

A close-up photograph of a person's hands holding a lit sparkler. The sparkler is bright yellow and orange, with many sparks flying out. The background is a gradient of blue and orange, suggesting a sunset or sunrise. The overall mood is celebratory and bright.

SPARC

STUDENT PERFORMANCE &
ACADEMIC RESEARCH CONFERENCE

Saturday, May 7, 1-5 P.M.
In-Person and Virtual Attendance

HOLLINS
UNIVERSITY

SPARC

SCHEDULE



1 - 1:50 P.M.

DIGITAL POSTER PRESENTATIONS

Virtual Q & A Session

<https://digitalcommons.hollins.edu/sparc/2022/presentations/>

Moderator: TBD

Anthropogenic Noise and its Impact on Plants, Pollinators, and People

Zoe Jordan '22

Shayla King '23

Breanne Sharp '24

Human generated noise is a pervasive and often ignored by-product of urbanization and development. However, short-term exposure to noise pollution raises blood pressure in humans and long-term exposure has been associated with cardiovascular disease (Farooqi et al. 2020). Additionally, noise pollution impacts animals including altering the physiology of caterpillars, reproductive success in birds, and hunting success in bats (Kunc and Schmidt, 2019). Noise may alter plant communities and thus ecosystem services by impacting pollination and seed dispersal (Francis et al. 2012). For our study, we established two microcosms, placed them 300 meters apart, and videotaped pollination activity at both locations on four occasions. The first location was along a busy road bordering the Hollins University campus and the other along a matching internal campus road. Additionally, human subjects (anticipated sample size N=50) have been recruited to spend 15 minutes in both locations separated by at least 24 hours. We took the initial blood pressure of each participant before they were asked to sit and relax under a shade tent facing away from traffic. After 15 minutes, we repeated blood pressure readings and administered the PANAS survey. We plan to compare pollination activity, plant growth, and human responses in these two environments.

Resilience in the Face of Adversity: An Analysis of the Refugee Entrepreneurial Population and Their Resources in the Mid-Atlantic Region of the United States

Zahin Mahbuba '22

This study presents an overview and analysis of refugee entrepreneurship in the United States' Mid-Atlantic region for refugee entrepreneurship by interviewing three refugee entrepreneurs and two professional individuals who actively work with refugee entrepreneurs. It introduces the refugee population and climate in the United States and examines the connections between forced migration and entrepreneurship in the present literature along with factors that affect access and viability of entrepreneurship due to economic and social barriers, cultural and familial influences, and financial hurdles. Through the interviews and examination of existing literature, three different traits distinguished refugee entrepreneurs in the region, according to the data. These characteristics included a risk tolerance, a family-community orientation, and an openness, willingness, and ability to adapt to changing/new circumstances, illustrating how refugees use entrepreneurship to maximize the pool of opportunities in their host countries and eventually become self-sufficient and a long-term economic asset.

The Influence of Prior Suspect Familiarity on the Cross-Race Effect

Soha Munir '23

This study examines whether the typical cross-race effect (CRE) could be extended to conditions where the suspect is casually familiar. To test this, participants studied a series of faces of white and Black males to create familiarity. Later, participants (N = 1,170) took part in a multiple-block eyewitness paradigm in which they encoded a target face, followed by a distractor task, and then received a lineup where the suspect was Black or white, familiar or unfamiliar, and either guilty or innocent. Our results confirmed the CRE, but only in cases when the suspect was familiar. Furthermore, the relationship was strong in all conditions except for the familiar Black suspect lineup. Follow-up research is underway to examine why the typical unfamiliar CRE was not found and to address other limitations.

