

INTERNS

CALS interns achieving locally and abroad

BY KATHLEEN FORMAN

TUDENTS in the College of Agriculture and Life Sciences are achieving great things across the board and the map. From the coast of Mississippi to the natural state of Arkansas and even across the pond in Wales, CALS students Courtney Storey, Madelyn Hunter, Jaylea Douglas, and Alex Speak interned with top-notch agricultural programs and brought back their knowledge to Mississippi State University.

Courtney Storey (top), Madelyn Hunter (bottom). (photos submitted)

COURTNEY STOREY AND MADELYN HUNTER

COURTNEY STOREY, senior animal and dairy sciences major, and **Madelyn Hunter**, junior biochemistry major, traveled to Mississippi's coastline to work hands-on with the Mississippi Aquarium. Each day brought a unique learning experience for Storey and Hunter. They shadowed exotic animal veterinarians, assisted in animal husbandry, educated aquarium visitors, and collaborated on a research project. While they both have an interest in pursuing veterinary medicine, this internship was pivotal in defining their individual passions.

After assisting with animal urgent care, Storey, a Tupelo native, has decided to pursue emergency and critical care veterinary medicine. She enjoyed the fast pace of emergency situations and the rewarding feeling of helping an animal in need.

"A typical day in this internship could be anything from catching up



on paperwork to watching procedures or running to prepare four different animals for procedures," said Storey. "There was never a dull moment."

Hunter, a student from Florence, Alabama, discovered an interest in veterinary radiology for exotic animals.

"This internship solidified my desire to become a radiologist when I found out that there is no data bank for exotic



animal radiographs," said Hunter. "Building a data bank would help veterinarians to better understand and care for hurting exotic animals."

Throughout their internships, Storey and Hunter worked on a joint research project examining the aquarium's Hoffman two-toed sloth. This species of sloth has a sense of smell stronger than a bloodhound, and the pair ran experiments to determine if the sloth has a preference for scents. They prepared extract scents such as rose and vanilla at different points of the sloth's enclosure and ran a statistical analysis on his behavior. Their research showed that the sloth did not have a preference, but both students appreciated the opportunity to develop a scientific experiment and the research skills needed for their future careers.

"This internship has taught me that anyone who believes something is out of their reach should continue to try," said Storey. "I was not accepted into the program my first year and used the resources given through Mississippi State to better prepare myself. If anyone feels a goal of theirs is unattainable, keep working toward it."

Jaylea Douglas (photo submitted)



JAYLEA DOUGLAS

JAYLEA DOUGLAS of Magee, Mississippi had already earned a degree before discovering her calling in agriculture and traveling to her neighboring state of Arkansas for the summer. After graduating from the University of Mississippi with a bachelor's degree in psychology, Douglas spent one summer shadowing her uncle who works as a private crop consultant. That summer led her to enroll at Mississippi State and pursue a degree in agribusiness with a minor in agronomy and a concentration in production. At Mississippi State, Douglas found a supportive community of faculty and students dedicated to helping her succeed. With the help of **Dr. Michael Cox**,

plant and soil sciences professor; **Dr. Randy Little**, retired professor in agricultural economics; and **Dr. T.J. Bradford**, former instructor in plant and soil sciences; Douglas applied to Helena Agri-Enterprises' competitive internship program. Douglas was accepted and stationed at Helena's Bay, Arkansas Retail Branch where she spent the summer collecting soil samples, learning AGRIntelligence—Helena's precision agriculture program—and consulting with customers.

"When I first started this internship, I was still unsure of what exactly I wanted to do with my agribusiness degree," said Douglas. "As a woman, it was intimidating attempting to join a male-dominated field. After this internship, I know that this was the type of work I wanted to do, and

I now have the confidence to pursue it."

To conclude her internship, Douglas presented her research on the benefits of Helena's AGRIntelligence Solutions Whole Farm initiative. This program provides farmers with a "start to finish" approach to incorporating precision agriculture on farms. Douglas compared the yield difference and economic benefits of Whole Farm customers before and after implementing the program. Douglas presented her findings and was later awarded the 2021 Southern Business Unit Intern of the Year Scholarship Award for her work.

"This internship helped me to make connections and grow my network in the agriculture industry," said Douglas. "I found that the industry feels like a small community because everyone is working together for a common goal."

ALEX SPEAK

FROM HER HOMETOWN of West Memphis, Arkansas to Aberystwyth, Wales, junior animal and dairy sciences major Alex Speak spent her summer in the hills of the United Kingdom. Speak has always been an ambitious student and earned accolades such as acceptance into the early-entry veterinary program, a study abroad trip to Guatemala, and the Shackouls Honors College's Delta Scholars Program. It was during her time in the Delta Scholars Program that Speak was encouraged by her fellow scholars to explore additional prestigious fellowship opportunities. Through searching online, Speak discovered the Fulbright United Kingdom Summer Institute program and was accepted into this prestigious cohort of eight students.

The three-week program focused on studying sustainable food production and maximizing land use in agriculture. Each week focused on a different subject area, with the first week consisting of lectures from resident professors on common agricultural practices in the United Kingdom. This week laid the groundwork for the following weeks of traveling to various farm sites, identifying problem areas in the region's agricultural system, and crafting the students' final projects. During her travels, Speak also had the opportunity to attend the biggest agricultural fair in Europe, the Royal Welsh Show, and experience livestock agriculture in a different culture.

For her final project, Speak investigated and worked to formulate a solution to the United Kingdom's heat stress issues in dairy cattle. The UK's normally cool climate is ideal for dairy cows, however, as climates change, dairy farmers are looking for ways to keep their herds comfortable during heat waves. Speak presented the quality issues that occur when dairy cows experience heat stress and suggested management practices and even breeding tactics to lessen heat stress. Through this program, Speak, who is pursuing an international agriculture minor, experienced firsthand the importance of viewing agriculture on a global scale and was able to bring her new found knowledge back to Mississippi.

"We, as people in agriculture, need to be investigating ways that we can help the industry succeed," said Speak. "There are many upcoming global challenges such as climate change and food insecurity, and having this experience abroad showed me that the challenges in other developed countries are very similar to our own."

While these students came from different majors and had unique internship experiences, all credit Mississippi State and the College of Agriculture and Life Sciences with equipping them with the skills and knowledge necessary for their work. These students' real-life application of their education at MSU is helping to provide better care for animals, increase farmers' crop yields, and combat arising issues in the agricultural industry. After their internships, all four students returned to Starkville, to continue their studies with a clearer view of their respective fields and exciting futures.



Alex Speak (photo submitted)