

SCHOLAR

Student Scholar Day 2025

Thursday, April 10



Welcome to Avila University 24th Annual
Student Scholar Day
April 10, 2025

2025 Student Scholar Day Committee Members

Kelsey Miles, Ph.D.
Dakota Shields, M.S.
Melinda G. Arnett, Ph.D.

Special Thanks to:

Maintenance Staff for room set-up and tear-down
Great Western Dining Services staff
ITS for technical support
Avila Faculty for student mentorship and encouragement

AVILA UNIVERSITY

SPECIAL THANKS

from

The Committee, Faculty, Students, and Guests

PROGRAM

POSTER PRESENTATIONS (Judging by Committee Members)

WHITFIELD CONFERENCE CENTER
12:30 – 2:00 P.M.

ORAL PRESENTATIONS

WHITFIELD CONFERENCE CENTER
2:00 – 3:00 P.M.

- 2:00 Exploring the Black American Experience During World War II**
Ollie Coleman
- 2:20 The Impact of Community on the Self-Esteem of Public School Teachers**
Taisia Sarazov
- 2:40 Women: From Pre-Modern to Contemporary China**
My Phuong Tran

KEYNOTE SPEAKER

WHITFIELD CONFERENCE CENTER
3:00 – 3:30 P.M.

Dr. Erin Holt, Ed.D., MPH, PAPHS
Associate Dean of Arts and Sciences
Professor of Public Health

AWARDS CEREMONY

WHITFIELD CONFERENCE CENTER
3:30 – 4:00 P.M.

Disciplines in higher education have different formats for presenting research and scholarship. You will notice that in the sciences (e.g., biology, kinesiology, psychology, education), scholars present research using a basic scientific approach: presentation of hypothesis, interventions or application, and results. Their research is usually presented with a power point and discussion. In disciplines such as history or English, scholar will present their research by reading a paper. Performance scholars will actually perform their presentation. All presentation styles and formats are valid and should be respected.

Poster Presentations/ Judging

WHITFIELD CONFERENCE CENTER

12:30 – 2:00 P.M.

The Myth of Learning Styles: A Replication

Anna Isaacs (Psychology)

Faculty Mentor: Dr. Jordan Wagge

The purpose of this study is to replicate Study 1 from Nancekivell et al. (2020) under the Collaborative Replications and Education Project (CREP) framework. The original study aimed to understand how people think about the concept of learning styles, which empirical work does not support as a valid construct (Pashler et al., 2008). Nancekivell et al. (2020) aimed to determine whether participants who believe in learning styles did so with essentialist, nonessentialist, or hybrid interpretations of the concept. They used a survey that included questions about essentialist beliefs regarding learning styles, control items, and demographics. The present study will follow this same design, but as an extension of the original study we will add two questions at the end: whether the participant believes they have a specific learning style, and whether they have taken a test to assess their learning style. We hypothesize that people who believe they have a learning style or who have taken a learning style assessment will be more likely to demonstrate essentialist beliefs of the construct. Additionally, in the original study, the authors did not analyze data from the participants who said they did not believe in learning styles. In our study, we will conduct exploratory analyses of this data to see if responses differ across people who say they do or do not believe in learning styles. We aim to recruit 100 participants and complete data collection in late March 2025.

Criminogenic Thinking and Maladaptive Behaviors in First-Gen Undergraduates

Kirsten Moore (Graduate Counseling Psychology),

Abrianna Hay (Graduate Counseling Psychology)

Faculty Mentor: Dr. Jon Mandracchia

College students engage in risky behaviors. First-generation students face more barriers than their peers. This study compares maladaptive behavior (i.e. behaviors that are detrimental, counterproductive, unhealthy, and risky) and criminogenic thinking (i.e. thoughts that perpetuate maladaptive behaviors) between 80 first-generation and 78 continuing-generation students during their first semester of college. Implications for programming to decrease problematic behaviors and support first-generation students are discussed.

Atrazine in Local Water Supply

Brianne Kuhlman (Biology Pre-vet), Gabby

Anderson (Biology), Karen Dorsainville (Biology)

Faculty Mentor: Dr. Kelsey Miles

Atrazine is a common herbicide used in agriculture and easily leaches into ground water and drinking water. It is an endocrine disrupter and at low doses (2.5 ppb) can have adverse health effects on the ecosystem and organisms around it. The U.S. Environmental Protection Agency (EPA) regulates the atrazine contamination in drinking water to 3ppb, regardless of the known health effects. The regional water treatment facilities vary in their protocols of water treatment and testing frequencies. Some local water treatment facilities have reported atrazine levels that surpassed the federal regulated limit. This represents a serious concern for the health and well-being of local residents who rely on public water systems. In addition, residents who live in rural areas rely on well water which receive no testing and no

treatment. Due to the regional concerns of atrazine contamination in drinking water, this research aims to investigate drinking water in a variety of residential homes around the greater Kansas City metropolitan area including rural and suburban locations. Findings from this study will help to inform local residents about atrazine contamination in drinking water supplies.