The Socially Dead: An Analysis of Museums, Identity, and the African Diaspora

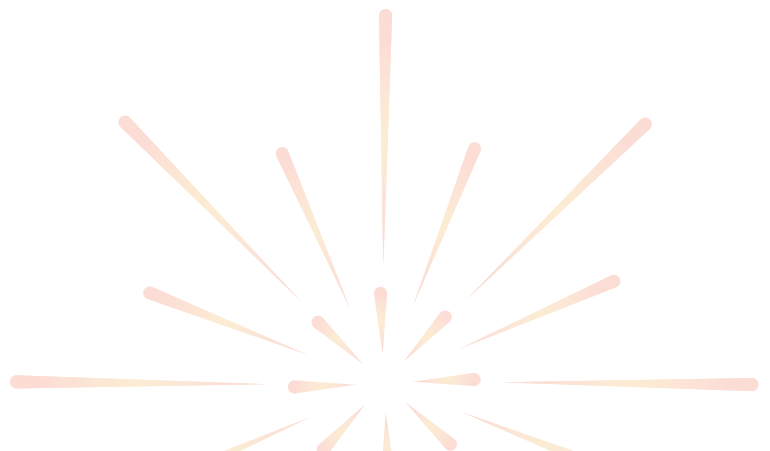
Kendall Sanders '22

This research explores how museums as an institution perpetuate the dehumanization of Black people throughout the African diaspora. I examine the ways exhibits are curated, along with who constructs them, and what narratives are put on display. Repatriation is a controversial topic as the public realizes the importance of original ownership; however, many people are more concerned with the allure of museums and private collections. Taking into account the current political state of Black people, I highlight the repatriation of African people and artifacts through theoretical frameworks such as Afro-pessimism and Critical Race Theory. I use Critical Race Theory to explain the institutionalization of racism in America and its parallels globally and Afro-pessimism to explore the root of the mistreatment of Black people as a whole. I compare types of repatriation (people vs. artifacts and human remains). Further, I analyze museums that chose to tell the story of another culture (The Africa Museum of Tervuren, Belgium) compared to those who collaborated and allowed the culture of focus to control their narrative (Robben Island of the South Africa Museum and The McLeod Plantation in Charleston, South Carolina). My research found that in instances of outside narrative control, the source communities felt, as do I, that their history was trapped in a stagnant past, while collaborative exhibits showed a complex understanding that fueled discussions and a critical understanding of the issues presented.

Communication of Values and Morals Through Andrea della Robbia's "Prudence"

Caylin Wigger '23

Created by Andrea della Robbia in 1475, the circular relief of Prudence, executed in tin-glazed terracotta, exemplifies an intrinsic relationship to religion, morals, and virtues in both medium and subject matter, typical of Renaissance Art. From the development of the della Robbia family workshop, to modern conservation efforts, the della Robbia tin-glazed terracotta method elucidates a timeless and extreme dedication to moral values. The inherent humility of the terracotta, a simple clay dug from the earth, had been recognized even before Andrea created Prudence by close followers of the Christian faith. Not only were the basic elements of Prudence high immoralistic value, but this work was also created as a reminder to follow the virtues set in place by Christian doctrine. In my research, I used formal and iconographic analysis alongside contemporary conservation reports on this work to help us understand the intricate layers and humble meaning literally baked into the terracotta medium, the ethereal and divine sheen of the glaze, and the reverence the figures hold in communicating virtues.



1 - 1:50 P.M.

ES 225 CLEAN ENERGY PROJECT PROPOSALS: MOODY SOLAR WINDOWS AND RIDING CENTER LED LIGHTING

Wetherill Visual Arts Center, Niederer Auditorium

Zoom: <https://us02web.zoom.us/j/86781472158?pwd=OVU5dk1mL2wrRWFpeDNFRWtvdFZldz09>

Moderator: TBD

Moody Solar Windows

Presenters:

Ella Wilds '25

Kaitlyn Pounders '25

Finn Webster '24

Katherine Klinedinst '23

This panel includes reports from students in the environmental studies Energy and the Environment course who examined the physics of human energy use and production and their effect on the environment. Students' final projects propose economically and logistically feasible improvements to Hollins' energy infrastructure that will reduce our carbon footprint.

Riding Center LED Lighting

Presenters:

Francis Turcotte-Hallee '24

E. Cirillo '23

Cheyenne Conaway '23

Kylie Lakin '24

2 - 2:50 P.M.

