

12-2015

AVS Corner, December 2015

Casey Wheeler
Clemson University

Emily Cook
Clemson University

Alexandra Johnson
Clemson University

Jamison Lynch
Clemson University

Kim Hill
Clemson University

See next page for additional authors

Follow this and additional works at: https://tigerprints.clemson.edu/avs_corner



Part of the [Animal Sciences Commons](#)

Recommended Citation

Wheeler, Casey; Cook, Emily; Johnson, Alexandra; Lynch, Jamison; Hill, Kim; Boyd, Hayley; Jeffcoat, April; and Johnson, Johanna, "AVS Corner, December 2015" (2015). *AVS Corner*. 4.
https://tigerprints.clemson.edu/avs_corner/4

This Newsletter is brought to you for free and open access by TigerPrints. It has been accepted for inclusion in AVS Corner by an authorized administrator of TigerPrints. For more information, please contact kokeefe@clemson.edu.

Authors

Casey Wheeler, Emily Cook, Alexandra Johnson, Jamison Lynch, Kim Hill, Hayley Boyd, April Jeffcoat, and Johanna Johnson

AVS CORNER

TEACHING • RESEARCH • EXTENSION

December 2015

INSIDE THIS ISSUE:

- FIRST ANNUAL VET ED EVENT
- INTERNATIONAL STUDENT WORK
- DID YOU KNOW?
- ALUMNI AND FACULTY SPOTLIGHTS
- CHANGING FACILITIES AND FACES
- AND MUCH MORE!



A New AVS Tradition in the Making

By EMILY COOK

On the afternoon of October 9th, AVS faculty, staff, and students began to welcome a line of eager guests into the sunny atrium of the Life Sciences Building. Veterinarians, veterinary students and technicians, and other animal health professionals collected their nametags and headed upstairs to enjoy Clemson's First Annual Veterinary Continuing Education Workshop. This brand new event was a result of months of diligent planning and collaboration between the AVS Department, the CAFLS Alumni Board, Clemson Live-stock Poultry Health, and the South Carolina Association of Veterinarians, with support from sponsors Idexx, Merial, and Merck Animal Health. The hard work of several individuals from these groups, including Drs. Adam Eichelberger and Boyd Parr, as well as volunteer efforts from the Clemson Pre-Vet Club, gave way to a fun and educational evening for alumni and friends of the AVS Department, as well as a few first-time Clemson visitors.

The first speaker of the evening was Dr. Gerryll Hall, a representative of Merck Animal Health's VetReach program and an expert of the recent outbreak of canine influenza viruses. Dr. Hall delivered a lively explanation on the origin of the disease, how it has spread so rapidly, and what preventative measures can

CENTER STAGE AT THE CONTINUING EDUCATION EVENT: Pre-Vet Club students Riley Jones, Emily Cook and Hayley Boyd, as well as Dr. Jim Strickland (AVS Dept. Chair) and Dr. Glenn Birrenkott (AVS Faculty) helped make Clemson's First Annual Veterinary Continuing Education Event a ROARING success!

CONTINUED ON PAGE 1

Notes From the Corner Office

Hello, and welcome to our 4th edition of the AVS Corner!

I certainly hope that you and your loved ones have been doing well since our last edition of the AVS Corner. The AVS family has had its ups and downs these past few months, but for the greatest part the department continues to move forward with positive impacts for our students, stakeholders and field of study.

In this edition of the AVS Corner, you will read about current or past students who successfully completed challenging internships, participated in research projects, chose career paths in human medicine or participated in a faculty led study abroad opportunity. In addition, you will find information concerning club activities including competitions and shows. You will be introduced to Mr. Steve McGill, our Stakeholder Board Chair for the past 18 months, and Dr. Peter Skewes our faculty spotlight for this edition, both extremely great contributors to the department's overall success.



On a sad note, Dr. Ashby (Budd) Bodine lost his three year battle with cancer on June 10, 2015. Many of you will remember Dr. Bodine as one the most rigorous, but also most helpful and personable faculty members to have taught you during your tenure at Clemson University. I was fortunate to have the opportunity to experience Budd as a mentor and teacher, colleague and ultimately a friend and confidant. I can tell you that in all three phases of my interactions with him, he was ever the consummate gentleman, professional and caring

individual that each of us should strive to be. Because of Dr. Bodine's positive impact on his students and colleagues, the department chose to honor him by establishing the "Dr. Ashby Burgess Bodine, II Scholarship Endowment". If you would like to donate to this endowment in honor of Dr. Bodine, you can find information on how to do so at: <http://www.clemson.edu/cafls/giving/bodine.html>.

In closing, I hope you enjoy this issue of the AVS Corner. I am personally very proud of the work our students and their mentor (Dr. Johanna Johnson) have put into this newsletter. So, drop us a line sometime and say hello, plan a visit or let us know how we could improve the newsletter.

May God bless each of you,
Jim Strickland



Department Chair, AVS



DECEMBER 2015

Table of Contents

- 1 A New AVS Tradition
- 2 Hands-on Experience & "Did You Know?"
- 3 Student Travel & Interview with Provost Bob Jones
- 4 Clubs and Organizations
- 7 Stakeholder Spotlight: Steve McGill & A Note from Margaret Owens
- 8 Alumni Spotlight: Wesley Patterson
- 9 News From Extension & AVS Faculty Spotlight: Peter Skews
- 10 The Changing Face of AVS & Grads on the Go
- 12 News and Awards & Research Highlights and Recent Publications
- 13 What's Going On: Calendar
- 14 Stay Connected

AVS Corner editors:

Casey Wheeler
Emily Cook
Alexandra Johnson
Jamison Lynch
Kim Hill
Hayley Boyd
April Jeffcoat
Johanna Johnson



CLEMSON
ANIMAL AND VETERINARY SCIENCES

be taken to alleviate its effects. Her talk was followed by another discussion of a hot topic in veterinary medicine: highly pathogenic avian influenza. Clemson Livestock Poultry Health veterinarian Dr. Julie Helm lightened the mood with her “Biosecurity Queen” ensemble, complete with a sash and tiara adorning her coveralls and hairnet. After capturing the audience’s full attention with her humorous garb, Dr. Helm gave an informative speech on the devastating effects that avian influenza has had on the poultry industry, how producers are responding to and recovering from outbreaks, and what South Carolina is doing to prevent and prepare for the potential spread of the disease into the state.

