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# upicmagazine

ISSUE 2

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### UPIC Magazine Staff

Perri Shockley - Editor, Art Director

Mette Kolind - Copy Editor, Production Manager

Jonathan Lashley - Publication Advisor, UPIC Mentor

Devan Bahr - Magazine Coordinator, Photographer

Sarah Barry - Magazine Coordinator, Photographer

**Cover photo provided by Rhonda Powell**

# From UPIC intern to UPIC staff member

# STACEY HUDDLESTON

## Program Coordinator

I was honored when our UPIC Magazine team asked me to write a piece for this semester's issue. Their first issue did an amazing job capturing our interns' and mentors' experiences with the UPIC program so I am happy to share my own story.

Just last year, I was a UPIC intern during the summer, working with the Office of Human Resources. I had been an intern with HR since spring but had no previous knowledge of human resources. I was pursuing a psychology degree minoring in biological sciences, but wanted experience in an office environment. Throughout my internship I worked with Susanna Johnson, Manager of Professional Development and Training. She informed me about the benefits of validating my internship on my transcript and told me I would get paid more than minimum wage. With that, I became a UPIC intern.

Throughout my internship, Susanna helped me develop my professionalism and improved my confidence in my abilities to produce great work. I gained an incredible amount of knowledge ranging from specific Clemson University processes and procedures to state HR regulations. She had me working with her on numerous projects, developing training documentation and presentations for the onboarding and recruitment units within the Office of HR. Working alongside Clemson's recruiting unit, they informed me of a position in which I might be interested. After some encouragement from the recruiting unit and my mentor I applied for the position. That job they encouraged me to apply for is position I hold today: UPIC program coordinator. Without Susanna's mentorship and the encouragement from the Office of Human Resources, I wouldn't have the opportunity to work for my alma mater. With that said, I want to take a moment to show my gratitude to the Office of HR and my mentor Susanna Johnson for providing a great learning environment.

The work experience and mentorship I gained through UPIC helped me get to where I am now. The UPIC Program's ability to provide students the opportunity to gain professional work experience on campus is truly remarkable. I enjoy hearing about the job opportunities available to our UPIC interns because I know just how great it feels to have a job secured with graduation fast approaching. I encourage students to seek out internships and work experience throughout college with the UPIC program to gain valuable knowledge and professional experience in their field of study. These experiences are what will help prepare students for life after college.



Stacey L. Huddleston



# SUMMER 2014 INTERNSHIP LOCATIONS



AS WELL AS  
Honolulu, Hawaii  
Cange, Haiti

## TOTAL UPIC INTERNSHIP EXPERIENCES

2011-12	2012-13	2013-14	2014-15
--	Fall <b>74</b>	Fall <b>87</b>	Fall <b>303</b>
Spring <b>20</b>	Spring <b>78</b>	Spring <b>206</b>	Spring <b>349</b>
Summer <b>33</b>	Summer <b>71</b>	Summer <b>196</b>	--
<b>53</b> Total	<b>223</b> Total	<b>489</b> Total	<b>652</b> So Far

# GET TO KNOW



## **TROY NUNAMAHER**

Director of Graduate and Internship Programs  
Middletown, OH is his hometown

### **RESPONSIBILITIES**

Manages internship programs and budgets  
Assesses program effectiveness  
Provides career development counseling



## **CAREN KELLEY-HALL**

Associate Director of the UPIC Program  
Anderson, SC is her hometown

### **RESPONSIBILITIES**

Conducts site visits  
Instructor for UPIC's internship courses  
Provides advising and counseling



## **COLLEEN LASHLEY**

Program Coordinator  
Oak Harbor, WA is her hometown

### **RESPONSIBILITIES**

Coordinates payroll  
Orchestrates emails  
Assists interns with hours



## **STACEY HUDDLESTON**

Program Coordinator  
Fontana, CA is her hometown

### **RESPONSIBILITIES**

Coordinates payroll  
Orchestrates emails  
Assists interns with hours

# THE UPIC STAFF



## LISA ROBINSON

Assistant Director of the UPIC Program  
Ithaca, NY is her hometown

### RESPONSIBILITIES

Conducts site visits  
Assists with mentor and intern training  
Provides career development counseling



## JENNA TUCKER

Internship Counselor  
Clemson, SC is her hometown

### RESPONSIBILITIES

Assists with intern and mentor trainings  
Conducts UPIC site visits  
Provides career development counseling



## MORGAN CLARDY

Graduate Assistant  
Pelzer, SC is her hometown

### RESPONSIBILITIES

Provides career development counseling  
Helps with UPIC site visits  
Assists with events such as the Career Fair



## Henrietta Maindidze

Optimization Intern  
Gaithersburg, MD is her hometown

### RESPONSIBILITIES

Creates the monthly newsletter  
Communicates with UPIC interns  
Fields questions about UPIC

**CAMPUS  
ACTIVITIES  
AND  
EVENTS**





Mutschler (left) and Culp (right) singing at the Beauty 101 event **Photo by Denton Dickerson**

## reflection by EMILY MUTSCHLER

Through my role as a Student Event Coordinator at Campus Activities and Events (CA&E), I have learned an incredible amount about independence and responsibility. All of the CA&E staff empower students to take ownership of their workplace responsibilities. CA&E is committed to customer service and making every event a success. We want to support the goals of the university so that our students have the best opportunities not only during their time at Clemson, but also when they leave Clemson. We also want to support all of our clients in producing events that in turn support the university's mission.

This internship showed me just what I am capable of and taught me to never back down from a project that seems "too big." I have learned that I am capable of handling four to seven events a week dealing with high-profile clients such as the president and vice president of the university, bands like NeedtoBreathe, and outside customers who are looking for the optimal experience at Clemson. As a representative of the of university, I have learned to take pride in my work and go above and

beyond for the self-satisfaction of seeing something I planned grow into the best experience possible for the client. I have learned professional skills like customer service, stress management, and accountability that I can carry with me throughout my career. Because of this internship, I will always have a piece of the Clemson work ethic and dedication to service with me no matter where my future career takes me.

As the event personnel in charge, my role was constantly changing and evolving after every event assignment. I was responsible for everything from initial communication with the client about reservations to communicating with operations staff to invoicing and billing after events. Some events required a creative role when it came to developing layouts and room diagrams, while others were more administrative. I frequently contacted various departments in the university to obtain consent or information about their area of specialization, including the Fire Department, Facilities, Dining Services, and the Clemson University Police Department.

A project may start out as a simple organization of a

few tables and chairs. At that point, my duty is to work with the operations staff at the venue to ensure we have what the client needs. If we do not have what they need in inventory, we have to work with outside businesses. Events that seem simple almost always blossom into something much larger. For example, as the event gets closer, the client may decide they want food. Approvals must be made, so my role would shift into a liaison between Risk Management, the catering company, and various other departments of the university. Then once food is added, the client may want to add linens and other details, which is where my role would shift even

more to coordinate and plan the details that would put the event together.

Having to constantly be in contact with high-profile clients, working with other departments, and being flexible enough to completely change an event has taught me a lot about stress management. This job was really all about the client's experience, so even if I was completely stressed out and panicking on the inside, I learned to control it and change the stress into productivity and problem-solving. Professionally, I will use this skill no matter what I do after graduation. Being able to work under pressure and trouble-shoot so the client doesn't have anything to worry about has taught me a great deal about customer service.

Some of my favorite memories involve the events we have put on across campus. My favorite was Mary Kay's Beauty 101 event. This event was planned by Denton, but we all attended and participated. At the event, students got tons of freebies from Mary Kay, makeovers, and the chance to take part in a photo booth. This was one of the more technical events in our department because there were so many pieces to coordinate. Seeing events like this go off without a hitch was incredibly rewarding. We all went through the stations and participated, and after we took a moment to observe. Seeing so many students genuinely enjoying an experience made all of the hard work and behind-the-scenes stress worthwhile.

Some of my other favorite events were the various fairs we organized. These always lead to great networking opportunities and were relatable to real world skills I'll need to have. I met so many potential employers and have made so many connections through these events.

One of the major struggles was working through university policies. Communication is another struggle I encountered because I had to connect with so many people across campus. Receiving positive feedback from clients in the form of compliments and post-event emails was really encouraging. Seeing that clients have had a great experience with us and want to come back to us for future events is very rewarding.

By the end of my internship, my goal was to plan and execute a large-scale event in Littlejohn Coliseum. I successfully helped plan the Fall 2014 Ring Ceremony. This ceremony hosted over 900 students and 1800 guests. The Ring Ceremony is a pivotal moment for Clemson seniors, and it was great to play a role in shaping that memory.



Mutschler working hard at her desk



Dickerson plans for the next on-campus event

one. The client and I were not sure if it was going to rain the next day. It was also quite the hassle to figure out parking for Mary Kay's employees. However, on the day of the event, everything I was stressing over ended up working out for the best! The skies cleared up, the employees found parking, the event turnout was huge, and Mary Kay had a very pleasant experience. Four hundred Clemson students received makeovers that day. Everyone left Beauty 101 with a smile on their face and free makeup in their pockets.

There is a striking difference between coordinating events for student organizations and coordinating events for third-party vendors. With third-party, non-affiliated clients (i.e. Mary Kay, Yahoo) it is very easy to have a breakdown in communication. For example: Mary Kay Enterprises is located in Massachusetts, their marketing agency is based in New York City, and their on-site representative is in Tennessee. Communication on all these fronts was a much more involved process. With a student organization, I usually only have to contact one person.

I have become much more proficient with professional emails during this internship. I've learned to eliminate fluff and maintain an appropriate level of cordiality. I have also created email templates for myself and the event coordination team that help streamline the entire process of reaching out to a client. My communication skills

## reflection by DENTON DICKERSON

As a Student Event Coordinator for Campus Activities and Events my job was to be an effective liaison between clients whom have decided to have an event at Clemson and the venue operations staff. Student event coordinators are often the first faces of Clemson outside clients get to meet. Our job is to ensure the event process is smooth for them. We need to be welcoming and encourage them to come back. When something goes wrong for an event, we need to be able to remain calm and professional but also proficient in solving whatever problem presents itself. This way the client leaves feeling that their experience was indicative of a top 20 public university. I have dealt with several events that took place on campus (Bowman, Union, Carillon Gardens, etc.), and viewed all of my assigned events as their own miniature projects.

I coordinated Mary Kay's Beauty 101 event in Cox Plaza this year. I worked on this event for a little over a month. The day before the event was a very stressful



Mutschler and Dickerson choosing projects





CA&E interns attend board meeting with mentor, Waldrop (right)

## reflection by HANNAH RAYMOND

As an intern for Campus Activities and Events (CA&E), I was given certain events to plan and coordinate with clients. It was great to work alongside such a hardworking team of people. I knew that if I needed anyone's help or advice, they were more than willing to sacrifice time and effort to help me. We helped coordinate and work out the details that made the events successful, and we did so with an incredible team of professional staff to learn from. Our mentor, Alanna Waldrop, has been so great to work alongside and learn from. She was always willing to answer our questions and to help us work through projects.

My favorite experience was probably getting to work at the Needtobreathe concert in September. We were able to help with different aspects of the concert throughout the day and it was such a fun experience to see all of the detail that happens backstage that makes a concert successful. I always found success when an event was complete and had run smoothly. It was so exciting see everything come together after putting in all of my hard work.

I think this internship helped me work with people

in different positions and departments. I met people that were members of clubs and organizations that I did not know existed beforehand. It also taught me problem solving skills. There were events where things had gone wrong at the last minute, and I had to figure out solutions quickly.

Good communication skills were also important, and I had to overcome the challenges of communicating with lots of people. I had to make sure that I understood what they wanted for their events, and I had to be able to accommodate all of my clients' requests.

This internship has also helped me with my time management skills and taught me what it really means to be organized. My schedule differed every day due to meetings and events. Sometimes I worked early in the mornings or late at night. I had lots of different events happen this semester, and it was exciting to see them come together!

Overall, I really enjoyed getting to work with so many different departments and organizations on campus. It was exciting to see what organizations are doing for Clemson's students, faculty and community.



Culp (far left) schedules Spring 2015 events

## reflection by ANDREA CULP

I have been a student event coordinator with Campus Activities and Events (CA&E) since January 2014. As an event coordinator, I have been tasked with lots of different events. Since my start in January, I have coordinated events such as: The Clemmy's (the athletic awards banquet), Summer and Fall Orientation, Employer Fair by Bosch, IPTAY Freshman Lunch, and some smaller events that took place in The Hendrix Student Center. A lot of the events that I took on this semester were typically longer than a day and involved VIP clients—clients whose events involved a lot of logistics and meetings.

When I first started working with CA&E, I spent a lot of time shadowing other student event coordinators so I could learn everything that went into the process. In the spring, I had about three events per month and my first big event was the Clemmy's Athletic Awards Banquet. This event taught what I needed to know about event coordinating.

After the Clemmy's event, I decided to stay with CA&E through the summer and complete another

internship with them. I became the event coordinator for all high school graduations and Clemson orientation. This summer I realized that I was now able to coordinate events without the help of others and that I knew almost everything I needed to know about making an event successful.

CA&E hired three new student event coordinators in the fall, which was hugely helpful within the department. Once the new event coordinators started working, they began coming to me with questions and would sit in on my meetings to learn about how to coordinate events. Within the year, I went from the newest member of the team to the person that new event coordinators came to for guidance.

