As we begin the 2017-2018 academic year, we are celebrating in the Department of Biological Sciences! We have four big reasons to be very proud and excited. First, on August 8 the Board of Regents approved a request for $49.4 million in bond funding next fiscal year for the construction of a new building to house the College of Science and Mathematics. This building, which is to be constructed adjacent to MCG’s Harrison Education Commons, will contain state of the art laboratories and classrooms for our department. It will provide the space we desperately need to grow both our academic programs and our research capacity, and it will put our faculty and our students right in the middle of the action on AU’s Health Sciences Campus. Second, the proposal for our Masters of Science in Biomolecular Science will be presented soon to the Board of Regents for approval. We anticipate a quick approval process, which will allow us to begin recruiting students for our inaugural incoming class for the fall of 2018. This two-year research-based masters program will prepare students for future jobs in a variety of molecular science fields or prepare them for Ph.D. or other professional programs. Third, this fall the first group of students from our Medical Scholars (BS/MD) and Dental Scholars (BS/DMD) Programs began working toward their respective degrees in the Medical College of Georgia and Dental College of Georgia. These students performed exceedingly well in the undergraduate portion of their programs while in our department, and they are already off to an excellent start in their professional programs. Fourth, the results of the Major Field Test, an exam taken by all of our graduating seniors, are in. While our students routinely perform very well on this exam, last year’s graduates collectively achieved scores that placed Augusta University’s Department of Biological Sciences at the 94th percentile nationally! That is an outstanding ranking, and it is all due to the very hard work of both our students and our faculty. We are all extremely proud of the quality of a degree from Augusta University’s Department of Biological Sciences.

Dr. Richard Griner
Department Chair
Student Research Presentations

INTERNATIONAL /NATIONAL MEETINGS

**National Collegiate Honors College Annual Conference**
*Seattle, Washington*

*Investigating the Role of Hob1 in translesion synthesis in Schizosaccharomyces pombe**

B. Walton and A. Abdulovic-Cui

**The Wildlife Society 23rd Annual Conference**
*Raleigh, NC*

*The Effects of Heavy Noise Levels on the Production of Corticosterone in Hyla squirella**

R. Cromer and B. Harris

**Evaluating the Effects of Mint Oil Scents on Feral Hog Behavior and Populations at Cowden Plantation, Jackson, SC**

H. Flaherty, S. R. Hitchens; V. West, K. Gill, B. Minter, A. Hunter, S. Sethuraman, D. Thiruvaiyaru, and B. Saul

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2017 American Association for Cancer Research Conference
*Washington, DC*

*Canonical NFκB signaling in myeloid cells is required for the glioblastoma growth ♦*


**Botany 2016**
*Savannah, GA*

*Population Dynamics of a Rare Species, Pediomelum piedmontanum (Fabaceae)**

L. Buckley, A. Brown and S. Bennetts

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**SYMBOL KEY**

♦ Oral Presentation
** Poster Presentation
★ Award Winner
❖ Presented at Phi Kappa Phi Conference
ⓣ Presented at CURS Brown Bag Seminar Series
✓ Georgia Collegiate Honors Council Meeting
REGIONAL MEETINGS

Southern Regional Honors Council Conference
Asheville, NC
Detection of Bisphenol A in Yellow-Bellied Sliders
(Trachemys scripta) and in Wetland Sediment
K. McDavid and R. Cromer

Molecular Mechanisms of Action of Di-N-Octylphthalate
on Differentiation and Tumorigenesis of Murine
Hepatocytes and their Implications for the Liver
Function
A. Pruitt and M. Sabbatini

5th Annual Southeast GURC Conference
Georgia College and State University
Milledgeville, GA.
Molecular Mechanisms of Action of Di-N-Octylphthalate
on Differentiation and Tumorigenesis of Murine
Hepatocytes and their Implications for the Liver
Function
A. Pruitt and M. Sabbatini