After enjoying a delicious barbecue dinner prepared by members of Clemson’s Block and Bridle Club, guests returned to the P&A auditorium for the second half of the evening’s program. South Carolina emergency preparedness veterinarian Dr. Charlotte Krugler led a very timely talk on how the veterinary community is involved in responding to local, state, and national disasters, focusing particularly on the devastating flooding that had taken place previously in the week. Finally, the Continuing Education Workshop ended on an exciting note with an animated speech by Greenville, SC, veterinarian and internet personality Dr. Andy Roark entitled “How to Drive Change in Your Practice.” Dr. Roark addressed common issues that veterinarians face with clients and employees, suggesting new, more effective approaches to interacting with veterinary team members.

The AVS Department was thrilled to provide such an enjoyable experience for those who dedicate their time and energy to improving animal and human health, and we hope to grow the size and success of this educational event in the coming years.

-EMILY COOK

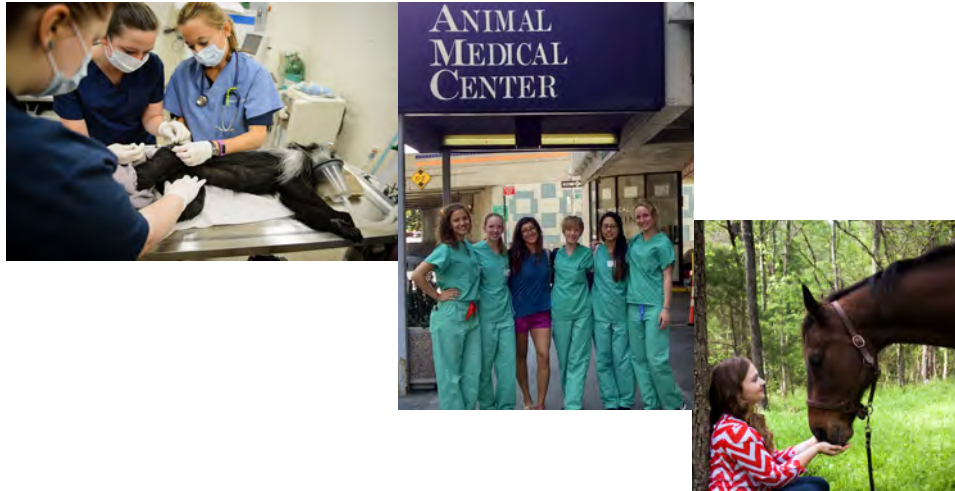


I felt that our workshop was a great success! We had many components of the Clemson community working together and this was a chance to showcase our new Life Sciences Building and the many positive things going on at Clemson. We look forward to working with our students, colleagues and corporate sponsors again next time!

- Dr. Glenn Birrenkott



Hands On Experience



DIVERSE ENCOUNTERS OF THE ANIMAL INDUSTRY

The Department of AVS requires that students engage in experiential learning along with their regular curriculum courses, and one of the best ways to do this is through an internship! Each semester, AVS students head out across the state and country to experience something new.

Kathryn Boyd was selected by the department to intern alongside Dr. Christy Belcher at the Greenville Zoo. She assisted Dr. Belcher with basic handling of exotics and livestock, laser therapy, and the Black Snake research project. Kathryn said, "One of the most memorable experiences during my time with Dr. Belcher was the annual exam for their Amur Leopards." Kathryn received a one of a kind experience with hands-on activities with exotic animals, wildlife, and livestock.

Jenna Washburn, a senior from Shelby, NC, received support from the department for her internship in New York City at the Animal Medical Center, a non-profit specialty animal hospital. She gained experience through rotations in surgery, diagnostic imaging, and recovery. Jenna says the best aspect of her internship was having the opportunity to explore the specialty areas of veterinary medicine in an education-focused hospital while also experiencing the exciting and diverse culture of New York City.

My own opportunity took me to Murphy-Brown Llc., where I had a phenomenal internship experience. I was placed on a multiplication sow farm in South Carolina. I spent five weeks in breeding and five weeks in farrowing. I participated in a wide range of tasks including breeding sows, sleeving sows, working up pigs, and treating ailments. Each Friday I was exposed to another part of the swine industry like packaging, farming operations, and talent management. I became PQA certified, and could not have asked for a better company or internship program!

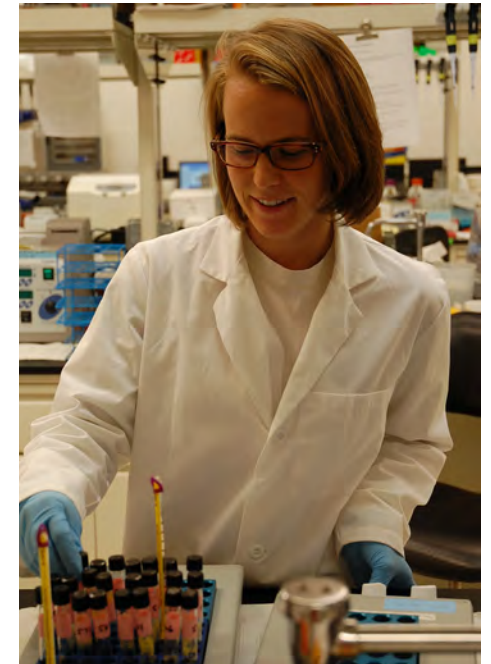
- KIM HILL

UNDERGRADUATE RESEARCH!

DID YOU KNOW?

Did you know that there are over 30 undergraduates involved in research in the AVS Department? These students are investigating a wide variety of topics, from canine lower back disease to ruminant nutrition, gaining hands-on experience both on the Clemson farms and in several professors' research labs.