SENIOR ART MAJORS

Wetherill Visual Arts Center, Niederer Auditorium

Zoom: <https://us02web.zoom.us/j/86781472158?pwd=OVU5dk1mL2wrRWFpeDNFRWtvdFZldz09>

Moderator: TBD

Victoria Cobbs '23

Samantha Jin '22

Abigail Hegwood '22

Ashley King '23

Sylvia Lane '22

Jahmesha McLemore '22

Maddie Zanie '22

This panel is in conjunction with the Senior Art Majors Exhibition that will be on display in the Eleanor D. Wilson Museum in May. Each senior works in a chosen medium of concentration and developed a body of work for their show. The media represented this year are painting, drawing, photography, and ceramics. The seniors worked with faculty in the fall of 2021 to develop their studio practice and visual work, as well as researched artist references and further refined their ideas. The senior exhibition is a significant step for Hollins art majors. It allows seniors to develop regular studio and professional practices. The panel presentation in the VAC Auditorium will also give other art students a chance to see each other's work in person.

- *Victoria Cobbs'* artistic practice in alternative photographic processes and film photography focuses on experimentation and the visual experience.
- *Samantha Jin* explores conflicting human emotions using pattern in her predominantly black and white marker drawings.
- *Abbey Hegwood's* oil paintings focus on the figure and portraiture and are impressionistically inspired explorations of the body at rest.
- *Ashley King's* black and white photographs focus on the blurred and disjointed space between human memory and the present.
- *Sylvia Lane's* work focuses on an exploration of intimacy, and her series combines her love of the figure and form via oil painting.
- *Jahmesha McLemore's* ceramic sculptures investigate human struggle, weariness, stagnancy, and vanity.
- *Maddie Zanie* uses oil painting of the still-life and interior portraits to contemplate ideas of control and surrealism.

FROM DOCTORS TO DEALERS: THE PATH FROM PRESCRIPTION TO DEPENDENCE

Wetherill Visual Arts Center, Room 119

Zoom: <https://hollins.zoom.us/j/81384020159?pwd=OCtZMkI5bU1rbE1hRysrdE9zeFpWUT09>

Moderator: TBD

Kendall Endres '24
Adriana Harrison '24
Carlia Kearney '23
Mackenzie Sessoms '24
Emma Thomas '22
Abby Wood '22

The opioid epidemic began in rural communities like the ones in Southwest Virginia with the introduction of the painkiller OxyContin in 1996. Purdue Pharma persuaded doctors, pharmacists, journalists, politicians, and the general public that OxyContin was safe and reliable, capable of treating all kinds of pain with addiction rates of less than one percent. Their message conveyed that prescribing opioids for pain was the moral, responsible, and compassionate thing to do for the everyday American who was struggling with moderate back pain, wisdom tooth surgery, and even bronchitis. As a result, the Centers for Disease Control and Prevention estimates that in the United States alone, 14,000 people die each year from prescription opioid overdose. How was America overwhelmingly persuaded by this argument? Is there anything to learn from our collective flawed reasoning? And what arguments need to be made to ensure more Americans have access to treatment to end this epidemic? To answer these questions, students in COMM 238 created a podcast series using Beth Macy's [M.A. '93] 2018 book *Dopesick* as a guide. Students will share their findings after exploring the medical, marketing, corporate, legal, and media messages during the late 1990s and early 2000s to persuade America of the safety and necessity for OxyContin.

3 - 3:50 P.M.

CREATION AND DESTRUCTION

Wetherill Visual Arts Center, Niederer Auditorium

Zoom: <https://us02web.zoom.us/j/86781472158?pwd=OVU5dk1mL2wrRWFpeDNFRWtvdFZlZ09>

Moderator: TBD

Will it Cyanotype?: An Exploration of Process Over Product

Alyssa Ennis '24

This project of over 40 pieces is the direct result of embracing the mindset of childlike curiosity paired with an unfamiliar medium during a month-long period of personal reflection. Cyanotype is a photographic process that is over a century old and allows the artist to create an impression of whatever is on the surface of chemically coated paper under ultraviolet rays. This project allowed me to lean into my failures and nurture the questions I had about both the environment around me and the limits of the cyanotype process. What kinds of things are in Tinker Creek? What happens if you mix egg whites into cyanotype chemicals? Will my hands ever not be stained blue? Will it cyanotype? The accessibility of this process mixed with personal burnout in other mediums sparked a creative drive I had yet to experience in my college art career. This process forced me to let go of control and appreciate the messy, sometimes objectively hideous, outcomes of my work. After a month of creating cyanotypes nearly every day, I am left with more questions than answers. However, something I am sure to keep asking is: will it cyanotype?

