

WILDCAT CAGE

STUDENT ORGANIZATIONS REPORT

SPRING 2023



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College of Engineering

ChemE Car

The ChemE Car put the funding received from the Wildcat Cage Competition to good use this past year. With this funding, the team was not only able to fund travel and hotel expenses for the trip to Phoenix for Nationals, but also funded the trip to Florida for Regionals as well. The team grew much larger this year, and we were finally able to take a large group of students to the regional competition. We upgraded our car's design this year thanks to the generous donations from the Wildcat Cage and made a more durable car than ever before. It was really important to us to be able to show the younger members on the team what competitions are like, and now these members will be more prepared for their upcoming national competition in Orlando this November. We couldn't have been this successful without the support of this funding, and I would like to express my gratitude on behalf of the entire team for these donations!



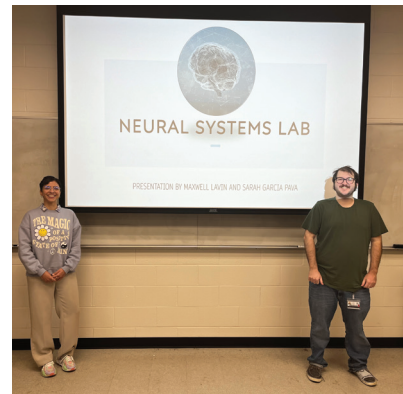
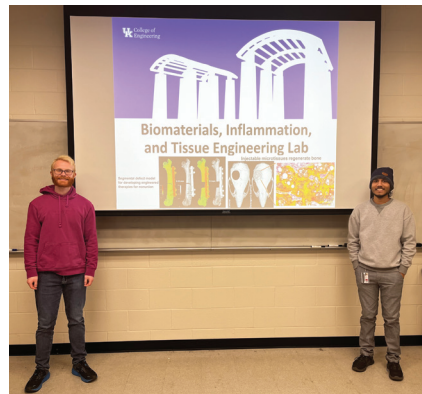
ChemE Car placed 5th out of 40 universities worldwide in Phoenix in November 2022.



ChemE Car funded the entire team to attend the regional competition in Gainesville, FL in March 2023. We took home 1st place with stopping just 1 cm away from the finish line!

Engineering in Medicine and Biology Student Branch Chapter

Engineering in Medicine and Biology Student Branch Chapter (EMBS Wildcats) used Wildcat Cage funding this year to support the Exploration into BME Territory lunch and learn series. This event series offered networking, collaboration, and professional development opportunities for students and faculty members at UK. We hosted four events with 13 guest speakers in total during the spring semester. These guest speakers were from 8 different laboratories within UK (6 from the Biomedical Engineering Department and 2 from other departments related to engineering in medicine and biology). The main goal for this lunch and learn series is to recruit undergraduates into research labs, which focus on using engineering applications in medicine and/or biology. Additionally, we want to give the undergraduates a better understanding of all the difference sub-fields within biomedical engineering. Therefore, we asked the speakers to make the talk interesting and exciting - like a sales pitch, but with more information. A sub-goal for this event series is to have the graduates interact in an informal setting and learn about the different labs at UK.



Materials Advantage

This semester we were able to have many different events with the funds provided by the Wildcat Cage event. Our first event was a welcome back cookout for students as they got back into the swing of things on campus. At the beginning of spring semester, we were able to purchase supplies for E-day activities. We also hosted an MA hangout night complete with pizza and games as a social gathering. Through all of these events, our club has grown in numbers and also closer together. It is our hope that the club continues this progress with the help of Wildcat Cage in the future. None of these events would have been possible without the funding from Wildcat Cage. We sincerely appreciate it!



Kentucky Solar Car Team

We were able to use the Wildcat Cage funds to purchase various new brake hardware such as brake fittings and brake lines. This is important for driver safety as well as the functionality of our car. When it comes to electrical purchases, we decided to invest in battery box materials for Gato del Sol VII. We purchased smaller materials such as copper sheets, compression springs, and multitudes of cables. With all of these materials, we are projecting a far more efficient battery than Gato Del Sol VI.



Society of Hispanic Professional Engineers

Thanks to your Wildcat Cage donations, we were able to send 10 students to the national convention, as well as fund the elementary after school program. This was very impactful since 6 of the students that went to the convention received an internship position. Two of the students received a co-op opportunity. One student received a full-time interview. Also, three of the students won a problem-solving competition. The donation also impacted the Latin community in Lexington since we were able to teach kids engineering is fun and plant the idea that it's a career path they could pursue.



SpaceLex Rocketry and Propulsion

This year has been an exhilarating year of growth for SpaceLex Rocketry and Propulsion. As a newer organization our goal for this year was to grow our organization's talent while providing a framework for the team going forward and we succeeded in these two goals. Our team's size doubled this year and we attracted excited members with backgrounds in aerospace, satellites, radio, business, and more. Their excitement for their craft came together into building SpaceLex's first ever team-built competition rocket. While we did not place in a competition, our members had the opportunity to make real carbon fiber parts, learn advanced additive manufacturing techniques, use generative design, and develop a better understanding of aerodynamics. With the funding provided we were able to purchase components for members to build their own L1 NAR certified rockets to achieve licensing and we had a few launches this semester and will continue to have more into the summer. Having the resources to provide hands-on experience was great for our members to learn and grow as future engineers in their fields. These skills gained at SpaceLex translated into career building opportunities with members landing internship positions with major aerospace companies, including SpaceX, Relativity, Space Tango, and more.