Ashley Bowyer is a senior who assists Dr. Gustavo Lascano and his graduate students with their research. She has been actively involved in a project investigating the effects of diet on milk fat depression in dairy cattle, with responsibilities including mixing rations and taking samples of rumen contents. She is also writing a manuscript on mineral digestibility in precision-fed dairy heifers. With regard to the benefits she has gained through her research experience, Ashley noted, "I am capable of working with precision to meet deadlines without direct supervision. Furthermore, I have gained an appreciation for all of the work and dedication required to improve animal production, specifically on the nutrition side of things."



Dr. Nathan Long has five undergraduates currently involved in research projects in his lab, two of whom will be presenting original abstracts at this year's American Society of Animal Science Southern Section Meeting. He can personally attest to the advantages that this experience has given to his students, especially in that "it allows them to start thinking about possible careers in academia or industries that require either a Masters or PhD," and adding that "even if they do not pursue a career in a science field, this positive research experience should change how they view science for the rest of their lives." As a member of Dr. Long's lab, I couldn't agree more!

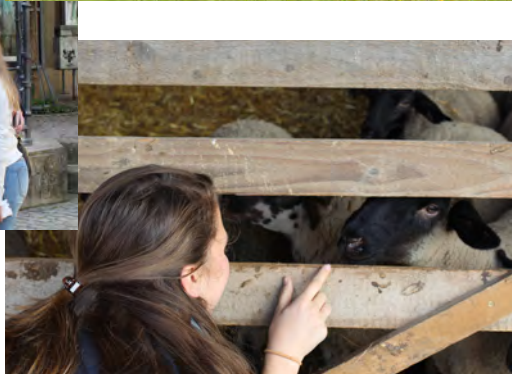
-EMILY COOK

Students in International Travel

VOLUNTEERS FOR INTERCULTURAL AND DEFINITIVE ADVENTURES EUROPEAN ADVENTURES

This past summer's study abroad trip to France and Germany was the first faculty-led, animal science study abroad program for Clemson. Needless to say, it was absolutely incredible. The efforts of the leading professors Drs. Dunn and Scott, as well as our amazing coordination team on the ground, allowed the maiden voyage to go off without a hitch. Throughout the trip, we were surrounded by the culture of every region we visited, from the Alsatian plains to the Black Forest in Germany. We explored small towns and villages, and learned about the many various facets of the agriculture community. Every day, a guide familiar with the region translated and explained the differences and similarities between our practices. The language barriers certainly didn't stop us from being completely stuffed with homemade meals from each farmer's table. (We all gained 30 lbs.) Beyond agriculture and animal science, we made time for the incredible and unique places around us. We toured a castle from the 12th century, the Louvre, and many, many other historic locations. As we bounced around the countries, waking up early in the morning and getting home late at night, we bonded as a team and as a small part of the Clemson family. Overall, it was an amazing two weeks of history, animals, science, and friends. Stay strong, Team No Sleep.

-LILA KILBY



AGRICULTURE MATTER

AN INTERVIEW WITH BOB JONES: EXECUTIVE VICE PRESIDENT FOR ACADEMIC AFFAIRS AND PROVOST

Having the chance to meet with Executive Vice President of Academic Affairs, Provost Robert H. Jones, is an experience that every Clemson student would appreciate. Recently, we had the opportunity to sit down with him to discuss the importance of the College of Agriculture, Forestry, and Life Sciences (CAFLS), specifically the agriculture aspect, and its effect on society and Clemson University.



For both Provost Jones and his wife, Dr. Jeryl Jones, learning and education have been very important. They have worked together as a team from their undergraduate time at Clemson through graduate and veterinary school, to numerous career positions, and finally back home to Clemson in their current roles. Throughout all of it, Provost Jones never lost his passion for forestry and his belief in the importance of agriculture.

Provost Jones feels that technology and education related to agriculture have structured the many ways that society maintains its growing population. He believes that the innovation of public universities, such as Clemson, and private partnerships have been crucial to helping the U.S. feed millions. As for Clemson's role in agriculture, we can look back to Thomas Green Clemson for answers. After the Civil War, this area of the country was devastated by poverty and hunger. Thomas Green Clemson had a vision to help grow the economy as well as educate people. This is what helped shape our foundation as a university. To promote education and provide jobs state-wide, Clemson University has extension agents in every county in South Carolina. Provost Jones feels that Clemson appreciates all that CAFLS has done and he foresees a large amount of growth within the next few years.

Provost Jones shared a few fun memories of his days at Clemson. He reminisced on Clemson's largest snowball fight! One winter day as it started snowing, hundreds of students poured from their classrooms to engage in a massive snowball war. He also remembered his two-and-a-half mile bike ride to and from classes every day. That is dedication! We learned that Provost Jones and his wife enjoy hiking and birding together. They also have a love for architecture, music, and art. Getting to know Provost Jones was a wonderful experience and knowing that Clemson University understands the importance of agriculture and the role of CAFLS was very refreshing. We appreciate all that Provost Jones has done for Clemson and enjoyed hearing his thoughts and stories.

- JAMISON LYNCH & ALEXANDRA JOHNSON

From the Field: Clubs & Organizations

CLEMSON UNIVERSITY POULTRY SCIENCE CLUB

WHAT'S HATCHING?

The Clemson University Poultry Science Club (PSC) is hatching new plans for the 2015-2016 school year. Due to the absence of the famous Turkey Project, the club has taken a new project under its wing. PSC is collaborating with the Thornwell Project Creative Inquiry team in an attempt to re-utilize a damaged feed mill found at the Morgan Poultry Center. The goal is to formulate a business plan for the feed mill and ultimately begin producing feed for sale to the public.

The PSC engaged in a number of other activities during the Fall Semester. Many members volunteered to help judge 4-H poultry competitions with Dr. Hall, a former professor and advisor of the PSC. The club also assisted in the processing of broiler chickens under the supervision of Dr. Birrenkott, the new 2015-2016 Poultry Club advisor. We look forward to keeping the momentum going in the spring!