This internship has helped with my professional growth because I was given the opportunity to work with professionals in different departments throughout campus as well as outside clients. I constantly communicated with other departments to see how things could improve or change in order to make the event process easier.

“This internship has helped with my professional growth because I was given the opportunity to work with professionals in different departments throughout campus as well as outside clients”

Every month, student managers and professional staff members met to talk about things that were going on in the department. I was able to see first-hand how many parts exist within a department and that coordinating events doesn't just take an event coordinator.

It was important to always look and act professional when working with CA&E because I worked with people from the Dean of Students office, the Athletic Department, The President's office and others, and I wanted to make a good impression.

One of my favorite memories so far was tied to the Needtobreathe concert where I was able to work hand-in-hand with the tour manager and production manager for the band. Working the concert gave me the opportunity to meet the band and their family as well as their production team.

Another favorite of mine was working the Letterwinners Tailgate during the North Carolina game. The Letterwinners Tailgate is an invite-only tailgate held every game day in Littlejohn Coliseum for athletes in the past that have been letter recipients. When working the Letterwinners Tailgate, I was able to meet previous football players of Clemson University that have held records and that are part of the Hall of Fame. Being able to work both of these events gave me the opportunity to meet people that hold high importance in the field that they are in.

Throughout the semester, I coordinated over 25 events for CA&E. My goal for these projects was to make sure that all clients were happy with the end results and that I left a good impression them. I always tried to seek out new information so I could continuously learn of different ways to help clients.

I learned the importance of being extremely organized. There was always a need for dividers, binders, post-it notes and folders. The more organized I was, the easier it was to stay on top of events that were coming up. Another skill I learned was how to talk to people that I did not know in a professional manner. It was hard for

me at first to have conversations over the phone with people I wasn't comfortable with, but now I feel like I have grown and I am capable of communicating with others more effectively.

This internship taught me that I truly want to work in event planning. I didn't realize how much hard work went into planning events, but they are extremely rewarding. Since working, I have created a professional network. It is important to build this network in the events industry because positive word of mouth is a huge way to be successful.

Another thing that my internship helped me with was the ability to work in different venues. I was been able to coordinate events in the Hendrix Student Center, Tillman Auditorium, and Littlejohn Coliseum. Depending on the venue, a client would need different things such as equipment, vendors and staffing. I feel like I became extremely well rounded when it comes to working in venues of different sizes and needs and I know that this will help me in the future.



Raymond (left), and Culp (right) look over materials

# MENTOR'S PERSPECTIVE

reflection by ALANNA WALDROP

Working as a UPIC mentor has been a challenging and very rewarding experience. As the Coordinator for Event Services with Campus Activities and Events (CA&E), I have had the opportunity to mentor four student event coordinators: Andrea Culp, Denton Dickerson, Emily Mutschler, and Hannah Raymond.

As student event coordinators, interns are responsible for overseeing event coordination from start to finish. Event coordinators combine excellent communication and customer service skills, expertise in university policies and procedures, and a working knowledge of venue capabilities to ensure that all areas of a client's event operates smoothly. The information they receive from meeting with clients is configured into room diagrams, event management software, technical

information for operations staff, equipment and service orders with campus partners, and any university required approval forms.

Each event coordinator is assigned several events at one time. Interns must use exemplary organizational and time management skills. In a typical week and with several events, the interns would meet with clients, order rental equipment, discuss staffing or technical equipment with

operations staff, create cost estimates and layout diagrams, invoice clients for a prior events, visit events in progress, and submit approval forms to various

campus partners. These are just a few of the regular duties that an intern experiences, and each event has its own requirements and challenges.

There are many types of events that interns coordinate each semester. During the fall semester at Littlejohn Coliseum, event coordinators were responsible for coordinating events such as football tailgates, Tigerama, Rock the John, and the Ring Ceremony. We had many exciting outdoor events, including visits from clients such as Beauty 101, a collaboration with Seventeen Magazine and Mary Kay cosmetics. We also coordinated visits from the US Polo Association, Coca-Cola, and Yahoo!. In our other venues such as the Hendrix Student Center, University Union, and Tillman Auditorium, we coordinated an event with Miss America, several career fairs with the Center for Career and Professional Development, assisted with New Student and Sophomore Program's Family Weekend, and many cultural and diversity events such as the Ticket to Celebrate Diversity and Inclusion with the Chief Diversity Office.

It has been a privilege to mentor such talented, bright, and motivated students. Having worked with students for many years, it was rewarding to see them grow during their time at Clemson and move on to thrive in their careers and personal lives. Our student event coordinators received a broad scope of skills and partnerships that will serve them well for years to come.

**“Our student event coordinators received a broad scope of skills and partnerships that will serve them well for years to come”**



Waldrop discusses events with interns



# KENDYL WILLIAMS

Biomedical Intern • Clemson Biomedical Innovation Campus • mentored by DR. MARTINE LABERGE



Williams (right) examines calf tissue

## reflection by KENDYL WILLIAMS

During fall semester, I interned at the Clemson University Biomedical Innovation Campus (CUBEInC). Formally established in 2011, CUBEInC's mission is education through research. As part of the Greenville Health System, they offer opportunities for research and innovation. There are several different labs and conference rooms where research projects and classes are hosted. In addition, CUBEInC provides several startup companies with space at the facility, creating close ties between Clemson and industry. For instance, they collaborate with Steadman Hawkins, a leader in orthopedics, and Proaxis, a physical therapy and rehabilitation company.

As an intern at CUBEInC, I had many different responsibilities. I gave tours of the facilities to visiting groups, from high school seniors to possible investors. I also acted as a liaison between CUBEInC and others working in the facility to ensure everything in the building ran smoothly. In addition to these responsibilities, I completed rotations in the research labs and learned

about the projects going on in each.

Interning at CUBEInC taught me how to collaborate with many different people and solve problems with limited information. I worked in one lab oriented towards stem cell research and regeneration and in another that focused on implant retrieval and sterilization. I enjoyed getting to work with the grad students and professors in the labs and being able to get a glimpse of some of the different research projects going on at CUBEInC. This helped me learn how to work both independently and as part of a group.

Some of my favorite memories at CUBEInC include the tours I gave. My first tour was for a group of high school seniors from the Governor's School of Science and Math. As a junior majoring in bioengineering, I really enjoyed being able to show them all that Clemson's Bioengineering department offers those interested in pursuing careers in bioengineering. I was able to answer questions about why I chose Clemson and, more specifically, bioengineering. I have also

enjoyed connecting with the various people who visited CUBEInC for meetings, research, and teaching purposes.

I was able to watch some of the procedures/surgeries performed in the lab that Steadman Hawkins uses. There were several procedures done each week on specific parts of cadavers, and the doctors were always more than willing to let me watch and ask questions. I had never been exposed to anything like these procedures before so it was a great learning experience.

The first round of surgeries I watched were dissections of knees that had undergone prior surgeries. It was interesting to find out the background of these patients and why the procedures had been done in the first place. In some cases replacement parts had been added during surgery. These studies found that though some patients were much younger than others, they had experienced advanced arthritis that called for orthopedic intervention.

For the knee patients, it was clear that there was degradation of the knee and that something had to be done. Being able to see these repairs in real life, not just in a textbook, was very interesting and not like anything I had seen before.

Another procedure I watched was the dissection of a human shoulder and arm that was then put through a throwing motion to better see the mechanics involved

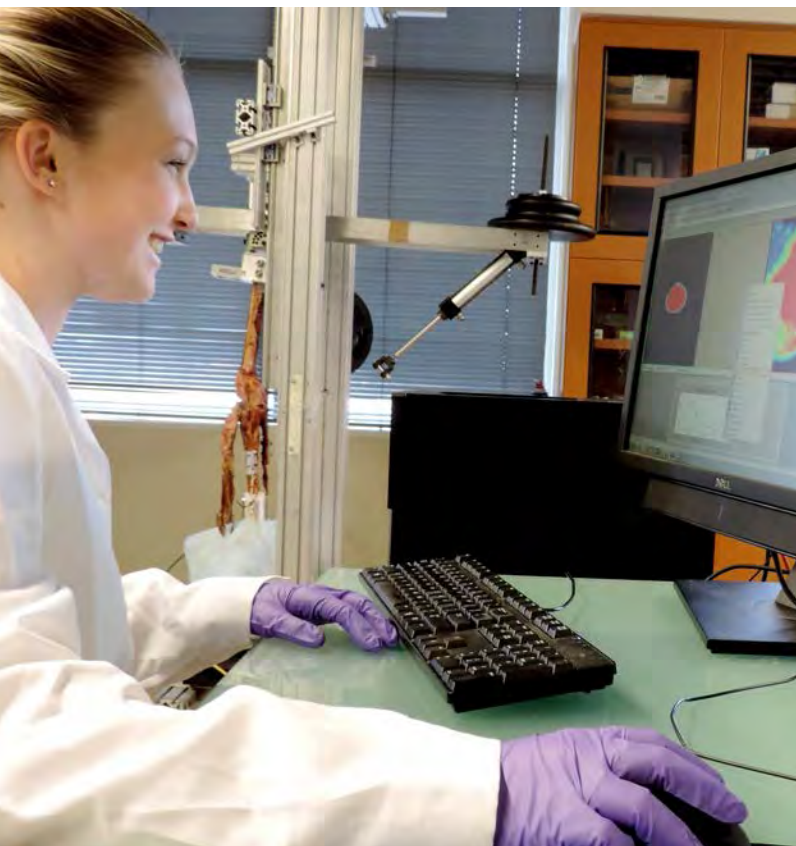
“These procedures allowed me to see how bioengineering is used in real world applications and under an orthopedic focus to improve a patient’s quality of life”

inside the arm.

During the fall, I also attended the annual conference for SCBIO, a member organization that seeks to grow the life science industry in South Carolina. The companies that attended ranged from well-known international companies like Novartis to other, young start-ups. The conference proved a great place for networking with professionals, learning how to start a company, and finding ways to obtain funding. I even learned what to expect when working with the FDA. I met a number of different people who all played different roles in the life sciences field. From patent attorneys to consulting groups for the different companies, many of these individuals had collaborated with Clemson University at some stage in their research. It was interesting to be able to see all of the connections our university has among others’ research. It was definitely an important educational experience and I am so glad that I was able to attend the conference.

The project I worked on this semester was with the Retrieval Research and Reprocessing of Medical Devices (ReMED) lab, which is run by Dr. Melinda Harman. The main goal is to create a registry of explanted surgical mesh in order to characterize their properties, which is done through mechanical testing and chemical analysis. The purpose of a surgical mesh is to “patch” holes in various parts of the body, such as the abdomen, or to provide structure inside of the body. They can be made of biological or synthetic materials and are usually placed below the skin. Hernias, for example, are often repaired using surgical mesh.

I helped ReMED on this project by measuring the pores of different types of surgical mesh and I had to make sure that the measurements were precise and accurate. We used sample meshes that were processed similarly to ones explanted from patients. The two programs I used to check these measurements were MATLAB and ImageJ. MATLAB is used to write codes



Williams studies computer generated renderings in the lab

to process the images and ImageJ is used to import, manipulate, and analyze them.

During my time on this project, I developed a code in MATLAB that would process the images of the various meshes. This meant I had to convert the images to black and white and then use Canny “edge detection” to obtain a clear outline of the pore, which then made it easier to take the image into ImageJ and measure the area of the pore. This code allowed me to take accurate measurements, which would not be possible if the same measurements had been taken using raw images. Once we developed this code we then decided to put explanted meshes through a tissue digestion protocol in order to better prepare them for photographs and measurements. I hoped to further alter and add to the MATLAB program in order to refine and “clean” the images up so that taking measurements could become even easier.

Working on this project was important because the ongoing goal is to understand the process of surgical mesh. While we know that many meshes fail when implanted into patients, we do not know the reason for their failure. Gathering information on this will help with the design process and ultimately create meshes that have a lower failure rate and can better serve the patient.

A challenge I faced while working on the project was figuring out how to write a code to process the images. I had never used MATLAB before to do this sort of thing and so it involved a lot of research on image processing and a lot of trial and error to see what worked. However, I found it rewarding to be able to figure these things out for myself and to produce a code that did what I wanted it to do. Colin Burns-Heffner and Erin Casey, two grad students who worked on the same project, provided a lot of guidance and I was grateful for their help.

Overall, I really enjoyed my experience at CUBEInC. The facility is one of a kind and offers ample opportunities for students in different areas of biomedical research to study. It was great working with and getting to know all of the people at CUBEInC and collaborating with them to reach my research goals. My internship has taught me a lot about the field of bioengineering and has helped me determine my career path. I also liked being able to see the impact that Clemson is making on the field of bioengineering. All of the research that is going on will produce major advances in the field.



