

THE HONORS SCHOOL

RESEARCH CONFERENCE

FALL 2025

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HONORS SCHOOL RESEARCH CONFERENCE SCHEDULE

FRIDAY, DECEMBER 5, 2025
GUGGENHEIM MEMORIAL LIBRARY ROOM 101

OPENING REMARKS: Honors School Director Jennifer Ross

SESSION A: 10:30AM - 11:20AM

Matthew Cioletti, History
Sarah Vladu, Biology (Molecular Cell Physiology)
Sophia Sabbagh, Biology (Molecular Cell Physiology)
Gianna Dibello, Nursing
Cades Linder, Health Studies/Health Science

SESSION B: 12:35PM - 1:25PM

Alexander Metz, Business (Accounting Analytics)
Emily Webb, Business (International Business)
Sarah Hilton, Business (International Business & Marketing)
Megan Constigliola, Psychology
Emma Vinci, Psychology

THESIS ABSTRACTS

Matthew Cioletti | FIRST READER: PROFESSOR WILLIAM GORMAN

Examining Polarization of Religion, Democracy, and Patriotism Through Grand Stages of History

Across three critical axes, the historical perspectives on polarization demonstrate how America has struggled to achieve unity. Freedom of speech gives people the power to make a difference, and the people who act on that freedom lead major political and social change. Colonial activists of the early Anglican church faced serious religious dissent, and that has evolved into psychological dissent today among groups such as Catholics and Jews. Presidential elections are shaped by affective polarization - the emotional division that emerges in a country that runs like a democracy. Remaining loyal to the country despite the divide is challenging, and the ideals of patriotism show how people's faith in unity changes over time. Polarization has existed throughout American history, defining political and social ideals from the Revolution to the present day. Extensive research on polarization demonstrates the enduring nature of emotional division.

Sarah Vladu | FIRST READER: DR. GARY LEWANDOWSKI

Masked Identities: The Effects of Masking Masculinity and Femininity on Relationship Satisfaction

This study examined how masking one's masculine and feminine energies, as well as behaviors of self-silencing and a couple's dyadic coping skills, influenced relationship satisfaction. Masking is the suppression or alteration of one's authentic personality, emotions, behaviors, and beliefs, often to prevent conflict or to conform to societal expectations. Inauthentic individuals may mask masculinity and femininity, which was hypothesized to decrease overall relationship satisfaction, commitment, and investment. Additionally, an increase in attention to alternatives, relationship stress, self-silencing, and negative dyadic coping was hypothesized. A correlational survey study with 92 participants was conducted at Monmouth University using a Self-Silencing measure, Masking Femininity and Masculinity measure, Relationship Stress measure, Dyadic Coping measure, and the Investment Model Scale measure. Results showed that overall masking was strongly correlated with masking masculinity and masking femininity. Masking was also linked to lower relationship satisfaction and commitment, higher relationship stress and self-silencing, poorer dyadic coping, and greater attention to alternatives. Masking was not correlated with perceived relationship investment, possibly due to the necessity of a long-term study observing changes in investment due to ongoing masking behaviors. These findings highlight the negative impact of masking on relationship dynamics and the importance of maintaining authenticity in partnerships.

Sophia Sabbagh | FIRST READER: DR. GREG MOEHRING SECOND READER: DR. JEFFREY WEISBURG

Second Reader: Dr. Jeffrey Weisburg

Application of Rhenium in Chemotherapy: Synthesis of Cytotoxic Rhenium Complexes

Cancer is one of the leading causes of death around the world. This is due to the lack of treatments available, leading to high mortality rates in comparison to other illnesses. Luckily, in 1978 the first chemotherapeutic was approved called cisplatin. This treatment helped many people suffering from cancer and is one of the top treatment options today. Unfortunately, this treatment includes the possible risk of harsh side effects that many would rather avoid. In order to lessen side effects and boost treatment effectiveness, current research has explored rhenium(I) tricarbonyl-containing substances as a promising alternative to cisplatin. After researching this approach, continuing work has been done in Monmouth University's laboratories focusing on developing a new bidentate ligand to support rhenium(I) substances. During this process, five new compounds have been prepared and characterized by nuclear magnetic resonance (NMR) and infrared (IR) spectroscopy. These compounds then went through cytotoxicity screenings to investigate the cytotoxicity and selectivity of the compounds against oral squamous cell carcinoma cells and normal human gingival fibroblasts. The results showed that two substances prepared were cytotoxic and somewhat selective. In future work, the mechanisms of these substances will be studied.

Gianna Dibello | FIRST READER: PROFESSOR KATHRYN VIEIRA

Reducing Anxiety with Pediatric Osteosarcoma

Osteosarcoma is a cancer found predominantly in the pediatric population with a difficult treatment and an extensive recovery period. This can cause incredible amounts of anxiety for not only the patient but for the family as well. This thesis investigated the relationship between pediatric osteosarcoma and anxiety while focusing on the factors that affect anxiety and strategies that can be used to limit symptoms. Through creating a website, this data and literature was presented and used as a resource to provide valuable information and examples on how to lessen anxiety. This is a very sensitive and heavy topic, and it is important to address this issue because mental health is often overlooked but is extremely prominent in the pediatric cancer population. The website is meant to provide comfort for the patient and their families by supplying them validating information while also suggesting various forms of nonpharmacological strategies to reduce anxiety.

