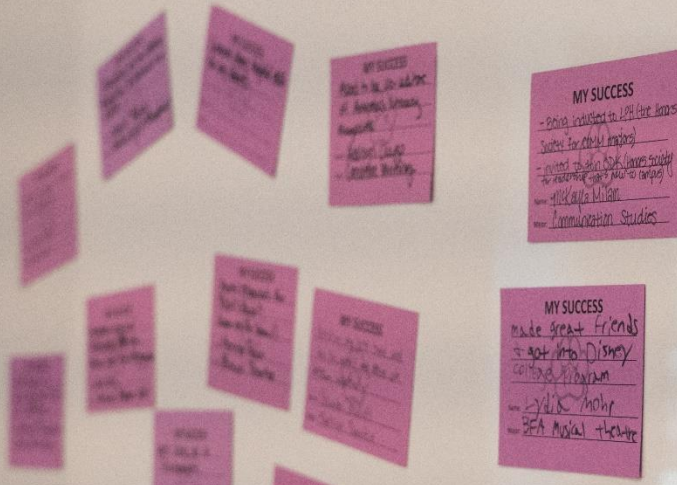


Celebrating Your Success!



UNDERGRADUATE RESEARCH JOURNAL

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Young
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COLLEGE



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Introduction from the Director of Undergraduate Research

This past fall, still acclimating to my first year as Undergraduate Research Director, I oversaw a student focus group with Dr. Joseph Pate, which we designed to qualitatively assess the impact of research curricula on our undergraduate students. Seven students participated, representing five departments and all four academic divisions at Young Harris College. The focus group's freewheeling discussion touched on all the central learning outcomes our Undergraduate Research Program was designed to address, including information literacy, the development of original ideas and questions, analysis and the pursuit of research through discipline-specific methodologies, and the ability to clearly and effectively articulate research processes and findings. These students' clarity and self-assuredness astonished me. They demonstrated not only impressive levels of awareness about the benefits of their research experiences, but a remarkable ability to articulate and reflect on those benefits. They acknowledged, for instance, how YHC's small liberal arts college environment allowed them to develop more meaningful mentor relationships with their professors. One student explained that for her friends at a large state school, the ability to "pop into [your professor's] office and say hey" was "a totally foreign concept."

Students also described the process of coming to see research and inquiry with new eyes. While they may have first perceived the research process it as something unattainable, inaccessible, or simply boring, their research experiences in the classroom allowed them to see it for what it was: specifically, as a process, a way of learning that could play to their strengths as students, accommodate their specific passions and interests, allow them to make mistakes and innovate ways to solve problems, and expand their knowledge, skills, and confidence in their respective fields.

This discussion helped me to see more clearly the high impact learning outcomes that YHC's quality enhancement plan, *Undergraduate Research for the Common Good*, has been aiming for since its initial rollout in Fall 2021. While not every student will be as invested in research as the students in this focus group, the ones with singular drive and curiosity will find those special opportunities at YHC when and where they are needed.

Fast forward, and the QEP has now completed its second year. While it was created as a component of our accreditation reaffirmation with the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC), the true potential of the Undergraduate Research Program lies in the high impact learning practices that will ultimately help our students come into their own as scholars and human beings. After a successful first-year rollout, the program continues to foster a culture of undergraduate research on campus and recognize student research accomplishments across disciplines.

As part of that recognition, I am pleased to present the 2nd issue of the YHC Undergraduate Research Journal. This issue summarizes the hard work and dedication of students and their faculty mentors across all four academic divisions and in all departments, reflecting the comprehensive, multidisciplinary nature of the tenets of original research and inquiry, both academic and creative. Here, you will find a wide range of projects utilizing diverse methodologies: the scientific method, quantitative and qualitative inquiry, textual analysis, literature review, and practical application, along with art exhibits, collaborative theater performances, and other creative presentations. You will find descriptions of both course-based undergraduate research experiences (CUREs) and mentored research experiences (MREs), which were designed by faculty to guide students toward their specific research interests and pursue independent research projects. You will also find recognition and celebration of our 2023 Distinguished Research Scholars, Honors Program graduates, and Undergraduate Research Day participants.

Additional content includes two research highlights: a multi-semester psychology experiment with Dr. Benjamin Van Dyke and recent graduate Henrik Timgren, and an interactive medieval literature project with Dr. Daniel Helbert, wherein students took a field trip to the University of Georgia to see medieval manuscripts firsthand. Also, Jacqueline Bruen, our Library Associate for Special Collections, has provided an article about Online Access Knowledge (OAK) Commons, YHC's digital repository for student work, which we hope will eventually feature many of the research projects found in this journal.

Overall, the wealth of talent and enthusiasm exhibited by our students and faculty continues to astonish me. A healthy culture of research and inquiry can only exist on campus with the total commitment of all institutional levels, and we have seen inspiring work and dedication from students and their faculty mentors, as well as staff and administrators. I am looking forward to the third year of the Undergraduate Research Program and am confident it will herald many new and fascinating projects.

Jen N. Julian, Ph.D.
Director of Undergraduate Research
Young Harris College, *Undergraduate Research for the Common Good*

Mission Statement

Undergraduate Research for the Common Good is an initiative to enhance the educational experience at YHC and positively impact student skills in many areas, including critical thinking, problem-solving, communication, and information literacy. By tackling difficult issues, working to solve the complicated problems, and facing the challenges inherent in research, YHC students develop valuable life skills, becoming resilient to adversity, ready for rigorous challenge, and confident in their abilities.

Undergraduate Research Advisory Committee & Acknowledgements

Jen Julian, Ph.D., Director of Undergraduate Research, Asst. Professor of Creative Writing

Amy Boggan, Ph.D., Associate Director of Psychology, Undergraduate Research Day
Coordinator

Benjamin Van Dyke, Ph.D., Assistant Professor of Psychology

Joseph Pate, Ph.D., Associate Professor of Outdoor Studies

Danny Woodbury, Ph.D., Assistant Professor of Business and Public Policy

Mary Brink, Ph.D., Associate Professor of Art History

Ambyre Ponivas, Ph.D., Assistant Professor of Communication

Anne Towns, M.F.A., Associate Professor of Theatre

Rosemary Royston, M.F.A., Assistant Vice President for Institutional Research

Kyle DeBell, M.A., Instruction & Access Librarian

Special thanks to **Jacqueline Bruen**, **Henrik Timgren**, and **Daniel Helbert** for contributing content for this issue. Also, a special thank you to the Undergraduate Research Journal editorial team—**Mary Brink** and **Alissa Cheek**—who dedicated special time to consolidate, organize, and edit this journal.

Additional thanks to those who supported and aided the committee in their efforts and made this publication possible:

Keith DeFoor, Ph.D., SACSCOC Accreditation Liaison, Associate Vice President for
Academic Affairs

Jenny Stowers, Coordinator of the First Year Experience

Debra March, Dean of Library Services

Lastly, a sincere thank you to all Young Harris faculty, students, staff, and administrators campus-wide who contributed to YHC's undergraduate research efforts this past year. We couldn't have done it without you!

Distinguished Research Scholars

We at the Undergraduate Research Advisory Committee created the distinction of Distinguished Research Scholar to foster a culture of undergraduate research, encourage student engagement and participation, recognize students who successfully complete research, and reward students who demonstrate excellence.

This past spring, faculty members took the first step in nominating students for the distinction. The nominees then completed an application summarizing the content and value of their research accomplishments and submitted a recommendation letter from a faculty mentor. We determined whether candidates met the criteria for the distinction, while recognizing that disciplines have differing criteria and expectations of research and scholarly work. Awards were announced in a special ceremony on Undergraduate Research Day. We awarded the distinction to four students.



HANNAH BEHNER

Hannah graduated this spring with a B.S. in Psychology and conducted multiple research projects during her career at YHC. Her senior capstone was an empirical research study on body image and perception, and she also completed an independent study literature review on the relationship between mental health and gun violence. Hannah identifies research as “a time to push yourself by asking questions that will challenge your limits as well as prior attitudes and beliefs.” For her independent drive, passion, and curiosity, she was selected to be a student representative for the Undergraduate Research Program. Following graduation, Hannah intends to continue pursuing research and wants to eventually get her PhD in clinical psychology.

CASSIDY CAMPBELL

Cassidy is pursuing an Interdisciplinary Studies degree in Psychology, Biology, and Sports Studies. Through the psychology department, she has served as a research assistant in an independent cold water pain study where, as her mentor notes, “her conscientiousness and enthusiasm made her invaluable to the...project” and she “served as a leader and a model for her classmates.” Last year, she worked on a literature review of recent studies on gut-brain microbiome, and she will be completing her senior capstone this fall. Cassidy sees research as integral to her post-graduation plans, which is to attend graduate school to become a Child Life Specialist. She wishes to continue conducting research “in a field [she] care[s] deeply and passionately about.”



CALEB THOMPSON

Caleb graduated this spring with a B.S. in Biology. He focused his personal research at YHC on the study of terrestrial isopods (i.e., roly polies), which, according to one of his mentors, was driven entirely by his own curiosity. He is identified as a student with “a very inquisitive mind” and “wide-ranging interests.” Last March, he presented his work at the Annual Meeting of the Georgia Academy of Science, where he won an award for best talk in biology. He also served as manager of our Predatory Beetle Lab in the spring semester of last year. Caleb is grateful for the opportunities his research has afforded him, saying, “I now feel confident enough to pursue a graduate degree and maybe even a doctorate in the future.”



LEANNA WOOD

Leanna graduated this spring with a B.S. in Psychology and aspires to be a sports psychologist. Last year, she enrolled in Dr. Amy Boggan's Psychology of Music course and acquired a singular interest in the effects of different aspects of music on exercise intensity. Praised by one mentor as exceptionally driven and focused, she completed a literature review, an empirical capstone research project, and an additional Honors thesis on whether certain qualities of music have a distractive or dissociative effect during exercise. Leanna envisions plans to attend graduate school, saying, "all of the knowledge I have gained from these research opportunities will be helpful to me in my future career in sports psychology."



Research News

ACA LEDFORD SCHOLARSHIP AWARDS

- ❖ Psychology major **Ashley Palmateer** and Biology/Psychology double major **Sophia Shook** were awarded Appalachian College Association Ledford Scholarships for the Fall 2023 semester. This award comes with funding for their respective research projects.

BIOLOGY

- ❖ **Madeline Deaton** and **Kiera Lewis** presented their research findings at the Georgia Academy of Science meeting this past March. Madeline was awarded Best Undergraduate Paper in the Biomedical section.
- ❖ 2023 Environmental Science graduate **Cynthia Jackson** presented her work (The effect of Delta-9 and Delta-8 Tetrahydrocannabinol on the developmental morphology of zebrafish) at the Georgia Academy of Science as a poster.
- ❖ **Dr. Andrea Kwiatkowski** presented a poster at Georgia Academy of Science showing a project that **Erika Williams** designed and performed.
- ❖ **Dr. Jonathan Micancin** had 2023 graduate **Jill Dixon** present at the Southeast Partners in Amphibian and Reptile Conservation conference. Jill has gone on to pursue a Master of Science at Western Carolina University.
- ❖ Biology graduate **Trey LaPine** presented at the Animal Behavior Society conference.
- ❖ **Dr. Johnathan Micancin's** Fall 2022 CURE in Conservation Biology has received results from the Student Network for Amphibian Pathogen Surveillance. Salamanders on the YHC campus tested positive for the fungal pathogen *Batrachochytrium dendrobatidis*.

COMMUNICATION STUDIES

- ❖ 2023 graduate **MacKenzie Johnson** is pursuing her Master of Arts at Mercer University.
- ❖ 2023 graduate **Riley Fields** is pursuing a Master's in Integrated Global Communication at Kennesaw State University.

INTERDISCIPLINARY STUDIES

- ❖ Interdisciplinary Studies major **Havyn Isaac** is pursuing a Doctorate in Occupational Therapy at the University of St. Augustine for Health Sciences.

LITERATURE & LANGUAGES

- ❖ 2023 English graduates **Katherine Davis, Ryleigh Roberts, and Skylar Sears** will be entering Master of Arts programs in English at Appalachian State University, Bucknell University, and Oklahoma State University, respectively.
- ❖ 2023 English graduates **Madison Dupriest and Jackson Taylor** will both be pursuing their Master of Arts in Teaching at Young Harris College.
- ❖ 2023 Spanish graduate **Luke Surowiec** will be attending Law School at the University of Georgia.
- ❖ 2022 Creative Writing graduate **Lakota Graham** was accepted to Hollins University's Master of Fine Arts Program and will be joining their new cohort this fall.

PSYCHOLOGY

- ❖ 2023 graduate **Christian Schach** is pursuing his Master of Science at Nova Southeastern University's Anesthesiologist Assistant Program.
- ❖ Fall 2022 graduate **Henrik Timgren** presented his research poster, "An Experimental Examination of the Interactive Effects of Perceived Observer Empathy and Distraction on Cold-Pressor Pain," at the Annual Scientific Meeting of the United States Association for the Study of Pain.

THEATRE

- ❖ 2023 graduate **Brandon McDuff** is on a full assistantship to Michigan State University for his Master of Fine Arts in Technical Theatre with an emphasis in Sound Design.
- ❖ Two 2023 graduates have signed acting contracts: **Jahlaynia Winters**, with Flat Rock Playhouse, and **Montaeo Bailey**, with the Asheville Community Theatre.
- ❖ 2023 graduates **Adreahna Brown** and **Ansley Phenix** have both signed technical theatre contracts with the Utah Opera and Celebrity Cruise Lines, respectively.
- ❖ 2023 graduate **Lydia Mohr** is on an internship at Disney.

OAK Commons: YHC's Institutional Repository

Jacqueline Bruen, M.A., History and Museum Studies

The Young Harris College Zell & Shirley Miller Library launched an institutional repository (IR) during the academic year of 2022-2023. The repository is titled Online Access to Knowledge (OAK) Commons and is available online at oakcommons.yhc.edu or through the library's Libguides page. An IR is an online platform “intended to support the preservation and organization of, and access to, the intellectual output of the institution”.¹ Institutional repositories can be utilized for several purposes including archiving historical documents and college records but also current scholarship from both faculty and students.

With the introduction of the new *Undergraduate Research for the Common Good* program in the Fall of 2021, a logical next step was to increase access to student scholarship. While this journal records the abstracts and brief descriptions of student scholarship from this past academic year, going forward it will be possible for students to post a digital version to OAK Commons of their research posters, the full text of their paper, poetry, or short story, detailed results from their experiments, recordings of music performances, and much more. OAK Commons is compatible with a large variety of file formats and is able to handle the full range of scholarship achieved at YHC.