Williams prepares procedural work

# REBECCA CIBULSKIS

Engagement Intern • Office of Global Engagement • mentored by GLORIA FREEMAN & SHARON NAGY



Cibulskis (right) reviews documents with mentor, Dr. Sharon Nagy (left)

## reflection by REBECCA CIBULSKIS

“The world is a book, and those who do not travel see only one page.” –St. Augustine

“Certainly, travel is more than the seeing of sights; it is a change that goes on, deep and permanent, in the ideas of living.” –Miriam Beard

These quotes are about more than just traveling to see the world. In fact, I think they’re about the limitations of not traveling. We live in an amazingly sophisticated world of technology, international collaboration and human development. We are more aware now than ever of the social problems facing people in the world. We have access to hundreds of years of research and history to educate our population on how to affect the world in a positive way—and that’s what these quotes are really about: education.

I have learned so much about the field of International Education since starting my internship at the Office of Global Engagement (OGE). When people think about our office they think ‘study abroad,’ but just like the words of Miriam Beard and St. Augustine, the role of

OGE is so much broader than student travel. University globalization encompasses nearly every aspect of the university and seeks to support students, faculty, industry, the local community, charities, and the environment.

One of our biggest challenges in OGE is trying to market the scope of our projects. The range of our Study Abroad programs are very impressive, sending over 1,300 students to work, study and serve overseas. Study Abroad, however is only one aspect of Clemson’s global engagement. Related to the topic of student mobility, Clemson also plays host to nearly 2,000 international students and scholars from all over the world. These students, researchers and professionals not only bring a new perspective to our campus, but they also come with great credentials, international awards and government funding. These great students and scholars have helped shape projects that paved the way for Clemson to become a top 20 institution.

In addition to hosting professionals and sending students and faculty to and from every corner of the world,

Clemson University also shapes our global footprint right here in the upstate. With satellite campuses for the MBA program and the CU International Center for Automotive Research in Greenville, Clemson is able to work closely with domestic and foreign industry partners on innovative projects that make us a global name in research. In addition to industry partners, Clemson has active agreements in place with over 100 institutes of higher education all over the world. This global outreach and collaboration contributes significantly to the university's global competitive advantage.

People need to stop thinking about international education as a topic that's only interesting to certain fields of study or for people who like to travel. The world is globalizing to such an extreme degree that every major in every field will feel the change. It's no longer about having a competitive advantage in your region or your country or your trade bloc. Globalization means that every industry, project and individual must successfully utilize resources, navigate culture, collaborate with colleagues and compete with thinkers from all over the world. Cultivating a successful global learning environment is the goal of international education and of Clemson University's OGE.

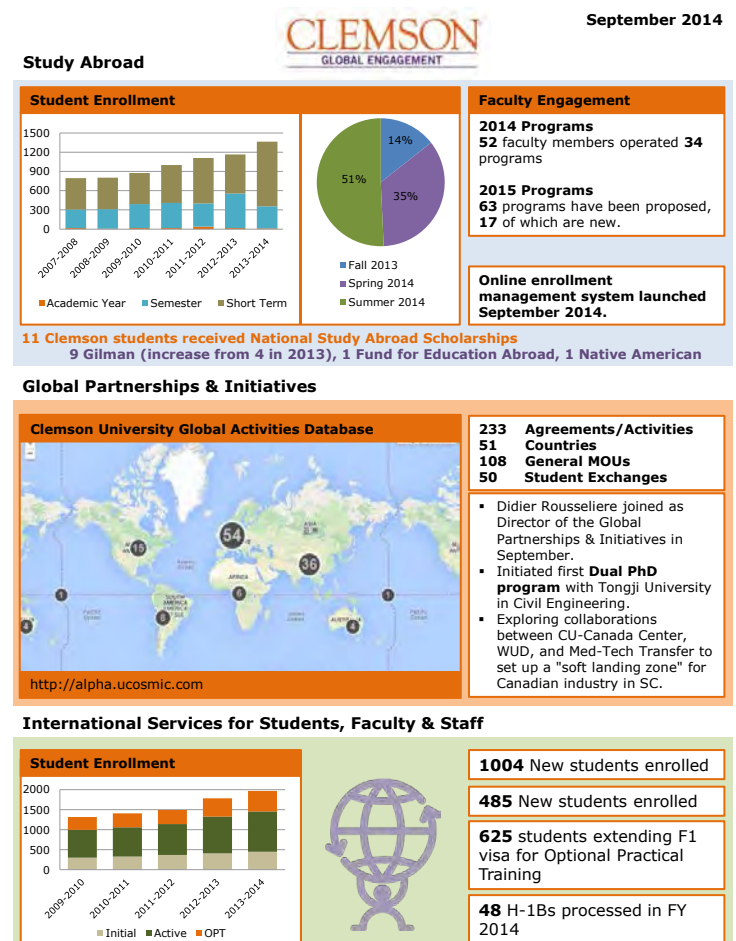
My role as an intern in the Office of Global Engagement gives me direct access to internationalization and globalization issues in higher education and industry.

One of my projects was to create an Internationalization Inventory to log and showcase global activities across the colleges. The hundreds of faculty activities, courses, partnerships, research projects and publications can be found on the OGE website, and seek to create some transparency in the scope of university globalization.

Working directly under the Vice Provost and her administrative assistant has opened my eyes to the extensive international topics going on at this university. In the Office of the Vice Provost I have had the great opportunity to develop a wide-range of skills in varying areas such as Human Resources, Recruiting, Marketing, and Strategy and Operations. Working on processing international professional visas, designing a newly organized website, logging all international activities across the colleges, planning new initiatives and analyzing inefficient processes have all helped me to develop these skills. Specifically, I have developed great skills in time and project management, critical and creative thinking, and communicating to a variety of audiences.

I can't say enough about how this UPIC internship has contributed to my personal and professional development. I have been very privileged to work in this office for the last full year of my undergraduate career. When I started the internship, I didn't know much about the field of international education or about working in a university. I remember, however, being a freshman, fresh out of my Study Abroad 101 session, a mandatory prep course for students who wish to study abroad. Listening to the advisors talk about the options I would have to go abroad inspired me: "I think I want to work in a Study Abroad Office when I graduate..." This was the first of many career aspirations I claimed at Clemson.

My experience with OGE solidified my aspirations to work in international education. With only one year of professional experience in Higher Ed topics like student mobility, international employment, curricular internationalization and economic development, I was able to confidently apply for jobs in at other universities and will be starting a new position in NC State's International Office upon graduation.



OGE by the numbers image provided by Cibulskis

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IMAGING  
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Cubism



5

Crystal Cubism™  
Presented by Crystal  
Cubism



## reflection by DEVANTE HORNE

I began working as a UPIC intern at the Clemson Light Imaging Facility (CLIF) in spring 2013. CLIF is the advanced light imaging core for the entire Clemson research community; as such, user interests cover a wide range of research areas. Users range from plant and environmental scientists who seek high resolution images of plant stoma, to those studying MSE who are observing the surface roughness of tooth enamel. On a typical day, I may be presented with problems from students of various departments on campus to requests from local industry representatives.

CLIF hired me specifically to lead their new Insect Imaging Project. The purpose of the project was to generate images of aquatic insects that our client could use for taxonomist examinations. When they hired me, I was unsure of what I could bring to the table as an engineer with little interest or knowledge of taxonomy whatsoever. Also, I had no microscopy experience. However, I had previously (and since) worked in multiple research laboratories.

My mentors, Dr. Terri Bruce and Ms. Rhonda Powell, each recognized my ability to learn quickly and to think critically. They desired an intern who was willing to take on any challenge and effectively find solutions to problems that came up. Little did I know, my work

would be a significant factor toward the success of this particular project, and it would ultimately shape me both as a student and a professional.

The Insect Imaging Project required me to master using the Leica stereoscope and necessary, supplemental software. The Leica stereoscope features a modular design which allows the user to easily configure and adapt the microscope based on particular applications. An example of this modularity are the pose-able LEDs which allowed for crisp LED illumination that could be adjusted for the purpose of reducing shadows or enhancing light in the region of interest. Another unique feature of this microscope is its wide magnification range which allows a combination of large sample overview and detailed sample imaging.

After months of unsatisfying attempts to acquire insect images on multiple other microscope systems, the facility attained the Leica stereoscope for the purpose of acquiring high quality insect images. During my first several weeks in the facility, my main focus was to teach myself to use the stereoscope and to come up with a protocol for imaging on the brand new system. I developed a standard operating procedure (SOP) for the use of the Leica M80 Stereoscope. This SOP detailed starting up the instrument, working with its various





features such as lighting, camera controls, extending depth of focus, and taking accurate measurements.

Soon after developing this imaging protocol, I began to work with the distinguished entomologist, Dr. John Morse—a real character. I am positive that I will never meet another man with more passion about his bugs! We began with the Eastern set of genera, which was approximately 70 aquatic insects. Over the course of several months, we acquired and processed literally thousands of images. An acquisition that I distinctly remember being incredibly and sometimes unreasonably tedious. Over time, though, we developed more efficient methods of positioning and dissecting the samples. Ultimately, we came out with a great product which received rave reviews from our clients.

I began interning during the spring of my sophomore year at Clemson. It is now my senior year, and looking back, I realize that without this experience, I would not be in the professional position that I am in now. I am now proficient on multiple microscope systems and I have developed a goal of mastering confocal microscopy before graduation in May 2015. Confocal microscopy is a light imaging technique that improves the optical resolution of a micrograph by eliminating light that is out of focus. Confocal allows you to stack individual focal planes, reconstructing an image in-focus among three dimensions. The skills that I have gained in this internship will make me an asset in any lab I join next fall as I begin my graduate studies in bioengineering. UPIC is an amazing program and I attribute many of my accomplishments to the experiences that I have gained through this program.



Band Aid pad viewed on the Olympus LEXT Optical Profiler



Aquatic insect head imaged using the Leica M125 Stereoscope



Aquatic insect belly gills imaged using the Leica M125 Stereoscope

**All photos provided by Rhonda Powell**

## reflection by CAROLINE ASHWORTH

As a new intern with the Clemson Light Imaging Facility (CLIF) I was introduced to the world of microscopy. Before my time at CLIF, I had only ever experienced microscopy in microbiology lab my freshman year. I had no idea how powerful some microscopes could be and what potential they could hold when exploring a smaller world.

CLIF is a multi-user facility located on the main campus of Clemson University. Directed by Dr. Terri Bruce, the imaging facility houses a number of advanced light microscopes. CLIF also serves as a technical resource, helping students who are using microscopy in their research. Additionally, the CLIF features cytometry equipment, a multi-user specimen preparation laboratory, and a dedicated classroom, which seats 20 people. The specimen preparation area houses all the equipment necessary for sample preparation, including a cell culture

“There was never a dull moment and I learned new things from my colleagues all the time”

hood, incubators, a chemical fume hood, and specimen rotators. Users also have access to common equipment, including automatic dishwashers, autoclaves, and cold rooms.

Undergraduate, graduate, doctoral, and faculty members alike all have access to all of the microscopes in the CLIF facility. Rhonda Powell, Terri Bruce, and CLIF interns provide training for each microscope free of charge. In my brief time at CLIF, I became familiar with using an Olympus LEXT Profiler as well as a Leica stereoscope. The LEXT Profiler is a 3D laser measuring microscope system that measures non-contact roughness, 3D form, and acute-angled specimens. If images are larger than the field of view, they can be collected using the stitching program. For precision, its Z-drive moves in steps fewer than 1nm. The Leica M125 stereoscope I worked featured a large field of view and a 10:1 zoom range. With these tools I examined the pores on the surface of leaves, baby spiders, toilet paper, duct tape, and many stranger things.

Working with Rhonda Powell and the other UPIC interns meant there was never a dull moment and I learned new things from my colleagues all the time.

When I wasn't walking around outside looking for interesting things to examine under our Olympus LEXT Profiler, I was event planning for the light microscopy symposium that we hosted on October 28. I especially enjoyed helping with this event because it exposed attendees to all that CLIF offers the Clemson community. The symposium featured the Clemson Light Imaging Facility's first micrograph competition, and we demonstrated a new Leica Microsystems microscope that was recently launched. I helped write the rules and regulations for the competition and brainstormed different ways and means of advertising this competition to potential participants. I also assisted in creating the invitations for all invited individuals and other miscellaneous materials that were used during the symposium.

I love working with everyone at CLIF and I find it rewarding to be a part of their exciting projects.



Ashworth studies specimens in one of CLIF's microscopes



Scott (right) at CLIF's Light Microscopy Symposium

## reflection by JUSTIN SCOTT

The Clemson Light Imaging Facility (CLIF) is an amazing facility, introducing its visitors to some of the incredible things that can be done with microscopes. One thing I came to understand as an intern is that CLIF is an actual business. I got to see first-hand what it took to operate within a business-professional setting. There was a lot that went into maintaining the facility's operations. There was scheduling and billing, processing client requests, troubleshooting client needs, etc. Working in this environment, I found my interpersonal skills improve greatly through my interactions not only with the supervisors and other interns, but also with the clients themselves when I conducted trainings.

I got to log time on a number of machines in the facility. CLIF has machines that can look closely at and into samples. Some machines can even take depth and volume measurements to create 3-Dimensional surface images. CLIF resources are available to anyone who needs them for research and education. The facility's staff help out in any way possible to help visitors determine which instruments they need to complete a project. CLIF proved itself as a great resource for faculty, students, and commercial customers.

