

Bom*Betastus* Von *Rhoenheim*

The Beta Rho Chapter of the Alpha Chi Sigma Fraternity Newsletter



Rho Sweet Rho

Pumpkin carving? Yes! A brand-new family competition? Absolutely! Beta Rho has had many memorable activities this semester! Plus! See updated family rosters! (See Pg. 2)

New Lead



Beta Rho had a successful and unusually large fall pledge class. These pledges enjoyed a variety of rush week activities and the traditional post-initiation IHOP dinner (See Pg. 4)

Striving for the Advancement

Brothers work hard in school, research, and internships. Learn all about the incredible things they have achieved this past semester! (See Pg. 6)

Epic Journeys

Beta Rho is not one to ignore the calling of adventure! This semester, we attended Biennial Conclave and the KC Pro Picnic. We also went to the renaissance fair with pro bros! (See Pg.9)

Rho Sweet Rho

Activities and Updates



Pumpkin carving night!



Fall Faculty Dinner!



Family Flask

In Alpha Chi Sigma, we strive to bind our members with a tie of true and lasting friendship. One way we do this is through our families which help to connect us with other members in the fraternity. The Family Flask is meant to take the role families play and enhance them to create a feeling of comradery between family members. The Family Flask is also designed to encourage participation and involvement in fraternity business by offering an additional incentive for participation. The flask also is meant to create a sense of familial pride. I hope that everyone can feel an appropriate sense of pride in their family's contributions and achievements for the fraternity.

-Dalton Denton

Brie's Birthday!



Rho Sweet Rho

Family Rosters

Copper

George Fischer
Emily Ball
Chloe Alexander
Riley Stearns



Gold

Erin Meyers
Gabrielle Ciccarelli
Tessa Maze
Isabell Lewis



Iron

Kaitlyn Stickels
Dalton Denton
Quentin Burger



Lead

Luke Zahner
Brienne Little
Rachel Schuetze
Aidan Cairns
Clarke Clemmons



Mercury

Bailey McAuley
Courtney Johnson
Erianna Basgall
Mathew Hamblin
Joseph Kempin
Hawa Dembele



Silver

Sydney Masters
Alexandria Elmore
Kasey Robinson
Gary Mack McIntosh
Cole Wilson



Tin

Chris Ball
Daniel Klima
Chiaki Kamiyama
Boone Steimel
Mikaela Moore
Chris Reusz
Troy Abram



New Lead

Rush Week



Brie leads an informational meeting and game for an enthralled audience of brothers and prospective pledges



Bowling at the Union!



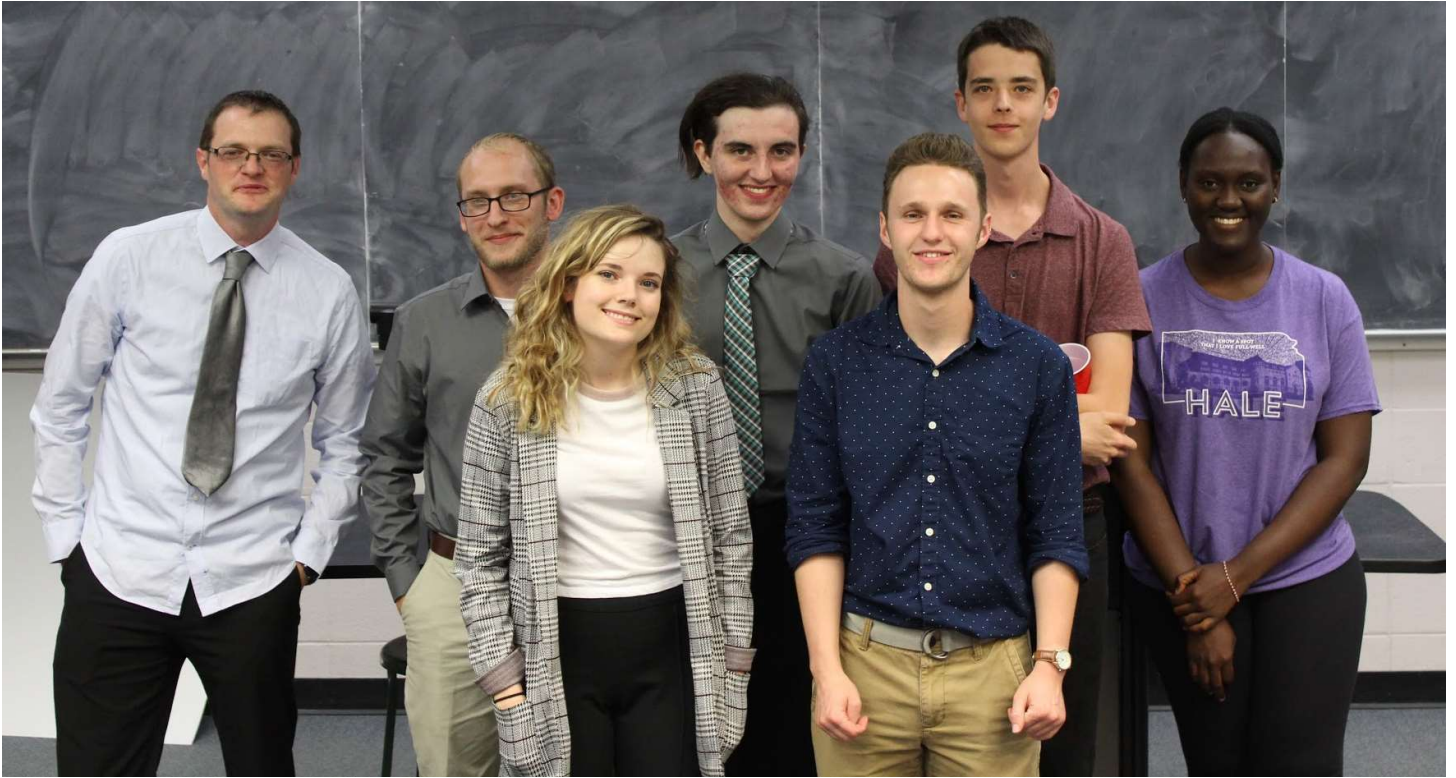
Pot luck and mingling!