Not only will students' work be recorded and preserved for future YHC undergraduates to access and look to as examples, but students can also direct future employers and graduate programs to the IR to view their work. This will give YHC students an advantage in their employment and future education placements not usually provided at a small institution like YHC. Students can also share their academic work with family and friends so they can see the final product of their hard work. The programs from Undergraduate Research Day from the past couple of years are available currently and we look forward to the full texts of student scholarship being shared on the repository next year.

While there is an untapped use of OAK Commons for undergraduate research, it is currently being filled with materials from the Young Harris College Archive and Special Collections. Currently available materials include select historical yearbooks, scrapbooks, letters, maps,

¹Callicott, Burton, et al. “Introduction.” *Making Institutional Repositories Work*, edited by David Scherer et al., Purdue University Press, 2016, pp xv. JSTOR, <https://doi.org/10.2307/j.ctt1wf4drg.4>. Accessed 6 July 2023.

and photographs. Furthermore, the Library intends to make available all the *Enotah* Yearbooks, class and personal scrapbooks, YHC course catalogs, student newspapers (*Enotah Echoes*), literary publications such as *Corn Creek Review* and *Artemas*, and personal college memorabilia. Alumni and interested individuals will be able to view every page of these digitized items from their own computers with the ability to download, zoom in and enlarge as necessary.

Institutional repositories are essential to preserving material for the future. By digitizing materials, it decreases handling of the original items, a process that protects them from additional damage. There is also the added benefit of having a copy of items in their current state as some materials will continue to decline, such as fading of ink, yellowing of old paper, and the breakdown of adhesives. Items on OAK Commons are protected for the future with online hosting including multiple backups on different servers and regular checks for any loss in data. This platform will ensure that the history of the college and the student scholarship produced here is available for future students, alumni, and others for years to come.

Works Cited

Callicott, Burton, et al. "Introduction." *Making Institutional Repositories Work*, edited by David Scherer et al., Purdue University Press, 2016, pp. xv-xxvi. JSTOR, <https://doi.org/10.2307/j.ctt1wf4drg.4>. Accessed 6 July 2023.

Research Highlights

The Effects of Distraction and Perceived Observer Empathy on Cold-Water Pain

Henrik Timgren, 2022 Psychology graduate



Henrik and his mentor, Dr. Van Dyke, at the Annual Scientific Meeting of the United States Association for the Study of Pain.

My research process started during my sophomore year when I took Psychology of Pain. During that class, we had an assignment in which we had to design our own research study based on previous research. While doing my literature research for this assignment, I found a paper that I found very interesting. I identified limitations in that paper, and I began to write my own research study which addressed the limitations of the previous paper.

During the next semester, I discussed my project from Psych of Pain with Dr. Van Dyke, and we both realized that we could potentially run my study right here at YHC. During the process of designing and conducting this experiment I had to learn several new skills such as how to find and apply for grants and funding; how to write an IRB proposal; and how to recruit, train, and manage a team of research assistants.

The whole process was extremely rewarding for my academic career as it forced me to learn and improve in areas that would come to be useful in other psychology courses. A good example of this is when I was taking classes such as the psychology stats classes and the empirical thesis class in which my experience with designing a study and analyzing the data from that study helped me excel during these classes. The project has also been very good for my future academic career as it is a great experience to have on my CV to showcase my skills and ambitions to potential grad school programs. I have realized after graduation that the sooner you can get started with research during your undergraduate career, the better you are going to be equipped for what comes after graduation.

Because of this project I have also had the privilege to travel and present my findings at a national conference on pain research, which was both a very interesting and rewarding experience.

We are currently working on trying to get the findings from this project published in an academic journal, which I believe shows how you can not only conduct a project at a small school like Young Harris, but you can also work on it and potentially take it all the way to publication and get your work out there for other people to read.

If you are interested in research in any way, then don't be discouraged by the limited size of Young Harris, there are great professors that will help you. And if you have energy that you are willing to put into a project, it can be done.

Research Highlights

ENGL 3002: Chaucer and Medieval British Literature

Dr. Daniel Helbert, Assistant Professor of English

Fall 2022's Chaucer seminar was a Course Based Undergraduate Research Experience focused on integrating students into the research subfield of literary criticism on Geoffrey Chaucer and medieval romance. One of the key components of studying medieval romance at the professional level is contact with leading researchers—contact which is difficult in rural Georgia. This class sought out means of closing that gap by having students read and report on recent publications by Professor Robert Rouse (University of British Columbia), Professor Megan Leitch (Cardiff University), and Professor Cynthia Camp (UGA), and then arranged for those professors to lead a class for our students over Zoom. The students discussed their own interpretations and readings of medieval Romance with the researchers and took notes on the publication process.

Another important component of researching medieval literature is having access to primary source materials. Some of the most difficult materials to access are the original medieval manuscripts in which the literature was written since those manuscripts are fragile, expensive, and often housed in special conditions. However, we secured arrangements with Professor Camp to access over a dozen medieval manuscripts at the University of Georgia, and the students travelled down together to do hands-on research with UGA graduate students on medieval manuscripts from the thirteenth, fourteenth, and fifteenth centuries. Access to source materials and contact with front-line researchers are both essential to doing professional literary criticism, and CURE made that happen for YHC students in this class.

Research Highlights



Field Trip to the University of Georgia Special Collections Library

Students pictured:

Larkinn Rainwater, Abigail Hill, Hannah Foster, Kat Davis, Rebecca Baker, Malia Little, Bryanna Meister, Luke Surowiec, Hannah Elliot, Addisyn Clapp, Anna-Reece Thomas, and Emma Brown



Honors Program Capstone Projects

Ten students graduated from the Young Harris College Honors Program this year, earning an Honors distinction on their transcripts. In addition to their Senior Capstones, these high-achieving scholars completed the following Honors Capstone projects.

Students in the Honors Program enjoy numerous opportunities for their academic efforts, including access to research support, priority registration, academic scholarships, and courses abroad. Every semester, YHC offers Honors-only seminars in a wide range of multidisciplinary special topics. If you are a student with further questions about the Honors Program requirements or the opportunities it could offer, please contact Dr. Kevin Geyer (kmgeyer@yhc.edu).

Saturn's Exoplanet Laboratory: Titan Indiana N. Ayers

Indiana, a Creative Writing major minoring in Astrophysics, used her multidisciplinary talents to put together a thesis on Saturn's moon Titan. Reviewing survey data from NASA's Cassini mission, Indiana explored the relationship between Titan and Saturn and made the case for Titan as a potentially habitable exoplanet that requires further study. Her work was presented in the planetarium dome on Undergraduate Research Day

The Evolution of Skills Through Training in the BFA Musical Theatre Program Montaeo Bailey

As a Musical Theatre major, Montaeo analyzed the evolution of growth in student skill within the BFA Musical Theatre Program at YHC. His results indicated a disconnect between the growth expectations of the faculty compared to the expectations of students. Overall, his study demonstrates how the BFA Program provides training that benefits students' individual growth, while also identifying areas that need improvement to create a more balanced curriculum. He shared his work as an oral presentation on Undergraduate Research Day.

The Fine Line Project

Emma Brennan

Emma, a Biology major, drew from her experiences as a women's lacrosse player to develop her thesis on the line between healthy amounts of exercise and a level of exercise that induces mental burnout in athletes. Her findings demonstrated a positive link between the likelihood to reach out about mental health concerns and mental health scores, and that the line for pushing student athletes is correlated to how much mental health support they receive.

How Does the Formation of a Lake Affect Its Coastal Fractal Dimension

Gwenyth Gibbons

Gwenyth, a Mathematics major, explored how a lake's coastal fractal dimension, that is, the level of coastline complexity, might be impacted by its method of formation, in particular, glacial formation, tectonic activity, and damming. She calls for further research that would investigate how coastline complexity might influence environmental diversity and human activity.

Language and Medieval Literature: Interpreting Sovereynete in Geoffrey Chaucer's "The Wife of Bath's Tale" and "The Wedding of Sir Gawain and Dame Ragnelle"

Abigail C. Hill

As an English major, Abigail investigated the use of the Middle English word *sovereynete* in Geoffrey Chaucer's "The Wife of Bath's Tale" and another Medieval tale, "The Wedding of Sir Gawain and Dame Ragnelle." Abigail's thesis seeks to understand how the word *sovereynete* would have been interpreted by Medieval readers compared to those in the present, particularly concerning how it relates to women's agency. She shared her work as an oral presentation on Undergraduate Research Day.

"Print of the Living Foot": William Faulkner's "The Bear" through an Ecocritical Lens

Malia C. Little

English major Malia, who won the Literature & Language Department's Award for Outstanding Senior this year, wrote a literary analysis of multiple published versions of American Modernist William Faulkner's short story "The Bear." Using an ecocritical lens, she determines how a particular version of the story reveals Faulkner's environmental concerns. Malia shared her work as an oral presentation on Undergraduate Research Day.

Review of the Relationship Between Mental Health and Exercise in Adolescents and Young Adults

Madelyn Meyers

Madelyn, a Biology major and women's lacrosse player, reviewed literature about the relationship between exercise and mental health in adolescents and young adults. She notes that the process gave her new appreciation into her own relationship with mental health and exercise, and that this kind of research is particularly relevant in the aftermath of quarantine and the Covid-19 pandemic.

Colors of the Year: The Fusion of Performing, Visual, and Literary Art in Fanny Mendelssohn's *Das Jahr*

Emma C. Pullium

Emma, a Music major, composed a thesis examining 19th Century composer Fanny Mendelssohn's *Das Jahr* (The Year), a piano suite containing thirteen pieces. She investigates how Mendelssohn used both auditory and visual art forms during her performances and how her work exemplifies the ideals of the Romantic Era. Emma shared her thesis as a multimedia oral presentation on Undergraduate Research Day.

Fascism's Grasp and Devastation on Argentina

Luke Surowiec

As a Spanish major with an English minor, Luke investigated the post-World War II spread of fascism in Argentina. His thesis identified the initial roots of fascism in the country and how this political doctrine transformed Argentina into a killing instrument that has lasting present-day consequences. Luke shared his work as an oral presentation on Undergraduate Research Day.

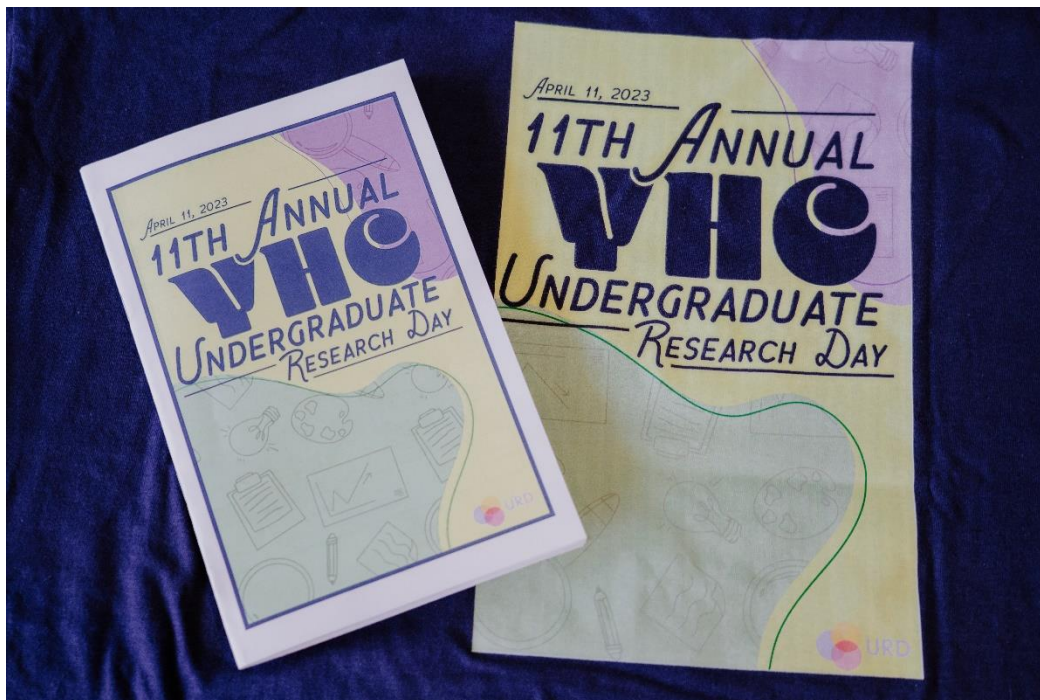
Musical Components and their Impact on Perceived Exertion: An Examination of Tempo, Lyrics, Synchronicity, and Preference

Leanna M. Wood

Leanna, a Psychology major, and one of this year's Distinguished Research Scholars, designed a broad literature review that built on her capstone project, which was an empirical research study into whether various components of music could impact participants' perceived exertion during exercise. Leanna shared her work as an oral presentation on Undergraduate Research Day. The project was funded by the Undergraduate Research Program.

Undergraduate Research Projects

This journal presents highlights of student research projects from throughout the academic year. This past year, more than half the student body participated in undergraduate research. The estimated four hundred YHC students who engaged in research represented every academic department.



Undergraduate Research Day

YHC's 11th annual Undergraduate Research Day (URD) was held on Apr 11, 2023. This all-day multidisciplinary event featured seven oral presentation sessions and one poster session, plus a planetarium presentation, two musical performances, a theatre production, an art exhibit, a creative writing reading, and a Plenary Session featuring a panel of YHC alumni. Around 120 students participated, delivering a total of thirty-six oral presentations and twenty-eight poster presentations. *All* academic departments were represented this year, representing a wide range of research topics and methodological approaches!

URD is an exciting opportunity to recognize the research, inquiry, and creative production that students generate, and to celebrate and support each other as an academic community.

Course-based Undergraduate Research Projects

Course-based research experiences (CUREs) introduce students to discipline-specific research methods and help instill students with a sense of ownership in their research projects. They provide students with the opportunity to make discoveries, generate new knowledge, and create works of interest to their academic field and the community at large. CUREs can also serve as a gateway to mentored research experiences (MREs), wherein students can deepen their research interests and develop an enduring rapport with a faculty mentor.

This past year, twenty-three faculty members across twelve departments implemented CUREs in their courses, which allowed hundreds of students to engage in collaborative or independent research, some for the very first time. The Undergraduate Research Committee is thrilled about the wide range of multidisciplinary research YHC offers, as well as the enthusiasm we have seen from the campus community broadly.

Mentored Undergraduate Research Projects

Mentored research experiences (MREs) entail discipline-specific, discovery-oriented research completed outside the bounds of a typical classroom. Under the direct supervision of a faculty research mentor, students explore the questions and problems that fascinate them, independently or collaboratively, in academic, creative, or professional pursuits. By the end of the semester, students present their findings as self-motivated scholars with newly found confidence in their field.

This past year, seventeen faculty members from eight different departments offered MREs and over forty students participated.