Once I developed a familiarity with the equipment at CLIF, Rhonda Powell got me involved with a project on squirrel whiskers. This project was a collaboration with a Ph.D. student on campus. If you've ever seen the little boxes beneath trees on campus, those are part of her squirrel study. The grand scope of her project may have been a little over my head, but when I was hired I understood that she needed to analyze whiskers from the squirrels who'd been in those boxes. Specifically, she needed to analyze fluorescence on the individual whiskers. I spent several weeks editing the whisker

images that has already been collected by former CLIF intern, Brittany Lamont, and mentor, Rhonda Powell. This editing was required for the software that Dr. Bruce would use to actually perform the analysis. Once the editing was complete, I was given a set of files to analyze myself. Image editing had always been a hobby of mine, but now I got to get paid to do something I enjoyed. This was a new experience for me.

Beyond editing images, my internship allowed me to work on many creative projects. On the graphics side of things, I was in charge of designing concepts for most of the flyers, postcards, and digital ads for our upcoming Microscopy Symposium. I also helped design office banners, general brochures, and instruction manuals for some of our machines. I even used technical writing skills that I thought I'd never get to use, to update standard operating procedures and design instruction manuals for the different systems.

As an electrical engineering major, I really felt like the proverbial fish out of water when I came to work at CLIF. I knew that it would be an interesting, different experience for me, but I had not realized how many connections I would find between the projects at CLIF and fields like electrical engineering and bioengineering. This is where my internship has helped me stand out professionally. I can now say, "Yes, I'm an Electrical Engineer but I also have some experience with bioengineering/biosci concepts such as Imaging and Microscopy." Because there were not many electrical engineering students in the "Bioinstrumentation & Bioimaging" I took Fall Semester, I feel this type of work experience makes me unique among peers and could potentially lead me to valuable non-traditional job opportunities.

## reflection by SARAH HOWELL

Here at the Clemson Light Imaging Facility (CLIF), I'm kind of an amorphous figure. I don't necessarily have a specific title, besides intern, that truly defines what I do. Coming in to this internship with CLIF I really wanted to understand and get a feel for the different aspects of a business, including the use and maintenance of machinery that is unique to the facility. After my first semester, I was able to help with billing clients, writing standard operating procedures for different equipment, using some of the equipment confidently, putting into practice different laboratory techniques, and seeing how advertisement of the facility was conducted.

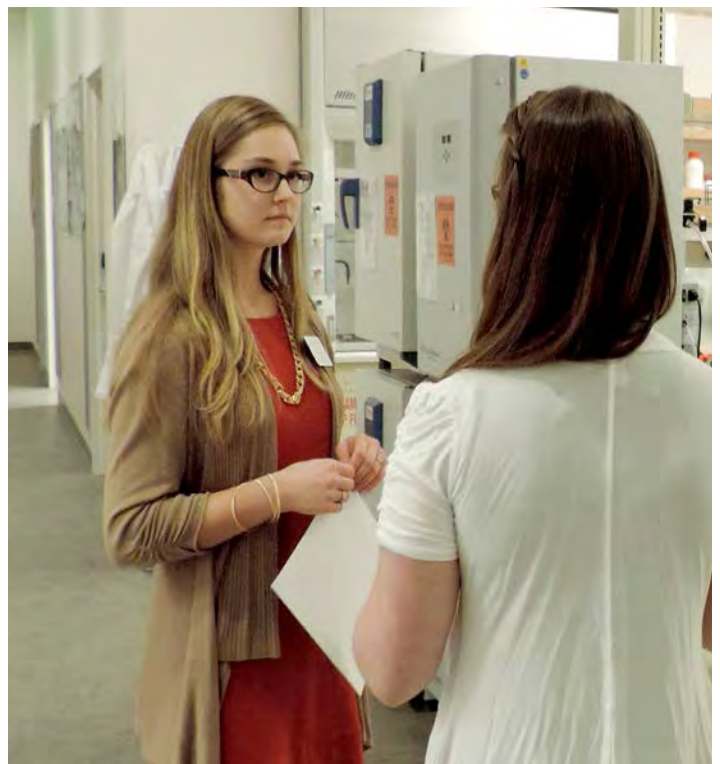
Given this foundation, I have been able to build on my abilities this semester (my second semester as a UPIC intern). Something new that has been added this semester is a symposium that CLIF will be hosting annually. This year we put together a microscopy competition and hosted our partner company, Leica Microsystems. Initially, this day was put together in order to highlight our partnership with Leica and to show off a new idea that they were debuting. Preparing for this day had been a major project for the staff and interns of the facility for this semester because once we started preparing for Leica to come, other ideas began flowing of how we could use this particular day to highlight what CLIF is and the potential we have for those in our community, and even others. My role in the preparation for the symposium was to help coordinate the event by interacting with the Campus Print Shop to print the slew of advertisements we requested.

Seeing how the facility is run and being able to be a part of that along with my communications and interactions with the Campus Print Shop has really helped to develop my character professionally. Within the business, I have also been exposed to how to communicate with my superiors in the area and how to act within my work setting, as well as how to communicate what they expect of me while working here.

Working with my mentors, Dr. Bruce and Rhonda Powell, is one of my favorite things about my internship at the CLIF. They are so eager to help me, and all the interns, with whatever we need, no matter how simple it may be! Each of them has so much knowledge to offer and I have to take advantage of it while I am still here. I also have enjoyed getting to know them on a deeper

level and hearing all of their family stories. I constantly leave "work" each day laughing at how silly we can all be together.

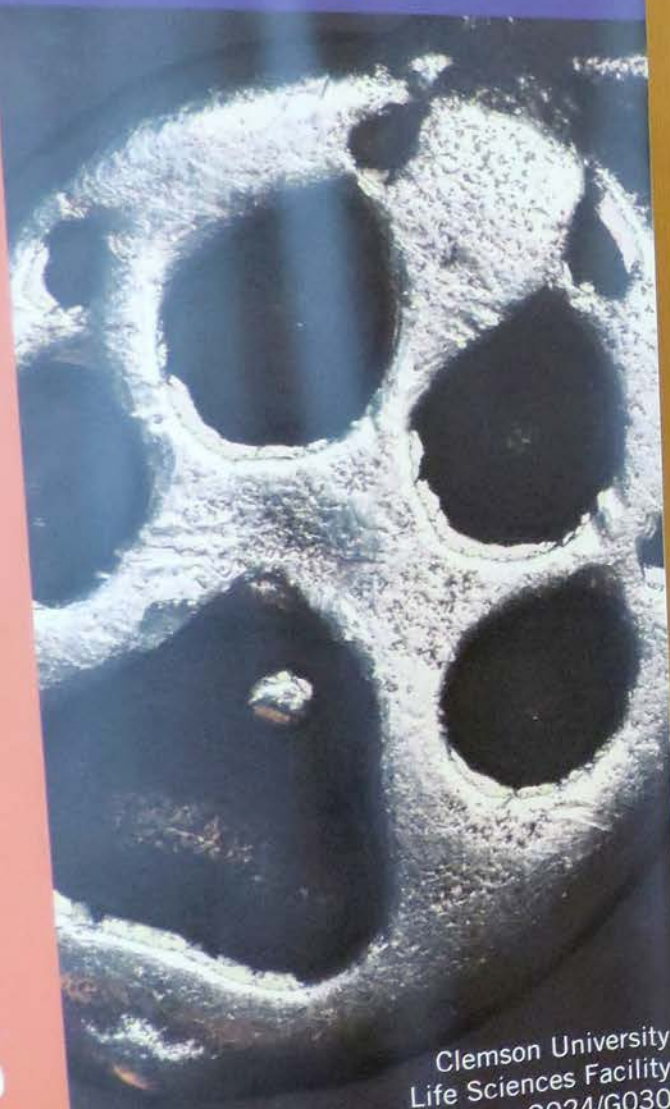
Before my time with UPIC is over, I would love to be proficient in a particular microscope system. Last semester I began working on a couple systems: the Optical Profiler, which is used for measuring surface roughness of samples; the Leica Stereoscope, which is great at imaging larger samples, such as insects; and our newest microscope, the Leica SPE, which is a confocal system that has a very user friendly interface, and takes high quality images. This semester (Fall 2014), I have begun learning the Cytoviva, which is a darkfield hyperspectral imaging system that can image nanoparticles. I was particularly interested in this system because I began a creative inquiry this semester that deals with nanoparticles and believed that being able to use the Cytoviva would be beneficial to my research. I would enjoy more practice on each system that I've learned so far, as well as learning other systems, such as the polarized light microscope, before I end my internship. Many of the goals that I came into this internship with I have already achieved, such as learning more about the business aspect of CLIF. Overall, the experience I have had is an incredibly positive one. I hope to learn much more in the next semesters.



Howell (left) giving a tour of the CLIF

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The Light Microscopy Symposium featured a micrograph competition

# Mentor's Perspective

reflection by RHONDA POWELL

By the time I started working in the Clemson Light Imaging Facility (CLIF) in the summer of 2012, the wheels were already in motion to take on a large scale insect imaging project. We would be collaborating with an entomologist, Dr. John Morse, to image around 70 genera of aquatic insects.

I didn't really appreciate the scale of the project at first. Each insect would need 8-12 high-resolution images, stacked in 3D. Each image needed to be taken with painstaking care since the pictures would become part of a pilot project to convert taxonomy certification tests to an online format. We were limited in our options for displaying the specimens for imaging since the aquatic insect specimens must be kept in liquid during imaging. It was also important to avoid damaging the specimens, as they were part of vouchered collections.

Quickly, we realized that the project was not going to move as fast as we had hoped if we were going to depend only on me to do the imaging. We needed a team. Dr. Bruce and I agreed that hiring an intern would be a great way to work on this insect project. By definition, UPIC wanted the student interns to have meaningful experiences and to have ownership in their assignments. We needed a student that was curious, willing to work independently, and who had the ability to take pride in the insect project.

Enter Devante Horne: Devante, a Bioengineering student, came to us with a research background, but no microscopy experience. When Devante started, we sat with him and taught him what we knew about our new Leica stereomicroscope system. From the very beginning, I could tell that he was a fantastic problem solver. Devante deserves much of the credit for developing the most appropriate imaging technique for the insects. He and Dr. Morse worked together to improve the methods to display the specimens, and to optimize the lighting conditions. Since each insect view was collected in multiple planes of focus; the two of them estimated that they took over 16,000 images. Did I mention those were just the images that passed the test of being high enough quality for our client?

Devante has been an amazing student to work with. He works methodically to investigate imaging techniques for complex samples. Aside from insects, he has worked

on samples such as gems and crystals. He has run a number of training sessions on the stereoscope and the LEXT optical profiler and is always willing to help his colleagues. He's my "go to" student when one of the newer interns has a question and has set the bar incredibly high for future interns.

Justin Scott, an electrical engineering student, joined the CLIF last summer, when he served a critical role in a whisker imaging project. He had lots of experience using a Photoshop-style program for editing images before he worked with us, and with little guidance, he was able to translate his knowledge to the use of Photoshop. Last summer, we needed to edit nearly 1,000 whisker images. At first, Justin devised a pretty standard editing technique, which wasn't fast enough. We discussed it at length, and when it seemed like all hope was lost for efficient editing, I got an "a-ha" email from Justin. He had figured out an incredibly fast and clever way to edit the images. Justin's work ethic and confidence resulted in us being awarded additional funds to continue the project.

There's nothing that I've asked of Justin that he hasn't at least tried to do. For instance, after teaching himself to use Adobe InDesign, Justin developed a user manual for one of our systems. From scratch, he took some technical instructions we had and learned how to put it in a booklet format, capture screen shots, etc. Justin also ran his first training session about three hours after I asked him if he felt confident running a training session! We had been working to earn the business of a small company. They asked for training at the very last minute and I could not fit it in my schedule. Justin agreed to run the session, and did a great job.

Sarah Howell (microbiology) and Caroline Ashworth (nursing) are two more of our current interns. These two students worked so hard to plan our first-ever micrograph contest and our symposium. They researched other imaging contests for rules, worked tirelessly on advertising the event, and thoughtfully considered the logistics of that day. Sarah helped me think of ways to make the facility "presentable" and Caroline enthusiastically jumped into any task I assigned her. You wouldn't have known that the two of them were new to

event planning. They were comfortable taking initiative, and I encouraged them to do so. Sarah offered tours of the facility during the event, and Caroline ran the welcome table. They were natural ambassadors for the CLIF.

Caroline and Sarah will continue to work with us this summer. Currently, they are working to expand our social media presence, and they are training to take over the insect imaging project.

As a mentor, I have learned so much. I have worked at learning how to instill confidence and leadership skills in the interns, but I do feel I could benefit from more training on how to be more effective at this. Sarah, for example, thinks she doesn't have a defined "role," but I feel that she just isn't confident in her abilities. She is instrumental in helping me write standard operating procedures and in helping me keep the lab area running smoothly. That's not busy work either! We operate like a small business, so it is important to have standard procedures to keep things running smoothly. She has done this for many of the systems and I know she knows more than she thinks.

Our interns have had many opportunities to learn the technical aspects of microscopy. Uniquely, though, all of the interns also see what it takes to run a business: billing and accounting, marketing and advertising, event planning, technical writing, etc. Considering this, I want

them all to work on prioritizing tasks and managing time, which isn't always easy since we are also juggling the needs of the facility itself. Sometimes, we need to stop to work on technical problems and assist users at the microscopes. I hope that they can continue to see how I make decisions about what needs to be done immediately versus what we can postpone.