Stereoselectivity Glycosylation via Dynamic Kinetic Resolution

Tram Nguyen '24

A newly effective method of synthesis of glycosyl compounds is urgently needed because controlling stereoselectivity of newly formed glycosidic bond is challenging. Differences in stereochemistry can alter a compound's biological activity. Several studies on synthesis carbohydrates have been published. However, they either required a tedious purification process or gave relatively low percent yield of total synthesis as only one single anomer can be converted to desired products. Therefore, we want to come up with a different stereoselectivity approach to the glycosylation reaction. The main goal of this project is to develop a new method for obtaining pure anomers of glycosylation products from a mixture of α and β anomers using dynamic kinetic resolution. The method allows one isomer to convert to another with a faster reaction rate resulting in product formation with a theoretical yield of 100%. The research will provide a practical solution to overcome the long-standing problem of controlling carbohydrate stereoselectivity.

Hyperbolic Geometry and Exploration of Mathematical Topology Through Crochet

Isabella Palmisano '22

The goal of exploring mathematical forms through crochet is to produce and explain mathematical objects and concepts to a general audience by allowing them to interact with a variety of crocheted items. Crochet was chosen as the method for representing the objects due to the sturdiness of crocheted surfaces and the ability to manipulate the crocheted objects in a way computer graphics cannot be manipulated. By crocheting different variations of a hyperbolic plane, with varying stitch ratios, one can observe how a hyperbolic plane is affected by exponential growth rate. One can observe that the fewer stitches a hyperbolic crochet pattern has between stitch increases, the more pronounced a hyperbolic plane's "curls." By having two crocheted mobius bands that are mirror-imaged, one can also illustrate the concept of how a Klein bottle is formed. Where one might have difficulty imagining a surface that has no distinction between inside and outside, by providing a craft-based visual representation, one can highlight the mathematical properties that go into composing the object.

"Safe as Life": Memory, Trauma, and the Desperate Quest for Security in *The Raven Cycle*

Natalia Sarram '22

This thesis discusses Maggie Stiefvater's 2012-2016 YA series *The Raven Cycle* and its dependence on Freud's theory of repetition compulsion in the way that it handles trauma, memory, and cycles of destruction. As I will examine throughout this presentation, cyclical natures of time and repetition can demonstrate inescapable harm, rather than a paradise, in children's fiction. These books function as an example of the difficulties and inescapable nature of trauma that persists. Assessing each of the main characters' relationships with repetition and trauma, I seek to do a literary analysis and use Freud's concept to examine themes of memory, adolescence, temporality, and recovery. This series cloaks itself as a traditional quest narrative, but then quickly flips itself into a "rebel" narrative and subverts our expectations. In doing so, it creates a darker, more uncertain space about the topic of recovery in YA. Ultimately, this work aims to analyze the specificities within *The Raven Cycle* and its characters, as well as speak to where the series fits within the children's literature canon and if and how it moves the genre of YA literature forward.

3 - 3:50 P.M.

IN COMMUNITY

Wetherill Visual Arts Center, Room 119

Zoom: <https://hollins.zoom.us/j/81384020159?pwd=OCtZMkI5bU1rbE1hRysrdE9zeFpWUT09>

Moderator: TBD

Chasing Beauty

Belinda Isaro '23

Through the form of poetic documentary, I explored the complexities and nuances of being a woman of color. Poetic documentary creates a particular mood and feeling and lacks a linear narrative resulting in character growth or resolution to a problem. This best reflects the “working title” theme of the project, as the documentary reflects an ongoing exploration of these ideas. Therefore, it is always a work in progress. Through music and poetry, I explore how race and gender intersect with other identities pertaining to sexual orientation, colorism, and ability. These intersecting identities create a harmonious and disharmonious lived experience for an individual. The project draws heavily upon my own personal experiences, as well as current research on intersectionality.