Several of the following CUREs and MREs received financial support from the institution, covering lab equipment, textbooks, field trips, visiting speakers, conference travel, and other special expenses.

Art & Graphic Design

Research Papers on Artworks by Female Artists (CURE)

ARTS 2100: Women in Art

Faculty Mentor: Dr. Mary Brink, Associate Professor of Art History

The students in ARTS 2100 each selected an artwork of their choice from any time period, made by a woman, and wrote a 6-8-page paper about the work. They turned in a series of assignments building up to the paper over the course of the semester—a list of potential paper topics, a bibliography with major questions, and an outline. They then engaged in a collaborative process with their peers when they peer edited their rough drafts. Students focused on a wide range of artists, including Kara Walker, Georgia O’Keefe, Hannah Wilke, Artemisia Gentileschi, and Camille Claudel. Each student developed their research question while considering available information about the artist, as well as their art theories and style, their time period, and their influences.

Thematic Art Exhibition Proposal and Presentation (CURE)

ARTS 3310: Issues in Contemporary Art

Faculty Mentor: Dr. Mary Brink, Associate Professor of Art History

The students in ARTS 3310 each developed a proposal for a thematic exhibition of contemporary art. The students submitted ideas for three possible shows, discussed their concepts in class, and selected one topic to develop further. Each topic had to be narrow enough to be addressed with fifteen artworks, but it could not be a solo show. Some students focused on a particular medium—like American traditional style tattoos—finding a range of artworks that used the medium in various ways and developing subthemes that they wanted viewers to consider. Other examples included exhibits focusing on immigration, plants and humanity, and artworks repurposing technology. Each student brought their wall text rough drafts and peer edited those in class one day. Several weeks later, they brought the rough draft for their entire project and also peer edited those. Their final written projects included a one-page proposal, a four-page curatorial essay, a bibliography, and fifteen wall texts for their chosen works. Finally, students each gave a twenty-minute PowerPoint presentation—including a floor plan—selling their show as they would present it to a gallery committee.

Women in Design Collaborative Posters (CURE)

Poster Presentation at URD

Faculty Mentors: Dr. Mary Brink, Associate Professor of Art History; Kerry Jenkins, Associate Professor of Graphic Design

Fifteen students in the Women and Art class each picked a female artist who worked in design or art, researched a single artwork by the artist, and filled out a research form on the artwork. Twelve graphic design students in Digital Arts II each selected three of these artists and made a poster for each of them. The overall goal was to make an informative, eye-catching, and creative poster that would introduce an intro student to this work, the time period, and the artist.



A set of posters designed by Hutch Ezell.

Student poster projects at Undergraduate Research Day.



LaCroix Brand Revival

Gallery Exhibit at URD

Lillian Black

Faculty Mentor: Becky Miller, Adjunct Instructor of Art & Design

Sparkling water originated in the late 18th century and initially embodied a sophisticated brand image that targeted upper socioeconomic classes. Since the 18th century, the sparkling water market has experienced significant growth and is expected to continue this growth into the next seven years. This growth is credited to the hundreds of sparkling water brands that have been introduced to the market within the last 200 years, making sparkling water available to anyone of any socioeconomic class. For example, AHA by Coca-Cola and Bubly by Pepsi was introduced within the last ten years and have sparked major compound annual growth in the sparkling water market. Furthermore, these modern brands have evolved and modernized their brand image, leaving original sparkling water brands like LaCroix, Pellegrino, and Perrier unable to compete. Throughout this paper, I explore LaCroix sparkling water's downfall, the modern brand's marketing and design tactics, and apply them to LaCroix through a concept called Brand Revival.



Symbolism in Art

Gallery Exhibit at URD

Karah I. Shea

Faculty Mentor: Becky Miller, Adjunct Instructor of Art & Design

Symbolism can be seen as applying a message, meaning, or ideas to an object, finding an already known meaning, and bringing emphasis to it. To understand the significance of symbolism in art, one can study and analyze pieces of art such as *The Course of an Empire* series by Thoma Cole. Cole deals with the underlying theme of man versus nature using imagery, gesture, color, and scale. Applying similar analytic practices, this concept is seen throughout my body of Senior Thesis work.

Exploring the Uniqueness of Different Last Judgements (CURE)

Oral Presentation at URD

Luke Harvey

Faculty Mentor: Dr. Mary Brink, Associate Professor of Art History

The Last Judgement is a key scene during the Apocalypse in the biblical book of Revelations. During the 14th and 15th centuries, the Last Judgement scene rose in popularity as a subject of religious artworks. Since much of the population during this period was illiterate, artists were often paid to produce didactic religious art. Hence, Last Judgements from this time period are often very detailed and contain a clear narrative. Additionally, there is a common formula used among these artists to depict the Last Judgement. While some aspects of the artistic agendas remain unclear, these works would have served to viewers of their inevitable death and judgement, which would persuade them to stop engaging in sinful behavior. My paper not only addresses the European blueprint for Last Judgement scenes but also explains how artists broke from this formula. Additionally, I hypothesize as to why some artists took unique approaches in their Last Judgement compositions while others stayed true to the formula. This paper explores Last Judgements from artists like Rogier Van Der Weyden and Jan Proovist, as well as considering Gislebertus' *Last Judgement Tympanum* at Autun. Each of these artists began their artworks with the formula as their foundation; however, they diverged from this path for reasons like patron preference, context, contemporary belief, and even regional law.

The Femme Fatale in Film Noir: Barbara Stanwyck's Phyllis Dietrichson in "Double Indemnity," Billy Wilder (1944)

Oral Presentation at URD

Alyssa Makina

Faculty Mentor: Dr. Mary Brink, Associate Professor of Art History

Double Indemnity is one of the most iconic American noir films from the 1940s. Looking at the film, we can see that this is in part thanks to actress Barbara Stanwyck's stellar performance as Phyllis Dietrichson. Her character has gone on to become one of the most recognizable femmes fatales and an archetype of this trope in film. This paper explores the trope of the femme fatale in American film noir, looking specifically at the character of Phyllis Dietrichson in the 1944 film. At the height of her popularity in the 1940s and 1950s, the femme fatale trope, known as the "sexual seductress of Hollywood," was said to have risen to popularity as a symbol of "changing views on sexuality and marriage" following World War II. We can learn about societal fears of women's strength and ambition by exploring how the film was received and what the character stood for off screen.

Biology

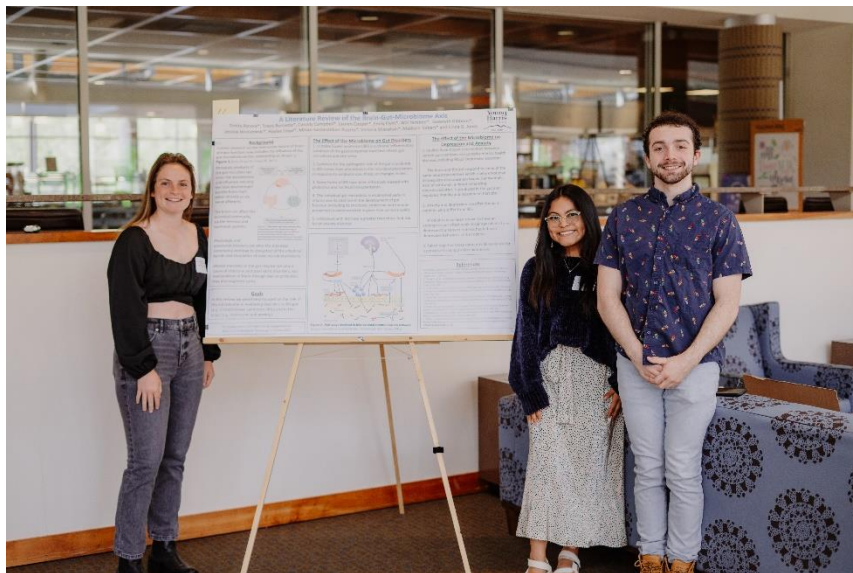
A Literature Review of the Brain-gut-microbiome Axis

Poster Presentation at URD

Trinity Aycock, Travis Burnette, Cassidy Campbell, Lauren Cooper, Will Ferebee, Emily Flynt, Gwennyth Gibbons, Jessica Jaruszewski, Haylee Lloyd, Mirian Santiesteban-Pizarro, Victoria Shanahan, & Madisen Tolbert

Faculty Mentor: Dr. Linda G. Jones, Professor of Biology

While the interactions between the gut and the brain have long been noted, much of the current research now includes the influence of the gut microbial populations on this relationship. The enteric (gut) nervous system sends much more information (90%) to the brain than the brain sends to the gut (10%). Approximately 95% of serotonin, a neurotransmitter associated with mood and the target of some antidepressant medications, is made in the neuroendocrine cells in the gut and only 5% in the brain. The microbial populations themselves produce a number of metabolites (including a variety of neurotransmitters) which can influence the local environment and the brain itself by influencing bi-directional neural signaling and perhaps directly by entering the blood stream. Evidence now exists for an influential role (though much of it still coincidental rather than causative) of the microbiome on the gut and brain mediated by the nervous, endocrine and immune systems, all of which have a pervasive presence and function in the GI tract. In this project, we surveyed the literature to learn of the general interactions between these three components and to focus more specifically on the relationship between gut microbes and gastrointestinal diseases such as irritable bowel syndrome (IBS) and the relationship between gut microbes and psychiatric disorders such as depression and anxiety.



The Immediate Effects of Beta-Alanine on Sports Performance in Young Harris College Students

Poster Presentation at URD

Gracie J. Hix & Brice T. Parrish

Faculty Mentor: Dr. Paul Arnold, Professor of Biology

This study's main objective was to examine the immediate effects of beta-alanine on sports performance in college students between 18 and 25 years of age at Young Harris College. To do this, participants with no known health conditions or food allergies were asked to complete two separate trials where they ingested beta-alanine in one trial and a placebo in the other without knowledge of which one they received. The two trials were randomized (some receiving the beta-alanine first, some receiving the placebo first). Trials had a 48-hour buffer between them to help participants rest and allow the beta-alanine to leave the body if taken in the first trial. Beta-alanine (or the placebo) were ingested 15 minutes before performing a handgrip strength test to find the participant's average single rep max and afterward they performed an endurance task by biking (stationary bike) for 20 minutes to determine the mileage completed during that time. We hypothesized that both variables would increase significantly with the presence of the beta-alanine in their system. A placebo effect may have complicated the results, since the beta-alanine treatment can cause a tingling sensation when it is ingested, making the participants aware that they were using it. It was found, however, that there was no significant immediate effect upon ingesting the beta-alanine on hand grip strength or endurance.

The Effect of Delta-8 and Delta-9 Tetrahydrocannabinol on the Developmental Morphology of Zebrafish (MRE)

Poster Presentation at URD

Cynthia A. Jackson

Faculty Mentor: Dr. Linda G. Jones, Professor of Biology

Marijuana has been used to treat conditions such as epilepsy, nausea, pain, and anxiety. The primary psychoactive ingredient in marijuana is delta 9-tetrahydrocannabinol (Δ 9-THC), which has been shown to alter behavioral and locomotor responses in zebrafish embryos. Previously, we reported that exposure of zebrafish embryos to Δ 9-THC promoted a higher death rate and shorter embryos with curved spines when compared to control embryos. Another psychoactive compound in cannabis is Δ 8-THC, but because it is less potent than Δ 9-THC (~50%), it is often considered "safe." Use of Δ 8-THC has risen greatly in the last few years despite little research into its developmental effects, and it is legal in many states now. In this study, we compared the effects of Δ 9-THC with those of Δ 8-THC. Embryos were randomly divided into groups receiving 0, 0.15, 0.3, 0.6, 1.25, 2.5 and 5 μ g/ml of either compound. Embryos were measured for length and observed for spinal curvature on day three post fertilization (3 dpf) but were kept until 5 dpf to allow further development of jaw

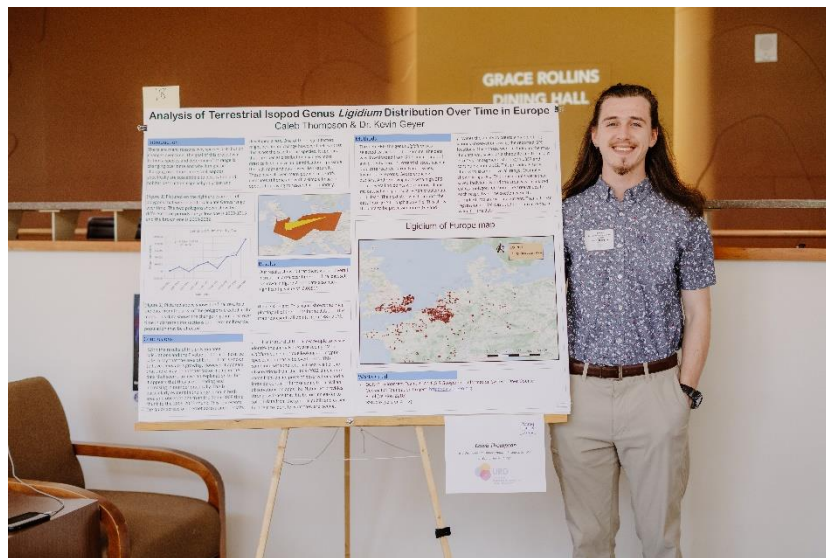
cartilages which were stained with alcian blue. We have found similar effects with $\Delta 8$ -THC as with $\Delta 9$ -THC: increased death rate, delayed hatch rate and shorter embryos with axial curvatures. We have also observed altered jaw cartilage formation. These data suggest that while $\Delta 8$ -THC may be legal it should not be considered safe during development.

Analysis of Terrestrial Isopod Genus *Ligidium* Distribution Over Time in Europe (CURE) *Poster Presentation at URD*

Caleb G. Thompson

Faculty Mentor: Dr. Kevin M. Geyer, Assistant Professor of Biology

There are many reasons why species distribution changes over time. The goal of this project was to find a species and determine if its range is changing over time and why it might be changing over time. Terrestrial isopods specifically are susceptible to desiccation and habitat destruction especially in urban and developed areas. One of the biggest factors might be climate change; however, I believe that this is not the case for this species. It appears that the species distribution changes most drastically once civilian identification is possible through apps and databases like iNaturalist. These have allowed many people to identify creatures at home and with a simple image as opposed to having to research it in a library.