Tri-Beta Regional and 78th Annual Association of
Southeastern Biologists Combined Meeting
Montgomery, AL
Impact of Myeloid Cell NF-κB Signaling on Glioblastoma
Growth
N. Venugopal, S. Howard, B. Achyut, A. Arbab, and J.W. Bradford

Southeastern Estuarine Research Society Spring
Meeting
Myrtle Beach, SC
What Shannon-Weaver reels in: using diversity indexes
to assess fish assemblage health in an altered estuary
J. Wiggins, B. Saul and J. Reichmuth

Secret Societies in the Soils of the Satilla: Bacterial
communities in the Satilla River Estuary Preforming
Nutrient Cycling

A Baseline Study of Fish Assemblages in a Pristine
Georgia Estuary
J. McKittrick, M. Hewett, C. Ong, M. Sapp, D. Thiruvaiyaru; S.
Sethuraman, J. Moak, and B. Saul

STATE MEETINGS

Georgia American Fisheries Society
Conference
Georgia Southern University
Statesboro, GA
A Comparison of Fish Communities in Savannah River
Oxbow Lakes. Presentation
J. Moak, S. Vives, B. Saul, and O. Flite

A Baseline Study of Fish Assemblages in a Pristine
Georgia Estuary
Ong, C., M. Hewett, J. McKittrick, M. Sapp, J. Moak, D.
Thiruvaiyaru, S. Sethuraman, and B. Saul

The Fishy Side of Ecosystem Health: An Ecological
Assessment of Fish Assemblage Composition and
Diversity in the Satilla River Estuary
J. Wiggins, B. Saul, and J. Reichmuth

Who’s eating crab legs? A preliminary analysis of shark
population and diet in the Satilla River Estuary
A. Henning, N. Dahdah, B. Saul, A. Mathews, and J. Reichmuth

Stony Dover Bluff Community Meeting
Brunswick, GA
Who’s Your Mother? Genetic diversity of blue crabs in
the Satilla River Estuary
B. White, K. Mingledolph, J. Reichmuth, and A. Abdulovic-Cui

Georgia Academy of Sciences Annual Meeting
Young Harris College, GA
Development of an inexpensive low-power sonde using
Teenstym microcontroller
C. Morrison, J. Hauger, J. Reichmuth, and M. Roeber
LOCAL MEETINGS

**CURS Brown Bag Seminar**
Investigating the Role of Hob1 in Translesion Synthesis in *Schizosaccharomyces pombe* ♦
B. Walton and A. Abdulovic-Cui

**CURS Summer Scholars Program Poster Session**
The Molecular Mechanisms of Action of DNOP on Differentiation and Tumorigenesis of Murine Hepatocytes, and its Implications for the Liver Function
A. Pruitt, C. Thomas, T. Micklon, and M. Sabbatini

The role of canonical NF-κB signaling between macrophages and glioblastoma cells.
N. Venugopal and J.W. Bradford

**Igniting the Dream of Medicine Conference**
Medical College of Georgia
The Past and the Present of the Birth Control and Women’s Health- Myth, Prejudice and Benefits: a Pilot Study**
A. Koss and S. Mukhopadhyay

18th Annual Phi Kappa Phi Student Research and Fine Arts Conference

Structural, kinetic and functional properties of CAP1/AC complexes ★★
S. Mehrotra and M. Sabbatini

Impact of Myeloid Cell NF-κB Signaling on Glioblastoma Growth ★★
N. Venugopal, S. Howard, B. Achyut, M. Jain, A. Arbab, and J.W. Bradford

Evaluating the Effects of Plant Oil Scents on Wild Hog Behavior on Cowden Plantation, Jackson, SC ★★
S. R. Hitchens; H. Flaherty, V. West, K. Gill, B. Minter, A. Hunter, S. Sethuraman, D. Thiruvaiyaru, and B. Saul

