



# HIGH POINT UNIVERSITY

# SPOTLIGHT

FROM THE OFFICE OF UNDERGRADUATE RESEARCH AND CREATIVE WORKS

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## HAPPY NOVEMBER!

Happy November students, faculty, and staff! As our semester comes to a close, the Office of Undergraduate Research and Creative Works (URCW) is working harder than ever to provide students with scholarly opportunities, novel tools, and helpful resources to ensure their success.

### RESEARCH ROOKIES OF THE MONTH



Jade and Madison are our October and November Research Rookies of the Month! They have been working hard to complete the Research Rookies curriculum. Congratulations, Jade and Madison!

**Our Mission:** To bring together undergraduate students and faculty members for the purpose of creating unique and collaborative projects. By fostering an imaginative research experience, we hope to promote the development of new competencies, encourage critical thinking skills, inspire students to add to the global sum of human knowledge, and help students develop the skills to be competitive in the marketplace.

## HPU STUDENTS ARE HEADED TO SNCURCS

On December 3rd, 40 High Point University students are headed to the State of North Carolina Undergraduate Research & Creativity Symposium (SNCURCS) at the University of North Carolina - Wilmington. Twenty of our students will be presenting research they have conducted in the form of either an oral presentation or a poster. HPU will have the 3rd largest contingent of students from any single university. Below are the names of students presenting and their respective departments.

### CHEMISTRY

Jalen Dixon*	Halie Balogh
Sadie Flagg*	Lexie Young
Abigail Nimmo	Rachel Spera
Angelina Pierre	Victoria Federico
Emily Gillis	Bailey Sobolewski
Gianna DiGiacomo	

### PSYCHOLOGY

Olivia Lender\*  
Alexandra Jack  
Ashley Cruz  
Jyllian Herman

### BIOLOGY

Raegan Koon  
Taylor Galavotti

### PHARMACY

Kristina Dzamba\*  
Priya Thornton\*

\*oral presentations



Twenty students who aren't presenting are Research Rookies who are completing part of the program by attending SNCURCS. These freshmen and sophomores will have a unique opportunity to attend an interdisciplinary regional conference and get exposure to undergraduate research that is happening across the state. URCW is supporting this opportunity, making undergraduate research accessible for all students.

As a student presenter, I am incredibly grateful to URCW for this opportunity to present the research I've been conducting since my freshman year. - Taylor Galavotti

## The George Barthalmus Grant

The George Barthalmus Undergraduate Research Grant is a support grant awarded at SNCURCS to a select few sophomores involved in undergraduate research.

Sadie Flagg was awarded a George Barthalmus Grant at last year's SNCURCS and is presenting her work this year.



Ethan Muckerheide was one of 4 recipients of the George Barthalmus Undergraduate Research Grant this year. He will present his work at SNCURCS next year.

## UNDERGRADUATE RESEARCH OPPORTUNITIES

**DECEMBER**



### INTERESTED IN JOINING RESEARCH ROOKIES?

There will be an interest meeting on December 9th where you can learn all about the Research Rookies program and the steps you can take to become a Research Apprentice. The program helps students refine the skills necessary in undergraduate research through 15 unique tasks. You can begin the Research Rookies program at any point through your first semester of your sophomore year. If you're interested in getting started in undergraduate research, Research Rookies is a great place to start!

**APRIL**



### INTERESTED IN PRESENTING at High-PURCS?

High-PURCS is April 19, 2023! At High-PURCS, HPU students can present the research they have been working on either independently or as part of a innovative class project. High-PURCS will be held in the Nido R. Qubein Arena and Conference Center and will showcase oral presentations, posters, performances and exhibits. The High-PURCS website will be live in January and abstracts will be due in March. We'd love to see your research and creative works there!

**JUNE - JULY**



### INTERESTED IN SUMMER RESEARCH?

Even though the fall semester isn't quite over yet, it's never too soon to start thinking about your summer plans! URCW offers 3 different summer research opportunities based on discipline of study. SuRPS is for students studying in Wanek School of Natural Science. SuRF is for students studying with the Congdon School of Health Sciences. SuRI invites student-mentor pairs with a project from all the other departments on campus. See the website for details. Applications are due March 1. All 3 of the programs begin in early June and end in late July.