Effects of Type I Diabetes on the Health of Athletes' Gut Microbiomes (MRE)

Poster Presentation at URD

Erika Williams

Faculty Mentor: Dr. Andrea L. Kwiatkowski, Associate Professor of Biology

Type 1 diabetes (T1D) is an autoimmune disease, in which the pancreas makes little or no insulin. Insulin is a hormone that regulates blood sugar levels. Studies have shown differences in the gut microbiomes between type I diabetics and healthy people, but this has not specifically been studied in college athletes. Diabetics tend to have lower diversity in gut microbiota than non-diabetics. Diabetic athletes have to be especially careful about their glucose intake. In addition, there is an increase in diabetes nationwide and the gut microbiome may be a contributor to this. This study's purpose is to compare gut microbiota health in athletes with type 1 diabetes vs. non-diabetic athletes. Six fecal samples were collected, three from non-diabetic female athletes and three from diabetic female athletes, all between the ages of 18 and 22. Participants filled out a survey about their overall health and diet. Participants took home a fecal sample kit from Biomesight to collect their samples. After defecating, they swabbed toilet paper to collect the sample. The swab was placed in the tube provided by the manufacturer and stirred in saline solution for 30 seconds. After sealing the tube, it was shaken vigorously for 10 seconds. Samples were mailed to the lab where 16S rRNA sequencing will be performed to analyze the community of microbes in each participant's gut. A Shannon diversity index will be calculated for each participant as well as genus identification of their microbes. This project was funded by the YHC Undergraduate Research Program.

Effectiveness of Quercetin in Lowering AhR Activation in Cells Treated with Extracts from Charcoal-grilled Foods (MRE)

Oral Presentation at URD

Emma K. Brennan

Faculty Mentor: Dr. Jennifer C. Schroeder, Associate Professor of Biology

Grilling foods at high temperatures is known to create chemicals that activate the aryl hydrocarbon receptor (AhR) and can lead to cancer. Bioflavonoids, like quercetin, may prevent cancer by blocking the AhR. This study aimed to determine if the type of grilled food (bell peppers, turkey burgers, or chicken breasts) could impact levels of AhR activation, and if quercetin's presence inhibits that activation. Food samples were grilled on a charcoal grill (external temperatures >137°C) on two separate days. Grilled samples were minced and incubated in ethanol for 24 hours to produce extracts. Hepa 1.1 mouse cells were treated with 100 µl of ethanol or one of the food extracts and 100 µl DMSO or quercetin. Following treatments, cells were lysed and used in luciferase reporter assays to determine AhR activity. Although only two trials were completed, general trends showed lower AhR activation in all samples containing quercetin. There did not appear to be a difference in AhR activation

among the three grilled food types. Furthermore, variation between trials of any food sample was noted. These findings suggest that food type does not correlate with AhR activation levels and that quercetin may be useful in preventing AhR activation, acting as a possible preventative agent for cancer. In addition to including more trials, future areas of research could expand the types of foods and bioflavonoids tested and explore a variety of fuel sources used for the grilling process. This project was funded by the YHC Undergraduate Research Program.

Effects of Cannabidiol and Omeprazole on Intracellular Lactate Levels in Mouse Liver Cells (MRE)

Oral Presentation at URD

Madeline Deaton

Faculty Mentor: Dr. Jennifer C. Schroeder, Associate Professor of Biology

Cannabidiol (CBD) is a non-psychoactive component of cannabis oil that is approved for certain medical uses. Numerous clinical trials are currently exploring its effectiveness in managing symptoms associated with Diabetes Mellitus. CBD is a ligand of the aryl hydrocarbon receptor (AhR), which has been shown to regulate intracellular lactate levels. Diabetics, especially when in ketoacidosis, are known to have increased lactate levels. Omeprazole, a common treatment for acid reflux available in both prescription and over-the-counter formulations, is also an AhR ligand. In these studies, we explore the effects of CBD (0.03-20 μM) and omeprazole (25-100 μM) on levels of lactate in the mouse hepatocyte cell line, Hepa 1.1, using a colorimetric L-lactate assay. We also examine morphological changes to the cells and overall protein content in the samples following treatment to detect changes in cell growth. Initial observations indicate that higher concentrations of either CBD or omeprazole decrease cell growth, resulting in lower lactate levels in those samples. Final results show that higher concentrations of CBD or omeprazole visually show lower cell growth and lower lactate levels, but these differences are not statistically significant.

Determining the effects of green tea extract, quercetin, and epicatechin on cell proliferation and lactate levels in mouse hepatocytes (MRE)

Oral Presentation at URD

Kiera E. Lewis

Faculty Mentor: Dr. Jennifer C. Schroeder, Associate Professor of Biology

Many health benefits have been reported in relation to the consumption of green tea, including the possible prevention of Type II Diabetes. Green tea (GT) is known to contain a variety of bioflavonoids, including quercetin and epicatechin, which are both ligands of the aryl hydrocarbon receptor (AhR). The AhR has been associated with the regulation of

intracellular lactate levels, which are high in diabetics, especially when in a state of ketoacidosis. In these studies, we are examining the effects of GT ethanol extracts, quercetin (200 μ M), or epicatechin (100-200 μ M) on L-lactate levels in Hepa 1.1 mouse hepatocytes in the presence or absence of benzo[a]pyrene (B[a]P) using a colorimetric assay. Cell morphology (as monitored using an inverted microscope) and total protein levels of samples (measured using a Bradford Assay) were analyzed. Initial results indicate that GT and quercetin treatments lowered lactate levels; however, this is likely due to a decrease in cell confluency observed under these conditions. Neither lactate levels nor cell growth seem to be influenced by epicatechin. Similarly, the addition of B[a]P to these treatments does not appear to impact lactate levels. This project was funded by the YHC Undergraduate Research Program.

Terrestrial Isopods of Young Harris College, GA and their Distribution Based on Disturbance with Additional Notes on *Ligidium elrodii* Morphology

Oral Presentation at URD

Caleb G. Thompson

Faculty Mentor: Dr. Kevin Geyer, Assistant Professor of Biology

Terrestrial isopods are overall highly understudied. These small terrestrial crustaceans are key decomposers of leaf litter and other detritus on the forest floor. The native species present in southern Appalachia are also particularly understudied. Local species distribution and local disturbance can have drastic effects on the local biodiversity and harm native species that are particularly susceptible to change. In this experiment, local terrestrial isopod species distribution was examined surrounding Young Harris, GA. Nativity and disturbance were compared to determine if there was a relationship between the two and the results were statistically significant ($p < 0.05$). This supports the idea that native species prefer undisturbed areas. The other part of the study observed variance in identifying features of *Ligidium elrodii*. These features are the antennae segment numbers and the male reproductive appendage. These features were examined and compared to the overall length of the specimen to determine if the variance was related to size as opposed to suggesting another species being present. Our results indicate that human activity has altered native isopod distribution and that some morphological features are not diagnostic species identifiers.

Business & Public Policy

How the COVID-19 Pandemic Changes the Meaning of Life: A Survey Approach *Oral Presentation at URD*

Riccardo Sambugaro

Faculty Mentor: Dr. Yang Jiao, Assistant Professor of Economics

In addition to the fact that millions of individuals lost their lives as a result of the spread of Covid-19, this disruptive event also had a psychological impact on billions of people. In this research, we examined how the Covid-19 pandemic affected people's perceptions of what life meant based on a survey approach. Understanding how the epidemic affected people emotionally, what changed in their life, and why those changes occurred is the goal of this research. Anyone above the age of 18 is the target population. It will be crucial to collect information from respondents of various ages to assess the relationship between age and how the pandemic has affected people. Respondents were contacted via social media platforms and emails. There are 30 survey questions designed to gather data on how the epidemic affected people's work-life balance, friendships, relationships with family members, and views on contributing to society. About 40 people responded to the survey. Several findings emerged. First, while 23% of respondents report no change, roughly 69% of respondents say that the epidemic affected their connections. Secondly, the majority of respondents stated that dating was more challenging than it was prior to the epidemic because social life has been significantly impacted by lockdowns and isolation. Thirdly, more than 90% respondents say that Covid-19 affected their job or their schools, and nearly 70% think that the epidemic modified society's safety precautions. After the epidemic, working adults felt more insecure about their jobs, and students felt more despondent about their schoolwork. Finally, when asked what the biggest change was resulting from the epidemic, 23% of respondents said "Priorities," 30% said "Habits," and 57% said it was how they interacted with their friends, family, and society.

Chemistry & Physical Sciences

Saturn's Exoplanet Laboratory: Titan

Planetarium Presentation at URD, Honors Capstone

Indiana N. Ayers

Dr. Brian Hoffman, Professor of Chemistry & Computer Science
and Dr. Kevin Geyer, Honors Program Director

The Saturnian system is a bountiful research location for astronomers. Within this system is Titan, the only moon in the solar system with a fully developed atmosphere and evidence of liquid on its surface. This moon has proven to have an abundance of methane and ethane, organic compounds required for life, and exhibits a hydrologic system like Earth's. There is even a runaway greenhouse effect compacted within its thick atmosphere. Due to the tilt of Saturn's axis, Titan also experiences seasonal changes. For these reasons and more, Titan demonstrates Earth-like habitats and may serve as an example of a habitable moon and provide information into habitable zones of extra-solar systems. Thus, it begs to be studied further. Following the end of the Cassini mission in 2017, NASA started to plan the Dragonfly Mission. Dragonfly will launch in 2025 and will incorporate a never-before-seen probe known as a rotorcraft. This mission will be the first craft to ever land on a moon other than our own, and with its first few images, humans will begin to explore Titan as never seen before. Now is the time to review surveyed data from the Cassini mission in preparation for Dragonfly. Using the planetarium dome, I will explore the journey of Cassini through the rings of Saturn, the relationship between Titan and Saturn, and finally delve into the findings of the Cassini-Huygens mission that mapped out Titan for future investigation by the Dragonfly project.

Study of parabens in various cosmetic products using UV/VIS Spectrometer

Poster Presentation at URD

Helen R. Hudgins, Noah Noonan, & Madisen Tolbert

Faculty Mentor: Dr. Amanda Song, Associate Professor of Chemistry

Parabens are commonly used in cosmetics as preservatives to prevent the growth of harmful bacteria and mold. However, public safety concerns have arisen due to research indicating their effects on hormones, reproductive organs, and possible increased cancer risk, especially in women. To date, the FDA has not established specific regulations for permissible paraben concentrations. In our research, we employ a UV /VIS spectrometer to measure the levels of various parabens, such as methylparaben, ethylparaben, and propylparaben, which are frequently found individually or combined in everyday items like shampoos, conditioners, lotions, and skincare products. Our research aims to offer insights into potential daily paraben exposure levels, ultimately enhancing public awareness of consumer safety.

Optimization of Bioethanol Production from Kudzu, *Pueraria montana* (MRE)

Oral Presentation at URD

Jordan T. Pandolph & Suzanne E. Moore

Faculty Mentors: Dr. Charles D. Swor, Associate Professor of Chemistry & Dr. Andrea L. Kwiatkowski, Associate Professor of Biology

With the looming prospect of fossil fuels increasing in price, recent attention has turned to the production of renewable, sustainable replacements for fossil fuels. One such fuel, ethanol, has also been commercially adopted as gasoline additive, and in some vehicles can replace gasoline entirely. Currently the majority of ethanol in North America is produced by the fermentation of corn (*Zea mays*). This is problematic because corn production, transportation, and fermentation relies heavily on fertilizer, diesel fuel and electricity, all of which are derived from fossil fuels. This research is focused on using kudzu (*Pueraria montana*) as an alternative feedstock for ethanol production. Kudzu grows quickly without any human inputs, contains up to 50% starch, and is an invasive plant in the southeastern United States. Previous research in our laboratory focused on converting the starch found in kudzu to ethanol, using ^1H NMR spectroscopy to analyze the final ethanol concentration. The highest concentration of ethanol we were able to obtain in previous research was 3.5% v/v. In this research, different treatments of kudzu root were studied in order to optimize ethanol production. Kudzu was treated by pressure cooking prior to fermentation with a brewer's yeast (*Saccharomyces cerevisiae*). The kudzu root was also pretreated with various amylase enzymes to break the starches into fermentable sugars, and the temperature profile of the enzyme treatments was optimized. It is expected that by optimizing both fermentation and root pretreatment techniques, the ethanol produced will be at a high enough concentration to be commercially viable as a bioethanol feedstock. This project was funded by the YHC Undergraduate Research Program.

Communication Studies

Sarcasm among Cultures

Poster Presentation at URD

Adelynn J. White

Faculty Mentor: Dr. Jennifer Hallett, Professor of Communication Studies

Through an extensive literature review, I plan on finding the ways in which sarcasm is nonverbally communicated among different cultures. There are many different research papers and studies already published that focus on sarcasm as a nonverbal element that I will thoroughly read in order to compile relevant information on sarcasm and specific cultures as a whole. After I gain a broader understanding of certain cultures and how they work, as well as how sarcasm itself works, I plan to dig deeper into how they interact together. I believe I will find many ways in which sarcasm is similar across multiple cultures, but I honestly don't know what I will find in terms of differences, if I find any differences at all.

The Effects of Clothing and First Impression

Oral Presentation at URD

Alex Boydstone

Faculty Mentor: Dr. Jennifer Hallett, Professor of Communication Studies

Clothing is an imperative nonverbal tool a person can utilize to form impressions of another before speaking to them. The purpose of this literature review is to discover how different types of clothing (i.e. professional, casual, trendy, etc.) affect people's first impressions of one another. I will examine various literature on gender differences and clothing, clothing in different settings, first impressions, and person perception theory to address whether various mental processes people use can shape their perception of others and their clothing styles. These various topics will come together to elucidate how clothing can affect people's initial thoughts, perceptions, and impressions of one another.

Proxemic Zones: An Evaluation of Gender Differences in Proxemic Violations

Oral Presentation at URD

Rebekah Hubley

Faculty Mentor: Dr. Jennifer Hallett, Professor of Communication Studies

This literature review will address the problem of how men and women respond when different levels of their proxemic zones are being invaded, and which gender displays the most effects of proximity violations. The areas of research will include proxemic zones, proxemic violations, different blocking behaviors such as withdrawals, insulators, and adaptors used when zones are being invaded, and if there are gender differences in any of the above.

Effectiveness of Fear Appeals Within Low Perceived Susceptibility Participants

Oral Presentation at URD

Spencer E. Mathis

Faculty Mentor: Dr. Ambyre Ponivas, Assistant Professor of Communication Studies

Fear appeals have been examined for over seventy years, and the literature has evolved drastically. The three most common independent variables within the fear appeal research are fear, perceived threat, and perceived efficacy. Many of the previous studies set out to find the effect of fear appeal ads on participants with high susceptibility; the current study aims to observe the impact that fear appeal ads have on participants with low perceived susceptibility to the given danger of the ad. This entails that participants cannot have drug or alcohol abuse problems, which will be a precursor to the experiment. Prior to the experiment being conducted, it is hypothesized that individuals with low perceived susceptibility to a given fear appeal target ad will experience high levels of fear and high response efficacy towards the recommended action. The final hypothesis uses the Theory of Planned Behavior; it states that participants in the experimental condition are less likely to behave in a risky way after being exposed to fear-appeal advertisements. This project was supported by the YHC Undergraduate Research Program.

