# UNDERGRADUATE RESEARCH CENTER



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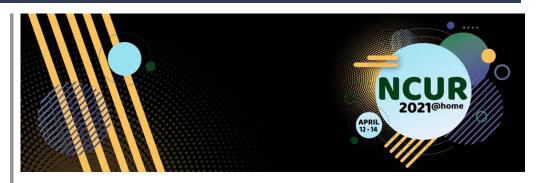
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# **NCUR 2021 Goes Virtual**

The National Council on Undergraduate Research is excited to announce that the National Conference on Undergraduate Research (NCUR) will be held virtually on April 12-14, 2021.

NCUR is dedicated to promoting undergraduate research, scholarship, and creative activity in all fields of study by sponsoring an annual conference for students. Unlike meetings of academic professional organizations, this gathering of student scholars welcomes presenters from all institutions of higher learning across all disciplines.

Check out the sidebar on page 4 for more information about NCUR 2021 and how to submit an abstract or serve as an abstract reviewer.

# URC'S MISSION

The Undergraduate Research Center's (URC) mission is to be the central hub for communication about undergraduate research grant programs and other related opportunities on and off campus, to distribute university funds for undergraduate research and creative projects, and to promote dissemination of results through travel grants and by offering opportunities for students to present their research findings.

NEWS

**SAVE THE DATE!** 

# Fall Research Open House

November 10, 2020 Science Building Atrium | 11-1pm

The Undergraduate Research Center presents our 3rd Annual Open House on November 10 from 11-1pm in the Science Building atrium, 2nd floor. This event is an informal poster session that showcases a sampling of current undergraduate research and creative projects at MTSU. All students, particularly new students and transfer students, are invited to attend.

This event presents the following opportunities for students:

- Introduction to undergraudate research and the importance of dissemination:
- Experience a variety of academic poster presentations representing an array of majors and disciplines;
- Present questions to current researchers about how they became involved in undergraduate research, how they balance coursework and research, and how they selected a faculty mentor;
- Find out more about our spring & summer URECA grants; and
- Learn about SOAR from current members.

FACULTY: We invite you to feature this event as an extra credit opportunity for your students. They will be required to talk with a minimum of 5 student presenters, which will be verified by the presenter initialing their program. I will sign off on the program once all requirements are met. Students can then submit the program to you for extra credit.



Added bonus: FREE boxed lunch for all preregistered attendees! Due to COVID-19, we are limiting the number of attendees to the first 25 students who sign-up by clicking on the "Sign Up Today" image.

# **Can't make it to the Open House? Join us virtually!**

Thanks to student activity fee funding, the Student Organization for the Advancement of Research (SOAR) is excited to offer students, faculty, and staff an opportunity to view the research and creative projects presented at the Open House from the comfort of your home or office.

Symposium, a program created by ForagerOne, offers a virtual platform showcasing the academic poster, a brief presentation by the student, and the ability for viewers to post comments and questions related to individual projects.

The virtual Open House will be available beginning Monday, November 9th, and run through Sunday, November 15th.

To check out the posters and presentations, please visit this <u>link</u>.



# STUDENT SPOTLIGHT





**Zachary Sanchez,** a two-time URECA grant recipient and Nursing major, focused his research on examining the eldercare workforce crisis. This project began with an Assistant level grant, which gave Zac the opportunity to conduct a literature review focused on his research topic and better understand gaps in the current literature. He discovered the absence of a reliable, precise, and contemporary instrument to measure today's students' attitudes towards the elderly, narrowing his focus for the continuation of his research.

Zac then advanced to a Gold level grant, committing 240 hours to developing a new instrument focused on nursing to students to measure their attitudes, perceptions and perceptions about the elderly population. In addition to developing a suitable instrument, Zac also focused on exploring various quantitative and qualitative data collection methods, completed IRB training, consulted with Nursing faculty experienced in instrument development, and devised a plan for data collection and analysis.

Faculty Mentor: Dr. Shelley Moore, Nursing

**Katrina Scott,** a Spring 2020 URECA Assistant grant recipient and Visual Art and French major, focused her creative project on exploring the role of women's anger in society. Conceptually, Katrina explored emotions commonly labeled as "undesirable" for women. She used animal and plant representations to explore these issues. Katrina's reasoning for using nature-based imagery was her interest in learning about human characteristics associated with different species throughout cultural history. For example, serpents have long served as symbols of guardianship and self-defense as seen at the Angkor temple in Cambodia and the historical American Gadsden flag.

To bring the images to life, Katrina created four mixed media paintings, including oil and torn paper on canvas. The finished creative works of art are showcased on Page 6.

