### The Brief Recount of the Age of the Digital Wyvern

Beta Rho Chapter of the Alpha Chi Sigma Fraternity Fall Newsletter of 2020



Meet the new brothers	Advancing for us all
Page 2	Page 3
Keeping Together	Spring 2020
Page 4	Page 5

# Pledging

This year's unique requirements provided some challenges to pledging, yet four brave new brothers joined us this fall



### **Advancing the Field**

#### The Research

Bandon Challons worked with Dr. Plakke to observe the behavior of rats with fetal valproic acid (VPA) exposure. They are searching for a link between VPA exposure and autism-like behavior in rats.

Cole Wilson is working on Research funded by K-INBRE aroud the enzyme DGAT in plants, this enzyme is the last step to produce Tracylglyceryol (TAG), a main component of plant oil. His research is comparing variants which make the regular TAG to ones that create Acetyl-TAG, which is relevant to industry and biofuel. This is done by making chimeras of the vairants and characterizing the lipid products.

Brighton Ferrara worked with Dr. Tomich on a project involving Branched Amphilic Peptide Capsules (BAPCs) and focused on a variant which formed bilayer-coated magnetic nanoparticles (BAP-MNBs). BAPCs were shown in Tomich's lab to be able to persist in cell nuclei and potentially asist delivery of drugs and specific gene expression. Brighton's project used the BAP-MNB variant in different ratios with dsRNA to use it as a carrier for nucleic acids.

#### **The Profession**

Courtney Johnson is keeping up with  $AX\Sigma$ , and running for VP of the the Research Triangle Pro Chapter, hoping to be a liaison between the pro chapter and the collegiate chapters of UNC and NC State. With degree in Chem and Biochem, She is moving through grad school at Chapel Hill and aiming for a PhD in Analytical Chemistry. She is also working on a project of electrochemical biosensors while part of the Schoenfisch group.

# **Keeping Together**

This was a year of challenges for all of us. In the fall a new format for the university was not the most ideal, so we danced the troubles away.



Zumba day

## **A Simpler Time**

Our most recent in-person magic show.

Back in spring, we visited Eisenhower Elementary School for a chemistry magic show. When we were working on the elephant's toothpaste experiments, one of the kids asked about re-lighting a match. While we were unprepared for that demo, the quick thinking of our brother brought an opportunity. We used the elephant's toothpaste reaction without soap to make oxygen and relight a match.



If you would like to see the videos, <u>check them out here</u> Ice Skating

We were out to have a fun day!