The Exploration of Apoptotic Pathways in MCF-7 Cells in Response to PFOA Cells ★★
D. Urizar, A. Smith, R. Peloquin, L. Gillen, and J. Cannon

Detection of AVM Toxin in Water Samples: Method Development and Environmental Analysis ★★
N. Maron and F. Wiley

A Baseline Study of Fish Assemblages in a Pristine Georgia Estuary★
M. Hewett, C. Ong, J. McKittrick, M. Sapp, D. Thiruvaiyaru; S. Sethuraman, J. Moak, and B. Saul

Assessing Blackworms as a Model for Studying AVM**
E. Frazier and F. Wiley

Effectors Implicated in the Adenylyl Cyclase 1 Inhibitory Effect on Cell Migration in Pancreatic Cancer Cells ♦ ★
V. Medepalli and M. Sabbatini

Di-N-Octylphthalate Acts as a Proliferative Agent in Murine Cell Hepatocytes by Regulating the Levels of Pro-Apoptotic Proteins ♦
A. Pruitt, L. Miller, F. Wiley, and M. Sabbatini

Chronic consumption of DNOP induces an epithelial-to-mesenchymal transition state in mouse liver ★★©
M. Amin and M. Sabbatini
Emil K. Urban Student Research Awards

These awards were created in memory of Emil K. Urban who passed away on January 23rd 2014. Dr. Urban was an internationally-known and highly-respected ornithologist who co-authored the definitive works on African birds, titled appropriately, the Birds of Africa. He led our department as chair for 27 years with excellence, and the sustained quality of our academic programs and the student-centered culture ingrained in our department are his lasting legacy. We owe it to his memory to strive to never lose these qualities as we seek to maintain the level of excellence he established for our Department. Each year two or three undergraduate students who have made outstanding contributions in research are selected by the faculty of the Department of Biological Sciences - one award is given to a student whose research is field-based, one is given to a student whose research is laboratory-based, and for the first time, another will be awarded to a student who’s researched bridged both categories.

Laboratory Research – Shelby Howard
Shelby is a Professional Medical Scholars Program student, from Savannah, who will begin medical school here in the fall of 2017. She has conducted undergraduate research with Dr. Jennifer Bradford since 2014. She presented her work at the Association for Southeastern Biologists Conference, the PKP Research Conference, and the Augusta University CURS Brown Bag Seminar. She will also co-author a scientific article on her research topic, myeloid cell NF-κB signaling in cancer.

Integrated Research – Jennifer Mercer
Jennifer is an Ecology major from Valdosta. She has conducted undergraduate research with Drs. Jennifer Cannon and Jessica Reichmuth based upon her own original topic exploring endocrine disruption in fiddler crabs. She has presented her work at the PKP Research Conference, and at the Southeastern Estuarine Research Society Meeting. She is currently working for the National Park Service and will graduate in the summer of 2017.

Field Research – Mikael “Koty” Sapp
Koty graduated in the fall with a degree in Ecology. He performed research with Drs. Bates, Reichmuth, and Saul in a variety of projects ranging from bacterial diversity in altered salt marshes to fish assemblages in unimpacted ecosystems. He has presented his work locally at the AU PKP Student Research and Fine Arts Conference, and regionally, at the Southeastern Estuarine Research Society Meeting. After walking the Appalachian Trail from March to October, he plans to pursue an MS in aquatic ecology.

Dianne C. Snyder Distinguished Service Award
Each year senior biological sciences major who has demonstrated an exemplary and sustained degree of selfless and dedicated service to the Department of Biological Sciences is selected by the faculty of the department to receive this award established in honor and memory of Dr. Dianne Snyder.

Geoff Franqui
Geoff is from Augusta, and served in the military for 4 years as a Satellite Controller. He will graduate in May of 2017 with a degree in Nursing. Geoff helped the Department of Biological Sciences for the last three years in many ways, but is most appreciated by keeping the microbiology labs running smoothly – a feat that required quite a bit of time, and even more attention to detail. Geoff is a passionate fan of Menudo and his favorite band member is Ricky Melendez, not Ricky Martin.

