.

**Eric Mueller**, DVM, (PhD ’96), DACVS, is president-elect of the American College of Veterinary Surgeons and will become president of ACVS in October. Dr. Mueller is a professor of large animal medicine and surgery, and a chief medical officer for the UGA Veterinary Teaching Hospital.

**Gary Baxter**, VMD, (MS ’88), DACVS, is serving as chair of the ACVS Board of Regents through October 2017. Dr. Baxter is director of the UGA Veterinary Teaching Hospital and the CVM’s associate dean for clinical services.

**Ray M. Kaplan**, DVM, PhD, DACVM, DEVPC, received a Federal Laboratory Consortium Southeast Region 2016 Excellence in Technology Transfer Award for “Technology to Aid in the Control of Internal Parasites in Sheep and Goats.” The award was presented by the USDA Agricultural Research Service’s Dale Bumpers Small Farms Research Center. Dr. Kaplan is a professor of parasitology in the Department of Infectious Diseases.

**Joerg Mayer**, DVM, MS, DABVP (ECM), DECZM (Small mammal), DACZM, received the 2016 Oxbow Exotic Mammal Health Award, presented annually for recognition of excellence and innovation in the field of exotic mammal medicine and care. Dr. Mayer is an associate professor of zoological medicine in the Department of Small Animal Medicine and Surgery.

**Susan M. Williams**, DVM, PhD, DACVP, is the new co-director of the Georgia Veterinary Scholars Program. Dr. Williams is an associate professor in the Poultry Diagnostic and Research Center.

**Tina Meichner**, DVM, DECVM-CA (Oncology), recently became board–certified in clinical pathology by the American College of Veterinary Pathologists. Dr. Meichner is an assistant professor in the Department of Pathology.

**Jarred Williams** (MS ’02, DVM ’06), PhD, DACVS (Large Animal), recently became board–certified by the American College of Veterinary Emergency and Critical Care (Large Animal). Dr. Williams is a clinical assistant professor of large animal emergency medicine in the Department of Large Animal Medicine.

**Rachel Reed**, DVM, recently became board–certified by the American College of Veterinary Anesthesia and Analgesia. Dr. Reed is a clinical assistant professor of anesthesia in the Department of Large Animal Medicine.

**Selena Lane**, DVM, recently became board–certified by the American College of Veterinary Emergency and Critical Care. Dr. Lane is a clinical assistant professor of emergency and critical care in the Department of Small Animal Medicine and Surgery.
NEW FACULTY

**Department of Small Animal Medicine and Surgery:**

**Joe Bartges** (DVM '87), PhD, DACVIM, DACVN, professor of small animal internal medicine and nutrition

**Janet Grimes** (DVM '10), MS, DACVS (Small Animal), assistant professor of soft tissue surgery

**Renee Barber**, DVM, (PhD '11), assistant professor of neurology

**Travis Laver**, VMD, PhD, assistant professor of oncology

**Mandy Wallace**, DVM, MS, assistant professor of small animal general surgery

**Selena Lane**, DVM, DACVECC, assistant professor of small animal emergency and critical care

**Tracy Hill**, DVM, DACVIM, PhD, MRCVS, DECVIM–CA, assistant professor of small animal internal medicine

**Sarah Czerwinski**, DVM, clinical assistant professor of ophthalmology

**Department of Large Animal Medicine:**

**Clare Ryan**, DVM, PhD, DACVIM, assistant professor or internal medicine

**Rachel Reed**, DVM, DACVAA, clinical assistant professor of anesthesiology

**Department of Infectious Diseases:**

**Karen Norris**, PhD, professor, Georgia Research Alliance Eminent Scholar and Wheatley Chair of Immunology; Center for Vaccines and Immunology

**Dennis Kyle**, PhD, professor, GRA Eminent Scholar in Antiparasitic Drug Discovery; jointly appointed to the Department of Cellular Biology in the Franklin College of Arts and Sciences

**Department of Pathology:**

**Kristina Meichner**, DVM, DECVIM (Oncology), DACVP (Clinical Pathology), assistant professor of clinical pathology

**Department of Population Health:**

**Brandy Burgess**, DVM, MSc, PhD, DACVIM (Large Animal), DACVPM, assistant professor of epidemiology, jointly appointed to the Poultry Diagnostic and Research Center and the Food Animal Health and Management Program