Instagram Usage and Spiral of Silence on Instagram Stories (CURE)

Oral Presentation at URD

Sarah Beth Williams

Faculty Mentor: Dr. Ambyre Ponivas, Assistant Professor of Communication Studies

The purpose of the research is to see how people use Instagram Stories and share their opinions using the feature. The theories being applied are the Uses and Gratification Theory and the Spiral of Silence Theory. Uses and Gratification has previous research about Instagram Stories, while the researcher is unaware of previous research on how the Spiral of Silence can be seen on Instagram. This research will add to the literature on both theories. An anonymous survey will be given to student volunteers from Young Harris College. They will be asked how they use Instagram Stories and their feelings about sharing their opinions using the feature. The measures in the survey are motivations, engagement, fear of isolation, willingness to express an opinion, the climate of opinion, and demographics. The end goal of the research is to see how people engage with Instagram Stories and if Spiral of Silence can be seen on Instagram Stories.

Nonverbal Communication Regarding Leaders of Different Cultures

Oral Presentation at URD

Riley Fields

Faculty Mentor: Dr. Jennifer Hallett, Professor of Communication Studies

This paper will explore how leadership differs among different cultures and how we can interact with one another non-verbally. The question for my literature review is, "How is leadership indicated/communicated nonverbally, and does this differ amongst different cultures?" First, I will review literature to determine how men and women lead. Next, I'll review literature to learn how different cultures interact nonverbally. These could be military personnel, world leaders, CEOs, etc. The main answer to the question is how this differs from each culture and how we can learn as a society to pick up on these nonverbal cues to become better communicators.

The Representation of Social Media Influencers on TikTok during the COVID-19 Pandemic
Oral Presentation at URD

Morgan D. Terrell

Faculty Mentor: Dr. Matt Smith, Assistant Professor of Communication Studies

Influencers have taken over social media platforms and have a lot of power over what their followers might purchase from different companies through brand deals and advertisements. Companies use influencers with a big following to reach a larger audience to promote their products. This is true for both well-known companies and small startups. The goal of this research is to explain the growth of social media influencers on TikTok. Using elements of uses and gratification theory to examine influencers and the algorithms behind the spread of influencers on social media, this research pays special attention to the impact of the COVID-19 pandemic on TikTok as people spent more time at home and strived for social interactions missing from their daily lives during the initial lockdown phases of the pandemic. If we look in more detail at the history of TikTok influencers and the major growth they had due to the COVID-19 pandemic, we see a rise in major influencers like Charli D'Amelio, who originally started the chain of influencers on the platform, and how this growth develops differently than on other forms of social media like Instagram and YouTube. As a platform, TikTok has a more interactive feel that allows users to make connections with the influencers through video-focused content. I will present my work on this topic through a written literature review.

Creative Writing

Creative Writing Capstone (MRE)

CRWT 4996: Senior Project in Creative Writing

Indiana Ayers, Rebecca Baker, Josephine Brooks

Faculty Mentors: Dr. Gale Thompson & Dr. Jen Julian, Assistant Professors of Creative Writing

Creative writing students completed a capstone project consisting of new and revised creative work (20-30 pages of poetry or 40-60 pages of prose) and a critical introduction that contextualized their work through the lens of a literary tradition. Students independently planned and executed their writing projects; they designed individualized lists of critical and creative sources through which to investigate and apply creative technique, revised according to their findings and the guidance of their capstone advisors, and gave and received feedback on their critical introductions in a workshop setting. By the end of the semester, Josie Brooks completed a hybrid manuscript comprised of both poems and a nonfiction essay, with a critical introduction centered on the power of metaphor. Prose writers Indy Ayers and Rebecca Baker both completed collections of short stories. Indy pushed the boundaries of genre by way of magical realism and speculative fiction, while Rebecca explored character and voice through subversive reimaginations of myths and fairy tales. Students then presented their final projects to a faculty committee, defending the content of their work, their creative approach, and the way they developed connections to broader literary traditions. Finally, to celebrate their capstones, the students were invited to read their work at the release of *Artemas*, YHC's undergraduate literary journal.

Creative Inquiry of Prose Craft (CURE)

CRWT 4602: Advanced Prose

Faculty Mentor: Dr. Jen Julian, Assistant Professor of Creative Writing

Five students in CRWT 4602 completed a creative inquiry focusing on a craft topic of their choice. They submitted proposals, selected craft guides and creative texts to aid their investigation, delivered presentations about their findings, and assembled a final portfolio in which they articulated in a 6-page paper what they had discovered about their craft and how they had applied it when revising their creative work. Students' craft topics included character arcs, the art of narrative concision, voice and point-of-view in middle grade literature, fairy tales as a means of exploring themes of trauma, and the nature "truth" in creative nonfiction.

Creative Writing Showcase

Reading at URD

Addisyn Clapp, Jason Anderson, Hannah Elliot, Genevieve Roy, Katie D'Ambrosio, Livi Lobst, & Abigail Hill

Faculty Mentors: Dr. Gale Thompson & Dr. Jen Julian, Assistant Professors of Creative Writing

Seven creative writing students presented five-minute readings of poetry or prose from their Spring writing workshops, Creative Writing in Poetry and Creative Writing in Nonfiction.

Jason Anderson reads one of his poems at URD.



The creative writers conclude their reading at the Chapel.

The Waves We Radiate

Poster and Oral Presentation at URD

Indiana N. Ayers

Faculty Mentor: Dr. Gale Thompson, Assistant Professor of Creative Writing

“The Waves We Radiate” is a series of poems inspired by Adrienne Rich’s *Twenty-One Love Poems*. This series is an exploration of teenage and adult love from a sheltered girl who learns to go with the waves of life, no matter which frequency she’s on. As a young girl, I was taught from early age specific values on love and intimacy. What I learned on my own was something very different but valuable to me as a woman. I couldn’t put it into words until I read Adrienne Rich’s poetry. Here, I found the beauty in taking something “mortifying” and found a way to make it just another part of my life, a part of growing up. The paradox of creative writing is that we write to explain the feelings we cannot put into words. Poetry can be found in any form of writing. For example, the electromagnetic spectrum consists of electromagnetic waves with frequencies ranging from below 1 hertz to above 10^{25} hertz while corresponding to wavelengths from thousands of kilometers tall to a fraction of the size of an atomic nucleus. These waves are listed on the spectrum as radio waves, microwaves, infrared, visible light (split into a spectrum of its own of red, orange, yellow, green, and violet), ultraviolet, X-rays, and gamma rays. Waves are around us constantly and we are constantly aware of them whether we choose to be or not. They make up the atoms around us, the air we breathe, and the people we love.

Camp Meriwether Magic (CURE)

Oral Presentation at URD

Katie L. Horsley

Faculty Mentor: Dr. Jen Julian, Assistant Professor of Creative Writing

Folklorist Jan Harold Brunvand describes the study of folklore as “records and attempts to analyze traditions (both content and process) so as to reveal the common life of the human mind apart from what is contained in the formal records of culture.” For this research project, I analyzed the folklore of the Girl Scout Camp I was employed at this summer, Camp Meriwether. This particular camp offers a unique perspective on the subject. Using ethnographic field methods, I interviewed two collaborators of this specific folk group. I then studied other sources on folklore to gather context for their stories, and where these folklore narratives stem from. From investigating these tales of the fae, UFOs and other strange occurrences, along with their context, I found that these camp employees created stories from the fear of the unknown, whether that be the woods or the night sky. Our imaginations run wild and we create folk narratives from this fear.

A Study of the Naming Folklore surrounding Blood Mountain (CURE)

Oral Presentation at URD

Eli Smith-Foot

Faculty Mentor: Dr. Jen Julian, Assistant Professor of Creative Writing

Blood Mountain is a place not far from Young Harris College and is recognized for its unique name. What is not as well-known are the sheer number of folk stories surrounding this mountain and its name, many of which are wildly different. One explanation for this could be, not only the passage of time, but also the passage of numerous peoples through the region, as the native Cherokee were driven out and replaced by several groups who would eventually become the Appalachians. In local Appalachian culture and in Blood Mountain itself we see a fusion of both Appalachian and Cherokee culture, such as one of the reasonings behind the name. The studying of naming is useful to folklore as we see how it can both endure, and imbue itself into not just folklore, but even into our history and geography. My project will research these folk stories, both through critical sources and ethnographic interviews with locals, with the goal of investigating why there are so many different stories. This project could point not only to why folklore changes but how it changes as it is passed down through oral tradition. I speculate that my research will find a link between older locals and particular interpretations about the stories surrounding Blood Mountain.

Deep South Ghost Folktales and Popularized Stories (CURE)

Oral Presentation at URD

Katherine Wright

Faculty Mentor: Dr. Jen Julian, Assistant Professor of Creative Writing

Ghost stories have been a point of fascination for many years. Ghost stories in folklore have played an important role in the cultures of folk groups for generations. Folklorists are able to study these stories to understand the culture of a group of people in order to gauge their beliefs and superstitions. More often than not, the general public do not take into account ghost stories as they are considered a taboo topic in many regions. However, there has been a shift in what ghost stories are now compared to what they used to be. In the past several years people have been taking more interest in ghost stories with it becoming more popularized in modern media and literature. One of the focuses of this project is around ghost stories in the folklore surrounding ghost stories and the folktales that are told. There will be a focus on collaborative tales from people who have had personal experiences and had folktales told to them by other family members. There will also be a focus on modern media and literature as a whole in relation to folktales and how they differ from the original tales. I will also be using secondary sources in order to better define ghosts in folklore such as Thomas E. Barden's book *Virginia Folk Legends*. In this study, there will be discussion on how and why these stories have changed over the years, as well as, exploring the overlap between folk narrative and commercial narrative.

Education

Informing Pedagogical Practice through Feedback and Reflection

Poster Presentation at URD

Patrick D. Allen

Faculty Mentor: Dr. Rinnel Atherton, Assistant Professor of Education

My research will pertain to how reflection, feedback, and pedagogical growth lend themselves to the creation of the model elementary teacher. I will use feedback I receive from my mentor teacher in relation to my pedagogical practice when assessing ideal teaching criteria. The goal of this research is to outline how to grow into the ideal teacher using research combined with reflection. I will focus on InTASC standards pertaining to leadership/collaboration and planning/organization throughout my research. While these two topics may be my main pointers, they have many subsets like employing prior knowledge and applying research/theory. I will incorporate my self-reflection on feedback from my field studies in a first-grade traditional classroom to coincide with my research on ways to become a model teacher.

Informing Pedagogical Practice in Relation to Differentiation and Critical Thinking Strategies

Poster Presentation at URD

Shea Bayreuther

Faculty Mentor: Dr. Rinnel Atherton, Assistant Professor of Education

The focus of this study is to investigate research that reflects my growth in rehearsing differentiation and critical thinking strategies. I am taking this information and supporting it with research and presenting my growth throughout this process. Throughout my student teaching this year, I have evaluated the different ways to incorporate differentiation in the classroom. I have investigated how effective differentiation in the classroom can improve 2nd grade students' learning experiences. A review of the feedback demonstrates the importance of differentiation and how each student in the classroom benefits from exposing them to different ways of learning a topic. Some students may need more structure, more visual examples, small group work, a specific work environment, etc. I have also observed how critical thinking strategies can affect a student's work in the classroom. A review of my feedback has shown that providing critical thinking questions throughout students learning experiences expands their thinking when they work through problems individually. During my student teaching I have worked one-on-one with students and in small groups and been able to challenge their learning with critical thinking questions.

The Impact of Creative Practices and Flexibility on My Pedagogy

Poster Presentation at URD

Laney Bradwell

Faculty Mentor: Dr. Rinnel Atherton, Assistant Professor of Education

This research examines how creative practices and flexibility correlate with positive pedagogical outcomes as it applies to an effective educator. Questions were developed to engage in metacognition in relation to teacher flexibility and creative practices during learning and instruction. In addition, a review of feedback occurring at four different time points are being conducted to determine the degree of pedagogical progress. A review of the feedback thus far demonstrates that teacher flexibility and creative practices contribute toward positive progression in instructional practice.

How Do Feedback and Reflection Inform Effective Teaching Practices?

Poster Presentation at URD

Annie D. Brooks

Faculty Mentor: Dr. Rinnel Atherton, Assistant Professor of Education

The focus of this study is to examine how effective teaching ties to the goals I have set within my advanced field placement for student teaching. More specifically, how I have worked towards achieving these goals from the beginning of my placement to now. My goals were to grow my classroom leadership skills in terms of being more organized and consistent. The information within this study will be supported by feedback from my mentor teacher on my growth during my senior year placement and how I can continue to grow in the future. This study will also be supported by peer-reviewed research articles that tie into my goals. Overall, this study will exemplify my growth throughout my advanced field placement and be supported by feedback and peer-reviewed research.



Informing my Educational Practice through Feedback and Self-Reflection

Poster Presentation at URD

Kimberly N. Petty

Faculty Mentor: Dr. Rinnel Atherton, Assistant Professor of Education

The goal of this research is to reflect on my pedagogical growth by integrating the feedback given from my mentor teacher and college supervisors to determine the effectiveness of my instruction and to strengthen the transformation of how to be an effective teacher. I will use the feedback I received from my mentor teacher and college supervisors to guide in my instructional practice and pedagogy, while assessing the criteria of an effective teacher. I will gain insight from research, educational standards, as well as my professional practice to aid in this project. Although I am primarily researching the two concepts of communication and assessment, I will identify the effectiveness that an educator's role and long-term impacts that both provide. I will reflect on classroom management strategies with how the implementation of different theories and strategies play a positive role to the classroom environment, as well as to develop positive connections with communication and assessment. I plan to use feedback and self-reflection as tools along with educational research to discover the effective teacher's impact (both short and long term) as well as the educational strategies and stages to determine the connection that effective educators play in an individual's (students, colleagues, and parents) long term success.

Pedagogical Practice Through Feedback and Reflection Through Content Knowledge and Learning Preferences

Poster Presentation at URD

Hannah E. Smith

Faculty Mentor: Dr. Rinnel Atherton, Assistant Professor of Education

This model will pertain to how reflection, feedback, and pedagogical growth work together in the creation of the ideal and/or effective teacher. This research will include feedback which I have received from my mentor teacher over the fall 2022 and spring 2023 semester in relation to my pedagogical practice when assessing ideal teaching criteria. I will be addressing effective communication through feedback and reflection, both through presenting materials and content knowledge and addressing learning preferences. The goal of this research is to outline how to grow into the ideal teacher using peer-reviewed research combined with reflection through my student teaching. While learning preferences and content knowledge are my main focus, they have many subsets like employing prior knowledge, being prepared, and listening skills. I will incorporate my self-reflection to coincide with my research.