Testing Atrazine Contamination in Commercial Sparkling Water

Grace Effertz (Biology), Jade Kennedy (Professional Health Science)
Faculty Mentor: Dr. Kelsey Miles

Atrazine is an endocrine disruptor that can inflict permanent damage to the reproductive and neurological systems of animals and humans. It is commonly found in water sources due to runoff from farmland where it is used as a herbicide. These water sources are used in the manufacturing of a variety of commercial beverages such as sparkling water, sodas, and bottled water. Sparkling water has become an increasingly popular beverage and the United States is the 2nd largest producer of sparkling water. Although manufacturers report the purification of these water sources using methods such as reverse osmosis, deionization, and multi-step filtration processes, there is little reported data available to the consumer. The objective of this study is to quantitatively test whether there is atrazine present in a variety of commercial brands of sparkling water.

Effectiveness of a Brita Filter in Removing Atrazine from Drinking Water

Kylin Mitchell (Biology), Emery Wingert (Biology)
Faculty Mentor: Dr. Kelsey Miles

Atrazine, a widely used herbicide in the United States, is a known endocrine disruptor. Its widespread use leads to water contamination across the country, and its known health risks highlights the importance of home filtration systems to

reduce exposure. This study aims to investigate the efficiency and longevity of the Brita pitcher filter, an affordable and commonly used activated carbon filtration system for removing atrazine from contaminated water. Activated carbon filters work by adsorption, utilizing high surface area to trap and remove contaminants such as pharmaceuticals and pesticides. However, their effectiveness can vary based on structural composition, surface chemistry, and the duration of use. This study will examine the effectiveness of new and used Brita filters in removing atrazine. The results of this experiment will provide insights into the reliability of home filtration systems in removing unwanted pesticides in drinking water.

The Presence of Atrazine in Kansas City Groundwater

Zayana Bradley (Biology), Evan Serrage (Biology)
Faculty Mentor: Dr. Kelsey Miles

Atrazine is a commonly used herbicide for weed control in agriculture. This herbicide enters water sources such as streams, lakes, rivers, and ponds through farm runoff. Atrazine contamination of as little as 2.5 ppb in local Kansas City groundwater poses a threat to the community and the environment. Previous research has shown Atrazine to be a potent endocrine disruptor that has adverse effects on human health and wildlife. These effects include reproductive system damage, decreased fertility, proliferation of ovarian cancer cells and an imbalance of hormones in certain organisms. Understanding the levels of atrazine in groundwater is crucial for assessing potential health risks and informing regulatory measures. Therefore, this study will quantify Atrazine contamination by testing samples from lakes, creeks, and rivers in Kansas City and use the results to evaluate its potential impact on the community.

Testing for Atrazine in Bottled Water

Sierra Rupp (Biology), Anastasia Wright (Biology)

Faculty Mentor: Dr. Kelsey Miles

Atrazine is a widely used herbicide found in bodies of water due to runoff, migration, rainfall, and improper disposal, causing it to become the most detected pesticide in American water systems. Many countries have banned the use of atrazine due to its adverse health effects; however, the U.S. Environmental Protection Agency (EPA) has set a maximum contaminant level of 3 parts per billion in unfiltered drinking water. Over half of bottled water companies use water from municipal water sources. The present study experimentally investigated the amount of atrazine in bottled waters compared to unfiltered Avila water. The aim of this study is to quantitatively determine the concentration level of atrazine in a variety of bottled water brands and compare the results to the levels of atrazine found in the tap water at Avila University. The results of this analysis will provide insight into the potential presence of atrazine in bottled drinking water and its implications for consumer health.

Oral Presentations

WHITFIELD CONFERENCE CENTER

2:00 – 3:00 P.M.

2:00 p.m.

Exploring the Black American Experience During World War II

Ollie Coleman (History)

Faculty Mentor: Dr. Jeffrey Myers

This presentation examines African Americans' struggles, joys, and contributions during World War II, thus shedding light on their significant, often overlooked role in the war effort. Despite enduring systematic racism, discrimination, and segregation, African American soldiers displayed incredible resilience, sacrifice, and patriotism.

