Research experience yields great advantage

On the fence about getting involved in undergraduate research?
There may be more benefits than you realize!

Why get involved with research as an undergraduate? Just ask graduating senior Mary Ware!

Ware was recently accepted into the University of South Mississippi’s graduate program, and she credits her experience in undergraduate research with giving her an advantage in the interview process. Mary applied to the Applied Behavior Analysis masters program at USM, and traveled to Hattiesburg, Miss., for her interviews.

“During my interview with multiple professors within the School Psychology department, I was able to elaborate on my previous research experience [as an undergrad at UNA], which they viewed as being very impressive,” said Ware. “Following my interview I received a call asking if I would be interested in the doctoral program in School Psychology, which completely took me by surprise. Exactly a week after my interview for the masters program, I was instead accepted into the Ph.D. program in School Psychology! I would say that my research experience played an instrumental role in my acceptance into this program.”

Ware will be attending USM this fall and will be

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Research Days 2016 winners announced

Thanks to everyone who attended Research Days 2016 and for helping to make Research Days a success! There were 72 oral or poster presentations and 17 Three Minute Thesis presentations. Over 250 students, faculty, and staff attended poster sessions and approximately 120 students, faculty, and staff attended and participated in oral and illustrated paper presentations. In addition, over 160 students from several classes attended sessions as a part of a class assignment. This was our largest and most successful Research Days to date!

Faculty and staff volunteers reviewed posters, illustrated paper presentations, and oral presentations. For each of the time slots, a Best of Session presentation was selected and each student researcher will receive $100. For the Three Minute Thesis (3MT) Competition, First, Second, and Third place winners, as well as People’s Choice Award, were selected and will receive $500, $300, $150, and $50, respectively.

For a complete list of winners, see page 4.
Three computer information systems (CIS) undergraduate students, Ali Murad, Adam Risher, and Jordan Simmons, presented their research findings at the 19th Southern Association for Information Systems Conference (SAIS 2016) in St. Augustine, Florida on March 18th, 2016. Their research is funded and supported by UNA’s Undergraduate Research Grants for Faculty/Student Collaborators.

They were accompanied by their faculty mentor and collaborator, Dr. Xihui “Paul” Zhang, Associate Professor of CIS. Their research paper, entitled How to measure IT effectiveness: The CIO’s perspective, aims to develop an improved model for the measurement of IT effectiveness from the perspective of the Chief Information Officer (CIO). They collected 119 CIO perspectives from two columns (CIS Profiles and CIO Values) in InformationWeek, published between 2007 and 2012. To analyze these qualitative data, they used two approaches. They used NVivo, a piece of powerful software for qualitative data analysis. They also worked in collaborative sessions. The improved model, generated from their research, can help current and future CIOs improve their ability to measure IT effectiveness in their organizations so that they can maximize the effectiveness of IT in helping their respective organizations achieve their business objectives.

The Southern Association for Information Systems (SAIS) is an official chapter of the Association for Information Systems (AIS).

The annual SAIS conference is an intimate gathering of information systems academics with fewer than one hundred participants. Past SAIS conferences have attracted doctoral students and faculty, including many recognized scholars, from across the nation and around the globe.

UNA is represented at ADA Annual Meeting

Six Human Environmental Sciences students and two HES alumnae attended the Alabama Dietetic Association Annual Meeting March 9-11. The trip to the Alabama Dietetic Association Meeting was funded by a QEP grant Kaitlyn Wilson and Jill Englett received.

Several UNA students participated in the Research Poster Presentation at the meeting:

Kaitlyn Wilson, Emily Hood, Mary Yarber, and Jill Goode Englett presented Comparing Dietary Intake of University Students from Peru and Alabama with an Analysis of the Effect of Dietary Intake on Anthropometrics Across Cultures. The research for the poster was partially funded by an Undergraduate Research Grant which Emily Hood and Mary Yarber received. (This was the first undergraduate research grant awarded to the Human Environmental Sciences Department.)