Biological Sciences Outstanding Senior Award
Each year a senior biological science major that has a distinguished record based on their classroom and laboratory performance and their major and overall grade point average is selected by the faculty of the Department of Biological Sciences

AND

Academic Excellence Award in Biological Sciences
This award recognizes excellence and achievement in academic performance for the highest science GPA.

Keri Jones
Keri is from Augusta and will graduate from our Honors Program with a degree in Cell and Molecular Biology. She has served multiple roles in the Department and the Honors Program. In addition to serving as a laboratory assistant in Microbiology, Molecular Laboratory Techniques, and Anatomy and Physiology, she has been a tutor, and undergraduate researcher. Keri has also served as the President for the Honors Program Student Association. She is also an accomplished artist, and has presented her art and research works locally and nationally. Keri demonstrates all of the best qualities of a great student and Departmental representative.
Graduate and Professional School Acceptances

**Medical School**
Kingsley Anosike – Temple School of Medicine
Keerthana Bathala – Augusta University
Shelby Buckner - Augusta University
April Smith - Philadelphia College of Osteopathic Medicine
Mike Shelton - Mercer School of Medicine
Lauren Yeargan – Mercer School of Medicine

**Veterinary School**
Karen Calloway – Cornell University

**Physical Therapy Program**
Fabian Azofeifa - Brenau University

**Pharmacy School**
Stephanie Turner - University of Charleston
Sierra Quinn – Union University

**Dental School**
Sarah Ozturk – Augusta University

**Graduate School**
Montel Hughes, MAT, Augusta University
Mary Law – MS Preclinical, Mercer School of Medicine
Alyssa Outhwaite – MS Biology, Dayton University
Sierra Mannix, MAT, Augusta University
Rahil Syed, MS Medical Science, GA State University

**Physician Assistant Program**
Brittany Blocker - Augusta University
Amanda Brown – Barry University, St. Croix

TriBeta 2016-2017 Inductees

Beta Beta Beta (TriBeta) is a society for students dedicated to improving the understanding and appreciation of biological study and extending boundaries of human knowledge through scientific research. Since its founding in 1922, more than 200,000 persons have been accepted into lifetime membership, and more than 553 chapters have been established throughout the United States and Puerto Rico. This year at AU 24 Biology majors were inducted into the Kappa Kappa Chapter of Tri Beta during a ceremony on April 11th in the JSAC Ballroom. Congratulations!

Alumni Accolades

**Brigette Haram** (2011) completed her PhD in Forest Resources at University of Georgia, Dec 2016.
**Michael Ridlehoover** (2013) completed AU Dental School and entered the Air Force
**Adam Meszaros** (2013) completed AU Medical School
**Michelle Cohen** (2012) completed AU Medical School
**Jacob Beltz** (2012) completed Mercer Medical School
Professional Scholars Program

As the 2016-2017 academic year comes to an end, reflection on the past year shows it has been eventful for Professional Scholars students. Current students embraced and integrated into campus life through involvement in academics, philanthropic events, and research opportunities.

We offer a “big shout out” to students who represented the program in 1828 Ambassadors, Biology Club, MAPS, Pre-Dental Club, Dental College of Georgia Impressions Program, Igniting the Dream of Medicine Conference, CURS Brown Bag Seminars and Seminars and Augusta University Day of Service. Many thanks are in order to faculty members on the Summerville and Health Sciences campuses who have mentored students through participation in research ranging from in topics such as breast cancer to splicing genes and the impact on pancreatic cancer.

Students are not slowing down over the summer; many are partnering with faculty to conduct research, continuing current research, volunteering in the CSRA and home communities, shadowing physicians, and preparing for the MCAT. In the upcoming year, we look forward to welcoming and mentoring the fifth cohort of Professional Scholars students as they start their journey toward a career in healthcare.