Renegotiating Liminal Spaces: Catholic Nuns as Spiritual and Feminist Activists

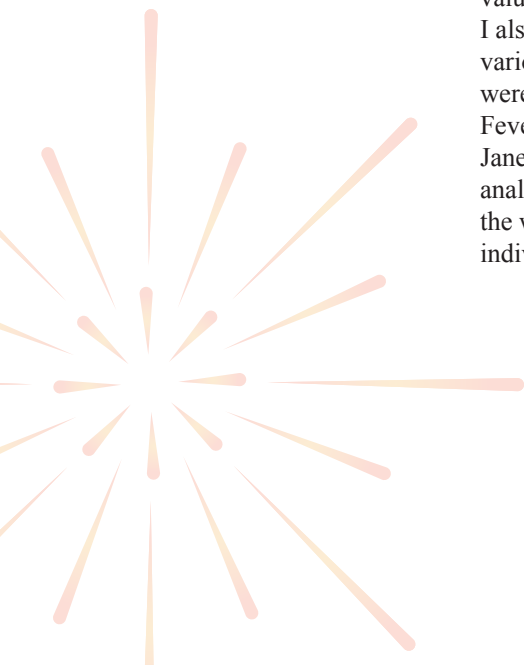
Emily Lauletta '22

Over the past few years at Hollins, I have performed specific case studies of Catholic nuns and their roles as social justice activists within the Catholic Church. In this project, I work to critically analyze the work of two sister-led social justice organizations: Network and Talitha Kum. Throughout my paper, I discuss how their actions do or do not align or share commonalities with a spiritual activist framework. This particular framework is informed by the work of Gloria Anzaldúa, Womanism, and Indigenous feminism(s).

Time Series Analysis to Predict COVID-19 Cases in the United States

Prakriti Pandey '23

Predictive modeling can help us quantitatively better understand diseases like COVID-19, aid in decision making, and take preventive measures sooner than we otherwise would. In this research, I predict the evolution of COVID-19 in the United States. Using a response variable of the first developed stage of COVID-19, I apply statistical and mathematical models, including time-series analysis, ARIMA modeling, and best-fit modeling, to predict the number of COVID-19 cases at the later stages. The predictions and results show that the predictions remain constant after a few values. The performance of the learning models is examined and values such as the mean absolute error are used to determine the effectiveness of the model. I also discuss several time-series analyses previously performed by other statisticians for various countries using models such as ARIMA and kth moving average. Similar predictions were done annually by the quadratic time-trend model for a different epidemic called Lassa Fever in Liberia in the 2000s. Non-time series regression for COVID-19 in Sao Paulo, Rio de Janeiro, and Manaus was also performed by several researchers using statistical and cluster analysis to find the best explanatory variables for predictive models. In addition, I consider the work by Fokas et al., 2020, which predicts the time evolution of the cumulative number of individuals reported to be COVID-19 infected in a given country.



4 - 4:50 P.M.

TRANSFORMING AND TRANSGRESSING **Wetherill Visual Arts Center, Niederer Auditorium**

Zoom: <https://us02web.zoom.us/j/86781472158?pwd=OVU5dk1mL2wrRWFpeDNFRWtvdFZldz09>

Moderator: TBD

Un-Natural: Gender-Transgressive Subjects in Medieval Literature

Jude Pratt '23

Until recently, the field of medieval studies has not included trans people's voices in examinations of medieval subjects that violate gender norms. As part of a growing movement to recognize trans potentials in the study of the Middle Ages, this project examines a broad range of texts to develop a trans lens for the analysis of medieval literature. This presentation will focus on one facet of the trans lens: nature and the unnatural. Nature often appears in medieval literature as a character who complains about violations texts such as the Romance of Silence and the Complaint of Nature undermine Nature's arguments, subverting assumptions about the fixedness of gender roles.