Taylor Tucker and Janice Jackson presented a poster entitled Evaluation of the Effect of a One-time Twenty Minute Education Session Identifying Carbohydrate Sources and Explaining Their Blood Glucose Impact on Peruvian and Alabamian Students’ Knowledge. This research was able to take place thanks to the 100,000 Strong Grant received for the Peru Study Abroad Program Summer 2015.

Natalie Anderson presented a poster entitled Impact of a Supermarket Tour Assignment on Upper Level Nutrition Students’ Knowledge of Healthy Supermarket Foods, Comfort Level in Providing Community Education and Perception of Volunteerism.

Students from the University of Alabama, Auburn University, and one student from Oakwood also participated in the Research Poster Presentation. Kaitlyn, Emily and Mary’s research poster took 2nd place in the Research Poster Presentation. Two Auburn Didactic students were awarded 1st and 3rd place. The judges made a point to come by and tell the UNA students who did not place that it was a very hard decision and they ranked really well.
assigned an internal assistantship.

Ware explained that her experience with undergraduate research is invaluable. “Research requires patience, organization, and dedication, which are all three characteristics I did not possess until I hopped on board the research train. I knew what direction I wanted to go with my career in psychology but I needed to get more involved academically,” she said. She talked to psychology professor Dr. Ryan Zayac, who asked her if she would be interested in serving as the principal investigator in her own research project with him as a mentor. She said yes.

“After applying for and receiving a grant to conduct this research, I was finally able to get started the following fall semester. The goal of this research project was to study the effects that behavior modification procedures can have on pro-environmental behaviors (decreased water/energy usage and increased levels of recycling) in college housing. Following this experience I was able to conduct research in Peru, which was by far the highlight of my undergraduate career,” Ware said.

Her research team studied the effects stimulus equivalence based strategies have on teaching food-portion size estimations to elementary-aged Peruvian children. “During my time in Peru I was able to grow as a researcher, but I was also given the chance to broaden my knowledge regarding the Peruvian culture. When we returned from Peru our research team conducted the same research on students at Kilby Laboratory School, which gave us an opportunity to compare the two populations,” said Ware. The Kilby connection had special meaning for the Florence native, who attended Kilby as an elementary school student. (She’s been at UNA since the very beginning of her academic career!)

Mary has also assisted Dr. Zayac in his research, which aims to determine essential readings for undergraduate students pursuing the study of behavior analysis. She is quick to acknowledge that Dr. Zayac is an excellent mentor and that she attributes many of her achievements to working with him over the past six semesters. “I would say that Dr. Zayac has definitely inspired me as a student and researcher. For those who have had the opportunity to have him in class, we all know that his classes require a significant amount of time and effort but this is for our own good. He pushes you to be the best student you can be while preparing students for their future career.”

Dr. Zayac is one of many professors who has inspired Ware. “Can I just say that the College of Arts and Sciences has the best faculty in the entire world? While I have had the opportunity to learn from a multitude of awesome professors, I can genuinely say that I have gained a wealth of knowledge from the professors within the Psychology and Family Studies (Sociology) department at UNA. I hope to carry that knowledge with me as I prepare for my career as a college professor,” said Ware. “My professors have all played a huge role in my success here at UNA …”

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Ware is on track to achieve her goal of a career in academia at the collegiate level. She will be studying School Psychology with an emphasis in Applied Behavior Analysis. She said, “I feel like this would allow me to broaden my footprint of influence for individuals with disabilities as well as contribute to the next generation of behavior analysts. Undergraduate research definitely played a role in my decision to pursue this career path.”
RESEARCH DAYS: ORAL PRESENTATIONS, ILLUSTRATED PAPERS, POSTERS, AND THREE MINUTE THESIS WINNERS

Nealey Sims (8:00 a.m. Oral Presentations)
Adventures in Making Images of Opals with Old-Fashioned Holographic Plates
Faculty Mentor: Dr. Brian Thompson • Physics

John Carr (10:30 a.m. Oral Presentations)
Complete Graph Decompositions and P-Groupoids
Faculty Mentor: Dr. Mark Greer • Mathematics