This job has taught me that asking for help and listening to ideas are strengths. Working as a team is a strength. When the whisker project called for a major editing component, I had to admit that I had no idea how to accomplish that by myself. Justin came up with a solution, but if I hadn't admitted I needed help, he wouldn't have had the opportunity to troubleshoot a solution. I encourage the interns to speak up with any ideas that would make the CLIF run more smoothly.

I have also learned to be clear with expectations. It's important to foster independence in the interns, but it's also important to set limits. I now make sure to tell them what sorts of problems they should solve and when they should ask for help. I want them to be hands-on, to use the microscopes, and to train others to do the same. However, if they feel intimidated, it's my job to work with them until they are ready to be independent.

I think the UPIC program is amazing. I'm so glad we decided to participate in the program. Having the students here has really allowed us to run the facility more efficiently.



Powell (left) with CLIF interns (right) at Symposium event

# MORGAN COPELAND

Improvement Intern • Finance/Lean Office • mentored by LISA KNOX



Copeland (left) presenting a process map to a colleague

## reflection by MORGAN COPELAND

This fall has been my third semester as a UPIC intern for the Lean Office. Over the course of my internship, my responsibilities and the expectations placed on me have increased greatly. I have been given the opportunity to make decisions on my own, and have been able to contribute more during the development process by creating templates and reporting information.

Lean is a way of thinking that can be applied to all business structures, including higher education. Lean principles aim to eliminate waste, create a process that produces the most value in the most efficient way, and improve productivity. To do this, it requires you to think about a process from the customer's point of view.

Throughout my time as a UPIC intern, Lean initiatives on campus have tremendously increased, giving me the unique opportunity to work on projects affecting various areas of the University. In an effort to develop a culture of continuous improvement on campus, the Lean Office trains employees on basic Lean principles and facilitates

Lean events to look at specific processes. Lean events offer the unique opportunity for all stakeholders of a process to get in a room and discuss how the process affects each area and how it might be best improved.

The Lean process begins by identifying the business issue, scope of the project, project objectives, key stakeholders, and any necessary data related to the process. Identified stakeholders throughout the process are invited to attend a Lean event where an in-depth process review takes place. Time is spent mapping the "current state" of the process. The current state is reviewed to determine where waste exists, and how the process can be streamlined. A "future state," or ideal process, is then developed by eliminating areas of waste in the current state. The gaps between the current state and future state are then identified and addressed. Every Lean event results in the development of an implementation plan. This plan includes tasks that must be completed to arrive at the desired future state.



I have been involved in Lean events for numerous processes including staff hiring, H1B-Visa's, student cancellation, and capital planning. During these events, I observed and documented ideas, helped gather and organize data, and created Visio maps of the identified current and future states. Beyond specific projects, I also worked with the Lean Team to create templates and tools that were used when facilitating and completing Lean projects.

**“It was a beneficial experience since it is hard to really learn or understand these skills in a classroom setting”**

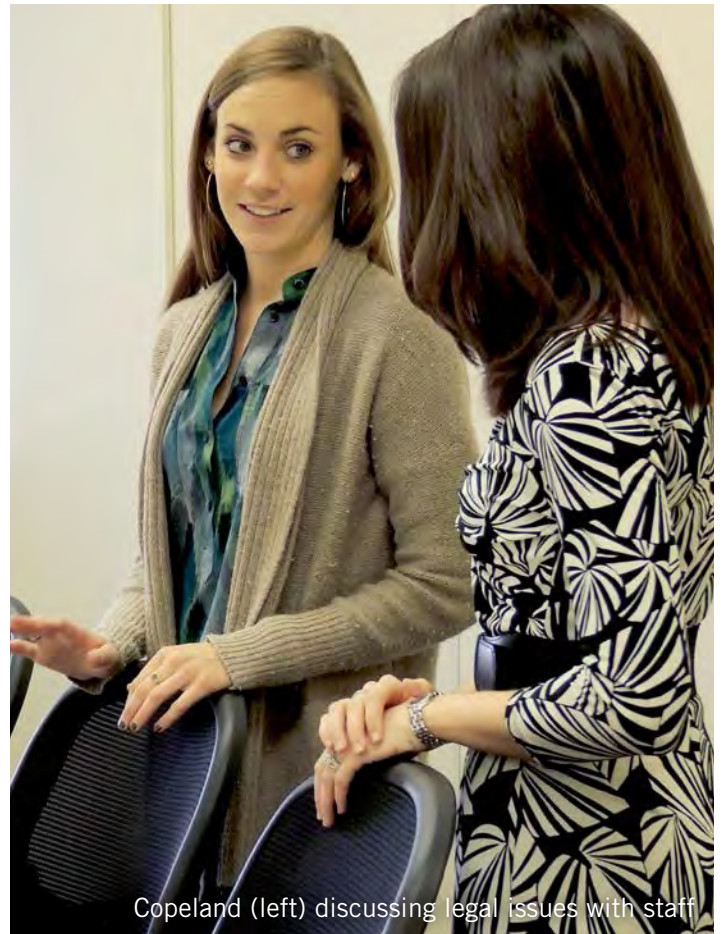
During one of the first projects that I worked on for the Lean Office I performed a time study, mapping out processes for a department. After gaining an understanding of the work that was needed, I created a current state process map that illustrated the steps necessary to complete the process. We used this process map to identify areas of “waste”, where work and time weren't adding any value to the process. I identified root causes of these issues and analyzed them from a customer's point of view.

My next step was to revamp the department's website. In order to revamp the website, I had to undergo training. I met with Jennifer Clark from the Student Affairs Publications office and she taught me how to use Cascade, which is the system that Clemson uses to run its websites. I then worked with the court office to understand what was needed on the website. I put this information into Cascade and worked with Jennifer to get the website published. I made sure that the website displayed relevant information for customers in order to minimize the number of phone calls that came into the office. These improvements, along with the other efficiency solutions I recommended, provided an estimated savings of 255 hours per year.

Through my connections as a Lean intern, I was able to join an Accounting Creative Inquiry to obtain my Six Sigma Green Belt. A Six Sigma Green Belt is a certification that demonstrates to future employers that I have an understanding of the Six Sigma process, which is a widely used strategy throughout different industries for process improvements. Graduating with this certification will prove to be advantageous for future employment.

Through my internship, I learned a lot of the details and specific tools that are used within a Lean process, such as how to analyze data to produce helpful information, how to create process and value stream maps, and how to use tools to identify the root causes of problems. Beyond the skills that I gained from my Industrial Engineering classes, this internship has provided me with a very unique learning experience by allowing me to sit in and observe Lean events. It was interesting to sit in on events with different groups of people. Their interactions and outlook on the Lean process always varied. I gained knowledge about soft-skills and management skills through observing the facilitators. This taught me how to work with and manage a team to create a successful process-improvement project. It was a beneficial experience because it is hard to really learn or understand these skills in a classroom setting.

Overall, my experience as a UPIC intern has been invaluable to my time at Clemson. It was a huge component in developing my skills and preparing me for a full-time job upon graduation in May. I would recommend a UPIC internship to any student that would like to gain experience while also doing work that can have an effect on their time as a Clemson student.



Copeland (left) discussing legal issues with staff

# JESSICA MITCHELL

Market Developer Intern • Clemson Community Foundation • Mentored by BO CRADER & HAYES CONE



Mitchell (right) and Cone (left), one of her mentors review materials in the office

## reflection by JESSICA MITCHELL

The Clemson Community Foundation was established only one year ago by a group of leaders in the community who wanted to encourage philanthropy in the area. What initially began as a project for the Leadership Clemson class of 2013 has now become a 501(c)(3) certified nonprofit, charitable organization.

The Foundation was looking for an intern that would assist the board in developing a comprehensive marketing program to include social media utilization, branding, and development of marketing materials for a variety of audiences. I applied for the position because I wanted to gain some real-world experience in the nonprofit sector. I am a double major in Marketing and Communication studies, so the job seemed to be the perfect fit.

From the moment I was hired, my mentors have been

guiding, teaching and encouraging me in my work. I jumped in at a very chaotic time for the organization: after finally creating a logo and pinning down some mission and vision statements, the board was ready run with the “quiet phase” of a fundraising campaign.

**“From the moment I was hired, my mentors have been guiding, teaching and encouraging me in my work”**

Fundraising is something that is very much out of my realm of expertise. Nonetheless, I was given more freedom and responsibility on projects for the foundation than I ever would have thought. For example, I got to lead a team on a project that established a donor recognition strategy. This included the branding of our giving levels, the donation requirements for each level, and the outlining of our stewardship approach. This was exciting for me because I got the privilege to work alongside some of the

most visionary and influential people in the Clemson community, and surprisingly they asked for my opinions and listened to my ideas!

The process of creating the donor recognition levels (“Donor Circles”) and the related infographics began when I met with one of the board members, Joe Turner, who is immensely knowledgeable and experienced in fundraising. Between the two of us, we brainstormed and outlined the names for each level and decided on dollar amounts to be recognized in each.

A large part of my internship involves weekly or biweekly meetings with some of the other board members that now comprise the Marketing & Communications Committee: Bo Crader, Chairman; Hayes Cone, Secretary; and Frank Cox, Vice Chair. All semester, this committee was focused on creating a coherent brand identity for the Foundation based on their logo. With this identity, I have designed several communications materials for the Foundation including a letterhead, PowerPoint templates, a full-page ad for a sponsored event, and fundraising proposals that will be used in asking for major donations.

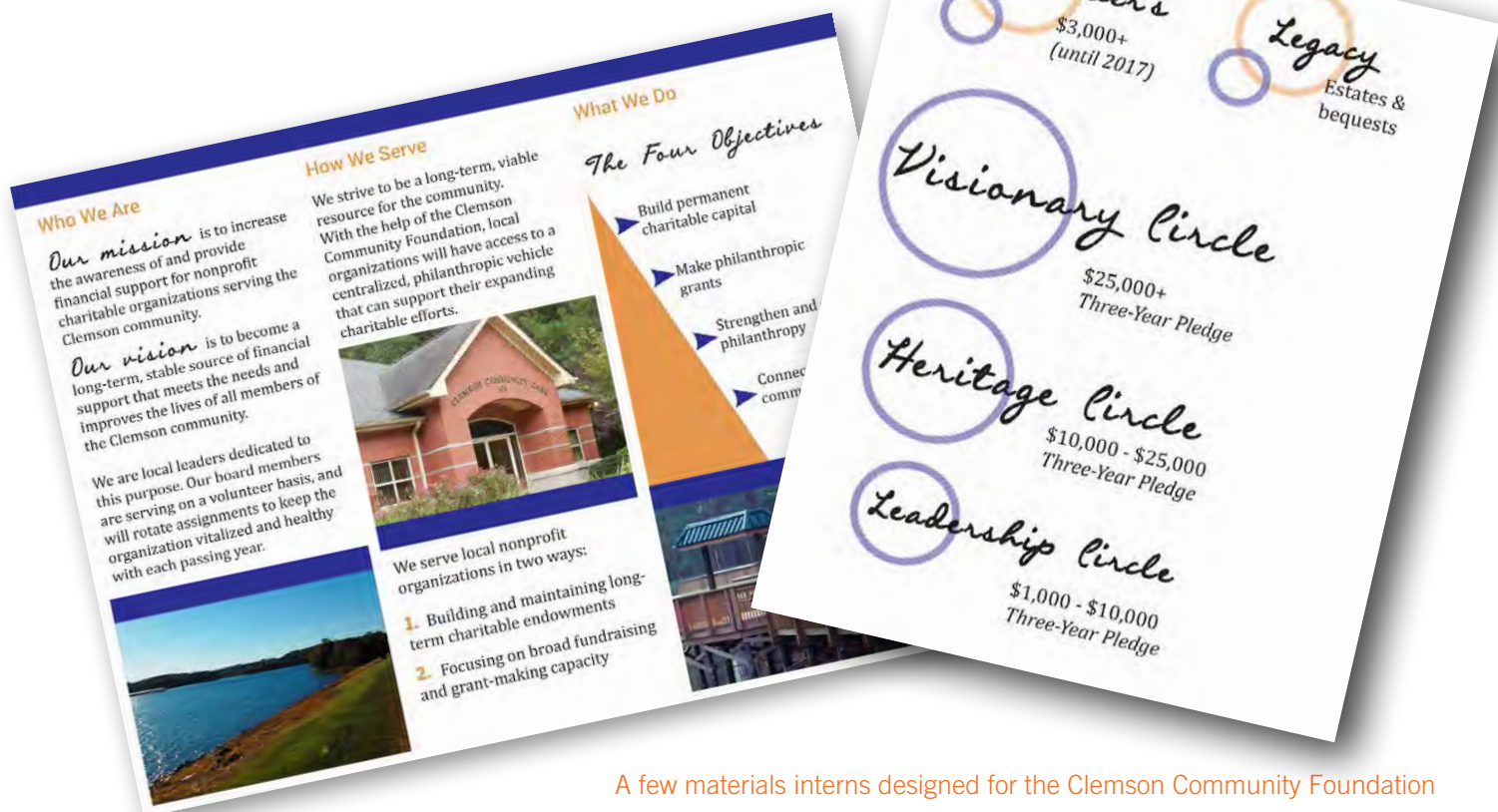
I also created a brochure for the Clemson Community Foundation so board members will have physical materials to leave behind after meetings with potential donors or other influential people in the community. After making a few edits, we realized there was a need for an infographic on the back panel of the brochure to

help explain how the “Donor Circles” of the Foundation work. My design skills came into play here: I had to use space, color, form, and shape to convey an important message to potential donors.

