Forewords from the Head

Dear DoCS:

With the Holiday Season coming up, I want to be able to look back at the prior year and think about 2022 with as much optimism as possible. I know what a struggle it has been managing the Hospital services during the pandemic, and I know this will continue to be challenging. I also know that it doesn’t help to pretend that everything is back to normal – but there are some things happening that suggest we are at the beginning of the end. The Hospital has put a great deal of energy into raising salaries, and although this is an imperfect solution for our current staff, we are starting to see more applications. We have also done remarkably well recruiting faculty from as far away as Brazil, which I hope is a sign that international recruiting is becoming more possible for difficult to find specialists. We have candidates we are trying to fly in from France and New Zealand next year, and we continue to be a highly sought-after CVM within the United States. For 2022, we will continue to recruit and retain faculty and staff as aggressively as possible. Along with the DoCS staff, we work almost daily with Human Resources to try to move things forward. I truly admire the loyalty and tremendous effort of the whole DoCS community, which has put us in a strong position for 2022. Practice plan receipts are increasing, and I will be dispersing funding to the faculty as we anticipate the possibility of more conference travel in 2022. For the retreat in January, we will focus on teaching. I have invited Dr. Jennie Hodgson, Associate Academic Dean at Virginia Tech, to talk to us about her experience with recent curricular overhaul, as we prepare to do the same. We will all have input in what ‘prototypes’ of a new curriculum we prefer, and how this might affect our teaching effort. Dr. Eleanor Hawkins has worked incredibly hard to document what DoCS faculty currently teach, which will help us gauge the level of activity with a new curriculum – keeping in mind this is not supposed to be more teaching, but rather a more cohesive delivery of education to our students. As part of this effort, we have begun to recruit Teaching Track faculty in our Department, and in others, particularly for foundational courses and clinical skills labs. Our research effort keeps gaining in strength, as you will see from the many publications and projects listed in this newsletter. Our Department continues to excel in clinically applicable scientific discovery. DoCS just reached 80 faculty, which I couldn’t possibly manage without Eva, Joy, and Justine as well as our tireless Assistant Department Heads. I sincerely hope everyone gets a break as we end the year, and I wish everyone all the best for the holiday season and the New Year.

-- Anthony
Faculty & Staff Updates

New Employees
- Vanessa Roman transitioned to a Research Specialist in the Cardiology Lab on June 21, 2021.
- Dr. Ina Herrmann was hired as an Assistant Professor of Dermatology on June 25, 2021.
- Chance Liedig was hired as a Research Specialist in the Intracellular Pathogens Research Lab on June 28, 2021.
- Christine Whitley transitioned into a Research Specialist in Dr. Natasha Olby’s Lab on July 12, 2021.
- Michael Karounos was hired as a Research Technician in the Vector Borne Disease & Diagnostic Lab on July 12, 2021.
- Jonathan Lucas was hired as a Research Technician in Dr. Tal Ben-Horin’s Lab on July 27, 2021.
- Dr. Kursten Pierce was hired as an Assistant Professor of Cardiology on August 23, 2021.
- Dr. Karen Park was hired as an Assistant Professor of Small Animal Soft Tissue and Oncologic Surgery on September 27, 2021.
- Dr. Chie Tamamoto-Mochizuki started her new role as a postdoctoral research associate in Drs. Santosh Mishra’s and Petra Bizikova’s Labs on September 27, 2021.
- Ariana Antezena was hired as a Research Technician in Dr. Annie Oh’s Lab on November 1, 2021.

Departing Faculty and Staff
- Dr. Sarah Townsend – June 30, 2021
- Dr. Lizette Hardie retired on July 1, 2021
- Stephen Stauffer – August 6, 2021
- Jon Hash – August 6, 2021
- Dr. Betta Breuhaus will be retiring on December 31, 2021

Faculty Recruitment Updates
- Dr. Fernanda Lopes Kubitza has accepted an offer as an Assistant Clinical Professor of Veterinary Dentistry and Oral Surgery and her start date is pending.
- Dr. Greg Wilkerson is starting as an Associate Research Professor of Pathology and Infectious Disease on January 24, 2022. We have a finalist for an Assistant Research Professor of Pathology and Infectious Disease position if anticipated grant funding is secured.
- We are currently in negotiations with the final candidate for the Equine Internal Medicine position.
- We are in the process of recruiting for faculty positions in Small Animal Soft Tissue and Oncologic Surgery, Equine Orthopedic Surgery, Small Animal Orthopedic Surgery, Small Animal Internal Medicine, and Clinical and Surgical Skills.