Zachary Ferris (1:00 p.m. Oral Presentations)
Determinants of Firing Coaches
Faculty Mentor: Dr. Keith Malone • Economics

Jacob Dawson (3:00 p.m. Oral Presentations)
Lower Temperature Limit for Feeding in Spotted Dusky Salamanders
Faculty Mentor: Dr. Glenn Marvin • Biology

Alexandra Priester (Illustrated Paper Presentation)
Religious Fundamentalism: Reaction to the Visual Dot Probe Task
Faculty Mentors: Dr. Larry W. Bates and Dr. Richard A. Hudiburg • Psychology.

Kathryn Kelsoe (9:00 a.m. Poster Session)
Going Green in the Residence Halls: An Investigative Study into Recycling Behavioral Patterns of Students in Mattielou Hall and Ways to Positively Effect These Behaviors
Faculty Mentor: Dr. Mario Mighty • Geography

Jonathan Marks (11:00 a.m. Poster Session)
Environmental Characteristics of Magnolia macrophylla (Bigleaf Magnolia) Occurrence Sites
Faculty Mentor: Dr. Jonathan Fleming • Geography

Aaron Avery and Emily Malone (2:30 p.m. Poster Session)
Bunting in Baseball: Getting it Down to Statistics
Faculty Mentor: Dr. Ashley Johnson • Mathematics and Secondary Education

First Place: Alex Heatherly (3MT)
Effects of a high fat diet on metabolic transitioning, body composition, and 5-km performance in male runners
Faculty Mentor: Dr. Eric O’Neal • Health, Physical Education, and Recreation

Second Place: Anna Goggans (3MT)
Stimulant Usage among Nursing Students
Faculty Mentor: Mr. Will Brewer • Nursing

Third Place: Vincent "Chuck" Chiriaco (3MT)
SHA-1 Collision Attacks with Parallel Computation
Faculty Mentor: Dr. James Jerkins • Computer Science and Information Systems

People’s Choice Award: Jordan Givens (3MT)
Heat-shock protein expression during temperature stress in the Antarctic Nemertean worm Parborlasia corrugatus.
Faculty Mentor: Dr. Isaac Sleadd • Mathematics

Three-Minute Thesis winners Givens, Goggans, Heatherly, and Chiriaco with Dr. Thornell (center). The University-wide 3MT competition, organized by Dr. Cynthia Stenger and Dr. James Jerkins, drew an appreciative crowd to the Performance Center on April 19.
Anh Nguyen presents her research, Law Enforcement Return on Investment: A GIS Analysis (below).

At right, Aaron Avery discusses his research topic, Bunting in Baseball: Getting it Down to Statistics.

Thanks to University Photographer Shannon Wells for capturing all these great moments.

(Clockwise from above):

James McKee hangs his poster on Micrometeorites in Rainwater.

Kaitlyn Wilson represented her research team during poster presentations with their poster Comparing Dietary Intake of University Students from Peru and Alabama with an Analysis of the Effect of Dietary Intake on Anthropometrics Across Cultures.

Judges at the 3MT competition included community members Ms. Victoria Greer, Dr. Jennifer Gray, Dr. Gary Dan Williams, and Mr. Ray Koopman with UNA’s Dr. Peter Rim, director and department chair of Engineering Technology. Also pictured is Dr. James Jerkins, co-founder of 3MT at UNA.
Announcing UNA’s first interdisciplinary, undergraduate, peer-reviewed journal!

Become a part of this exciting new project from QEP!

We need:
- Undergraduate Students to submit their research for publication
- Undergraduate and Graduate Students to serve as reviewers
- Faculty and Staff to serve as reviewers
- Graphic artists to work on layout and design

Full details will be announced soon!
For more information, write us at qep@una.edu.

Discover, the undergraduate research newsletter, is a publication of the QEP office, 111 Wesleyan Hall, Box 5167, University of North Alabama, Florence, Alabama. To submit articles, photos, or news items, contact us at qep@una.edu or (256) 765-4640. Thanks to everyone who supports research at UNA!