## STUDENT PROFILE

### JAKE DREW, PARKER GREENE, AND HENRY WALLACE



Henry Wallace working with the Virtual Production setup

Parker Greene, Jake Drew, and Henry Wallace are revolutionizing the way movies are made. Using “Unreal Engine 5 which is a game engine and...a HTC Vive Pro 2 VR headset,” these students were able to “*film mini movies that were being processed in real time.*” Parker, Jake, and Henry were inspired by the complexity of current video game backgrounds and its possibilities outside the gaming sphere; Henry said, “Now that [video] games can be so incredibly detailed, people have realized that they can just use that for video backgrounds while filming.” They were also inspired by *The Mandalorian* because “they use the same kind of technology and research,” according to Jake. Using this new research from the industry, Parker, Jake, and Drew are working to update current green screen technology. This is valuable because when using traditional green screens, directors can’t always visualize the scenes in front of them, actors can’t always visualize the environment they’re meant to be interacting with, and the post-

production team almost always runs into issues, requiring copious amounts of reshoots. All of this can be avoided by using this new technology being recreated by Parker, Jake, and Henry. According to them, they can, “replace the green screen background live,” to, “simulate what it’s like to be in real time environments.” This will help “film director[s] to see exactly what they are making and how it looks in real time [as well as] speed up production time.” Parker is majoring in game and interactive media which is heavier on the technical aspects of game design, like coding. Jake and Henry, however, are both media production and entrepreneurship majors, so they bring a different specialization to this project. They are working with Professor Brian Heagney as well as Professor Robert Powell, Dean Virginia McDermott, and Josh Harris in supporting roles.



Jake Drew & Parker Greene, Student Researchers

Professor Brian Heagney showing Virtual Production with live video footage and a different background





## GRANTS AWARDED BY URCW

### EXERCISE SCIENCE

Madison Kee, Gabriela Ochoa, and Caroline Rivera received support funding from URCW to obtain antibodies and primers to continue their research on the effect of insulin resistance on a mitochondrial BCAA transporter with Dr. Robert Vaughan, professor of exercise science.

### PSYCHOLOGY

Hannah Tameling, Jenna Ginther, Samantha Riveros, and Ava DeMonte received grant support from URCW to present their research on different learning retention methods at the Annual Meeting of the Psychonomic Society in Boston, MA. They were joined by fellow psychology student, Ethan Muckerheide. The students were mentored by Dr. Stacy Lipowski, associate professor of psychology, and Dr. Kimberly Wear-Jones, interim director of neuroscience and associate professor of psychology.

### DANCE

Nicole Amorocho, Caitlin Black, Melanie Fitts, Karissa Fryar, Lauren Johnson, Cierra Mahoney, Mary Gomez, Jordyn Perez, Connie Quagliata, Devlin Turner, and Grace Wagonblot have been awarded a grant from URCW to perform at the American College Dance Association Conference at Sweet Briar College in Virginia. The students will be accompanied by their mentor, Lindsey Howie, associate professor of dance, and Christine Stevens, adjunct instructor of dance.

### COMMUNICATIONS

James Laborde and DeV Vaughna Tulloch received support funding from URCW to purchase camera equipment and props to complete their senior capstone projects under the direction of Mr. Joseph Michaels, associate professor of media production.

### HONORS

Max Kresock, Courtney Collar, Cora Hicks, Amanda Nguyen, Jordan Morrison, Madison Manz, and Nicole Lieffrig presented their research in teaching at the National Collegiate Honors Council Annual Meeting (NCHCAM) in Dallas, with support from the office of Undergraduate Research and Creative Works. They were joined by fellow Honors students, Mac Mollins, Catie McKinney, and Nasia Ballas. The students were accompanied by Dr. Lipowski, assistant director of the Honors Scholars program. These students were mentored by Dr. Lipowski as well as Dr. Hedman, director of the Honors Scholars program, Dr. Fiser, chair of the physics department, Dr. Winkel, associate professor of Spanish, and Tony Kemerly, professor of exercise of science.



Honors students at NCHCAM

## UPCOMING EVENTS THROUGH URCW

### RESEARCH CONFERENCE SCHEDULE

#### SNCURCS

December 3, 2022  
University of North Carolina -  
Wilmington

#### NCAS

March 2023  
East Carolina University

#### NCUR

April 13-15, 2023  
University of Wisconsin -  
Eau Claire

#### High-PURCS

April 19, 2023  
High Point University

### ARE YOU COUNTED IN THE REGISTRY OF UNDERGRADUATE RESEARCH?

Are you counted in the graphic displayed here, which comes from the URCW Registry? It's important that we have records of students who are involved in projects to be able to share valuable information with you and to recognize you and your mentors. Visit [highpoint.edu/urcw](http://highpoint.edu/urcw) and click "Register URCW Activity". Congratulations to chemistry for leading the pack!

### STUDENTS IN RESEARCH

14

HUMANITIES &  
BEHAVIORAL  
SCIENCES

Psychology - 13  
Criminal Justice - 1

14

HEALTH  
SCIENCES

Exercise Science - 13  
Physical Therapy - 1

34

NATURAL  
SCIENCES

Biology - 8  
Chemistry - 20 ★  
Physics & Astron. - 6

6

COMMUNICATION

Event & Sport Mgmt - 1  
Game Design - 1  
Media Production - 1  
Strategic Comm - 4

7

PHARMACY

Basic  
Pharmaceutical  
Sciences - 7

1

ARTS & DESIGN

Art & Graphic Design  
Interior Design & Fashion  
Merchandising  
Music  
Theatre & Dance - 1