Pedagogical Practices of Small Group Engagement and Classroom Consistency

Poster Presentation at URD

Madalynn V. Thomas

Faculty Mentor: Dr. Rinnel Atherton, Assistant Professor of Education

My project is focused on reflection, feedback, and growth that pertain to pedagogical practices that support an effective teacher and the characteristics of what will make me an effective teacher. The main idea of this project is to obtain research that reflects my growth throughout my whole senior year of student teaching. I am taking this information, backing it up with research and presenting my growth along with factors that support effective teaching. The reflection, feedback, and growth aspect are supported by different aspects that were documented throughout my year of student teaching in first grade. I will provide feedback from my mentor teacher and college supervisor as a support for my focus of being an effective teacher. My two main goals that I focused on throughout the year were small group engagement strategies and consistency. Consistency includes consistent mini lessons at the beginning of small groups and consistency of procedures and routines in the classroom. I will list the two goals as well as tie in the two other goals that were not a main focus but were also important to me throughout my student teaching. The other two goals are the following, patience when teaching a lesson and consistency with classroom leadership that creates a positive learning environment. Each goal reflects and ties together an InTASC Standard to show how that supports educational based research. The InTASC standards that are stated in my reflection of goals are InTASC standard 1 and 2; which are learner development and learning differences; InTASC standard 8 which is instructional strategies, InTASC standard 4 which is content knowledge, and InTASC standard 3 which is a learning



environment. As well as InTASC standards, I am using peer reviewed articles to support each InTASC standard that ultimately supports each goal that I have stated. The research model will show the pedagogical practices and peer reviewed research of small group engagement and consistency and how it supports effective teaching growth.

Reflecting amongst Effective Teaching

Poster Presentation at URD

Faith I. Sullens

Faculty Mentor: Dr. Rinnel Atherton, Assistant Professor of Education

This research project will pertain to how reflection, feedback, and pedagogical growth lend themselves to the creation of an effective teacher. I will enlist feedback I receive from my mentor teacher in relation to my pedagogical practice when assessing personal growth. I am specifically focusing on two facets of my pedagogical practices, intentionality, and operationalizing standards within the classroom. The goal of this reflection is to outline how to improve my teaching skills using research combined with personal metacognition. I will incorporate research through empirical articles that relate to my personal findings. Although there is no data being collected, I will evaluate the effectiveness of using direct intentionality and standard operationalizing with 1st grade gifted students. This will allow me to see how direct instruction and careful planning positively impacted student growth and comfort within the classroom.

English

Irish Poetry After Yeats: Entering the Critical Conversation (CURE)

English 4998: Irish Poetry after Yeats

Faculty Mentor: Dr. Ruth Looper, Professor of English

The entire class of eleven students in ENGL 4998 participated in the CURE project: students prepared a researched critical analysis of a significant feature of no more than three texts of their own choosing. Students were challenged to take intellectual risks by choosing topics not discussed in class or by putting their own spin on previously explored topics. Students honed their research by taking it through several stages: annotated bibliographies, complete first version of the essay, informal peer review, individual conferences with the instructor, and revision. Additionally, students found best evidence from credible sources to support their own arguments; crafted their own arguments after close readings and research; and consulted current sources as well as well as scholarly touchstones in the field. Juniors have the opportunity to revise the work as their senior capstone. A sampling of essay titles provides an overview of students' pursuits: The Power of the Irish Catholic Mother in Patrick Kavanagh's *The Great Hunger*; The Repressed Self: a Psychoanalytic View of Irish Poetry; "Language of Dismissal": an Examination of Language in Derek Mahon's "Everything is Going to Be Alright"; The Role of Identity in Eavan Boland's Poetry; Yeats—the Magus and his Charms; and "A Druid Land! A Druid Tune": Yeats and his Use of Irish Folklore.

William B. Yeats's influence on Ireland's National Identity

Oral Presentation at URD

Madison J. DuPriest

Faculty Mentor: Dr. Ruth Looper, Professor of English

William Butler Yeats dedicated his career to Ireland and contributed to its literature an abiding passion for Irish culture. Yeats devoted his literature to the vision of Ireland that he deeply believed in. His vision of Ireland brought Celtic tradition and rural Ireland to the foreground. Yeats's focus, however, did not foster the inclusivity required when establishing a nation identity and uniting a civilization. My research narrows in on Yeats's specific choices and how they inadequately represented the Irish people. I will be analyzing Yeats's poems "September 1913" and "To the Rose Upon the Rood the Time" along with various of his essays to exemplify his vision and inadequacies. Yeats's ideal vision of Ireland was pagan, anti-modern, a-political, and asked the Irish society to revert to pre-industrial and agrarian ways of living. This strategy was not adequate for the newly free and growing Irish society. Ultimately Yeats's inadequate representation and rejection of growth led to his failure in reaching his goal. I also present the idea that Yeats's lack of inclusivity only furthered the divide of the Irish people.

Language and Medieval Literature: Interpreting Sovereignty in Geoffrey Chaucer's "The Wife of Bath's Tale" and "The Wedding of Sir Gawain and Dame Ragnelle" (CURE)

Oral Presentation at URD, Honors Capstone

ENGL 3002

Abigail C. Hill

Faculty Mentors: Dr. Matt Bruen, Associate Professor of English, Dr. Daniel Helbert, Assistant Professor of English, & Dr. Kevin Geyer, Honors Program Director

This thesis explores the methods by which authors use language in the Medieval era, specifically Geoffrey Chaucer, to communicate certain viewpoints to their audience. In Chaucer's "The Wife of Bath's Tale," the Middle English word *sovereignty* appears, voiced by a character that claims this is the greatest desire of women. A similar circumstance occurs in another Medieval tale, "The Wedding of Sir Gawain and Dame Ragnelle" where the word *sovereignty* is presented as critical to the tale as a whole. The actions of the characters in both tales revolve around the definition of *sovereignty*, particularly from the mention of the word to the conclusion of the tale. Additionally, neither author explains directly what *sovereignty* means. It seems that the word is left up for individual interpretation. However, this is risky if readers infer it differently because of how their community defines it. The dilemma is determining what *sovereignty* means, and why it is important to the tale. Because readers may interpret the definition differently since the author fails to provide one directly. There could be one definition the audience must discover or the audience may be free to interpret it differently. My research paper, *Language and Medieval Literature: Interpreting Sovereignty in Geoffrey Chaucer's "The Wife of Bath's Tale" and "The Wedding of Sir Gawain and Dame Ragnelle"* will provide clarity by analyzing the word *sovereignty* within the whole of both texts, and the impact this word had on Medieval readers compared to its significance today.

"You needn't be scared. I ain't crazy": Sarah Penn's Calculated Revolt in Mary Wilkins Freeman's "The Revolt of Mother" (CURE)

Oral Presentation at URD

ENGL 3204: American Realism & Naturalism

Amber N. Jackson

Faculty Mentor: Dr. Eloise Whisenhunt, Associate Professor of English

My research project focuses on Mary Wilkins Freeman's short story "The Revolt of Mother." Until fairly recently, the story was dismissed as being nothing more than a local color story. However, in the 1990s scholars started to consider Freeman's work as being more significant. This critical attention largely agrees that Freeman's story is motivated by gendered differences and patriarchal language; however, most scholars ignore the main character's actual revolt and its subsequent effect on her husband. My project examines the

power shift that the female lead accomplishes by going against gender roles, and most evidently, her husband. Overall, I will analyze “The Revolt of Mother” and the gender roles, language, and positions within it to show how the mother is able to use her position to ultimately subvert the patriarchy as well as shift the power dynamic within her marriage. This project uses critical articles and close reading as its foundation.

"Print of the Living Foot": William Faulkner's "The Bear" through an Ecocritical Lens

Oral Presentation at URD, Honors Capstone

Malia C Little

Faculty Mentor: Dr. Eloise Whisenhunt, Associate Professor of English & Dr. Kevin Geyer, Honors Program Director

This paper is in the humanities discipline and concerns American Modernist William Faulkner’s short story “The Bear,” which was published on May 9, 1942 in The Saturday Evening Post. Not unlike many of Faulkner’s other works, “The Bear” was revised and republished. In fact, it was published four separate times as both a short story and chapters in two novels. While the novel chapters have received critical attention, the Saturday Evening Post version has not because the revised versions that appear as chapters in *Go Down, Moses* and *Big Woods* are longer and more complex. However, this shorter version of “The Bear” is significant because of its seeming insignificance. Through a comparison of “The Bear”’s four different versions, this paper analyzes the differences between the versions and ultimately illustrates how The Saturday Evening Post version, which was meant for a broader reading audience, reveals Faulkner’s concerns for the environment.

History

An Investigation of Xenophobic Violence in Eastern Germany: The Experience of Guest Workers in Formerly Divided Germany (CURE)

Oral Presentation at URD

Sarah Mele

Faculty Mentor: Dr. Larissa Stiglich, Assistant Professor of History

Asylum seekers in East Germany are ten times more likely to experience violence than those in West Germany. This paper aims to examine the history of guest workers in former East Germany and West Germany as well as identify why xenophobic violence occurs more often in Eastern parts of the country. Remembering the Turkish guest workers in Germany during the Cold War and through reunification can give insight as to why the violence is more concentrated in East Germany. A revision to the German Workers Visa aims to attract skilled workers from outside of the European Union as a means to help lessen the demographic crisis Germany is facing. If Germany is trying to recruit workers from outside Germany and the European Union are they potentially putting foreigners in the path of experiencing xenophobic violence?

Fascism's Grasp and Devastation on Argentina

Oral Presentation at URD, Honors Capstone

Luke Surowiec

Faculty Mentor: Dr. Kevin Geyer, Honors Program Director

Fascism is a well-known ideology that has been identified with nations such as Germany and Italy during the 1930s and 1940s. After World War II, fascism seemed to be defeated by the free world, but it was not. In fact, it had managed to spread into other parts of the world including the South American country Argentina. From the late 1940s to the early 1980s, Argentina would be the most impacted by this ideology. This study will demonstrate the story of fascism in Argentina. It will explore the initial roots of fascism in Argentina and how this political doctrine transformed Argentina into a killing instrument which would have lasting consequences to this day.

Mathematics

Building Neural Networks: Mathematical Principles and Implementations

Oral Presentation at URD

Joshua Pettino

Faculty Mentor: Dr. Chris Sass, Associate Professor of Mathematics

This presentation examines how the mathematical concepts of forward propagation, backpropagation, gradient descent, and cost functions regulate the flow of data in neural networks, which are an essential component of machine learning. These concepts are crucial for developing and training neural networks, which have practical applications in various industries such as e-commerce, transportation, and healthcare. The example presented in this talk focuses on a neural network that is capable of recognizing handwritten digits not included in its training dataset. The network's architecture, layers, and weights are analyzed to understand how these elements affect its performance. The process of testing and validating the network is also discussed to ensure its accurate recognition of digits. The example demonstrates how these mathematical concepts can be applied to real-world problems (in this case image recognition) and how neural networks can learn from experience to make predictions and classifications.

Music

Movie Musical Interlude

URD Musical Performance

Sarah Carver, Ella Casey, Leah Harp, Isabella Rousseaux, & Anthony Stevenson
Faculty Mentor: Cheryl Star, Adjunct Instructor of Music

The YHC Wind Ensemble performed a selection of themes from movie soundtracks including *Harry Potter*, *Robin Hood: Prince of Thieves*, and *Amadeus* as a musical interlude during the lunchtime break.



Making Your Favorite Song Your Own Through Choral Arranging (Featuring YHC Altitudes)

URD Musical Performance

Brandon McDuff (as Music Arranger), Michael Crouse, Justin Spano, Sarah Carver, Sophie Burnette, Savannah Chapell, Bethany Allison, Sienna Nason, Jordan Sharp, Alana Murdock, & Sebastian White

Faculty Mentor: Jeff Bauman, Professor of Music

Arranging is any adaptation of a composition to fit a medium other than that for which it was originally written. The process of arranging feels like a lot like managing. Yes, creativity and musicianship are there, but you are a manager. Choir music is typically divided into Bass, Baritone, Tenor, Alto, and Soprano, but the group I arranged for today is unique. With one Bass and one Tenor, if I arranged these songs like they were a typical choir, then balance would be a severe issue. So, my job is to manage the notes of the music and guide them where they need to go to balance out the parts. Chord structures and progressions are fundamental to how I can turn my favorite songs into choir arrangements. You will hear three very different songs in the same medium. “Sky Above,” “Human Heart,” and “America the Beautiful.” The first step in my process is connection. I do not want to arrange a song I do not connect with. The second step is analysis. There are two ways that I go about this: I look up the sheet music and analyze the chords or I do it by ear at my piano. The third step is managing the parts and deciding who gets to sing what. I urge you to listen to the original arrangements that Altitudes is going to perform and see where liberties and similarities are.



Colors of the Year: the Fusion of Performing, Visual, and Literary Art in Fanny Mendelssohn's *Das Jahr*

Oral Presentation at URD, Honors Capstone

Emma C. Pullium

Faculty Mentor: Dr. Kevin Geyer, Honors Program Director

Composing at the height of the Romantic Era, Fanny Mendelssohn (1804-1847) made her mark in the realm of combining poetry and art with music. The Romantic Era celebrated artistic creativity and self-expression and prioritized themes of nature and imagination. Garnering these aspects into her own compositions, Fanny Mendelssohn composed a piano suite containing 13 pieces—one piece for each month of the year including a postlude. Mendelssohn titled this work *Das Jahr*, translated The Year. She gifted the completed set to her husband, Wilhelm Hensel, on Christmas Day. Mendelssohn's husband would later add vignettes—sketches that fade into the surrounding paper—on the title page of each piece. Alongside the vignettes, Mendelssohn also added epigrams—short, witty poems—written by important literary figures of her day to accompany each piece. Mendelssohn's use of written words (epigrams), musical notes, and vignettes within her piano cycle exemplify the Romantic Era's emphasis on art forms combining forces to express a singular idea. The purpose of my thesis is to explore Fanny Mendelssohn's life as a female composer in 19th century Europe and to examine the inspiration and connection between the different art forms she employed in *Das Jahr* and how the medias were woven together to evoke the idiosyncrasies and “colors” of each month.