Finally, a hearty congratulations to the first class of Professional Scholar Medical and Dental students to complete the undergraduate portion of the program and will be going to medical and dental college in the fall of 2017!

MAPS (Minority Association of Pre-Med Students)

MAPS (Minority Association of Pre-Medical Students) is a sister organization to the SNMA (Student National Medical Association) at AU’s Medical College of Georgia campus. While membership is open to all undergraduate students interested in the health professions, MAPS particularly aims to increase diversity in the medical field. The organization facilitates academic enrichment and professional development opportunities for students as well as raises awareness of the health professions in the community, especially among underrepresented populations. MAPS meetings provide students an opportunity to network with MCG representatives and receive information pertaining to the application process, student life, and undergraduate opportunities on the Health Sciences campus. Additionally, they provide students with medically related service opportunities. MAPS meetings provide students an opportunity to network with MCG representatives and receive information pertaining to the application process, student life, and undergraduate opportunities on the Health Sciences campus. In addition, they provide students with volunteer opportunities. The 2016-17 academic year was a busy one for AU’s MAPS Chapter. Student members volunteered at MCG’s Igniting the Dream Medical Conference, MedWar, as well as free health clinics offered to the community. The organization collaborated with the Junior Medical League at MCG and volunteered once a month at the Boys and Girls Club by conducting science experiments with the students to help them develop a love for science.

In addition, MAPS volunteered with SNMA to help host math tutoring sessions to 8th graders at Murphy Middle School once a week. Furthermore, we provided students with the opportunity to volunteer as medical scribes at the Latina Clinic in downtown Augusta.

Last year, MAPS saw the establishment of a MEDLIFE chapter under its umbrella. MEDLIFE is an organization that works to deliver healthcare and education to low-income communities in Latin America, Africa, and Asia. This year, our MEDLIFE chapter collaborated with UGA’s MEDLIFE chapter, participating in their annual MEDtalk global health conference and volunteering with them in the Athens community. Several members of our MEDLIFE chapter will be participating in volunteer trips to low income areas in Latin America this summer. MAPS continued the mentoring program for its current members with medical school students at MCG. Students were able to meet and mingle with their assigned mentors at a mixer held at MCG. MAPS also hosted an informative medical school admissions workshop with a Kaplan representative, a seminar with Dr. Savage who is a Pathologist at MCG, and an admissions info session with a recruiter from the Philadelphia College of Osteopathic Medicine (PCOM). MAPS held a student research panel at one meeting, answering any and all questions members had about getting involved in research. At another meeting, MCG students taught MAPS members how to conduct a basic cranial nerve exam.

MAPS is currently working with Kaplan to offer students discounts on MCAT prep classes and testing materials and is working to mainstream job shadowing opportunities.

Medical Scholars
Matthew Alber
Vidya Medepalli
Sanah Aslam
Dikshya Baral
Nicholas Forrister
Sarvani Ginjupalli
Tianyang Guo
Shelby Howard
Sri "Rasmita" Jalla
Sadia Jamshad
Kashif Malik
Jordan Moraczewski

Dental Scholars
Paige Elliott
Courtney Marshall
Jessie Yuan

Akul Munjal
Zachary “Zach” Ramsey
Arjun Rangan
Lokdeheraj Ravilla
Aditya Reddy
Vamsi Reddy
Varsha Reddy
Aditi Talkad
Faculty Awards, Grants, and Presentations

Awards

**Dr. Eugenia Sabbatini**: Excellence in Research Award for the College of Science and Mathematics, AU & Favorite Faculty Awards from students at University Village

**Dr. Amy Abdulovic-Cui**: Caught in the Act of Representing Values of Augusta University - Collegiality

**Dr. Soma Mukhopadhyay**: Scholarly Activity Award, Students Faculty Choice Award for Teaching Excellence MCG, Education Innovation Award,Office of Leadership and Experiential Learning, and Favorite Faculty Awards from students at University Village