Cades Linder | FIRST READER: PROFESSOR PAUL MLODGENSKI

Barriers & Inequities in American Rural Healthcare

The research completed in this study was to define the barriers and inequities American rural communities face compared to their metropolitan counterparts. This work is important to educate future medical providers on how to address cases and disparities in a unique way due to the differences based on residential communities. There were 29 peer reviewed journal articles accessed in this literature view between 2010 and 2025. Various databases were accessed and keywords were repeated to get optimal results. The capstone project was completed by creating an informational website that stated the key findings of the research, and offered ways to implement this knowledge into medical school and Physician Assistant program education. The website was shared with Misericordia University's Master of Physician Assistant Studies program and Rutgers University's Medical School. The key finding of this research was that American rural residents are underserved in healthcare due to physical barriers, a scarcity in providers, and limited financial resources. These barriers cause a higher rate of chronic & preventative illness, and greater use of federal support for health insurance.

Alexander Metz | FIRST READER: DR. DAVID TRIPOLD

Lines of Power: How Gerrymandering Affects Representation

Voting is a central feature of democracy, allowing citizens to choose who represents them. This thesis investigates the effect of gerrymandering on U.S. House elections' competitiveness by evaluating whether states with more biased (or gerrymandered) district maps have higher winning margins. Using the results of the 2022 House elections, the dataset was reduced from about 1,350 entries to 370 winning candidates from states with stable, multi-district congressional maps. Using the Princeton Gerrymandering Project's letter grading system (A–F), the fairness of each state's congressional map was assessed. Then, the vote share and margin of victory was computed for every winner and compared average trends based on their grades.

The findings present a clear trend, indicating that states with fairer maps (A and B) have lower average winning percentages of about 63%, relative to states with poor maps (particularly C and F) which average above 66%. After extensive statistical analysis, the findings have shown that gerrymandering creates safer seats and diminishes electoral competitiveness. Nonpartisan redistricting practices, such as independent commissions, would result in more competitive elections and would better represent the electorate.

Emily Webb | FIRST READER: PROFESSOR ASHLEY BOSONAC

Pixels or People: Human vs. Artificial Intelligence Influencers on the Impact of Consumer Purchasing Decisions

In today's marketing world, brands commonly use celebrity-likeness in order to reach a broader audience. In recent years, artificial intelligence personalities have taken over that role for some brands, drawing the question of which influencer can be more effective in gaining traction: a human or an artificial personality. Through research, six key components were found to be at the forefront of this discussion: the role of influencers, perception and decision making, use in fashion marketing, engagement, ethical concerns, and use of case studies. The use of "mega," "macro," and "micro" influencers are also discussed, as these influencers can drive up to 50% engagement on a post. With all of this in mind, a survey was created to test the differentialities between a human and Al influencer, including a questionnaire and varying print ads, to test which is believed to be more reliable and better induce customers to purchase a product.

Sarah Hilton | FIRST READER: PROFESSOR ASHLEY BOSONAC

The Cost of Being Superwoman: A PSA Campaign to Combat the Pink Tax

This research investigated the economic and social impacts of the "Pink Tax," the phenomenon in which products marketed to women were priced higher than comparable products marketed to men. Through a numerical analysis of price discrepancies in industries such as personal care, clothing, and toys, the study examined whether these differences were the result of gender-based marketing rather than genuine variations in product quality or production costs. The research also explored the psychological consequences of gendered marketing, particularly its influence on children. Findings suggested that exposure to gendered toys and consumer goods shaped self-perceptions from an early age and reinforced societal expectations tied to gender roles. By analyzing both market data and social implications, the study highlighted how the Pink Tax not only placed an economic burden on women but also perpetuated long-standing patterns of inequality. To address this issue, I developed a public service announcement (PSA) campaign designed to raise awareness of the Pink Tax and educate audiences on its broader implications. This campaign aimed to encourage discussion, challenge existing norms, and inspire greater consumer and organizational accountability regarding gender-based pricing.

Megan Constigliola

FIRST READER: DR. JEN McGOVERN SECOND READER: DR. NATALIE CIAROCCO

From Feed to Fact: The Implications of Instagram and TikTok Usage on Perceptions of Crime

Social media's growing popularity and increased reliance as a news source means that individuals are now susceptible to believing false information, which means their perceptions about crime may become skewed. Current research fails to acknowledge whether there is a connection between TikTok and Instagram, two newer forms of social media, and perceptions of crime. An online survey asking about fear of crime, social media use habits, and perceptions of the justice system was used to investigate potential relationships between these variables. With data from 131 participants, positive, significant, correlations were found between the type of content participants view on Instagram and TikTok and their fear of crime. Those who view crime content on their social media are more likely to have an increased fear of crime, and, in some cases, are more likely to agree with punitive criminal justice policies. Significant group differences in fear of crime were found between those who view high amounts of crime on their social media versus low amount of crime content on their social media. These results indicate that time spent on these social media apps is not as important as the content viewed when looking at fears and perceptions.

A SPECIAL THANK YOU TO OUR THESIS READERS & THE HONORS COUNCIL

OUR MISSION

The Honors School promotes transformative learning in a collaborative community of student leaders and faculty mentors both inside and outside of the classroom. Students challenge one another to maintain the highest standards in their own discipline and across all fields of interest. Student scholars in the Honors School are expected to develop a great depth of understanding within their field of study, while appreciating intellectual inquiry in a broad context. Participants in the Honors School raise students' cultural, ethical, and social awareness as they develop into well-rounded scholars and citizens of a global community.