Faculty Mentor: Erin Anfinson, Art & Design







# **URECA Deadlines for Spring and Summer 2021**



**Spring 2021: Thursday, January 28th** Applications must be submitted by 4:30pm



**Summer 2021: Thursday, March 25th** Applications must be submitted by 4:30pm

# **NEW Requirements for Scholar Applicants**

What else does the URECA committee need to know about the student's ability to perform the proposed research or creative project at the level for a Silver, Gold, or Platinum award?

The committee encourages applicants to submit evidence including, as appropriate, one or more of the following:

- Letter(s) of support from previous research or project mentor(s);
- Examples of creative works or resume/curriculum vitae (CV);
- Brief description of relevant work experience or research experience;
- and/or List and brief descriptions of courses that have prepared you for the proposed project.

Please note: Scholar applicants without a prior URECA award will need to submit a letter of support from their previous research or project mentor(s) and either an example of previous creative works for creative activity applicants or a resume/CV for research applicants.

To review the full application guidelines for Scholar proposals, please visit our <u>website</u>.

# **NCUR 2021 @Home**

What's next for interested students and faculty mentors?

#### **SUBMIT AN ABSTRACT.**

Submissions are open! Submit as an individual or part of a research group. Students accepted to present at NCUR 2020 will be automatically accepted to present at NCUR 2021, but you MUST review and resubmit your 2020 abstract in order to be accepted again.

### SIGN UP TO BE AN ABSTRACT

**REVIEWER.** Faculty mentors, administrators, graduate students: NCUR needs your help! They expect several thousand submissions to NCUR this year and are calling on our valued CUR members for support.

## Other helpful links:

- Abstract Guidelines and Instructions for New Submissions
- <u>Abstract Guidelines and</u> <u>Instructions for Resubmissions</u>
- Frequently Asked Questions

# FEATURED SOAR STUDENT

# OMAR ALI SENIOR

Major: Biochemistry

**Faculty Mentor:** Dr. Yanseung Jeong (Biology), Dr. Scott Handy (Chemistry)

Current Research Focus: Species composition of forensically-important flies associated with human decomposition at the Anthropology Research Facility of the University of Tennessee

**Additional Interests:** Organic chemistry research

Project Description: Forensic entomologists use insect evidence to reconstruct the circumstances of a crime scene at/around the time of event (e.g., estimation of time since death, determination of body movement). Forensically-important flies (FIF) are found in various stages of human decomposition. They lay eggs on a body and their maggots consume soft tissues, which significantly affect the pattern and rate of decomposition. Anthropology Research Facility (ARF, so-called the 'Body Farm') of the University of Tennessee has been used for human decomposition research for 40 years. Despite the important role of FIF in the process of human decomposition, it has not been fully investigated what species of FIF are present at the ARF. The purpose of this study is to investigate the seasonal and regional composition of FIF species at the ARF. This long-term study will serve as a basis to evaluate the effect of different FIF species on human decomposition.

# Why does this topic interest you?

In the biology research, sometimes the role of insects in term of human body decomposition is underestimated.



However, some insects, particularly Forensically-Important flies (FIF), serve as an important evidence in forensic investigations and are of great interest of forensic entomologists. Understanding the seasonal and regional distribution of the FIF will help estimate the time since death of a victim and determine the location of a crime. This research will contribute to enhancing the accuracy of forensic entomologists' decisions at/around the time of the event and eventually to solving criminal cases.

## Do you have any advice for future researchers?

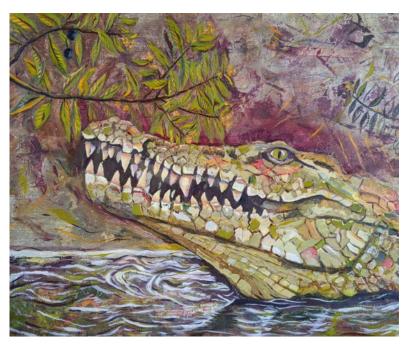
Dear Future researcher, My advice to you is to start research as early as you can, so you will have ample time to find what interests you. Learning theories from lectures and practicing them in the laboratory constantly will stimulate your thoughts to quickly discover other related academic concepts. Sometimes hands-on practices in the lab work better than reading textbooks in a library in understanding and retaining complex academic information/theories I believe that the goal of doing research is to gain the ability to employ the theory inside the lab and to create a tangible outcome. In addition, I discovered that discussing academic concepts with classmates and colleagues has helped me generate more constructive ideas as well as see them from a different angle. Doing research in general will improve your scientific skills as well as your ability to organize ideas in the future.





# ART BY KATRINA SCOTT

URECA Assistant Scholar Spring 2020





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