-HAYLEY BOYD



CLEMSON COLLEGIATE HORSEMAN'S ASSOCIATION

STRAIGHT FROM THE HORSE'S MOUTH

The Clemson Collegiate Horseman's Association had a busy semester! With a large influx of new members, we worked hard to get everyone involved in the horse industry. In August, we hosted our annual Summer's End Horse Show and in December had our Trottin' Around the Tree show at the T. Ed Garrison Livestock Arena. We planned and attended various farm tours, ranging from Joey McRae's cow horse training center to the Friesian Marketplace. We also toured boarding facilities and an endurance horse training farm. In the spring, we look forward to attending the ACHA National Convention hosted by Oklahoma State University!

-COURTNEY LEE



OUR AMBASSADORS: SHOWING OFF AVS

With eight new members came new ideas to strengthen the AVS Ambassadors' involvement both within and outside of the AVS Department during the fall semester. The Ambassadors were invited to author the November edition of the American Society of Animal Scientists kids' magazine, *Jr. Animal Scientist*, so group members collaborated to write articles and design activities related to their chosen theme, "Camouflage in the Animal Kingdom." The Ambassadors were thrilled to branch out and share their knowledge of animal science with a younger crowd! The annual CAFLS Tailgate also allowed the AVS Ambassadors to showcase the department to the Clemson community. This year, the Ambassadors set up an interactive booth with a AVS trivia game, and they had a great time teaching visitors some fun facts about animals and agriculture! Alumni and their families were happy to learn about the new opportunities the department offers, as well as the traditions that remain from years past.

-EMILY COOK



From the Field: Clubs & Organizations



CLEMSON UNIVERSITY LIVESTOCK JUDGING TEAM

THE LIVESTOCK JUDGING LIFE

After months of traveling around the United States, the 2015 Livestock Judging Team has successfully completed their year of judging contests. Members Danielle Cromwell, Alle Dann, April Jeffcoat, Jessica Plunkard, Cole Ramsey, Casey Wheeler and coach Richelle Miller worked very hard this semester, practicing twice a week and also put in time on the weekend at different Clemson locations and traveled to shows and farms.

Over the course of fall, the team traveled to three contests; Keystone International Livestock Expo in Harrisburg, PA, American Royal Livestock Show in Kansas City, MO, and North American International Livestock Expo in Louisville, KY. Each contest consisted of members judging twelve classes of cattle, sheep, and swine, while also giving eight sets of reasons.

The semester was filled with entertaining, educational, and memorable moments that will never be forgotten by the team members. Members not only made bonds and friendships made along the journey, but also learned lessons in responsibility, leadership, dedication, and success, all of which can be applied in their future lives and careers. Livestock Judging is not only traveling to multiple places, having opportunities to meet new and important people, or learning how to develop communication skills; it is a lifestyle. I am proud to have been a part of the team, and look forward to sharing what I have learned with new team members.

—APRIL JEFFCOAT

Block & Bridle

TAKING THE BULL BY THE HORNS

The Clemson University Block and Bridle club had a great start to the 2015-2016 year. Getting to know new members and rekindling with old ones, the club had an amazing time starting the year out float building. Block and Bridle built one of the best floats in the First Friday Parade. With a tribute to all of the research farms and football, the club reminded everyone what truly continues to call us home to Clemson. Along with getting to know everyone and listening to our awesome guests at each meeting, Block and Bridle has been “serving it up” by cooking for various organizations throughout the college.

The new grill has come in handy with helping us serve barbecue and smoked brisket to several organizations throughout the CAFLS college. In October, six members had the distinct honor of hosting the President’s Box at the Georgia Tech football game (following the CAFLS tailgate), and 12 club members traveled to Oklahoma State University for National Block and Bridle Convention. The club came back with new knowledge and great memories. With membership at an all time high, the Block and Bridle club is looking forward to another awesome spring full of agriculture and fantastic memories.

—MAGGIE JUSTICE



PRE-VETERINARY CLUB

A SEMESTER OF NEW OPPORTUNITIES



In October, the Pre-Vet Club had the unique chance to volunteer at Clemson’s First Annual Veterinary Continuing Education Workshop. Club members worked tirelessly throughout the day helping with set-up and cleanup, welcoming guests at the registration table, and ushering them through the new Life Sciences Facility. The students were able to attend the fascinating presentations and mingle with veterinarians and other guests from a variety of fields, who provided insight to the most current, urgent issues in veterinary medicine and the unique career options associated with them. The Pre-Vet Club also hosted several speakers of their own throughout the semester, including representatives from Mississippi State University and University of Georgia Colleges of Veterinary Medicine, as well as AVS faculty member and veterinary radiologist Dr. Jeryl Jones, who is serving as the new Pre-Vet Club advisor. Club members are excited about the experience and expertise she will bring to the group!

—EMILY COOK

DAIRY SCIENCE CLUB DAIRY DAYS

The Dairy Science Club began the fall 2015 semester with booths at Tiger Prowl, Bash at the Barre, and the CAFLS Tailgate where attendees were able to interact with a calf from the University's dairy farm, which is always a huge hit! The show team competed in showmanship and conformation events at the annual Anderson County Livestock Show and the South Carolina State Fair, taking home many ribbons (4-1st place animals, 10-2nd place and 19-3rd thru-8th place ribbons) and even a grand champion for the Holstein breed. The club was lucky to have a professional fitter visit and help the club improve their fitting and clipping skills for future shows. During the club's biweekly meetings, several guest speakers came to talk about the importance of dairy in the industry. Several members of the club competed in the North American Intercollegiate Dairy Challenge in November, where they put their knowledge of the dairy industry to the test. Our Clemson students were among the top members of their respective teams and two of our students placed first and second with their team. Along with our shows and competitions, club members took a break from their busy schedules to have their annual bonfire at the dairy and a football viewing party for the popular University of South Carolina Game. The club also has merchandise available for sale, including new bumper stickers, t-shirts, and three-quarter zip sweat-shirts, contact crholet@clemson.edu if interested!