**Dr. Jennifer Bradford**: Favorite Faculty Awards from students at University Village

**Dr. Jennifer Cannon**: Favorite Faculty Awards from students at University Village

**Dr. Debra Saul**: Favorite Faculty Awards from students at University Village

**Dr. Faith Wiley**: Favorite Faculty Awards from students at University Village

Center for Undergraduate Research (CURS) 2017 Summer Scholars Program:

- **Dr. Jennifer Bradford** with students: Deanna Doughty, Michael Goodall, and Anthony Peppers
  
  *Microglial NF-kB signaling in glioblastoma*

- **Dr. Eugenia Sabbatini** with students: Allison Pruitt, Cecilia Thomas, & Anthony Micklon
  
  *The Molecular Mechanisms of Action of DNOP on Differentiation and Tumorigenesis of Murine Hepatocytes, and its Implications for liver function*

External Grants

**Ichthyofauna of St. Catherines Island.**

**Dr. Bruce Saul.**


Presentations


**Dr. Jennifer Bradford** - Georgia Cancer Center Immunology, Inflammation, and Tolerance Program Research in Progress Seminar, Augusta, GA, June 2016: *Investigating the importance of myeloid NF-kB signaling in glioblastoma.* Invited keynote speaker at the 41st Lineberger Comprehensive Cancer Center Postdoc-Faculty Research Day, UNC Chapel Hill. October 2016: *From Postdoc to Professor My journey through the trenches.*

**Dr. Soma Mukhopadhyay** - Annual Conference of the Human Anatomy & Physiology Society and Celebration in Research & Creative Activities at Augusta University: *Significance of Gene Expression: Bringing the Evolutionary Perspective as an Invigorating Tool for Better Understanding of Human Anatomy and Physiology. 30th*

**Dr. Donna Wear** - Botany Conference. Savannah, GA: *Reproductive status of the shoals spider lily, Hymenocallis coronaria (Le Conte Kunth (Liliaceae)) in the Savannah River Basin.*

Presentations to National Garden Clubs at The Phinizy Center. Augusta, GA: *Introduction to Ecology, Introduction to Environmental Science, and The Concept of Sustainability*

Publications


Biology Club Corner

The Biology Club is an organization that aims to fortify the passion for biological sciences among its members. The club organizes volunteer opportunities, plant sales, speaker events, and even social gatherings. The cohort of students in this group support one another by mentioning job shadowing opportunities, upcoming campus events, and any other event that promotes volunteerism. On and off campus, members of this club often share advice and tips about classes and swap textbooks. The Biology Club holds bi-monthly meetings as well as special events throughout both semesters.

We hosted two informative sessions at Augusta University. One was for Campbell School of Osteopathic Medicine and other Health Professional Programs at the college, and the other was for the Army Scholarships available for people looking to go into healthcare. Along with that, we also helped judge a science fair at Tutt Middle School. We recently had Beta Beta Beta Initiation and we are happy to announce that we have 24 new members. Finally, we had a Plant Sale at the end the semester and used the funds to support our mission.

Undergraduate Research at AU

Sometimes an opportunity falls into your lap that you cannot pass up. In my freshman year, first semester, I had a meeting with my advisor, Dr. Jennifer Bradford. She presented one of those opportunities to me. Dr. Bradford was starting up her lab on the Summerville campus and was recruiting students for breast cancer research. She gave me some papers to read to get a feel for what we would be doing in the lab, and honestly, I did not understand every other word in the paper. Beginning in January, I actually got into lab, specifically performing tissue culture. Because it was flu season, I had a perpetual running nose, and every time I tried to split cells, it somehow got worse. Being overly dramatic, I thought that I could not do research because I was allergic to it and this opportunity is going to fall apart, all because of a runny nose. However, my sickness eventually passed, and my research took off.