Outdoor Studies

Independent Study on Phenomenology and Qualitative Inquiry (MRE)

ODRS 4996: Reflective Lifeworld Research: Research, Evaluation, & Philosophy of Science

Janie Jones

Faculty Mentor: Dr. Joseph Pate, Associate Professor of Outdoor Studies

Outdoor Studies major Janie Jones sought an Independent Study to learn more about phenomenology as both a philosophy and a methodological approach to qualitative inquiry within the social and behavioral sciences. Beginning by situating both the philosophical underpinnings of phenomenology, as well as various methodological applications and expressions (i.e., descriptive, interpretive, post-intentional, etc.), through the experience Janie explored research tasks common across diverse qualitative inquiry methods and approaches (e.g., literature reviews, research mining, and encyclopedic entries; interviewing, transcribing, and analysis through codes and themes; participant observations, lifeworld artifact identification, and ethnographic approaches; arts-based approaches and creative representation of findings; research presentations and formats). Ultimately, through this work, Janie identified *narrative inquiry* as a potential future research approach to studying the lived experiences of others. Janie, as a budding scholar, engaged the world with the lens of a wondering, curious, and reflexive “questioner,” and through this experience explored personally relevant and meaningful questions as the platform for scientific inquiry that could be further developed through YHC Undergraduate Research initiatives and provide value to her future academic, professional, or personal endeavors. The culmination of this Mentored Research Experience was a poster presentation at Undergraduate Research Day titled, *What is Qualitative Inquiry? Exploring Different Ways of Studying the World* (see below), and a final culminating narrative of her research experience titled, *Discovering A New Way of Studying the World*.



What is Qualitative Inquiry?: Exploring Different Ways of Studying the World (MRE) Poster Presentation at URD

Janie Jones

Faculty Mentor: Dr. Joseph Pate, Associate Professor of Outdoor Studies

Through a desire to understand different ways of studying the world, this presentation reflects my exploration into qualitative inquiry, qualitative research, and various qualitative methodologies. Qualitative inquiry, sometimes referred to as qualitative research, “uses non-numeric naturalistic data (e.g., interviews, field notes, images, and documents) to construct rich description and/or explanatory frameworks that can deepen our understanding of complex phenomena.” (*Journal of the American Society of Nephrology*, 2021) Through this project, several different qualitative methodologies were investigated including phenomenology, ethnography, and narrative inquiry. This presentation will overview the meaning of qualitative inquiry, the relevance, approaches and orientations into studying qualitative research, explorations of methods, and future directions of this study. Qualitative inquiry reveals the complexity of lived experiences which might be hidden within traditional quantitative research and is important as it provides different and unique ways to study and understand the world around us.



Philosophy

Defining Personhood for the *Teen Titans* 2003 Animated Series

Oral Presentation at URD

Bryanna N. Meister

Faculty Mentor: Dr. Chris Lay, Assistant Professor of Philosophy

My research focuses on the five original *Teen Titans* characters from the *Teen Titans* 2003 animated series. I am assessing each character's degree of personhood and their characterization identity along three spectra: how society as a whole perceives them, how their sub-society as a group—the Titans superhero team—perceives them, and how they perceive themselves. I will adopt the Lockean view of “person” as something with sentience, self-awareness, intelligence, and rationality. “Characterization identity” refers to which attributes or qualities one uses to identify themselves. The degree of personhood is how they understand themselves within those three characterization identity spectra. I determine that depending on the characterization spectrum used, characters occupy variable places along each. For example, in terms of their characterization by society, Robin is most clearly identified as a person, then Raven, Beast Boy, Cyborg, and finally Starfire is the least clearly identified. I will introduce each character and their backgrounds before diving into each characters' place on the spectrum. Schechtman's work, “The Constitution of Selves,” is the most crucial to my argument and I will be summarizing some of her points throughout the work and in reference to my evidence.

Psychology

Homesickness and Academic Performance (MRE)

PSYC 4501 Senior Empirical Seminar

Morganna Oberdorfer

Faculty Mentor: Dr. Amy L. Boggan, Associate Professor of Psychology

As part of her senior empirical seminar (PSYC 4501) in fall, 2022, Morganna Oberdorfer investigated whether homesickness impacts college students' academic performance directly on a given task. To address this research question, she created an online study that systematically assigned research participants to complete a survey that would ask questions about their home environment, about the Young Harris environment, or a neutral environment. Following this priming task, participants completed a timed standardized math assessment. Lastly, participants completed a homesickness inventory. Morganna performed a statistical comparison of math performance scores among the three groups, finding a significant trend towards decreased performance among those primed with the "home" condition relative to those primed to think of the Young Harris community. In addition to the finding that participants primed to think of home scored lower overall on the math task, those participants also attempted fewer questions per minute than those primed to think of the Young Harris community. This study provided a substantial contribution to the small literature on homesickness among students by utilizing an experimental paradigm rather than the correlational/survey methods used in previous work on this topic.

Investigating the Effect of Cold-Pressor Pain on Cognitive Performance (CURE)

PSYC 3996: Psychology of Pain

Poster Presentation at URD

Cassidy B. Campbell, Ashley N. Palmateer, & Gracie J. Hix

Faculty Mentor: Dr. Benjamin P. Van Dyke, Assistant Professor of Psychology

This study examines how painful stimuli affect a person's cognitive function and working memory. In the context of the opioid crisis partly driven by inadequately managed chronic pain, it is essential to understand the relationship between physical pain and working memory. This is important because pain contributes to cognitive load which may decrease ability to participate in treatment. Specifically, this study aimed to determine how a painfully cold stimulus and how pain-induced stress can impact one's cognitive ability. The participants for this study were 29 Young Harris College students who were at least 18 years old. All participants were required to respond to an online survey before completing the in-

person portion of the research. Once in the experiment room, participants were asked to do a baseline random letter generation task (RLGT), followed by an audio shadowing filler task, and then another RLGT. Some participants were randomly selected to complete a cold-pressor test (a safe experimental pain task) during the filler task, second RLGT, or not at all. The results showed that participants' performance for the RLGT improved over time. Participants' improvement on the RLGT was lessened, though not significantly, in both pain conditions, regardless of whether they experienced the pain during or prior to the RLGT.

The Role of Resilience in How People Respond to Feedback (MRE)

Poster Presentation at URD

Michael A. Buehring

Faculty Mentors: Dr. Amy L. Boggan, Associate Professor of Psychology & Dr. Julie E. Delose, Assistant Professor of Psychology

This study examined how people respond differently to feedback and how resilience impacts perceptions of task performance. While substantial research has investigated the impact of feedback on performance, less is known about how individual differences in personality traits such as stress or resilience impact perceptions of performance. We hypothesized that positive feedback (versus negative feedback) would improve subsequent participant performance, participant perceptions of their performance, and their motivation to continue a time-limited anagram task. We hypothesized that participant neuroticism and resilience would moderate the response to feedback. Twenty-four (24) college students (ages 18-22) at Young Harris College completed an anagram (6 letter word scrambles) task, received phony/false feedback (randomly assigned to positive or negative) about their performance, and then completed a second anagram task. Students also responded to questions about their stress, resilience, and perceptions of their performance. Results showed that regardless of whether participants received positive or negative feedback, both groups performed worse in the second anagram task and did not differ in perceived performance of the task or motivation to continue. Insufficient data prevented analysis of how neuroticism and resilience interacted with the feedback condition. However, participant responses to the questionnaires revealed a significant negative relationship between neuroticism and resilience, suggesting the importance of stress-relieving techniques incorporated into treatment programs in order to build resilience. This project was funded by the Young Harris College Undergraduate Research Program.



Most Effective Notetaking for Academic Performance: Handwritten vs. Typed (CURE)

PSYC 3112: Research Methods & Statistics II

Poster Presentation at URD

Piper Fendley

Faculty Mentor: Dr. Benjamin P. Van Dyke, Assistant Professor of Psychology

As college students, we are constantly looking for ways to improve the student experience, especially when it comes to academic performance. Because notetaking is a necessary skill to succeed, my research will examine which form of note taking is most effective. As part of a larger study on experiences at Young Harris College conducted via an anonymous online survey, my study specifically seeks to determine whether handwriting one's notes or typing them is associated with better academic performance. The independent variable will be note-taking method (2 levels, handwritten vs. typed) and the dependent variable will be students' self-reported grades. I hypothesize that handwritten notes will be the most effective for students at YHC. Hopefully, the results of this study will provide some direction in further developing student's academic skills. Financial support for this study is provided by the YHC Undergraduate Research Program.

Examination of Perceived Stress and Workplace Satisfaction among YHC Faculty & Students (CURE)

PSYC 3112: Research Methods & Statistics II

Poster Presentation at URD

Christopher C. Jones

Faculty Mentor: Dr. Benjamin P. Van Dyke, Assistant Professor of Psychology

Our research study investigates the relationship between academic divisions' perceived stress and workplace/coursework satisfaction among the students and faculty at Young Harris College. Our hypothesis is that students and faculty in fine arts departments will report higher levels of satisfaction than STEM departments. Alternatively, students and faculty in STEM departments will report higher levels of perceived stress than fine arts departments. We used the Facet Satisfaction Scale to measure faculty workplace satisfaction. To measure student satisfaction within their chosen majors, we used an adapted version of the Facet Satisfaction Scale. We used the Perceived Stress Scale to measure perceived stress. We will only be examining levels of perceived stress and workplace satisfaction, measuring differences, and drawing conclusions with our data. Hopefully this study will provide insight into the cultural dynamic of Young Harris College and illuminate both students but especially faculty, especially about departments outside of their specialty.

A Study on Disciplines, Stress, Mood, Academic Performance, and Exercise (CURE)

PSYC 3112: Research Methods & Statistics II

Poster Presentation at URD

Avery H. Lester

Faculty Mentor: Dr. Benjamin P. Van Dyke, Assistant Professor of Psychology

The purpose of the current study is to investigate the experiences of students and faculty on college campuses. This study aims to examine the relationship between college students' and faculty members' division and levels of escapism. I hypothesize that students and faculty in fine arts departments will report higher levels of escapism than students and faculty in other disciplines. The researchers aim to identify patterns in escapism of people in specific disciplines. If evidence supports my hypothesis, this information could be useful in understanding the effects of interests on behavior. The sample will be students and faculty at Young Harris College who are at least 18 years old. The data for the study will be collected via an anonymous online questionnaire sent to the participants' email addresses. The items on the escapism questionnaire regarding are adapted from items used by Wu & Holsapple (2104). After all data has been collected, the researchers will run statistical analyses on the results. Financial support for this study has been provided by the YHC Undergraduate Research Program.

Effect of a Calming Intervention on Sleep Quality, Total Sleep Time, and Wellness among College Students (MRE)

Poster Presentation at URD

Mary Kate E. McKenzie

Faculty Mentor: Dr. Amy Boggan, Associate Professor of Psychology

Often college students struggle to get an adequate amount of sleep. In addition, sleep quality may suffer due to roommates, electronics use, and other factors. The present study investigated whether a guided meditation intervention would benefit college students' sleep quality, total sleep time, and wellness. Twelve (12) college students completed one week with a guided meditation intervention and one week in a control condition (typical sleep behavior). The order of treatment



and control condition were counterbalanced across participants. Responding to phone-based prompts, each morning participants reported hours of sleep and sleep quality using the Groningen Sleep Quality Scale (Mulder-Hajonides Van Der Meulen et al., 1981). Additionally, participants reported daily wellness each evening using the Freiberg Mindfulness Inventory (Walach et al., 2006). Results revealed no significant difference in wellness or time spent asleep related to the meditation intervention. Given the popularity of sleep app interventions, these findings suggest that more research is needed to isolate and validate any possible benefits of guided meditation. This project was funded by the YHC Undergraduate Research Program.

How Does the Presence or Absence of Personality Disorders Affect Incarceration Rates? (MRE)

Poster Presentation at URD

Janna C. Otting

Faculty Mentor: Dr. Benjamin P. Van Dyke, Assistant Professor of Psychology

After President Kennedy signed the Deinstitutionalization Act, many people that suffer from mental illnesses were released from institutions and sent back to their families. The goal was to build more outpatient mental health centers to offer them better care. However, due to budget cuts many of these centers have been shut down and left the country with a shortage of accessible mental health resources. After the deinstitutionalization movement, incarceration rates in the United States have been at a steady incline in part due to the criminalization of mental illness. There is also a common misconception that those who suffer from mental illnesses, specifically personality disorders, are dangerous when they are more often the victims of crimes. This literature review will seek to answer how the presence or absence of personality disorders affects incarceration rates in America. The studies analyzed for this literature review discuss the comorbidities of personality disorders and the effects of demographics and SES. It will also look at the potential biases and misconceptions that may affect how someone with a personality disorder may be treated in a court of law. The literature shows that comorbidities that often accompany personality disorders can cause someone to engage in risky behavior if that person does not receive treatment or intervention. There has yet to be a source that directly ties a personality disorder diagnosis to a higher chance of incarceration. However, sources indicate that it is a combination of PDs with other factors that lead to higher incarceration rates.

Investigating whether or not Young Harris College Greek Life Alcohol Consumption is More than Those Not in Greek Life (CURE)

PSYC 3112: Research Methods & Statistics II

Poster Presentation at URD

Ashley N. Palmateer

Faculty Mentor: Dr. Benjamin P. Van Dyke, Assistant Professor of Psychology

This study aims to investigate whether students involved in Greek life organizations will report higher levels of alcohol use than students not involved in Greek life organizations at Young Harris College. As growing adults and students, it is important to understand the potential risks and unhealthy habits that can form in college. There is hardly any parental supervision among college aged students which often leads to partying and consuming alcohol at unhealthy rates. As students, it is important to understand the potential risks and consequences that come along with alcohol. I predict that students that are involved in Greek life organizations on campus will consume more alcohol than students who are not in Greek life organizations. The participants for this study are Young Harris College students who are at least 18 years old and not currently enrolled in PSYC3112. Participants were asked to fill out an anonymous online questionnaire about alcohol consumption and involvement in Greek life. These findings could potentially allow students to become more aware of their alcohol consumption. Looking at the overall Greek life consumption can also allow members to hold one another accountable and encourage one another to decrease their intake. Financial support for this study was provided by the YHC Undergraduate Research Program.

Influences of Parental Style on Behavior of School Aged Children (MRE)

Poster Presentation at URD

Hadley M. Smith

Faculty Mentor: Dr. Benjamin P. Van Dyke, Assistant Professor of Psychology

Parenting style has been shown to influence the behaviors of school aged children. Understanding how parenting style influences development will allow parents to raise their children in a way that optimizes quality of life and social skills. This literature review compares research to identify which parenting style least promotes maladaptive behaviors in school aged children. Authoritative parenting is characterized by reasonable expectations, high responsiveness, and parental warmth. Authoritarian parenting is characterized by strict rules with little room for flexibility. Permissive parenting has low demands and high responsiveness to their children's behaviors and communication. Absent or neglectful parenting is recognizable by the lack of both demands and responsiveness. So far, my literature review has found that authoritative parenting promotes maladaptive behaviors the least.