— BAILEY HUNT AND
CASEY WHEELER



THE SISTERS OF SIGMA ALPHA

CULTIVATING PROFESSIONAL WOMEN IN AGRICULTURE

As the leaves began to change color for the fall, Sigma Alpha also saw change. As an organization we continue to transform and expand, and this semester alone we extended 14 bids. All 14 of these were accepted, representing an increase of nearly 45% in our membership! The women of Sigma Alpha held several fundraisers at locations such as Wingin It and BGR in downtown Clemson. The sisters were also very active in philanthropic events, such as Ag in the Classroom, which now educates both kindergarteners and high schoolers about the exciting field of agriculture. While these ladies know how to be professional, they also had multiple social events, including sisterhood movie night, bowling, team building, two mixers, and a semi-formal. This semester meant new friendships, and sisters excited about promoting agriculture!

— SARAH KREUTZIGER



WAVS

WIN WITH WAVS

The fall semester has been filled with fun and excitement for Women in Animal and Veterinary Sciences (WAVS). These freshmen women live together on the third floor of Young Hall and bond over their shared passion for animals. A strong sense of sisterhood developed on the floor, and throughout the fall semester, WAVS participated in a number of events. These events included a beach bash, a self-defense class, and an etiquette dinner. This fall was the first time WAVS participated in a self-defense class where WAVS members were able to relieve some stress. The etiquette dinner provides the opportunity for WAVS to

dress professionally while learning about personal professional development. At the dinner, WAVS sat down with AVS faculty and staff, and a number of industry professionals including Michelle Higdon, Heather Holliday, and Christy Belcher. WAVS has proven to be a highly influential community that not only positively impacts academics, but also friendships and relationships.

— HAYLEY BOYD



AVS Stakeholder Spotlight

STEVE MCGILL: OUR INSIGHT INTO PHARMACEUTICAL SALES

Senior year can be a confusing time for those who are about to graduate. While veterinary school may be in the not too distant future for some AVS majors, others may not be sure that is still the right path. If you're like me, and are thinking of venturing in a different direction, there are a lot of options!

Mr. Steve McGill, our stakeholder spotlight for this edition of the AVS Corner, helped shed some light on one of those options, namely pharmaceutical sales within the animal industry. Mr. McGill graduated from Clemson University with an Animal Science degree in 1984. After graduating, he attended LSU where he obtained his Masters in Animal Breeding and Genetics. He spent six years in Omaha where he worked for the American Shorthorn Association. After that, he moved back to Anderson, SC where he worked with the SC Cattlemen's Association for three years and was able to become involved in his family farm again. In 1998 a friend suggested he consider pharmaceutical sales. Since then he has worked in Georgia, South Carolina, and North Carolina selling cattle and horse pharmaceuticals.

Mr. McGill explained that his job includes many different duties including traveling around the region meeting with clients, selling his products, and building relationships. The hardest and maybe most tiring part of the job is traveling. Staying out on the road at least two nights a week is quite normal for Mr. McGill. However, he loves the agricultural farming side of the job and the flexible schedule. His background

within the cattle industry has also helped him to thrive in this business and understand his clients' needs and concerns.

Mr. McGill served as Chairman of the AVS Stakeholder Advisory Board in its first year. We very much appreciate his efforts and his continuing dedication to the Department of AVS!

—JAMISON LYNCH



Dear Fellow AVS Alumni:

Greetings from Clemson University!

I graduated from Clemson in 1991 with my BS in Animal Science and came back to work at Clemson three years ago as the Senior Director for Development for the College of Agriculture, Forestry and Life Sciences and Public Service for Agriculture. One of the greatest pleasures I have had recently has been the opportunity to reconnect with many AVS alumni who are doing great things in the agriculture and the animal industries.

It seems like yesterday that I roamed the halls of the P&AS building with my "B" in hand to get signed by upperclassmen members of the Block & Bridle Club. Now, many of those familiar faces are doing great things as leaders in agriculture. I remember clearly Dr. Carl Thompson telling the B & B Club one night that one of the greatest things that you will do during your time as a student at Clemson will be meeting fellow students that you will one day call co-workers, partners, and colleagues in this great industry that provides food, fiber and shelter for our world. Boy, was he right!

In my current role, I have the honor of helping to raise crucial resources for the institution that we all love. In working with the leadership of the AVS department, we have identified two priority areas for department. Both of these areas will enable students to become better leaders and employees.

Student Support: The first is a scholarship endowment in memory of Dr. Budd Bodine. The Dr. Ashby Burgess "A. B." Bodine II Scholarship Endowment was established this year by family, friends, former students, faculty and staff. Many of you may remember Dr. Bodine for his ability to teach and empower students in unpredicted ways. Funds from this endowment will provide scholarships to students in AVS in Dr. Bodine's memory. Gifts can be made here: <https://cualumni.clemson.edu/give/ashby-bodine>

Engaged Learning: The second is a new initiative to provide students with experiential learning opportunities. The AVS Experiential Learning Travel Grant-in-Aid will provide funds to AVS students in order to gain much-needed hands on experiences to further their education or become more marketable in the workplace.

To make a gift to either of these areas, please feel free to send your tax-deductible contribution made to the following:

Clemson University Foundation
Attn: Joni Jordan
110 Daniel Drive
Clemson SC 29631

Please be sure to write in the "memo" line that the gift is for the Bodine Scholarship or the AVS Experiential GIA. If you would like information regarding other priority areas of need for the AVS department, the College Agriculture, Forestry and Life Sciences or Clemson University, please feel free to contact me at 864-276-7245 or mr6@clemson.edu.

Go Tigers!
Margaret Richardson Owens '91



Alumni Spotlight

PRE-VETERINARY TO PHYSICIAN'S ASSISTANT WESLEY PATTERSON

"The AVS major was awesome and had a lot to offer. It was a great stepping stone for people who wanted to go to vet school, as well as people who wanted to pursue other branches of medicine."

- Wesley Patterson



People often assume that students majoring in Animal and Veterinary Sciences (AVS) will become veterinarians when they graduate. While this may be true for many AVS students, many do not realize that the AVS degree can also lead to other occupations and opportunities. Just ask Wesley Patterson.