I started with the basics: washing dishes, learning proper pipetting, and organizing the lab. I kind of felt like the Karate Kid, except washing dishes did not help with future research skills. The whole time I was learning more about the NF-κB pathway, macrophages, and different types of breast cancer. Once we had the lab put together and I learned how to be a good parent by raising viable cells, it was time to start wading into true experiments. One of those experiments was genotyping through PCR (polymerase chain reaction), which learning the name was half of the battle. This procedure took up many of my first hours in the lab. This experiment entails many steps that can be applied to other experiments: making a gel, reading a protocol, and doing the math to have the right concentrations.

I decided to stay in Augusta, for the 2015 summer months, to continue research. My summer project was to optimize a nuclear extraction protocol. I have to say that was one of the most frustrating times of my life. The protocol took about a week to do from start to finish, and the object was to separate the nucleus from the cytoplasm of macrophages in order to perform a western blot. The joke was on me because the cells did not want to separate, nor did they want to give me enough protein to run on a gel. After many trials, I finally optimized the protocol, had enough cells, and enough protein; however, the results did not support previous findings. I was crushed, but that is one of the biggest learning blocks of science and research: things do not always work out.

I have now performed research for two and a half years with Dr. Bradford, and I have greatly enjoyed my experience. I have learned multiple experiments such as Miltenyi cell isolation, western blot, and bone marrow derived macrophage harvesting. I have presented my research at multiple conferences including Phi Kappa Phi and Association of Southeastern Biologists (ASB). From the experience of presenting at these conferences, I have become more comfortable speaking about science in front of people. Being a part of the research community at Augusta University has also strengthened my relationship with the faculty members and other students doing research. I am very grateful for the opportunity and I will take the skills I have accumulated over the years with me when I begin medical school.

Shelby Howard
AU Class of 2018
Study Abroad Experience

Adventures in the Amazon Rainforest

Being a young college student, I have always enjoyed dreaming about the different places I plan on traveling to in my life. As an ecology student, I longed to visit a place filled with nature and animals that I had never seen before. I was blessed with the opportunity to experience this exact place when Augusta University offered a study abroad trip to Ecuador, with most of the trip being spent in the Amazon rainforest. To be honest, Ecuador had never been a place that I had considered traveling to and I didn’t really know much about it at all. However, my ten-day trip to Quito, Ecuador and the Amazon Rainforest changed my view on life and opened my eyes to what the world can truly offer.

The first few days of this trip were spent in Quito, the capital of Ecuador. We actually got to spend the night at the Academia campus, a school where other students from around the world that stay there for a whole semester live and take classes. On the first day, we toured the entire city of Quito and saw places such as the Presidential Palace, famous churches, and several cathedrals. It was incredible to see the way people live there compared to the way we live in the United States. Even though over a million people live in Quito, it still has a small city atmosphere because you are able to walk to many places.

On the second day, we traveled to Mindo Cloud Forest, one of my favorite places we visited on this trip. It took about three hours to travel up the mountains to the Cloud Forest, but the views were incredible. While there, a family served us lunch that included soup with popcorn in it. The weirdest food combinations were shockingly delicious. We went tubing down a very fast moving river while the guides stood in the freezing water and pushed us away from the rocks. This was both terrifying and extremely fun because I had never done anything like it before. We also got to zip line through the Cloud Forest. We stopped at the Monument of the Middle of the World where the equator is located on the way back to the dorms. We visited the monument that divides the Northern Hemisphere from the Southern Hemisphere, which was built during the XVII century when a French Expedition defined the precise location of the equatorial line. At Latitude 0, we were able to stand an egg on a nail and lose several pounds within a matter of seconds.