**Daniela de Souza Rajao**, DVM, MSc, PhD, assistant professor of virology, Poultry Diagnostic and Research Center
TEN UGA CVM ALUMNI, all current or former members of the U.S. military, attended the formal dedication of a statue commemorating the U.S. Army Veterinary Corps; the ceremony was held in August during the AVMA’s 2016 convention in San Antonio, Texas. The statue was installed at the U.S. Army Medical Department Museum at Ft. Sam Houston and unveiled last June during the Corps’ centennial celebrations. UGA alumni who attended the formal dedication, from left: Marlaina Nelson (DVM '13); David Swayne, DVM (PhD '87); John Smith (DVM ’75, MS ’83, MAM ’91); Gary Brown (DVM ’84); Jenny Munhofen (MS ’12, DVM ’16); Anna Maria Travis (DVM ’13); Larry Corry (DVM ’66); Michael Topper (DVM ’80, PhD ’97); Stic Harris (DVM ’09) and Melissa Dugan (DVM ’12). Kimberly Topper, wife of Dr. Topper, is also pictured with the group. Photo provided by the AVMA/by Scott Nolen.

GET YOUR OWN ANATOMIC DOG

For details, call our Office for Veterinary External Affairs 706.542.1807
C. Carter Black, III (DVM ’68) received the J. T. Mercer Lifetime Achievement Award from the GVMA. Dr. Black is currently serving on the Georgia Agriculture Commodity Commission for Equine. His lengthy service to Georgia includes serving as its state veterinarian.

Michael Topper (DVM ’80, PhD ’97), DACVP, was elected president-elect of the American Veterinary Medical Association during its 2016 convention. Dr. Topper will become president of the AVMA at its 2017 convention, to be held in Indianapolis, Indiana, in July.

Michael Younker (DVM ’82) was named the 2016 Veterinarian of the Year by the GVMA. Dr. Younker is a co-founder of the Fayette Veterinary Medical Center in Fayetteville, Georgia.

Lynn Bahr (DVM ’91) is one of eight committee members serving on the Pet Professional Guild’s Cat Committee. Dr. Bahr is a practitioner at the Cat Clinic of Roswell, Georgia.

Four UGA CVM alumni made the 2017 UGA Bulldog 100 list, which honors the fastest-growing businesses owned or operated by UGA alumni:

- **Rebecca Babcock** (DVM ’98), **Karen Donovan** (DVM ’04) and **Ella Scholz** (DVM ’92), all practitioners at Red Barn Veterinary Hospital, located in Dahlonega, Georgia. (No. 49)

- And, **Jason Eisele** (DVM ’02), of Specialized Veterinary Services, located in Ft. Myers, Florida. (No. 7)

Tim Loonam (DVM ’00) is featured in several chapters of a book released in 2016, titled “Farewell to Football? An American Fan’s Examination of Conscience,” written by Steven Liparulo. Dr. Loonam is a mixed-animal practitioner at Grace Animal Hospital and Pet Lodge in Lexington, South Carolina.

Stephan Schaefbauer (DVM ’06) was named to the UGA 40 Under 40 Class of 2016, which recognizes outstanding UGA alumni under the age of 40. Dr. Schaefbauer is assistant director of the USDA–APHIS office based in St. Paul, Minnesota. In March 2016, Dr. Schaefbauer received the UGA CVM alumni association’s Young Achiever award.

Caitriona Matthews (DVM ’09) received the 2016 Clare B. Reagan Recent Graduate Award from the Georgia Veterinary Medical Association. Dr. Matthews is a small animal practitioner at Weems Road Animal Hospital in Columbus, Georgia.