But the experiences of black soldiers were shaped by racial prejudice, as many were subjected to serving in menial roles as non-combatants, discrimination in terms of roles promotion, as well as, physical and psychological abuse. Despite these hardships, this presentation is an analysis of the long-lasting postwar impact, such as desegregation efforts, which were heavily influenced by the sacrifices of these men and women. In particular, this presentation will spotlight Charity Adams, the first African American woman to lead a battalion, and her crucial role in the success of the 6888th Central Postal Directory Battalion. Overall, with the help of these stories, this presentation will argue for including African American soldiers' experiences in educational curricula to honor their legacy, broaden the narrative of American history, and promote healing for racial divides within the nation.

2:20 p.m.

The Impact of Community on the Self-Esteem of Public School Teachers

Taisia Sarazov (Social Work)

Faculty Mentor: Dr. Debra Olson-Morrison

Teacher retention is a major concern in the United States, especially in the Kansas City Kansas Public School District. Studies show that the quality of teachers' sense of community can be a deciding factor in the likelihood that they will remain at the school at which they are employed. The student implemented, conducted and analyzed teacher support groups at an elementary school in the Kansas City Kansas Public School District. The support groups aimed to improve teacher's self-esteem and sense of community. Mixed methods results indicated a slight change in each factor and revealed systemic issues beyond the focus of the group, highlighting the need for broader interventions to address rates of teacher recidivism and retention.

2:40 p.m.

Women: From Pre-Modern to Contemporary China

My Phuong Tran (Business Administration)
Faculty Mentor: Ling Zhang

In ancient China, a woman's worth was often measured by her ability to maintain family harmony, follow commands, be obedient, or uphold her chastity. This reverence for female purity and submission was deeply rooted in Confucian ideals that permeated every aspect of Chinese society. Even in contemporary China, women are still confined to their identities as daughters, wives, or mothers. While legal reforms in the recent centuries have advanced women's rights in China, these deeply rooted Confucian ideals continue to shape women's roles in society today. This paper will explore the persistence of these gendered institutional norms from the Zhou Dynasty to contemporary China, demonstrating that gender equality remains an ongoing struggle in a society steeped in patriarchal traditions.

Keynote Speaker

WHITFIELD CONFERENCE CENTER
3:00 - 3:30 P.M.

DR. ERIN HOLT, Ed.D., MPH, PAPHS Associate Dean of Arts and Sciences Professor of Public Health

Dr. Erin Holt is the Associate Dean and Coordinator for Assessment and Quality Assurance for the College of Arts and Sciences and is currently finishing up her first year at Avila. While working on her Doctorate in Education from Delta State University, Dr. Holt began her scholarship pursuits. She worked as a grant coordinator for a project implementing physical education classes into elementary schools while seeing the effect on academic achievement, absenteeism, and overall health.

Her first faculty role allowed her the ability to further this research interest on implementing physical activity programs in elementary school classrooms to help with academic learning, thus sparking her interest into the public health side of physical activity. Dr. Holt's research expanded to see how active recess time, including active indoor recess opportunities, increase students' classroom success and meeting national physical activity standards. After realizing how much she enjoyed the public health, Dr. Holt pursued her Masters of Public Health degree from the University of Missouri-Columbia.

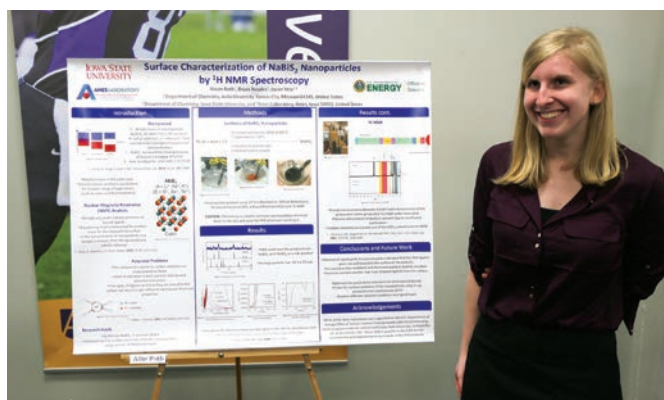
Dr. Holt's research consistently stems around the health and wellness in a variety of populations. While early in her career, she investigated how recess and active play influences learning outcomes in elementary-aged youth, Dr. Holt's current scholarship interests focus more on the wellness spectrum and college students..

Awards Ceremony and Closing

WHITFIELD CONFERENCE CENTER
3:30 P.M.

Winners for Oral/Performance and Poster Presentations will be announced.

Participants from past Student Scholar Days



STUDENT SCHOLAR DAY GOALS

- Promote and encourage student contributions to scholarly activity across the campus.
- Recognize and reward outstanding student achievements and scholarly activity.
- Promote interdisciplinary academic interaction among students and faculty.
- Reinforce the breadth of learning that characterizes a quality formal education.
- Support the institution's educational efforts regarding the importance of communication skills.
- Enhance community awareness of the high level of scholarship at Avila University.