Wesley was born and raised in Ninety-Six, South Carolina in the Northwestern part of the state. He came to Clemson aspiring to be a veterinarian and soon realized that he did not have a passion for working with animals, but rather was very interested in pursuing a career in the human healthcare field. He also realized the Animal and Veterinary Sciences major fulfills most requirements needed to attend medical school, physician assistant school, and many other graduate programs associated with science. Wesley did not want to switch majors because of everything the AVS department offered. He enjoyed everything from the clubs and extracurricular activities to the close-knit family feel of the students and faculty. With the support of two influential faculty members, Dr. Birrenkott and Dr. Hall, Wesley

graduated from Clemson in May of 2009 and went on to become a physician assistant with Self Medical Group. He now works at Family Healthcare - Newberry.

The Animal and Veterinary Sciences degree is more encompassing than just being an avenue to attend veterinary school. It can lead to many other exciting, unique opportunities and professions. It is of course the perfect major for an aspiring veterinary school student; however, the AVS major is also an excellent degree for students aspiring to work in any other science or medical field.

- ALEXANDRA JOHNSON



SUMMER WITH EXTENSION

This summer and through this fall semester, I've had the wonderful experience of working with the Clemson Cooperative Extension Service. For someone who didn't know much about Extension before, this was a truly great learning experience, and I had the chance to work and network with people from all walks of the agriculture industry. This summer, besides attending programs with topics ranging from pesticide application to honeybees, I got to help plan and coordinate South Carolina Junior Beef Round-Up, a youth cattle exhibition that concludes the summer. The event was a huge success, with about 250 head present at the T. Ed Garrison Arena. In addition to Round-Up, Clemson Extension also hosted the S-1064 beef genetics research meeting and started up the annual Bull Test, which will culminate in the test-end sale in February. Agents also played a role in 4-H Congress and South Carolina Commissioner's School of Agriculture. Since the summer,

Extension had a two-week long presence at the South Carolina State Fair and at the SunBelt Ag Expo and also hosted the annual Artificial Insemination School at the Simpson Experiment Station. Working with Clemson Extension has been an incredible learning experience, and it has given me a unique chance to see the many different facets of South Carolina's agriculture industry.

—JILLIAN MILOPOULOS
Clemson University Cooperative Extension Intern



FACULTY SPOTLIGHT: DR. PETER SKEWES

The Department of Animal and Veterinary Sciences is fortunate to have influential and respected faculty members who are invested in and supportive of their students. For thirty years now Clemson and its AVS students have had the pleasure of knowing and working with Dr. Peter Skewes.

Dr. Skewes graduated from the University of New Haven in 1979 with a Bachelor of Science in Forensic Science and a minor in Biology and Chemistry. After exploring medical and veterinary school options, Dr. Skewes took a course in animal science, and discovered that he had an interest in poultry. He then went on to obtain a M.S. in Poultry Science from the University of Florida in 1982 and following that, a Ph.D. in Poultry Physiology from Virginia Polytechnic Institute and State University in 1985. Clemson University offered Dr. Skewes a job following completion of his Ph.D. and he has taught many courses at Clemson over the years, including Animal Welfare, Domestic Animal Behavior, and Contemporary Issues in Animal Science.

Dr. Skewes serves on a number of departmental committees including the Institutional Animal Care and Use Committee, where he has been the chair for the past five years. The purpose of this committee is to assure that animal care and use are in compliance with university policies and federal, state, and local regulations. Dr. Skewes serves the committee in many capacities such as coordinating meetings, assigning reviewers for animal use protocols, assigning subcommittees, and reviewing reports of animal concerns.

In Dr. Skewe's spare time, his interests include do-it-yourself home projects, motorcycles, and playing pool.

—ALEXANDRA JOHNSON

The Changing Face of AVS



Meet Meena Mukherjee!

She is our newest Research Specialist/PhD Student/Genetics Instructor! She is originally from Kolkata, India, and completed her BS at Bangalore University and her MS in biomedical genetics at VIT University. From there she took advantage of an opportunity to pursue her PhD in genetics with Dr. Jeryl Jones at West Virginia University. Meena's work involves trying to identify the genetic factors that might be responsible for causing lumbosacral stenosis in military working dogs. Meena explains that we often forget about our four-legged soldiers who mask their pain in order to do as they are trained and she is passionate about the potential to help them. Meena hopes to stay in academia in the future, and in her spare times love to cook, bake and play with her own four-legged friend!

- JOHANNA JOHNSON



Meet Katie Elliott!

Katie joined the Department of Animal and Veterinary Sciences in fall of 2014 and has dual roles as both a lab technician for Dr. Tom Scott and a PhD graduate student in Biological Sciences. She is a Clemson area native and received her bachelors and MS degrees from Clemson University. After completing her MS, Katie spent four years in industry as a medical device development Project Manager at Poly-Med, Inc in Anderson, SC. In her PhD research as well as her role as lab technician, Katie is studying triple negative breast cancer development and mammary stem cell signaling. Katie enjoys spending time with her husband, running and competing in triathlons, baking, and she LOVES Clemson football!

- JOHANNA JOHNSON

BAKING FOR BODINE

The Animal and Veterinary Sciences Graduate Student Association (AVSGSA) has had another successful fall. In August, we welcomed eight new graduate students focusing on fields including animal reproduction, growth and development, ruminant nutrition, endocrinology, physiology and immunology! We currently have 18 graduate students from 22 to 50 years of age, coming from eight states and three countries! The AVSGSA began philanthropic events in October holding a bake sale to raise funds to help initiate the Dr. Ashby "Budd" Bodine II Scholarship Fund. The goal is to collect \$25,000 for the scholarship fund within the first five years. Collectively, the bake sale earned over \$200.00 dollars to donate to the scholarship fund. In February we'll hold the second edition of the successful AVSGSA philanthropic Chili Cook-off to raise additional money for the scholarship fund, so consider joining us! Any additional donations can be made online at <https://cualumni.clemson.edu/give/ashby-bodine> or you may contact the AVSGSA about the chili cook-off if you have any questions about registration and other details (louisab@g.clemson.edu).



- LOUISA BOWEN & TINA ROWLAND

Grads on the Go

MEET OUR NEW GRAD STUDENTS!