Of course, none of this could be done without the funding provided to keep our organization going. Along with the L1 program we requested funding to improve our newly required workspace and build it out for our new members. Due to the contributions from Wildcat Cage, we were able to do just that. We turned a mostly unused classroom into a thriving makerspace with a CNC machine, ample seating and tables for members, and a more advanced extruder for our 3d printer allowing us to print carbon fiber composite parts. We set up a carbon fiber work area, electronics station for soldering and programming, and provided space to communicate and work together. We were also able to vastly improve safety, including providing filtration masks, purchasing a first aid kit, fire extinguisher, and other PPE.

We are incredibly thankful for the opportunity we were given this year through Wildcat Cage and look forward to continuing our mission to grow the aerospace industry in Kentucky. De Kentucky, Ad Astra.





IEEE Student Branch

Your Wildcat Cage contributions helped us participate in the circuits and hardware (robotics) competitions at IEEE SoutheastCon 2023 in Orlando, Florida, and we are thrilled to report that we secured third place in the circuits competition and first place in the hardware competition! Your support has made a significant impact on our students and faculty, and we are grateful for your generosity. Your contribution has helped us achieve this success, and we could not have done it without your support. Once again, thank you for your invaluable contribution to the IEEE Student Branch at the University of Kentucky. Your generosity is greatly appreciated, and we hope to continue to have your support in the future.

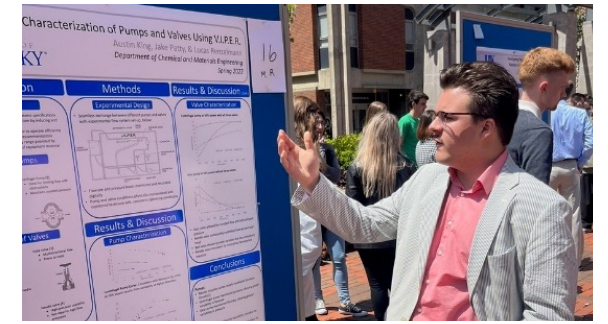


Biomaterials

The wildcat cage funding was used for organizing a series of events titled "Women in STEM" from Jan - April. The event was held in a lunch and learned style where undergraduates and graduates interacted with the speakers for about an hour. The first speaker for our event was Dr. Stacy from the University of Cincinnati. We had Dr. Chaplin from BME and Dr. Sama from the professional development office at UKY as our invited speakers for Feb and March, respectively. The finale event was held on April 14th, with Dr. Lisa Cassis, UK's Vice President for Research, as our keynote speaker. We also hosted a panel discussion about women's problems in STEM and how to address them strategically. The speakers on the panel were Dr. Julie Whitney, Dr. Kathleen O'Connor, Dr. Emilie Clemmens, and Dr. Laura Letellier. As part of the Women in STEM series, we also provided snacks and refreshments to BME students during one of their last weekly seminars (April 19th) to promote wellness and support for their physical and mental health as they prepare for the end of the semester (e.g., final exams, qualifiers, dissertation defense, etc.).

AIChE

AIChE is extremely grateful for the generous donation from the Wildcat Cage this year. Your donation was used in two major ways. The first way was for recruiting younger members. We used a large portion of the donation on two large recruitment events, the first being Meet the Professors which is held in September and allows all the students to meet their teachers for the upcoming semester. The second recruitment event was our Evening with Chemical Engineers for freshman to help them explore and join chemical engineering. The other type of events that the wildcat cage donation was used for is our Wednesday study breaks. For the last 6 weeks of the semester, we offer breakfast in the commons every Wednesday as a mental health study break. This really brings the grades together and is a great opportunity to take a quick brake from senior design and the lab reports. We really appreciate the donation from the wildcat cage members and want to emphasize that these events would not be possible without your continued support.



Phi Sigma Rho

This year, our Wildcat Cage funding allowed us to do two awesome things!! Firstly, it gave us a bit more money to host our largest formal yet (this only happens every 4 years), Orchid Ball! It was held at the Kentucky Castle, and we had a wonderful time!! Another place where we will be using our WCC funds is for national conference 2023!! We will be sending 8 sisters, which is the largest group we have ever sent to conference!! Conference will be in Chicago, IL, and we will be attending meetings and programming sessions to better our chapter and our chapter's future. Thank you to all our donors for their support and for their generosity. We appreciate everything you do for us!! Phi Rho love <3

ASCE Student Chapter at the University of Kentucky

Highlights from our Participation in the 2023 ASCE Indiana-Kentucky Student Symposium

With the help of our generous sponsors, UK ASCE was able to take a group of 24 students to this event hosted by Western Kentucky University in Bowling Green, KY from April 13-15 and participate in multiple competitions. This experience provided a valuable supplement to students' learning from throughout this spring semester and created great memories.

Competitions we participated in:

- Concrete Canoe
- Sustainable Solutions
- Construction Institute
- Mystery Design
- Surveying
- Balsa Wood Bridge
- Technical Paper and Presentation
- Concrete Cornhole
- Lawn Darts
- Tug-of-War



Notable Results:

Sustainable Solutions
FIRST PLACE

Concrete Canoe (Races)
THIRD PLACE

Construction Institute
THIRD PLACE

Mystery Design
SECOND PLACE

Advanced to National Competition

UK ASCE also won the Symposium Spirit Award



THANK YOU TO OUR 2023 SPONSORS!



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