The remainder of the trip was mostly spent in the Amazon rainforest. We first stayed in Baeza, a very small town home to the Quechua indigenous people. The native guides took us on a hike through the jungle to the Huasquila caves, where we got to see several bats flying over our heads. At the end of the cave, we got to jump in the beautiful waterfall to cool off and refresh. The next morning we traveled to the city of El Coca, which is the main entrance to the Amazonian jungle. The Coca port is located on the south bank of the Napo River, the largest of the Yasuni National Park. We took roof canoes down the river for about two hours before arriving at our lodges. Upon arrival, we were welcomed with a traditional drink and taken to our cabins amidst the teeming wilderness found on one of the most biologically diverse places on earth. For several days, our backyard neighbors consisted of several monkeys swinging on branches.
Our time spent at the Yasuni National Park was incredible. We visited a parrot clay lick that brought us face to face with several species of parrots and an interpretation center where we got to meet the women of the community and learn about the Kichwa culture and how they survive in the jungle. We climbed several observation towers that were over 35 meters high and saw a variety of howler monkeys, squirrel monkeys, toucans, and sloths. Almost everyone has seen a monkey or a sloth at a zoo, but seeing these animals in their natural habitat was truly remarkable. One of the coolest birds we saw here was the Hoatzin, which is so unique and bizarre looking that you almost have to see it to believe it’s real. We also took several canoe trips down the river where we witnessed caiman and anaconda. It was so crazy to us the Kichwa people weren’t worried about these animals that could possibly be so dangerous.

One morning, we woke up at 4 a.m. to share one of the ancient customs of the Kichwa culture. This included drinking wayusa tea, made from drying the leaves of the guayusa tree and brewing them, in order to energize the body. The Kichwa people were so kind and down to earth and we befriended several of the children that lived there and even played soccer with them. No one wanted to leave this amazing place.

After spending several days in the Amazon, we traveled back to Quito by plane. We then visited Calderón and the Flower Trail. The Flower Trail consists of beautiful roses, fed by natural springs and refreshed by the cool Andean nights. They even had some rainbow roses there that we all got to keep! We had lunch at a restaurant that was located right beside an Imbabura volcano. This was one of the most remarkable views I have ever seen. Our last night in Ecuador was spent at a hotel in the Imbabura province. Most of us on the trip would agree this was one of the coolest hotels we’ve ever stayed at. We placed soccer with our guides and got to watch the Copa América quarterfinal game featuring the USA vs. Ecuador!

On our last day, we visited the Otavalo Indian Market and bought lots of cool souvenirs including hammocks, purses, and bandanas. Our last lunch was spent at an indigenous home and we got to try “cuy” (as known as guinea pig). Honestly, it was not as bad as I thought it would be. After this, we traveled to the airport and waited for our flight back home.

Overall, every day spent in Ecuador consisted of trying new things that I would never imagine doing and seeing things I’ve only ever seen in my school textbooks. This trip truly opened my eyes to the way people live in different places in the world. I hope to return to Ecuador one day in the future, especially the Amazon rainforest, to see the beautiful places I got to visit on this trip.

Kayla-Anne Van Rengen
AU Class of 2017
An AU Student’s Story

I began my undergraduate education in 2012 and decided to major in Cell and Molecular Biology largely because I just wanted to learn more about the field after taking AP Biology in high school. I’ve never felt compelled to pursue medical school like most biology majors, but I tried to consider other options as well. I went on with my education unsure of what I wanted to do. I began undergraduate research for my Honors Thesis and began taking my upper level biology and chemistry courses. Eventually, I decided to start an art minor and pursue medical illustration in the hopes of one day using my skill to communicate what I learned and loved in my classes.

My years at Augusta University have been some of the best of my life. Through the Biology Department and Honors Program I have met many intelligent, driven, and kind people, some of who became good friends, as well as wonderful, helpful professors that really encouraged learning and success. I consider myself blessed to have had such a wonderful education and incredible professors. I am very grateful for all they do, their inspiration, and their encouragement. With all the support from faculty and the pure desire to learn, it wasn’t hard to enjoy my time here.

Keri Jones
AU Class of 2017