Awards/Congratulations

Dr. Adam Birkenheuer received the Andy Quattlebaum Distinguished Chair of Infectious Disease Research.

Dr. Megan Burke passed the ECC boards and is now a diplomate of ACVECC.

Dr. Greg Lewbart was elected as the 2021 Fellow of the Year for the World Aquatic Veterinary Medical Association.
Dr. Greg Lewbart was accepted into the NC State Global Education Institute.

Dr. Kathy Lunn received the 2021 Academy of Educators' Faculty Educator Award.

Dr. Kate Meurs, Senior Associate Dean for Research and Graduate Studies, was named the Interim Dean of the CVM. Dr. Meurs begins her term as Interim Dean on January 18, 2022.

Dr. Shelly Vaden was appointed to the International Renal Interest Society Management Board in October.

Dr. Amanda Ziegler awarded Poster of Distinction at the FASEB Gastrointestinal Tract XIX Conference, Aug 3-4 2021.

---

**Grants Received**

Drs. Ed Breitschwerdt and Ricardo Maggi are part of a new Bartonella Research Consortium, established through a four-year, $4.8 million grant from The Steven & Alexandra Cohen Foundation.

Schnabel LV, Duffy DJ, Fisher MB. 2021 NCSU CVM Research Equipment and Service Contract Grant. Awarded $75,000.


Olby NJ, Gruen ME. The effect of combined senolytic and NaR supplementation on activity and attention in aging dogs. Funded by Animal Biosciences for $451,044.

Qurollo BA (PI), Nolan M (Co-I), Maggi R (Co-I). Enhanced detection and characterization of Spotted Fever Group Rickettsia species in dogs and ticks with focus on a novel Rickettsia species infecting clinically ill dogs in the US. AKC-CHF. $68,524.

Schnabel LS. Evaluation of stability and safety of platelet-like-particles for treating bleeding after trauma. NIH (NHLBI); R41HL15676301 (Selsym Biotech, Inc.) 2021-2022; $256,072.

Fisher (PI), Schnabel (Co-I). Using 3D nonwovens fabrication to engineer region-specific extracellular matrix structure and
bioactivity of the knee meniscus NIH (NIAMS); R01AR078245-01A1. 2021-2026. $3,021,270.

Abstracts, Books, Papers Published and Accomplishments

https://doi.org/10.1111/jvim.16100

https://doi.org/10.1111/vde.12982

https://doi.org/10.1371/journal.pone.0250165

https://dx.doi.org/10.3390%2Fpathogens10030354

https://doi.org/10.1002/ccr3.4512

https://doi.org/10.1111/age.13074

https://doi.org/10.2460/javma.20.05.0291

https://doi.org/10.1111/vsu.13653


Hammond S, Kedrowicz AA. (In Press). Exploring the impact of team training on team experience and effectiveness among first year DVM students. Journal of Veterinary Medical Education.


Gupta A, Chiavaccini L, Minnema LM, Chiu KW, Knazovicky D, Hash JA, Mishra SK, Lascelles BDX. Serum artemin is not correlated with sensitivity within dogs with naturally occurring osteoarthritis pain. Scientific Reports. 23 March 2021. 11, Article number: 6682. https://doi.org/10.1038/s41598-021-85976-y


Wolf J, Law J, Lynch AM. Non-cardiogenic pulmonary oedema and multisystemic haemorrhage secondary to an accidental intravenous injection of melarsomine in a dog. Veterinary Record Case Reports. (early view)


6


---

**In the News**

Adjusting pets to life after COVID-19 quarantine with [Dr. Margaret Gruen](https://www.exoticvets.org/). The exotics team provided medical care for an abandoned bear cub.

[Dr. Tara Harrison](https://www.wral.com/) spoke to WRAL about wolf-German shepherd hybrids that were on the loose in Orange County.

Why are coyotes in the Raleigh area? [Dr. Tara Harrison](https://www.wral.com/) provided insight.

[Dr. Greg Lewbart’s Research Connection](https://www.favafrica.com/).
DVM student, Emi Retter and Dr. Greg Lewbart’s Research Connection

Dr. Greg Lewbart is part of a team back at work protecting sea turtles and other native species in the Galapagos.

Dr. Greg Lewbart spoke with ABC11 about Raleigh’s escaped zebra cobra.

Dr. Greg Lewbart shares some important information and safety tips about living with snakes in North Carolina.