This brings me to the coolest part of my internship with the Foundation. I experienced the convergence between my studies and my work. I am currently enrolled in a Communication Design course, which has been an incredible asset in my internship. I am able to use the Adobe Creative Suite to create materials for the Foundation, implementing the very skills that I learned in class.

I presented the brochure and donor recognition levels to the entire board. It was exciting to have that experience, but I was also very nervous. It was surreal to be in that position as a college student. In that moment, I really understood the value of the UPIC program. I have the unique opportunity to earn money while enrolled in classes by gaining actual experience in the field in which I hope to have a career!

I am very thankful for the UPIC program. I plan to continue with my internship for as long as they will have me, and I already know that it will be one of the most valuable experiences I have at Clemson University.



A few materials interns designed for the Clemson Community Foundation

# MENTOR'S PERSPECTIVE

reflection by BO CRADER

Having an intern has allowed us to accomplish things we never could have on our own. As an early-stage startup in the nonprofit space, this assistance has been mission-critical to getting our organization up and running in a sustainable fashion.

When we started our intern program at the Clemson Community Foundation, we envisioned a part-time staffer that would help us get organized and keep our diverse (and very busy) board members on track. We had planned for the intern to coordinate various administrative tasks, proofread communications, and update spreadsheets.

After getting our first batch of resumes from students applying for our internship, we quickly realized we had tapped into a much more valuable resource: a pool of highly talented and passionate young professionals looking for opportunities to take on new projects and push their limits.

Our first intern, Cary Nabors, immediately understood our vision for the Community Foundation, and put a plan in place to develop a brand for our organization, including defining our brand guidelines and recruiting a graphic designer (Meghan Matthews, another Clemson student) who would integrate our various (and often conflicting) input into a cohesive logo and branding kit. These materials were approved unanimously by our

board and are now used in all of our communications today.

Jessa Mitchell, our fall intern, built on Cary's groundwork. Within a week of starting, Jessa had facilitated the development of a creative brief on our organizational brochure, a project that she led to completion. This process included leading sessions to gather requirements from a wide variety of sources, taking and processing photographs, copywriting and layout, securing pro bono printing services, and working through the inevitable challenges and changes along the way.

Upcoming projects include developing our website, designing a comprehensive marketing plan, initiating our granting program, and following through on our fundraising strategy, all of which will benefit from the enthusiasm and skills of UPIC interns.

Upon reflection, there are a few key differentiators that set UPIC interns apart:

- **Skills:** Our interns have had incredible skill sets, both technical and professional. I doubt we could have found this type of assistance outside of the UPIC program.
- **Willingness to Learn:** Our interns wanted to learn about our organization and goals, not just take on administrative tasks. No project was "not my job."
- **Energy:** I've found UPIC interns to be highly motivated and interested in putting their skills to use on real world projects. This has resulted in outcomes beyond our expectations.

The professionalism and capabilities of the UPIC interns and program have far exceeded our expectations, and played a key role in the founding of our organization. We look forward to growing our involvement with UPIC in the future, as well as following the bright careers of Cary and Jessa.



Logo designed by an intern at the Clemson Community Foundation

# ALEXIS HINSON

Aspire Program Student Coordinator • Healthy Campus • mentored by CHLOE GREENE



Hinson (left) and her mentor, Greene (right), brainstorm ideas for the Aspire program **Photo by Alexis Hinson**

## reflection by ALEXIS HINSON

My internship focused on Clemson's Aspire to be Well program. This dialogue based, peer facilitated training program includes resources and skill building activities to empower students to recognize problematic situations and to do something to help.

The goals of the Aspire program are to teach students responsible behavior and decision making, promote bystander intervention, and create a safer environment at Clemson University for all students to receive the college experience they desire and to provide additional resources that students can use to seek help.

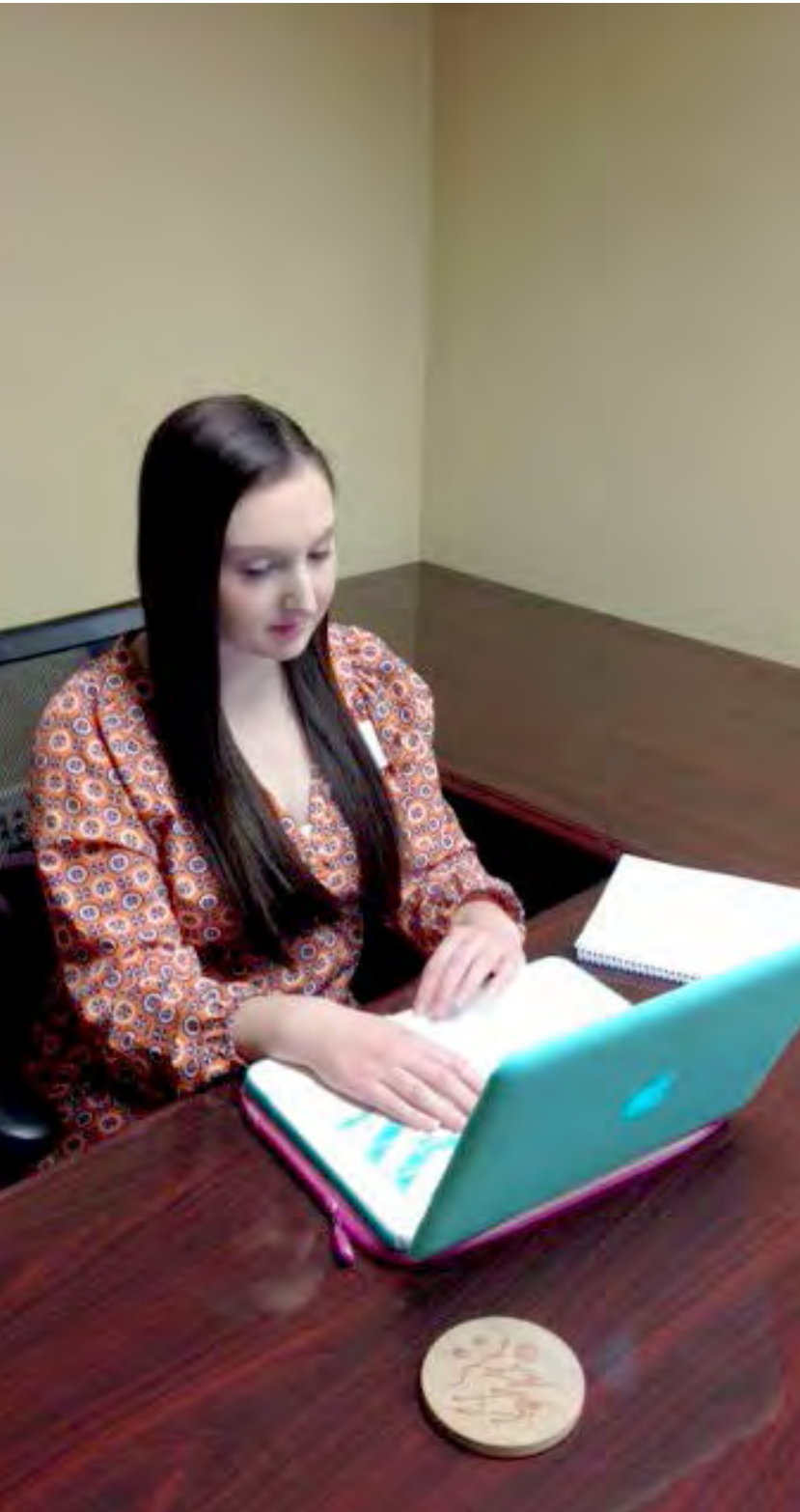
I think it's important that first year Clemson students go through the dialogue-based Aspire program so they can discuss strategies to intervene within groups and learn about ways to achieve a safe and successful transition to college.

There were several tasks I completed to help prepare for the Aspire classes in the fall. I assisted in planning a peer education training for Aspire Facilitators, created the syllabus for the Aspire Creative Inquiry team, conducted secondary research on training peer educators, created PowerPoint presentations to educate Aspire Facilitators,



Some of the topics covered during the Aspire programs

“My favorite memories of the semester came during the discussions, engaging first-year students with unique conversations about alcohol and drug misuse, sexual victimization, and mental health”



Hinson creating a presentation to educate Aspire Facilitators  
Photo by Alexis Hinson

and served as an Aspire representative at multiple new student orientation sessions.

In addition, I served as an Aspire Facilitator and taught the Aspire To Be Well classes to first-year students. I also assisted the associate director of Healthy Campus with additional tasks related to the Aspire program.

One of the challenges I encountered came when teaching Aspire to Be Well sessions. Every session's discussion is different in terms of the level of participation. There may be some sessions where several students are active in discussion while there are other sessions where students do not speak up at all. A way I addressed this challenge was making sure students understood the questions we asked during discussion.

My favorite memories of the semester came during the discussions, engaging first-year students with unique conversations about alcohol and drug misuse, sexual victimization, and mental health. It felt rewarding to know I had provided students with facts and resources for handling real life situations and that they might apply the bystander intervention skills that we taught them if assisting their peers in times of need.

My internship with Healthy Campus inspired me to pursue a career in student affairs because I realized how much I enjoy assisting students and working on a program that benefits the health and safety of first-year students. Professionally, I was able to engage in networking opportunities related to student affairs, gain and apply the skills needed to become a marketable and successful employee for a higher education institution, work cohesively in a team with employees and other interns, and gain relevant job experience in the area of student health services. I learned that the skills that are essential to working in student affairs are conflict resolution skills, counseling skills, public speaking skills, communication skills, and critical thinking skills.

# CAROLYN LANZA

Extension Intern • Clemson Cooperative Extension Program • mentored by CATHLEEN REAS



Lanza (right) talking to a group of children about the effects of stormwater runoff

## reflection by CAROLYN LANZA

I started working with the Pickens County Stormwater Partners in the Fall of 2013 as a volunteer. In May 2014 I became a UPIC intern working with Cathy Reas Foster, the natural resources agent, and Anderson and Pickens Counties Stormwater Partners (APCSP). APCSP is part of the Clemson Extension Service's Carolina Clear program that focuses on educating the public about stormwater pollution and the different ways we can help keep our waterways clean. The runoff from stormwater picks up everything in its path including litter, chemicals, sediment and pet waste, as it travels to our local creeks, rivers and lakes.

Carolina Clear is a program developed by Clemson to educate the community about water quality and the effects of stormwater runoff. Helping to educate the public is important to me because I am concerned about there being clean water for future generations. Even though

about 71% of the Earth's surface is covered with water, clean drinking water is running out. There are many places around the world and the U.S. that lack access to drinkable water.

Throughout the semester, I have helped with various projects. I worked closely with schools, Girl and Boy Scout troops, and with the South Carolina Botanical Garden. I helped install rain barrels, rain chains and rain gardens. The rain barrels and rain gardens are a couple of ways to catch stormwater and help reduce erosion.

“Helping to educate the public is important to me because I am concerned about there being clean water for future generations”

We participated in many city festivals and farmers markets and usually do something different for each. Sometimes we will bring

out the EnviroScape, allow people to paint a rain barrel, or bring out APCSP's mascot, Gilli the Stormwater Fish! The EnviroScape is an interactive model of a watershed. It allows us to show the different ways our watershed can

be polluted and what we can do to prevent it from happening. These activities are beneficial because it engages the audience instead of them just listening to us talk about stormwater pollution.

I rarely have a regular workday. If I am not out at schools or going to events, I am in the office doing research about different clean water topics or keeping up with the APCSP Facebook page. Over the course of the summer I created seven tip sheets with helpful hints on how to keep our waterways clean. Most of them I was unfamiliar with like household tips, detention ponds and pool care so a lot of research was involved. Others I knew some information but research was still necessary for topics such as composting, flooding, rain gardens, and how to be a good outdoor camper.

The main project that I worked on was creating a compost education program. Food and yard waste make up about 28% of landfills and composting can help reduce this. It is nature's way of recycling and reduces the amount of water, fertilizers and pesticides needed.

The biggest problem I had while building the compost bins was that I had never designed or built anything before. I did research on building a compost bin, but we could not find one that exactly fit our needs so I designed one from scratch. What I did not find out until we were building the bins was that a 2x4 is not actually 2 inches by 4 inches. It is more like 1.5 inches by 3.5 inches. It does not seem like that big of a deal, but when trying to make even measurements this threw everything off. The purpose of the bins was to make them as simple as possible for homeowners to replicate.

During the summer, I designed and constructed four compost bins made out of untreated cedar and reused pallets with the help of a few other UPIC interns, Holly Benehaley, Sam Quinney, and Austin Cole. The bins are now located at the recycling centers of Pickens and Anderson Counties, the City of Belton, and the South Carolina Department of Natural Resources building in Clemson. Along with the bins, I made a tip sheet, trifold brochure, signs to go along with the bins, and a compost game for children.