### Obituaries

- **Walter C. Cottingham** (DVM ’61); Kingstree, S.C.; Jul. 25
- **David E. Rogers** (DVM ’78); Atlanta, Ga.; Aug. 13
- **William P. Knox** (DVM ’59); Seaford, Va.; Aug. 17
- **Sharon M. Zygmont** (MS ’81); New Hartford, Conn.; Aug. 22
- **John W. Sample** (DVM ’58); Charleston, S.C.; Sept. 2
- **Henry A. Brubaker** (DVM ’64); Comer, Ga.; Oct. 9
- **David H. Mobley** (DVM ’65); New Smyrna, Fla.; Oct. 15
- **Bobby J. Herlovich** (DVM ’58); Preston, Ga.; Nov. 20
- **Michael Fusco** (DVM ’77); Miami, Fla.; Nov. 24
- **James E. McClellan** (DVM ’55); Frederick, Md; Nov. 26
- **Don M. Witherspoon** (DVM ’59, PhD ’70); Eden Prairie, Minn.; Nov. 29
- **Arthur L. Dorminy** (DVM ’50); Ocilla, Ga.; Dec. 3
- **Deborah F. Talkington** (DVM ’80); Decatur, Ga.; Dec. 5
- **Michel Y. Carr** (PhD ’93), Ames, Iowa; Dec. 10
- **Charles G. Sims** (DVM ’52); Browns Summit, N.C.; Dec. 16
- **James D. Tanner** (DVM ’60); Alpharetta, Ga.; Dec. 28
- **Edwin C. Anderson** (DVM ’61); Simpsonville, S.C.; Jan. 1
Alumnus Dr. Marko Stejskal returns to Croatia to teach

by Taylor Gordy

Croatian veterinary surgeon Marko Stejskal, DVM, PhD, recently completed his residency at the UGA College of Veterinary Medicine and became board-certified by the American College of Veterinary Surgeons—thanks in part to a long-standing fund that supports academic exchange and collaboration between UGA and institutions in Croatia. Now he’s a senior assistant in the Surgery, Orthopedics and Ophthalmology Clinic in the Faculty of Veterinary Medicine at the University of Zagreb.

Dr. Stejskal was born and raised in Zagreb and completed his undergraduate and veterinary medical studies at the University of Zagreb. He says he was inspired to pursue higher education by his grandfather, who was one of the first veterinary parasitologists in the region. Looking back on his own desire to pursue a career in veterinary medicine, Dr. Stejskal says, “I don’t remember dreaming of being anything else.”

Before he had heard of the University of Georgia, Dr. Stejskal had the opportunity in 1998 to visit the U.S. through the International Veterinary Students’ Association. This experience opened his mind to the possibility of completing a residency outside of his home country. However, programs across Europe were full years in advance. The American College of Veterinary Surgeons is an older and larger college than its European counterpart, the ECVS, and as a result, most of the residency opportunities are in the U.S.

In 2010, Dr. Sheila W. Allen, then dean of UGA’s veterinary college, visited the University of Zagreb with a delegation of other faculty and administrators from UGA; on this trip, she met Dr. Stejskal. She was impressed by his institution’s desire to further advance veterinary services in Croatia through the development of specialty training. In order to provide specialty training for veterinarians, the faculty members must be board-certified specialists themselves.

Dr. Allen worked with Dražen Matičić, deputy head of the clinic, and other administrators at the University of Zagreb to allow Dr. Stejskal to pursue specialty training—a residency in surgery at UGA which began in 2012, supported by the UGA–Croatian Program Support Fund. There was an adjustment period for Dr. Stejskal after he arrived in Athens.

“At the beginning times were hard, but it never crossed my mind that I should give up,” he says. “There were many sleepless nights.” However, he quickly developed friendships with the people he worked with on night shifts and in the emergency room at the Veterinary Teaching Hospital.

“Those are the people that I heavily relied on, mostly my fellow residents,” he says. “I certainly made some meaningful friendships while I was there.”

At the UGA CVM, surgical residents must participate in faculty-led research and publish a paper prior to taking their board certification examinations. Dr. Stejskal worked with veterinary orthopedic surgeon Steve Budsberg, DVM, MS, DAVCS, on the topic of gait analysis in dogs at a trot.

“I could not do gait analysis here in Zagreb because we do not have the facility and instrumentation to do that,” says Dr. Stejskal. “UGA’s equipment spoiled me.”

His time at UGA exposed him to an entirely new set of possibilities than what was available to him in Croatia. The residency program with the UGA CVM is intensive and challenging, but he says he was “surrounded and taught by the best of the best.” One of his most memorable cases dealt with a dog
named Thor that was struck by a truck. Thor was badly injured and required intensive care in the Veterinary Teaching Hospital. Though he is not usually one to become overzealous about how “cute” his patients are, Stejskal formed an attachment to Thor.