We ended rush week with an ice cream social at Call Hall in the Union!

New Lead

Formal Pledging and New Brothers



Formal Pledging- Pledges: (left to right) Back row Dr. Townsend, Troy Abram, Clarke Clemmons, Quentin Burger, Hawa Dembele Front row Riley Stearns, Cole Wilson. Not Pictured: Isabel Lewis



Left: Newly initiated brothers

Right: Post-initiation IHOP



Striving for the Advancement

Research

Erin Meyers is working with Dr. Culbertson. She is in the paper writing process for a teaching lab experiment comparing two methods of determining pH: spectrophotometers and electrodes. The spectrophotometers are known to have better precision and can be used to detect small changes in pH that can occur with events like freshwater or ocean acidification.

Bailey McAuley is working with Dr. Amama to research environmental remediation via a photocatalyst which cleans the air. They are using titanium dioxide enhanced with carbon nanotubes as the catalyst. This combination allows the TiO_2 to be pushed into having a conduction/valence band gap that can be activated by wavelengths smaller than 400 nm. Once this is achieved, the TiO_2 and carbon nanotube composite can be implemented in paints, cements, and other common materials. When sunlight or other high energy wavelengths irradiate these materials, the composite can oxidize gaseous pollutants into less harmful pollutants or species that can be more easily naturally broken down.

Cole Wilson is working with Dr. Durrett to research modifying the way the oilseed crop camelina sativa makes oils to make modified unusual TAGs. They mainly focus on acetyl-TAG oil, which has a lower viscosity and freezing point, making it a potential substitute for diesel. Cole is currently working on taking an enzyme that produces acetyl-TAG and one that produces regular TAG and making chimeric proteins which sections of both to try to understand the structure/function relationship.

Dalton Denton works with Dr. Geisbrecht to solve the crystal structures of functional proteins of the immune system.

Erianna Basgall works in Dr. Finnigan's lab where she and her partner Megan develop applications of the CRISPR system. The system works by using a CRISPR nuclease, Cas9, and a piece of RNA that Cas9 uses to target and cleave specific loci in DNA. They use *Saccharomyces cerevisiae* (yeast) as a model organism for this. She has been working in this area of research since her freshman year and has co-first authorship on a paper (Basgall *et al.*, 2018). She also shares co-first authorship on another paper that has recently been accepted (Goekel *et al.*, date pending) and a review that she is currently working on. Her current research centers around the use of a nuclease-deficient Cas9 mutant to ferry transcriptional activator or repressor domains to specific genes in order to regulate transcription and develop a high throughput genetic screen for testing transcript regulation.