Creating the compost program was the biggest learning experience of my internship. Even though I thought I planned out the design perfectly, different conflicts came up that made me realize no matter how much research is done, all the tips and tricks come from experience. I had to learn how to improvise and not be afraid to ask for help. The Agriculture Mechanization and Business program allowed us to use their shop and were a big help.

Overall, being a UPIC intern gave me the opportunity to take on more responsibility over my concerns for clean water. I am delighted to continue working with UPIC.







Volunteers reflect on their work during rain garden planting

**WATT FAMILY  
INNOVATION  
CENTER  
BUILDING  
SITE**



Foundation for the new Watt Family Innovation Center

## reflection by CALEB CROW

I started my internship during the Fall 2014 semester. As a civil engineer, the two general career options upon graduation are civil design and construction. I have been interested in the construction side of civil engineering and therefore jumped at the opportunity for an on campus construction internship with UPIC. The Watt Family Innovation Center project is just getting off the ground. When I joined the team, auger cast piles were still being drilled for the building foundation.

When the building is complete, the innovation center will prepare Clemson students to take ideas from concept to reality using 21st century technology, focusing on real-world issues and collaborating across university disciplines. It will thrive on public and private investment and expose students to global leadership and critical thinking. Space in the student-centered environment, supported by a robust technology infrastructure, will be adaptable to serve an increasingly diverse student community.

In the civil engineering department I have taken classes about estimating, construction management, and geotechnical engineering; through UPIC I got to experience all of these disciplines first hand on the construction site. When the geotechnical analysis of the site was conducted, a foundation system was chosen

based on soil samples. However, when excavation began actual soil conditions were not as suitable as the analysis predicted. Because of this, the initial foundation system plan was replaced with the auger cast pile system.

Also, I have used the principles of estimating and construction management in the bidding process. I had the opportunity to solicit bids for work on the building. This required compiling the appropriate drawings and documents and sending them to multiple companies in order to get the best estimate for work.

My main activities were learning about the construction process, keeping track of safety forms, and taking inventory. In regard to safety all subcontractors on the site are required to take a safety course and fill out an orientation form; it is my responsibility to collect these forms and store them in an online database for easy access. Taking inventory was my most interesting task. When materials are delivered to the job site, I verify that all items have been delivered as reported.

Through the internship I have had the opportunity to develop my communication skills. I sent many internal and external emails, which needed to have a professional tone. I also frequently talked with subcontractors on the phone. I became better at reading complicated construction drawings and matching what I saw in the

“This internship allowed me to experience the construction aspect of civil engineering and helped me develop skills that will be valuable to a future employer”

drawing to what was taking place on the construction site. I also got to observe how a building is constructed, how the project is kept on schedule and within budget, and how the construction company and owner work together.

One of my favorite parts of my internship was when I had the exciting opportunity to climb the tower crane on the construction site. From the crane operator’s cabin 150 feet in the air, I had a great view of the construction

site as well as the rest of Clemson’s campus!

This internship allowed me to experience the construction aspect of civil engineering and helped me develop skills that will be valuable to a future employer. On the project I was considered a temporary engineer rather than an intern, which gave me the opportunity to do real work and determine if this is the career I would want to pursue following graduation. Also, I got to know Turner employees and have learned about Turner as a company and potential future employer.



Interns Hakimji (top left) and Bohl (bottom right) observing the new changes at the construction site



View of Cooper Library from Turner Construction site

## reflection by DARREN BOHL

I have contributed to our site in many ways. In the first few weeks, we helped set up our office trailer. I assisted in building a deck off of the trailer, built our e-plan table, and constructed frames to display our signage. I took pictures of the site, monitored the amount of storm drain and sewer line that was installed, and documented this information for future reference.

Starting this project, involved normalizing a lot of the day-to-day operations of the office. It required setting up a website, establishing processes to give subcontractors access to our software programs, posting all of the proper documentation in the office (OSHA regulations, Safety procedures, etc.), and creating a site tour so classes could come and observe real working conditions.

During the summer semester, I did a lot of Quality Assurance/Quality Control (QA/QC) in the field. This basically documents the processes of a project as it is being built. For example, when we were installing the foundations, we had to excavate, place the rebar, pour the concrete, and test the concrete. We documented the installation by taking pictures to see the progress and placement of things. We also checked dimensions of the foundations to make sure that the rebar was set in the

proper orientation and alignment. All of this was put together to document our workmanship in case there was ever a problem in the future.

I gained valuable experience in project engineering. I have been documenting Requests for Information (RFI)



Bohl taking progress pictures in the field on an iPad

onto our SharePoint—a paperless filing cabinet—site as well as posting them to Plan Grid—our paperless blueprint site. A RFI is a process used to communicate questions and potential issues between the subcontractor and the engineer/architect. All of our contractors are required to have access to our drawings with the use of an iPad or similar device that they use in the field to ensure that they have the most current blueprint.

I was also able to see stormwater and sewer line installation. This included two directional bores under Sigma Drive and the library parking lot. This is foundation work, which is structural work as far as forming and pouring the basement walls. I learned how to schedule operations so that the job site kept moving in a positive direction.

Turner Construction, their subcontractors, the architects and the structural engineers wanted this project to operate as a “working classroom” by offering both classroom tours and individual site tours. This has given Clemson students the opportunity to get a closer look and hands-on experience regarding a major work site. This bridges the gap between what is learned in the

classroom and real world experiences. I have coordinated with professors in Civil Engineering and Construction Science Management in setting up and guiding these tours.

I hope to see the completion of the WFIC project by my graduation next fall. This internship has provided me with a career opportunity with Turner Construction: I was offered a full time position when I graduate. This has given me the confidence that I can do the job and confirmed that I have chosen the right career path for myself.

This internship has really given me the professional experience that I needed. I have been able to be play a role in the building of a construction site, and I have created processes that will be used later on at this specific site. I worked on tasks both in the field and in the office, and I have learned what I am good at, and what I need to work on.

This internship has given me reassurance and confidence. It also put me in touch with a lot of great people from both UPIC and the construction site that will likely help me in the future with my career.



Hakimji (left) and Bohl (right) discussing the daily progress of the work site



Hakimji adding new information to the e-plan table

## reflection by FATEMA HAKIMJI

I contributed to the Watt Family Innovation Center project by building a website in order to facilitate communication between Clemson University students and faculty, contractors, and subcontractors on campus. I created a collaborative website where all of the safety forms, orientation forms, logistics, etc. are easily accessible on one site. Aside from the website, I also helped with engineering setup for the subcontractors.

Later on in my internship, I transitioned to field engineering work that involved daily checks as well as Quality Assurance/Quality Control (QA/QC). Daily checks include asking the subcontractors what they accomplished and what they plan on accomplishing by the end of the day. When assessing QA/QC we look for progress of the actual construction work.

Professionally, I have gained insight into the construction world. I am more knowledgeable about construction and construction management. It showed me how much planning and organization is involved in building and maintaining a construction site. Also, communication is key since there are so many subcontractors to communicate with on site. I learned how to build a website and other computer skills dealing with PowerPoint and Excel which I did not know before. I also learned how to critically observe the construction site—what to keep an eye out for and what factors are needed to maintain a clean and respectful environment.

I have built great relationships with the project team.

The UPIC internship has provided several opportunities for us to network not only with the project team, but also with bigger teams in Charlotte and Atlanta.

Some of my favorite memories include demolishing the main underground tunnel (connecting the entire campus), witnessing the first concrete pour, participating in the Ice Bucket Challenge with the team, building teamwork at the Whirleyball event in Atlanta, and enjoying conversations over many team dinners. By the end of my internship experience, I hope to see the entire building finished.



Hakimji walks the Turner Construction site

# MENTOR'S PERSPECTIVE

reflection by ALLISON FORD

As a graduate from Clemson's engineering program, I understand and value the importance of internships. I have been involved with college recruiting for years and people always ask me what is most important when considering full-time candidates. I always say the best thing to have on a resume is relevant experience.

Whether or not our interns decide they want a career with Turner (or even within the industry), they can at least say they tried it and learned something from the experience. I chose to be a UPIC mentor because I understand the importance of learning and gaining experience. I also wanted to provide this knowledge to Clemson students.

Turner Construction's core values are teamwork, integrity, and commitment. These are qualities we look for when we interview students for internships, and I can say with confidence that each of our interns possesses these traits. They have demonstrated these qualities when taking on each new task and have learned why each of these characteristics is important in this industry.

The interns that have worked with us on campus have

played an integral role in the construction of the Watt Family Innovation Center project. They have taken on a variety of tasks and have learned skills that expand beyond what is taught in the classroom. We are in our second semester of this project and our interns have been given the opportunity to see a construction project from the very beginning, as we put the first shovel in the dirt.

Our students took on a number of tasks including setting up the construction trailer as well as the project controls. Fatema did a great job setting up our Sharepoint

and Community Outreach project websites that other employees have asked if they could utilize

**"I continue to learn from our interns every day"**

her expertise to help them with their sites. She also played a key role in documenting the work that has taken place through producing as-built documentation that is critical for quality control and measuring productivity.

The Sharepoint site is a website which is essentially a server that we utilize to house all project documents electronically. This allows us to keep the lines of communication open with the owner, architect, engineers, and trade subcontractors. The Community





Outreach project is a public website that keeps the students, residents, and faculty up to speed on our construction project. It includes information regarding site plans and alerts, upcoming events, and it allows students and professors to sign up for project tours.

Caleb was given the opportunity to help with a trade subcontractor bid, which helped him better understand the preconstruction, purchasing, and buy-out processes that typically take place prior to the start of construction. Given that next semester he will take on a new role at the Memorial Stadium renovation project, he will be able to use what he has learned here and expand on that knowledge at his new internship.

Darren came in with previous related work experience that proved to be valuable knowledge when we kicked off our site work activities. He has taken on an important role in documenting our Stormwater Prevention Plan measures, which included completing an extensive online training course. He has also completed his OSHA Safety 30 hour course, which has given him a strong background in safety as he takes on more responsibilities in the field.

There are always challenges on a new project and our interns have experienced a few of these first hand. One of the biggest challenges was keeping up communication open between Turner Construction and the design team, the owner, and the surrounding campus community. Through the use of the Community Outreach websites, project tours, meeting minute documentation, etc., our interns have been able to experience first-hand the importance of communication.

I continue to learn from our interns every day as they have skills and experiences in areas that I do not. They also ask great questions that have helped us to go back and reevaluate a particular issue or process. We are fortunate to have interns with a true desire to learn and a drive to be better every day. It is evident that they are all great students and are able to connect their coursework to the work we do in our industry. They have requested to take on roles and responsibilities that are outside their comfort zones in an attempt to make sure they gain the most amount of experience possible during their time on the construction site. As a mentor, it is exciting to see these students truly enjoy themselves. Our interns are truly members of this project team as well as the Turner

Family.

My favorite part about working with the students is seeing them take on new challenges and learn something new every day. In our industry we never stop learning, and seeing them with the eagerness to learn more reminds me to keep that same passion and attitude towards learning.

I have worked with many interns in the past and am able to recognize the benefits of the UPIC Program. Given that our interns are here on campus, we have been able to extend their full-time summer internships into part-time internships during the school year. This is not something that we are typically able to do given our work hours and schedule, and it has been great that they are still able to be a part of the team in between their classes. Fatema, Darren, and Caleb have been key contributing members of our community outreach here on campus, and it is with their help that Turner will continue to be successful here. We are truly grateful for all they have done with our project team.



Hakimji (left) and Bohl (right) examining construction

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## INTERNSHIP PROGRAMS

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# UPIIC PROGRAM REPORT

Spring and Summer Term 2014

“By working with the many organizations on campus and in the state, I have gained more knowledge about working with a diverse group of people and how important it is to practice emotional intelligence.”

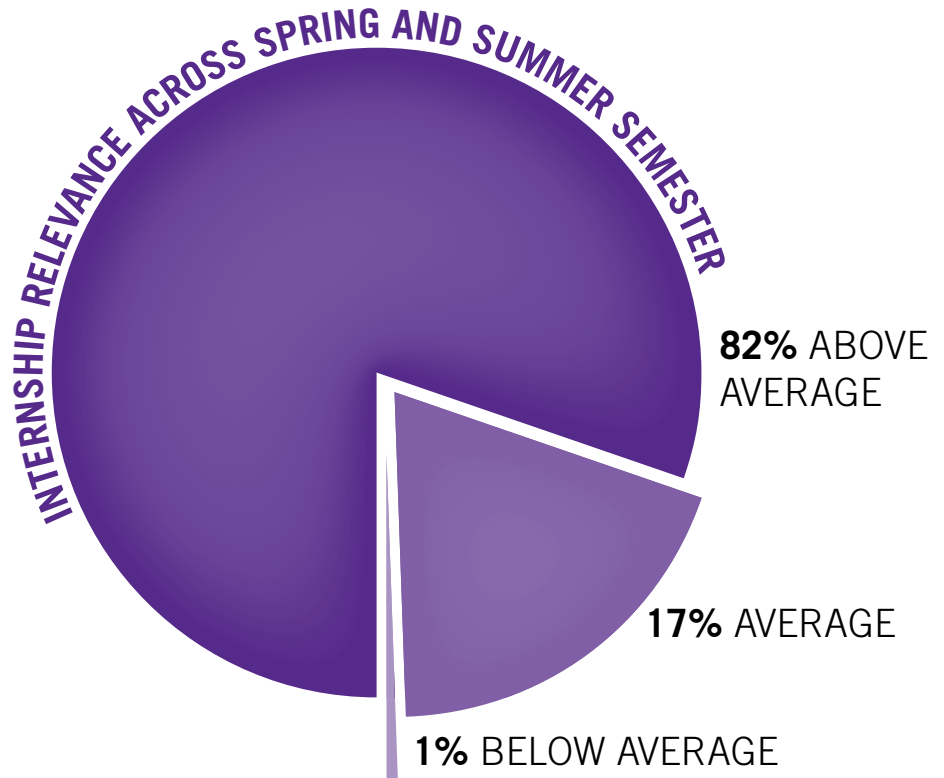
– UPIC Intern, Summer Semester

### RELEVANCY TO CAREER

Interns were asked to indicate how relevant their UPIC internships were to their respective career goals.