The Relationship between Mental Illness and Gun Violence in America: A Short Literature Review (MRE)

Oral Presentation at URD

Hannah R. Behner

Faculty Mentor: Dr. Julie E. Delose, Assistant Professor of Psychology

The current short literature review dissects seven empirical studies to examine the relationship between mental illness and gun violence. This research is prevalent due to an increase in firearm violence within America in recent years. Factors investigated include demographic, trait, and historical factors. There are two research questions within the current paper to be investigated: (1) what is the relationship between mental illness and gun violence and (2) what are possible predictors to gun violence other than mental illness? These questions were addressed with the use of quasi-experimental and longitudinal analysis. Findings have shown that correlations between mental illness and gun violence are inconsistent, but mental illness was not shown to play a significant role. Demographic factors included youth, being a male, and having an education of high school or less. Historical factors included a history of violence, parental abuse, parental mental illness, antisocial household behaviors, experiences of abuse, and prior hospital admission to be proximal predictors to gun violence. This project was funded by the YHC Undergraduate Research Program.

The Relationship between Body Image and Perception of Others with Dieting Beliefs: An Empirical Research Study (MRE)

Oral Presentation at URD

Hannah R. Behner

Faculty Mentor: Dr. Amy L. Boggan, Associate Professor of Psychology

This study examined whether our body image and dieting beliefs impact how we perceive the bodies of others. Internal locus of control is defined as attributing life experiences to internal factors, such as personal qualities, while external locus of control is defined as attributing external factors to life experiences. The hypotheses investigated were: (1) participant's initial judgment of someone else's body reflects personal body insecurities regardless of body size, (2) individuals who are less satisfied with their body will focus on body parts that are associated with their body insecurities, and (3) participants who report lower body satisfaction will exhibit an external weight locus of control and participants who report higher body satisfaction will exhibit an internal weight locus of control. Thirty-two (32) participants from a small college completed surveys, a filler task, and a body observation circling task. In the body observation circling task, the participants are shown a body and they must circle the first body part they notice as quickly as possible. Results presented that circling patterns of other peoples' bodies did not correlate with personal body insecurities, but there was a relationship between the circling patterns and the size of the person's body in

the photo. No correlation was shown between the number of insecurities the individual had and which body parts were circled. Finally, people with an external weight locus of control were significantly less satisfied with their body compared to individuals with an internal weight locus of control. This project was funded by the YHC Undergraduate Research Program.

How Student Organizations, Belongingness, and Covid-19 Interact (MRE)

Oral Presentation at URD

Emma Hambrick

Faculty Mentor: Dr. Benjamin P. Van Dyke, Assistant Professor of Psychology

COVID-19 has impacted populations across the world, and certain factors have moderated the impact on those populations. For example, a sense of belonging has been shown to improve people's mental health. Based on a previously conducted literature review, this research project expands on and examines the factors that may buffer against the adverse effects felt by college students due to COVID-19. The current study focuses on relationships among number of student organizations in which a person is involved, sense of belonging, and social support as predictors of distress and counseling service utilization. We hypothesized that students who had higher belongingness scores during the pandemic would report lower distress levels than those who had low belongingness scores during the same time period. The second hypothesis stated that people who were involved in more organizations during the height of the pandemic utilized fewer counseling services than those who were involved in fewer organizations during that same time period. These hypotheses were tested using retrospective self-report questionnaires of experiences before and during the pandemic to determine if any of these factors lessened the impact of COVID-19 felt by college students. Once data was collected, mediation analyses were run to test both hypotheses. Although the mediation analyses did not reveal any significant results, there were significant findings in the regression models. The main significant finding was that social support had a negative relationship with distress, meaning that more social support was associated with less distress during the height of the COVID-19 pandemic.

The Effects of Distraction and Perceived Observer Empathy on Cold-Water Pain (MRE)

Oral Presentation at URD

Henrik L. Timgren

Faculty Mentor: Dr. Benjamin P. Van Dyke, Assistant Professor of Psychology

Distraction as a buffer against acute pain has received much attention within research. However, the idea of a person's perceptions of observer empathy has received minimal attention and is still largely unknown in its role as a potential buffer against acute pain. In

the limited research that has been conducted, positive empathic expressions from other people have buffered against an individual's experience of pain (Fauchon et al., 2017). The current research (OSF preregistration: <https://doi.org/10.17605/OSF.IO/3SJC6>) was conducted to continue the examination of perceived observer empathy as well as the role of distraction to buffer against acute pain. Participants were exposed to a specific level of empathy (positive, negative, or neutral) either before or while performing a cold-water task (6-7 degrees Celsius). Observer empathy was manipulated by a confederate who performed a script designed to project either neutral empathy, negative empathy, or positive empathy toward the participant's pain. Results showed that neither empathy, distraction, nor the interaction between the two had a significant effect on pain intensity or pain tolerance. However, medium to large effect sizes suggested that the positive empathy + distraction group tended to experience more pain, providing tentative support for the Operant Model of Pain by suggesting that receiving positive empathy from others may reinforce acute pain. This research was funded by the Council on Undergraduate Research and the Young Harris College Undergraduate Research Program.

Musical Components and their Impact on Perceived Exertion: An Examination of Tempo, Lyrics, Synchronicity, and Preference (MRE)

Oral Presentation at URD, Honors Capstone

Leanna M. Wood

Faculty Mentor: Dr. Amy L. Boggan Associate Professor of Psychology & Dr. Kevin Geyer Honors Program Director

Improving our health and well-being is a goal that individuals share. One way to reach this goal is by developing an exercise routine, and for many, music is an essential part of their workout. Though music can make exercise more enjoyable, is there an underlying benefit? The research project presented here represents two phases: an initial empirical research study for my psychology capstone, and a broader literature review for my honors thesis. Phase one, the experiment, investigated whether lyrics and different tempos affect participants' perceived exertion during 10-minute cycling intervals. Both music with lyrics and higher tempos seemed to lower perceived exertion, though these trends were not statistically significant. Phase two, the honors thesis, builds on phase one by exploring the broader question of whether music impacts perceived exertion through distraction and/or dissociation. A systematic literature review examines the impact of four components of music: tempo, synchronicity, preference, and lyrical content. This project was funded by the YHC Undergraduate Research Program.

Sports & Recreation Studies

The Prevalence of Stress, Anxiety, and Depression in Young Harris College Athletics (MRE)

SPRS 4700: Sport and Recreation Studies Practicum

Poster Presentation at URD

Ryann G. Haly

Faculty Mentor: James R. Thomas, Associate Professor of Kinesiology & Sport Studies

In 2017 as a rising sophomore lacrosse player at Duke University, Morgan Rodgers sustained a dream-shattering knee injury. Eventually, the stress, anxiety, and depression she suffered, as a result, became too much to endure. Morgan died by suicide on July 11, 2019, at the age of 22. While the physical well-being of all athletes has historically been a coach's primary concern, there is comparatively less knowledge and understanding of the role of mental health in an athlete's overall wellness. This research experience sought to understand the extent to which anxiety, stress, and depression affect a Young Harris College Athlete's life and the importance of recognition, treatment, and management to an athlete's mental health. The ultimate objective of this research is to bring awareness to the prevalence and stigma of mental illness in Young Harris College Athletes and to inform and educate Young Harris College athletic personnel on the importance of treating mental illness as one would physical injuries. Through an anonymous standardized questionnaire, the collection and summarization of data on athlete stress, anxiety, and depression will also support the mission of Morgan's Message—a national organization dedicated to athlete mental health.

Theatre

Scenes from *And Then We Saw the Stars Again: A Devised Play* *Theatre Presentation at URD*

Avery Lester, Kat Miller, Lydia Mohr, Montaeo Bailey, Jeanacris Thomas, Chris Say, Katie Horsley, & Cara Mackey

Faculty Mentor: Gina Dropp, Adjunct Instructor of Theatre

Devised theatre is a collaborative creative process. Eight Theatre students worked together to write an original script, which they would then perform on Undergraduate Research Day. In this original devised production, five friends face an impossible mission to save planet Earth. Moving through the past and the inception of their environmentalist group, “Operation: Earth” and the present-day internal conflicts of the group, these humans are met with the impending doom of the planet. Due to both the man-made destruction and a warning of abandonment of from the Ethereal Sun, Moon, and Stars, will this group ascend to greatness, or will they perish?

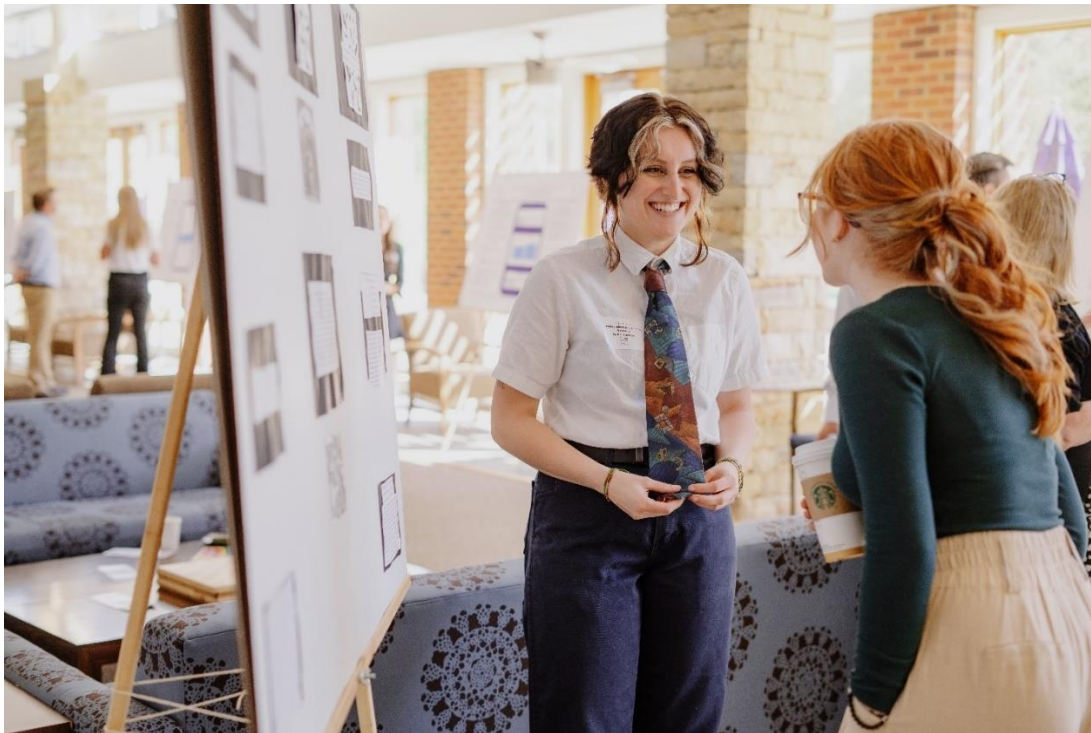


The King James Witch Project (CURE) Poster Presentation at URD

Katie Horsley

Faculty Mentor: Gina Dropp, Adjunct Instructor of Theatre

In this project I analyzed the play *Macbeth* and how it reflected real-world happenings. I used several texts and cross-referenced real historical events to the fictional ones in *Macbeth*, finding many correlations in the witches and other happenings in the world of the play. The witches of *Macbeth* directly correlate actual accounts told during the Scottish witch trials that King James attended, elements found in King James's *Daemonologie*, and happenings in King James's life. Using *Will in the World*, *Daemonologie*, and *King James and the Witches*, I compared these sources to *Macbeth*. I uncovered an understanding of the world in which Shakespeare lived in, King James's descent into madness, and how that is portrayed in *Macbeth*.



The Psychology of Movement and Character

Poster Presentation at URD

Avery H. Lester

Faculty Mentor: Anne Towns, Associate Professor of Theatre

“The Production of Character” and “The Production of Movement” are two separate honors projects that are both based on the current devised piece being produced by Young Harris Theater, *And Then We Saw the Stars Again*. The current research aims to examine the relationship between emotional states and the process of creating character, starting from the drawing board and all the way into production. Using past research and theory, which is accompanied by my own research using the cast of the devised show, this research focuses on variables of collaboration, writing, movement, creativity, and emotional schemas. To collect my own data, I created 7 character-based warm up routines to examine their effect on character building, accompanied by a questionnaire for the cast, which was composed using the work of movement pioneers Rudolph Laban and Michael Chekhov, as well as current movement literature. The questionnaire consisted of forced choice survey questions, which focused on emotional states felt by the cast throughout the various warm-up routines. I also collected data through observation of the devised show’s writing and rehearsal process to gather further information on the creation of character, as well as the emotional processes of creativity. After collecting this research, I used it to compose an informational essay and creative art project, both of which will be presented to my professors for honors program credits.

The Evolution of Skills Through Training in the BFA Musical Theatre Program

Oral Presentation at URD, Honors Capstone

Montaeo Bailey

Faculty Mentor: Dr. Kevin Geyer, Honors Program Director

This research analyzes the evolution of growth in student skills within the BFA Musical Theatre Program at Young Harris College, highlighting areas (Acting, Singing, Dance) where students have seen development and progression in their training. This study pertains to the Class of 2023. To answer this question, we conducted an anonymous survey to compare the expectations and the results of a student’s training to the expectations of the faculty providing the instruction of the curriculum at Young Harris College. The results indicate a disconnect between the growth expectations of the faculty compared to the students about their training. Results also revealed that there is a primary focus in certain areas within the program where faculty and students believe the most growth has occurred (singing and acting). The conclusion of this study uncovered that the BFA program provides productive training for the benefit of the student’s individual growth in Musical Theatre while also highlighting factors to focus on within the program such as the overall structure of the program’s curriculum where certain areas need to receive more of a focus for a balanced curriculum.

Honors

Art and Science of Fermentation (CURE)

HONR 2104: Art and Science of Fermentation

Faculty Mentor: Dr. Kevin Geyer, Assistant Professor of Biology



*Mango Habanero Hot Sauce
by Phebe Carroll*

Eight students in HONR 2104 (Art and Science of Fermentation) began their journeys into a world of fermentation, an ancient form of food preservation that is largely misunderstood or forgotten today.

Sauerkraut, hot sauces, kimchi, kombucha, sourdough bread, and many more dishes were explored from social, historical, and scientific perspectives. We examined how important fermentation can be for supplementing our diets with added nutrients, flavors, and probiotics critical to our physical as well as mental health. Students chose at least three ferment recipes to iteratively prepare, maintain (specific temperatures, oxygen conditions), monitor (pH levels, carbonation), and then repeat with improvements based on the quality of their foods (taste, texture, smell, visual appearance). Research journals were kept during the semester to document the experience and reflect on successes and failures. Students also explored the artistic sides of cooking through decisions about flavor

combinations that appealed to their palate, often going beyond standard recipes to add their own touch. Twenty-eight final dishes were presented to the class at the end of the semester for students to demonstrate their development of skills and knowledge. These recipes were compiled into an Art and Science of Fermentation Cookbook for students to reference on their fermentation journey in the future!

Dongchimi by Montana Owens



Sourdough Focaccia by Emily Birnbaum



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