1. Michael Carnevale

Degree Program: M.S.

Major Advisor: Jeryl Jones

Undergraduate Institution: West Virginia University

Hometown: West Long Branch, NJ

Research Focus: Lower back disease in working/military dogs

"While working with Dr. Jones at West Virginia University and finding out about her move to Clemson, I quickly came to learn about Clemson's reputable AVS department, its close-knit community, and beautiful location."

2. Andrea DeCarlo

Degree Program: Ph.D.

Major Advisor: Scott L. Pratt

Undergraduate Institution: Stockton University

Hometown: Ventnor City, NJ

Research Focus: Studying bovine semen chromatin quality for assessment of fertility

"I chose Clemson University because of the one-on-one faculty interaction. I really thrive in that environment and there are not many universities that take so much detail and care in education quality like this."

3. Saad M. Hussein

Degree Program: Ph.D.

Major Advisor: Gustavo J. Lascano

Undergraduate Institution: Kirkuk University

Masters Institution: Tikrit University

Hometown: Baghdad, Iraq

Research Focus: Microbial Protein Synthesis and Nitrogen Metabolism in Ruminants

"I chose Clemson University because it is a distinct university with a high ranking. It has obtained 21st in the last rankings among public universities."

4. Shanice Krombeen

Degree Program: M.S.

Major Advisor: Tiffany Wilmoth

Undergraduate Institution: Clemson University

Hometown: Clover, SC/ Seattle, Washington

Research Focus: Reproduction and Placental Efficiency

"I finished my undergraduate degree in three years but I wasn't sure if I wanted to leave just yet. I was still in love with Clemson and as I researched other options I realized Clemson offered everything I wanted and could ever need. It felt like fate!"

5. Kate Lewis

Degree Program: M.S.

Major Advisor: Nathan Long

Undergraduate Institution: Oklahoma State University

Hometown: Broken Arrow, OK

Research Focus: Fetal Programming

"I wanted to get my Masters somewhere outside Oklahoma. Clemson was my top choice as it has an excellent reputation for research, and it just happens to be a beautiful place."

6. Markus Miller

Degree Program: M.S.

Major Advisor: Susan Duckett

Undergraduate Institution: Texas Tech University

Hometown: Abernathy, Texas

Research Focus: Impact of fescue toxicosis on fetal development and postnatal growth

"I picked Clemson because of the dedication to students and research the professors I talked to have shown."

7. Jenny Presgraves

Degree Program: M.S.

Major Advisor: Tom Scott

Undergraduate Institution: Erskine College

Hometown: Anderson, SC

Research Focus: Altering the diet of Tilapia to strengthen the mucosa so that it has greater protection from Staph infection/ Aquaculture

"I chose Clemson because it was conveniently located and had an excellent reputation."

8. Rebekah Strunk

Degree Program: M.S.

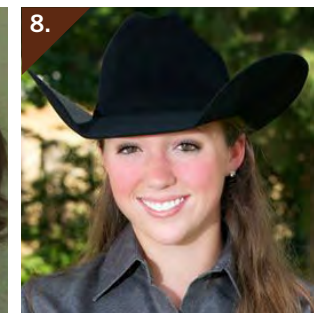
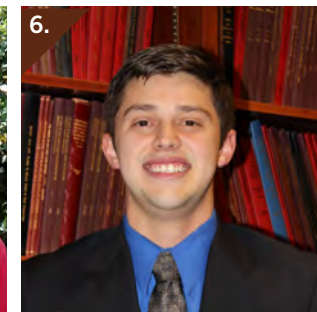
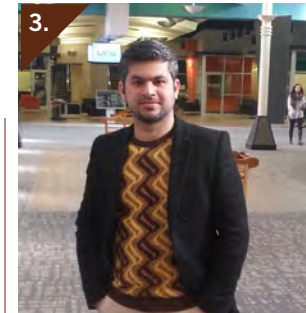
Major Advisor: Kristine Vernon

Undergraduate Institution: Clemson University

Hometown: Indian Land, SC

Research Focus: Equine exercise physiology

"I chose Clemson so I could continue my education in a place that had already exhibited its high academic standards and for Clemson's top-notch equine program."



AVS News & Awards

Something in the Water in P&A!

The P&A Building welcomed three new (little) faces since the last AVS Corner. Meet Abby, Lia and Parker!



Abigail "Abby" Marie Jones
Birthday - June 30
2 lbs and 13 3/4 inches
Valerie and Chris Jones



Elizabeth Cecilia "Lia"
Lascano
Birthday - July 2
8 lbs 6 oz and 20 inches
Johanna and Gustavo Lascano



Parker Ann Black
Birthday - August 26
7 lbs 3 oz and 20 inches
Katie and David Black

Awards

- South Carolina 4-H'ers took a national title for the second straight year at the Eastern National 4-H Horse Roundup in early November in Louisville, Kentucky. KRISTINE VERNON is the SC 4-H Horse Program Coordinator.
- PATTY SCHARKO was named President of the American Association of Ruminant Practitioners (AASRP)
- JESSICA PLUNKARD was named to the Intercollegiate Livestock Coaches Association 2015 All-American Team presented at the North American International Livestock Exposition.
- JILLIAN MILOPOULOUS won 4th place honors for the National Block and Bridle Outstanding Junior Scholarship Award presented at the 2015 National Block and Bridle Convention.
- Dairy Science Club member CALLIE RHOLETTER and her team won first place at the Regional North American Intercollegiate Dairy Challenge hosted by Virginia Tech in Abingdon, VA! DANIELLE MCCULLOUGH and her team took second!

Four veterinarians (including Patty Scharko) joined Dr. Kelly Crowdis for a 4 day livestock agent training on how to better treat/care for animals in Haiti. They taught suturing and used bananas to start with! They were surprised to see one Haitian boy wearing a Clemson shirt!



AVS Research Highlights

AVS has been busy this year presenting research and publishing papers to disseminate important research findings! See something that looks interesting? Let us know! More information is available on the AVS website at clemson.edu/avs.