Feeling the heat: Dr. Steve Marks offers tips for keeping pets healthy and safe this summer.

Drs. Valery Scharf and Kenny Carroll’s Research Connection

Something to ‘shell-elebrate’. Student-led group helping rehabilitate North Carolina’s turtles.

Staff, Post-doc, Graduate Student & Resident News

Emily Hellstrom, DVM has been awarded the 2021 AAEP EQUUS Foundation Research Fellow Scholarship (only one per year, prestigious national award!)

Emily Hellstrom, DVM (CBS PhD Candidate) and Kayla Harrower (Comparative GI Lab Undergraduate Research Assistant) each received a Trainee Award from the Federation of American Societies for Experimental Biology (FASEB) Gastrointestinal Tract Conference XIX which was Aug 3-4 2021.

Dr. Drew Koch PhD student and T32 Fellow received the AAEP Past Presidents’ Research Fellow from The Foundation for the Horse.

Dr. Anna McManamey was a 2021 ACVIM resident research abstract award winner for her ePoster on Population Pharmacokinetics of Oral Pimobendan and its Metabolite in Dogs with Myxomatous Mitral Valve Degeneration.

Elizabeth Rose passed DACVP boards in August and is now Elizabeth Rose DVM, DACVP (PhD Candidate in CBS program).

Dr. Katharine Russell is a veterinarian with an interest clinical neurology. She joined the Olby Lab as a research intern and is running studies on frailty and a new clinical trial on supplements for healthy aging.

Brittany Thomas was promoted to Research Specialist and Manager of the Vector-borne Disease Diagnostic Laboratory (VBDDL).

Who Am I

Ariana Antezana, Research Technician

Ariana graduated from Wake Forest University in May 2020 with a B.S in Biology and a double minor in Chemistry and Health Policy & Administration. The past year she worked at an emergency animal hospital in Charlotte, NC as a veterinary technician and then moved to Peru to be close to extended family. In her spare time, she enjoys baking, traveling, and spending time with her cat, Jellybean.
Dr. Ina Herrmann, Assistant Professor of Dermatology
Dr. Ina Herrmann is from Germany and went to the University of Veterinary Medicine in Vienna, Austria. Following graduation, she completed a three-year postgraduate doctorate program in Comparative Medicine at the Messerli Research Institute in Vienna. She also worked in the Veterinary Teaching Hospital where she found her passion for student teaching. She visited NCSU in 2016 for a three-month externship to work in the Bäumer lab and to visit the Dermatology Service. She became part of the Dermatology team a year later as a dermatology intern and stayed on for her residency. While not at work, Dr. Herrmann enjoys traveling, visiting family and friends around the world, hiking, and climbing. She does not appreciate being close to snakes or pineapples. Dr. Herrmann shares her home with her partner, David, and their two cats Kevin and Carolina Käsebrot.

Chance Liedig, Research Specialist
Chance graduated from Baylor University with a bachelor's of science in Biochemistry and later graduated from Tulane School of Public Health and Tropical Medicine with a master's of science in Tropical Medicine. His master's thesis involved testing optimal feeding angles for lab-adapted mosquitoes. In his spare time, he enjoys hiking, video games and sports.

Jonathan Lucas, Research Technician
Jonathan joined our department on July 27th as a shellfish pathology technician. He received his Master's degree from the University of North Carolina at Chapel Hill, and his Bachelor's degree from Bryan College. He has worked for the Maryland Department of Natural Resources, and is a U.S. Marine Corps veteran. In his spare time he enjoys spending time with his family, boating, fishing, and exploring the coastal waters of eastern North Carolina.
Dr. Karen Park, Assistant Professor of Small Animal Soft Tissue and Oncologic Surgery
Dr. Park grew up in Fairfax, Virginia with her family. She received her BS from Virginia Tech and her DVM from NC State. Following graduation, she completed a small animal rotating internship at UGA and continued on to UC Davis where she recently completed her small animal surgery residency. Dr. Park is excited to be back with the Wolfpack and the CVM family. Outside of work, she enjoys spending time with family and friends and hiking with her dogs (Darci and Bingley).

Dr. Kursten Pierce, Assistant Professor of Cardiology
Dr. Pierce received her veterinary degree from Western University of Health Sciences in California. She completed a one year small animal rotating internship at Angell Animal Medical Center in Boston, MA followed by a cardiology residency at Tufts University. After residency, she worked in private practice for a few years prior to completing a 2 year interventional cardiology fellowship at Colorado State University. She stayed at CSU for an additional year as an adjunct professor in cardiology prior to arriving at NCSU. Outside of work, Dr. Pierce enjoys hiking, fly fishing, traveling, and spending time with friends and family.