“When you have a high-intensity case like this, you have to avoid getting too involved with just that one case,” he says. “You also have 10 or 15 other animals to care for.” In the end, Thor was released from the hospital after five weeks of recovery and today is enjoying a good life with his owners.

On the last day of his residency, Dr. Stejskal felt an overwhelming sense of accomplishment.

“I could not be happier with the program and my experience there. It was hard for me to leave,” he says. “My big hope is that we [University of Zagreb] will continue to collaborate with UGA.”
AMANDA PERRY (DVM ‘97) practices veterinary medicine today because of scholarships she was awarded two decades ago. She gives back to the College of Veterinary Medicine because receiving student aid from the same college enabled her to become the vet she is today.

“Scholarships help students focus on what they need to learn and concentrate on becoming a vet, rather than worrying about student debt,” Perry said.

Perry says the student aid she received helped alleviate her future financial burden that weighs many students down. The workload is challenging enough on its own, she said, and students don’t need additional burdens competing with their success. Knowing that she has lessened that worry for even one student working towards a veterinary career makes her donations worthwhile.

Perry owns Pineywoods Veterinary Hospital, a small animal practice in Valdosta, Ga., named after her family’s seven-generation farm. Her family has long ties to the University of Georgia, and her parents instilled the importance of giving back early on. “We’ve always been blessed by others’ generosity, and we want to pass that blessing on,” she said.

It’s also important to Perry that she’s donating to an institution that she relies on for referral services, too. Perry refers patients to the Veterinary Teaching Hospital and relies not only on hospital staff’s expertise as a resource for own practice, but also on the institution that cares for her patients who don’t have anywhere else to go, she said.

“We don’t have a referral hospital in South Georgia,” said Perry. “So it’s important to have the Teaching Hospital as a referral option for patients who need very specialized care.”

Perry says donations are critical to help the CVM remain a competitive trainer of future veterinarians. “As we’re losing vets in rural areas, we need to improve and keep up with new techniques at our institutions and prepare vets to be as efficient as possible,” she said. “If we keep our vet schools cutting edge, we keep our vets coming out cutting edge.”

Perry tries to inspire her friends and family to give to UGA as well, and every little bit helps, she says. Knowing one vet student is better prepared to face financial challenges or medical cases makes giving back worthwhile to her. From your local region to the state, and through the veterinary community at large, she said, “Giving comes back to me tenfold in other ways.”
UPCOMING EVENTS

April 7  Annual Open House at the UGA CVM
April 13  Phi Zeta Ceremony
April 21  Honors and Awards Banquet
May 6    CVM Graduation (ticket required)
June 11–14  Southeast Veterinary Conference (SCAV meeting)
June 11–17  VetCAMP
June 28–July 2  Emerald Coast Veterinary Conference (GVMA annual meeting)
July 1    UGA Alumni Reception (GVMA annual meeting)
July 21–25  AVMA Annual Convention (Indianapolis, Indiana)
July 21    UGA Alumni Reception (AVMA Annual Conference)

CONTINUING EDUCATION COURSES

CE dates and topics are subject to change. Questions about CE? Contact Melissa Kilpatrick at melissak@uga.edu or 706.542.1451, or online at www.vet.uga.edu/ce

March 24–25  54th Annual Veterinary Conference & Alumni Weekend
March 25    Veterinary Technician Conference
April 29–30  Ultrastructural Pathology
July 29–30   Small Animal GI Endoscopy
August 19   Pathology - Dlab
September 9–10  Small Animal Surgery
September 30–Oct. 1  Advanced Laparoscopic/Thorascopic Surgery
October 21  Fall GVTTAA Veterinary Technician Conference

This publication is paid for by private donations and printed on partially recycled paper. It is available online at vet.uga.edu. For future mailings, if you would prefer to receive our Aesculapian or Annual Report electronically, please email us at vetnews@uga.edu and tell us what email address you would like us to notify when the publication goes online. Thank you for your support of the UGA College of Veterinary Medicine.