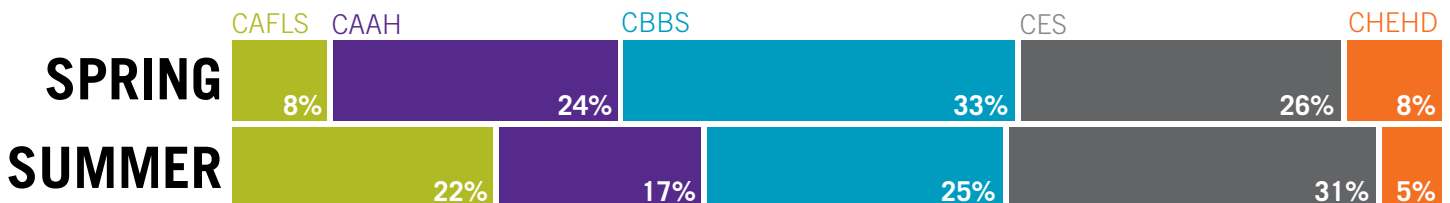
Student opinion remained the same from Spring Semester, with 99 percent of Summer Semester interns considering their work to be relevant to their prospective careers.

The graph to the right represents total student opinion collected during the Fall and Spring Semesters.



### UPIC INTERN POPULATION BY COLLEGE

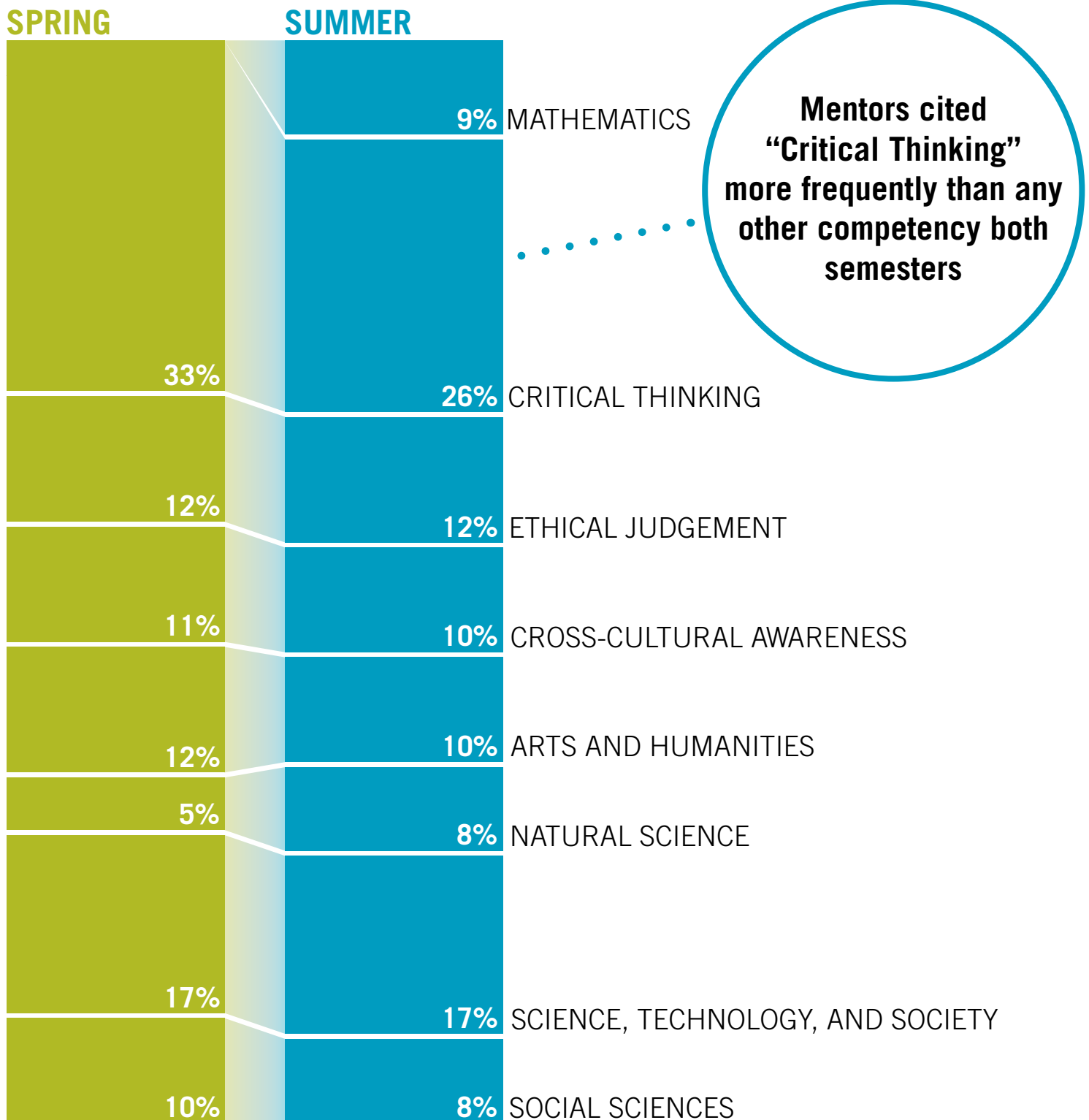
Hiring records show that all of Clemson University’s colleges were represented among UPIC intern populations during both Spring and Summer Semester. Spring Semester saw a dramatic influx of students from the College of Agriculture, Forestry and Life Science (CAFLS) relative to the other colleges. The College of Engineering and Science’s (CES) student influence on UPIC’s intern population increased 5 percent from Spring Semester.



## INTERN COMPETENCIES

Mentors described instances when interns employed specific competencies in their workplace. Short answers were coded for explicit references to eight of Clemson University’s core competencies: Critical Thinking; Ethical Judgment; Cross-cultural Awareness; Arts and Humanities; Natural Science; Science, Technology and Society; Social Sciences; and Mathematics (added as a competency Summer Semester).

Between Fall and Spring Semester, intern competency grew in Natural Science (+3%). During both terms, mentors referenced Critical Thinking more frequently than any other competency when describing student ability.



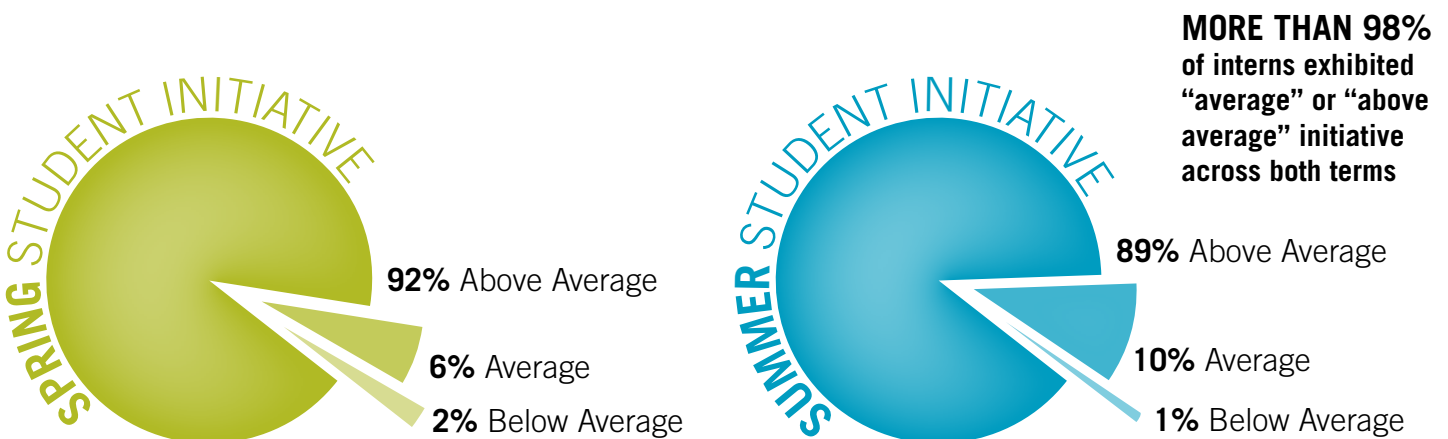
## COMMON PROJECTS

Both interns and mentors were asked to describe the common projects that students pursued as UPIC interns. Both groups agreed that “creating new resources” was the most common project that interns worked on during both Fall and Spring Semester. Both “marketing and communications” projects and “overseeing operations” in the workplace were commonly mentioned by mentors and students alike, but importance varied among these groups by term.



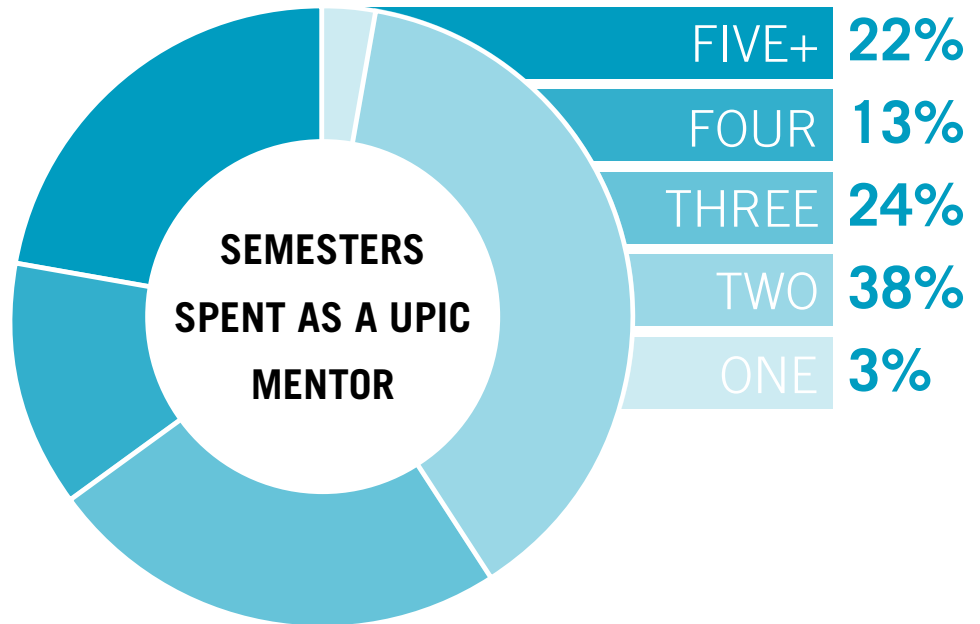
## STUDENT INITIATIVE TOWARD COMPLETING TASKS INDEPENDENTLY

Mentors ranked general intern initiative in terms of completing tasks independently. The percentage of interns rated as having “above average” initiative saw a two percent increase during Spring Term.



## MENTOR RETENTION

The vast majority of Summer Semester mentors had previously worked with UPIC interns. Only three percent of mentors were new to the UPIC program. The largest proportion of mentors (38 percent) served for their second time during Summer Semester. The vast majority of mentors, 59 percent, have worked with UPIC interns for more than three semesters.



## UPIC INTERNS COLLECTIVELY WORKED WITH THEIR MENTORS

38,039 hours during Spring Semester

49,257 hours during Summer Semester

▲ That's a student engagement increase of over 11,000 total hours from Spring Semester 2014

*"I feel very good about being a UPIC mentor and acknowledge the wonderful outcomes of the program"*  
– UPIC Mentor, Summer Semester

OTHER STATISTICS WORTH MENTIONING

**100%**

of mentors claimed that their Summer Semester interns exhibited “above average” ability when encountering new knowledge, concepts, and situations

**MORE THAN**

**98%**

of Summer interns claimed they would rate the overall quality of their internship experience as “good or excellent”

**MORE THAN**

**95%**

of mentors claimed that their interns exhibited “good or outstanding” ability to apply college-level skills and academic knowledge to internship projects

**MORE THAN**

**95%**

of mentors ranked their interns “above average” in the performance areas of “enthusiasm, interest, engagement, dependability, attendance, punctuality,” as well as “handling constructive criticism”

**MORE THAN**

**92%**

of mentors considered the “knowledge” that interns possessed to be “above average” during Spring and Summer Terms

**MORE THAN**

**90%**

of mentors considered their interns to be “good or outstanding” at handling workplace responsibilities

**MORE THAN**

**89%**

of mentors considered their interns “good or outstanding” at articulating the transferable skills gained during the internship experience

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