Vanessa Roman, Research Specialist
Vanessa graduated from a Veterinary Technical program in Georgia 2009, but started off as a kennel assistant in 2005. She has worked in multiple General practices and specialty practices throughout her career. In her free time, she enjoys spending time with her daughter and doing anything outdoors / sports related. Vanessa shares her home with 2-leopard geckos, 3-dogs, a bird, multiple fish and butterflies!
Dr. Chie Tamamoto-Mochizuki, Postdoctoral Research Associate

After graduating from the Veterinary School of Obihiro University of Agriculture and Veterinary Medicine in Japan in 2007, Dr. Tamamoto-Mochizuki underwent an internal medicine internship for two years, followed by a dermatology/oncology residency for two years at the University of Tokyo in Japan. She had further clinical training at North Carolina State University as an alternative route resident of Asian College of Veterinary Dermatology (AiCVD) from 2014 to 2017 and became a board-certified veterinary dermatologist by AiCVD in 2018. Dr. Tamamoto-Mochizuki completed her Ph.D. in Comparative Biomedical Sciences with a concentration in cell biology (major) and molecular biotechnology (minor) at the NC State University in 2021. Her research focused on the role of IL-31 in the pathogenesis of acute atopic dermatitis in dogs. She currently works as a postdoctoral research associate at Dr. Mishra’s lab to investigate the itch pathways in animals while participating in the Dermatology service at NCSU as a senior clinician. Her husband, Dr. Hiroyuki Mochizuki, is a faculty at Clinical Pathology. She has a two-year-old boy, Riku, which means “the continent” in Japanese since he was born in the American continent.

Christine Whitley, Research Specialist

Chris has an AAS in Veterinary Technology from SUNY Delhi, is a Registered Veterinary Technician, and earned a BS in Animal Science from Cornell University. She grew up in Upstate NY in the small town of Skaneateles (pronounced “skinny atlas”) on 65 acres. Chris enjoys being outdoors, hiking, running, biking, and gardening.

Before coming to NC State CVM, Chris worked at Organon Technika, in both the Microbiology department and in the Validation Engineering department. She has been with the VH for 11 1/2 years (3 years in Intermediate Care and 8.5 years as the supervisor in the HWC).

Other News and Updates

Dr. Tres Clark III, DVM DACZM (NCSU) has taken on the challenge of developing the new Sea World Aquarium in Dubai.

‘A Miracle Goat’: Groundbreaking cancer treatment holds promise for Alvin.

Dr. Matthew Godfrey, NC Wildlife Resources Commission Sea Turtle Biologist and DoCS Adjunct Associate Professor was named Wildlife Conservationist of the Year in the Annual Governor’s Conservation Achievement Awards.

Dr. Pamela Govett, DVM DACZM (NCSU) is the new senior staff veterinarian at the Milwaukee Zoo in Wisconsin.
**Dr. Gladys Kalema-Zikusoka**, who completed her residency in zoological medicine at NCSU CVM was named this year’s Champion of the Earth for Science and Innovation, knew she wanted to work with animals.

**Dr. Jb Minter**, DoCS adjunct assistant professor and director of animal health at the North Carolina Zoo, discussed the zoo vaccinating some of its animals to prevent COVID-19.

**After finding a throat tumor, a special fund means more life for Phife the dog.**

Dr. Betsy Stringer, DVM, DACZM (NCSU) recently accepted a new position at the Disney Wild Animal Kingdom, joining a number of NCSU Alumni including Dr. Ryan DeVoe, Dr. Andy Stamper, and Dr. Beth Nolan.

Lt. Col. Scott Willens, DVM, PhD (NCSU), DVPM, retired from the military November 4, 2021. Speaking at his retirement event was Col. Jennifer Kishimori DVM (NCSU), PhD who just recently retired having served as director, Chemical, Biological, Radiological, and Nuclear Medical Countermeasures Policy, Office of the Assistant Secretary of Defense for Health Affairs. Col. Michael Berecz, DVM, PhD (NCSU) was appointed the new director, Chemical, Biological, Radiological, and Nuclear Medical Countermeasures Policy, Office of the Assistant Secretary of Defense for Health Affairs.

**Here’s a first look at the new equine hospital and dairy barn in the works at the CVM.**

---

Justine Tillerson, Newsletter Editor

Next Issue: Winter/Spring 2022