Toward an Embodied Queer Dramaturgy

Deirdre Price '22

As an undergraduate developing my own theatre-making practice, I view all artmaking in the educational space I occupy as research; messy, squishy, unbalanced, practice-as-research, or PaR. In their article "Queer Practice as Research," Alyson Campbell and Stephen Farrier state that "queer PaR is a lived experience that exceeds binary thinking, upsets unitary subjects, and presents identities expressed in non-normative sexualities. Researchers take these identity positions to the heart of their research fields, studios, and stages – and in doing so bring a fluid knowing, or a messy existence, to the kinds of knowledge those research projects produce" (3). The queering of research practice as described here by Campbell and Farrier is fundamental to my approach to theatre-making, particularly because of how queer theatre and performance art processes occupy that fundamental intersection of "lived experience" and "fluid knowing." This research project chronicles my approach to developing my own methodology of theatre-making and the development of my play *The Jupiter Bird*, resulting in what I refer to as embodied queer dramaturgy, or EQD. This methodology is not my own invention, but rather my own vocabulary for a phenomenon occurring all across the landscape of queer research-practition. EQD seeks to acknowledge the multitudinous nature of dramaturgy and revel in the space in-between blurred lines. This project outlines the approach to such work through a case-study model and offers alternate and queered methods of new play development.

Who Are You Protecting? A Feminist Analysis of Gay and Trans Panic Defense Bans, How They Are Defined, and Who They Serve

Tyler Sesker '22

As of April 2022, sixteen U.S. states ban gay panic and trans panic criminal defenses. These state-law prohibitions stemmed from several high-profile murder trials, focusing on the identity of the decedent, including the killings of Matthew Shepard and Latisha King. Between 1970 and 2020 criminal defenses interrogating the gender identity or sexual identity of victims of violence were used at least 104 times, with nearly a third of those cases resulting in reduced criminal charges and penalties (Williams Institute, 2021). Today, in thirty-four states, the same tactics remain legal. Applying a feminist and outsider legal lens, this study engages in a textual analysis of state legislative ban language and trial orders to explore how identity is defined and conflated in existing state bans and their legal consequences, to frame an argument for novel, comprehensive federal legislation. This study critically challenges ubiquitous connotations of sex and gender in codified state bans, which miss subtly implied gay panic or trans panic defenses in practice. Through this examination, the paper isolates and remedies these gaps in legislation. Recommendations include amending existing state bans to more accurately reflect distinctions between sexual identity and gender identity, as well as propose language creating an effective federal ban.

4 - 4:50 P.M.

FINDING MEANINGS IN MEDIA
Wetherill Visual Arts Center, Room 119

Zoom: <https://hollins.zoom.us/j/81384020159?pwd=OCtZMkI5bU1rbE1hRysrdE9zeFpWUT09>

Moderator: TBD

This panel showcases the theses of two communication studies seniors, both focusing on specialized areas of contemporary media. Presenters Chin Wai (Rosie) Wong and Moira Everett share their research and analysis on American pop music and YouTubers' advertisements, respectively. Both seniors are diving into the core of media messages and striving to encourage a more critical understanding of the culture we construct and consume.

Passion, Power, and Pop

Chin Wai (Rosie) Wong '22 Rosie's project is guided by her research question, "What are the cultural narratives represented in Christina Aguilera's music?" Through a combination of extensive literature review and lyrical analysis, Rosie aims to understand deeper meanings in media texts that are often overlooked. She also strives to encourage critical thinking and analytical skills for people to become more critical media consumers and, potentially, creators.

This Thesis is Sponsored by: A Look at Advertising on YouTube

Moira Everett '22 Moira's presentation focuses on the potential connection between YouTube video content and the method of advertising performed by content creators. This relationship was examined through a content analysis of a small sample of YouTube channels that represent three distinct content areas. Her project seeks to contribute to the recognition of commercial and creative trends on social media.