Striving for the Advancement

Achievements

Sydney Masters was accepted into Optometry School at Indiana University, which is one of the top schools in the country. She was also chosen as the West Virginia contract seat, which will allow her to pay in-state tuition. She is also the president of the Pre-Optometry club this year.

Erianna Basgall has been a K-INBRE Scholar both her sophomore and junior years for her lab work with Dr. Finnigan. She had a fellowship through the American Society for Microbiology this past summer and has just been nominated by K-State to represent the university in the Goldwater Scholarship Competition this coming spring.

Matt Hamblin received an award for Plant Insect Ecosystems Undergraduate Student Achievement. With this award, he received a waiver for registration to the 2018 Joint Annual Meeting of the Entomological Societies of America, British Columbia, and Canada, \$1,500, and a plaque which was presented to him in Vancouver, BC, Canada. Winners were selected based on evidence of outstanding performance related to activity and achievement in entomology, and at least one of the following: an undergraduate research project, a creative approach to teaching, or a creative achievement in outreach.

Christopher Ruesz interned with International Flavors and Fragrances in Dayton, New Jersey in their bakery applications lab this past summer. His main work was creating and applying new flavor combinations to commercial bakery and cereal-based products. The applications process generally includes: flavor conceptualization, application testing, sensory analysis, flavor alteration, and the cycle is continued. On the side he assisted flavor chemists with compounding to better understand the organoleptic properties of each chemical and their contribution to the overall flavor profile of a product when applied at specific amounts. When neither of those labs needed assistance, he helped the confectionary applications lab with products such as truffles, chocolates, gums, gummy candy, etc. He learned quite a bit about the flavor industry this summer and gained a better understanding of how to break down and describe flavor profiles of foods which he is hoping to turn into a career after completion of graduate school.

Striving for the Advancement

Graduating Seniors

Luke Zahner will be graduating with a bachelor's degree in Electrical Engineering. He will then be moving on to be a power planning engineer at Kansas Electric Power Cooperative.



Gabby Ciccarelli will be graduating with a bachelor's degree in Nutritional Science. Afterwards, she will be completing the Disney College Program this spring. Then she will begin attending the University of Missouri-Kansas City School of Dentistry in the fall to get her DDS. She was accepted into UMKC in her sophomore year through a reserve admissions program which allows her to bypass the traditional application process. She was also selected to be an Outstanding Senior for the college of Human Ecology.



Christopher Reusz will be graduating with a bachelor's degrees in Bakery Science, Food Science, and Spanish with minors in International Agriculture and Chemistry. After graduation he will stay in Manhattan and take a professional commercial baking course at the American Institute of Baking where he will learn the ins and outs of baking and problem solving for commercial sized baking applications. After he will most likely attend grad school for a Masters in Food Science but he is keeping his options open to both work and school to see what works best.



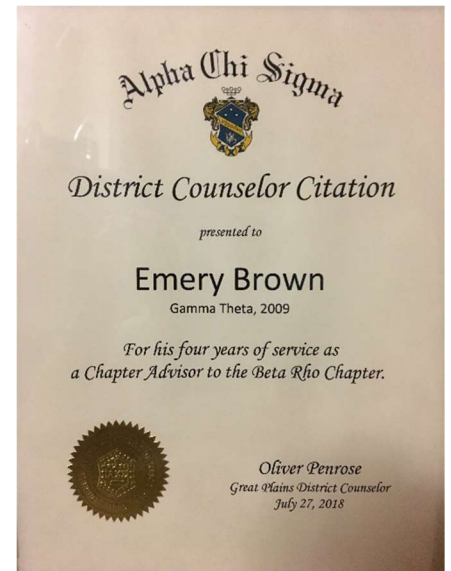
Epic Journeys

Biennial Conclave

This July, Courtney Johnson, delegate, and Dalton Denton, alternate delegate, represented the Beta Rho Chapter at Biennial Conclave in Pittsburgh, Pennsylvania. There, the Grand Chapter voted to amend bylaws, accept ritual changes, and promote inter chapter communications. Beta Rho was presented with the Walter T Schrenk Award for the largest attendance of a collegiate chapter at Conclave and a One Star Chapter Award for exemplary performance in several areas.



Additionally, Dr. Emery Brown received a District Counselor Citation for "his years of service as a Chapter Advisor to the Beta Rho Chapter" presented by Oliver Penrose, Great Plains District Counselor.



Epic Journeys

Biennial Conclave, KC Pro Picnic