Scientific Publications

Ali A, Tabanca N, Demirci B, Baser KH, Ellis J, Gray S, Lackey BR, Murphy C, Khan IA, Wedge DE. Composition, mosquito larvicidal, biting deterrent and antifungal activity of essential oils of different plant parts of *Cupressus arizonica* var. *glabra* ('Carolina Sapphire'). Nat Prod Commun. 2013 Feb;8(2):257-60. PMID: 23513743.

Ding LM, Lascano GJ and Heinrichs AJ. 2015. Effect of precision feeding high and low quality forage with different rumen-degradable protein levels on nutrient utilization by dairy heifers. J. Anim. Sci. 93: 3067-3075.

Gray SL, Lackey BR, Boone WR. Impact of kudzu and puerarin on sperm function. Reprod Toxicol. 2015 Jun;53:54-62. doi: 10.1016/j.reprotox.2015.03.010.

Ferdous, F. and T. Scott. 2015. A comparative examination of thrombocyte/platelet immunity. Immunol. Lett. 163: 32-39.

Gray SL, Lackey BR, Boone WR. Effects of Panax ginseng, zearalenol, and estradiol on sperm function. Journal of Ginseng Research 2015 (in press) DOI: <http://dx.doi.org/10.1016/j.jgr.2015.08.004>.

Lackey BR, Gray SL. Identification of kinases, phosphatases, and phosphorylation sites in human and porcine spermatozoa. 2015 Syst Biol Reprod Med (in press)

Lackey BR, Gray SL. Second messengers, steroids and signaling cascades: Crosstalk in sperm development and function. Gen Comp Endocrinol. 2015 Jul 16. pii: S0016-6480(15)00199-9.

Patrick EF, Bowers J, Read S, Lackey BR, Murphy C, Gray, SL. (2015) "Essential Oils from Apple mint (*Mentha suaveolens*) and Passionflower fruit (*Passiflora incarnata*): Studies on Cognition, Coordination, and Chemical Components.," Journal of the South Carolina Academy of Science: Vol. 13: Iss. 1, Article 8.

Suarez-Mena FJ, Lascano, GJ, Rico, DE & Heinrichs AJ. 2015. Effect of forage level and replacing canola meal with dry distillers grains with solubles in precision-fed heifer diets: Digestibility and rumen fermentation. J. Dairy Sci. 98: 1-12.

Presentations

Bowen, Gomez & Lascano. (2015). ADSA, Precision-feeding dairy heifers a high rumen undegradable protein diet with different levels of dietary fiber and F:C. Effects on nutrient utilization, N efficiency, and rumen fermentation. Orlando, FL.

Jones, J. 2015. Invited CE Lecture at GCAV: Lower back pain in working dogs, Columbia, SC

Jones, J. 2015. Invited CE Lecture at IAVR: Strategies for publishing scientific research, Freemantle, Western Australia

What's Going On!

2016 Calendar of Upcoming AVS-Related Events

JANUARY

- Jan 6
Classes start

FEBRUARY

- Feb 6-9
American Society of Animal Science 2015 Southern Section Meeting, San Antonio, TX
- Feb 14
Greenville Zoo Summer Internship applications due
- Feb 20-21
CU equestrian team hosts Hunter and Western shows
- Feb 21-22
SC 4-H Hippology and Horse Bowl

- Feb 25-27
Southern American Dairy Science Association Conference 2015, Athens, GA

MARCH

- March 3-5
Spring Dairy Show
- March 28 - April 1
Experimental Biology 2015

APRIL-MAY

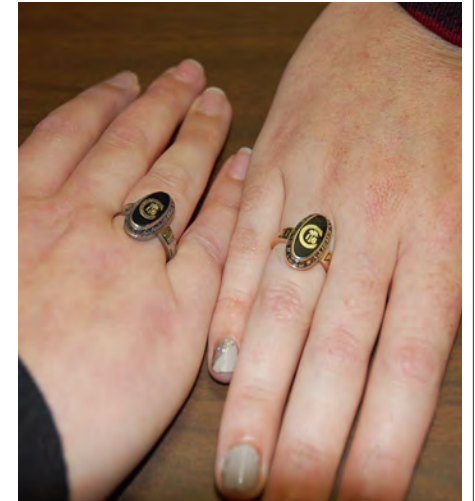
- April 1-2
Little North American Livestock Exhibition
- April 2-6
Experimental Biology, San Diego, CA

- April 9
CU Equine Center Open House
- April 10
Inaugural CU Alumni Horse Show
- April 16
4-H Horse Judging Contest
- May 7
Spring 2016 Commencement

For **Destination Clemson** dates check the Clemson Events calendar!

- EQUINE EVENTS
- DAIRY EVENTS
- CLEMSON AVS DEPARTMENT EVENTS
- GENERAL EVENTS

* More information and additional extension events listed at <http://www.clemson.edu/extension/livestock/events.html>





Department of Animal and Veterinary Sciences
129 Poole Agricultural Building
Clemson University
Clemson, SC 29634

Nonprofit Organization
U.S. Postage
PAID
Clemson, SC
Permit 10

RECONNECT!

Interested in reconnecting with the AVS department? Contact us, and we can talk about what form that might take. Perhaps you're interested in being a guest speaker for one of our classes, acting as a sponsor for a WAVS member or moving a pet project forward. If you saw something here that piqued your interest, let us know! Former club members, students and faculty — we would love to hear about what you're up to and where you are!

Be sure to visit the department website for more information, to join our mailing list (mailing or email addresses) and to suggest stories for future newsletters.

Find us at: clemson.edu/cafls/departments/animal_vet_science/

For general inquiries, please contact:

Jim Strickland
AVS Department Chair
jstric@clemson.edu
(864) 656-3138

Opal Rousey
Administrative Assistant
orousey@clemson.edu
(864) 656-3428

Kathy Still
Student Service Program Manager & Freshman Advisor
ktstill@clemson.edu
(864) 656-3162

For newsletter inquiries, please contact:

Johanna Johnson
Lecturer & Grants Coordinator
johann3@clemson.edu
(864) 656-0493

