



SPARC KICKOFF WITH FACULTY AWARD SPEAKERS | 1 - 1:30 P.M.

Register in advance: https://hollins.zoom.us/webinar/register/WN CMrMrfiZR aFJbp-0p8Chw

President Mary Dana Hinton, faculty speakers, Interim VP for Academic Programs Alison Ridley

PANEL SESSION 1 | 1:45 - 2:30 P.M.

ECONOMIC HEALTH, INEQUALITY, AND RESILIENCE

Register in advance: https://hollins.zoom.us/webinar/register/WN Xwn3m2ipTNCB8bZVUrkOuQ

Zoe Brooks '23 "Photographing Appalachia: A Coal-Mining Town"

(Faculty sponsor: Mary Zompetti)

Allison Goguen '24 "Relativity and Inequality: Redefining and Realigning America's Approach

to Poverty"

(Faculty sponsor: Charles Lowney)

Pragya Khanal '21 "Gross Domestic Product Forecasting Using Linear Regression"

(Faculty sponsors: Molly Lynch and Giancarlo Schrementi)

GENDER IDENTITIES AND MOVEMENTS

Register in advance: https://hollins.zoom.us/webinar/register/WN_fAnWIqcpT3yBb2A1j2RNvw

Brooke Biastock '21 "Beth: The Virtuous Artist of Little Women"

(Faculty sponsor: Julie Pfeiffer)

Maya Flores '21 "Women Symbolic and Real: Situating Gender and Ethnicity in the Colonial

Mexican Landscape"

(Faculty sponsor: Rachel Nuñez)

Autumn Green '24 "Popular Misconstructions of Roe v. Wade"

(Faculty sponsor: Jon Bohland)

ENVIRONMENTAL IMPACT

Register in advance: https://hollins.zoom.us/webinar/register/WN EsDnpbEBQE6iH2p1XDO9DQ

Emily Bulifant '22 "Addressing Climate Change at Hollins University"

(Faculty sponsor: Mary Jane Carmichael)

Bronte Hoefer '21 "The Role of Edge Effects in Emerald Ash Borer Infestation and Forest Responses"

(Faculty sponsor: Liz Gleim)

Simran Shrestha '22 "The Relationship Between Household Income and Desert Attitudes in Phoenix"

(Faculty sponsor: Meg du Bray)

PANEL SESSION 2 | 2:35 - 3:10 P.M.

TAKING A STAND AND CHANGING SYSTEMS

Register in advance: https://hollins.zoom.us/webinar/register/WN seg6gRyvRHqnU KWznollQ

Megan Bull '21 "Examining Bias in Facial Recognition Programs"

(Faculty sponsor: Giancarlo Schrementi)

Emily Lauletta '22 "'Radical Feminist Nuns': Spiritual Activism and the Power of (Sister)hood"

(Faculty sponsor: LeeRay Costa)

Kaitlyn Phillips '21 "Mothers, Morals, and Godly Motivations: Women in American Conservatism from

Anticommunism to The New Christian Right"

(Faculty sponsor: Rachel Nuñez)

WORKING THROUGH IT: STRATEGIES FOR PUBLIC SPEAKING

Register in advance: https://hollins.zoom.us/webinar/register/WN JxaD7dCcRSCeg-6bMYfdog

Maggie Gildersleeve '23 (Faculty sponsor: Heather Derrick)

Saro Naomi Gakusi '24 Chin Wai (Rosie) Wong '22

THE INTERSECTION OF ART, LITERATURE, AND TECHNOLOGY

Register in advance: https://hollins.zoom.us/webinar/register/WN kukODx33SVOq4OnKDroZsw

Averi D. Greenstreet '21 "The Arc of a Scythe Series and the Dystopian Genre"

(Faculty sponsor: Rebecca Rosen)

Marie Gruver '24 "Alfred Sisley: The French Industrial Revolution and Its Effect on Impressionist Art"

(Faculty sponsor: Genevieve Hendricks)

Tate Hurley '21 "Tarsila do Amaral: The Queen of Modern Brazilian Art"

(Faculty sponsor: Genevieve Hendricks)

10-MINUTE BREAK

PANEL SESSION 3 | 3:20 - 4:05 P.M

OPPOSING VIEWS AND PARADOXES

Register in advance: https://hollins.zoom.us/webinar/register/WN_lXqGUTyhQQeoG41seuLCKA

Mary-Leigh Biastock '23 "Life's Meaning"

(Faculty sponsor: James Downey)

Clairanne Johnson '21 "Happy as a Wife, Happy with Life?: A Cluster Rhetorical Analysis"

(Faculty sponsor: Chris Richter)

Emma Thomas '22 "Free Will: A Paradox in Paradise"

(Faculty sponsor: Julie Pfeiffer)

PSYCHOLOGICAL AND CHEMICAL PROCESSES

Register in advance: https://hollins.zoom.us/webinar/register/WN POZz8UWdSTOMNFh58Vv6fg

Maria Jdid '21 "Synthesis and Evaluation of the Rhodamine- and Biotin-Probes for Detection of

Cysteine Containing Proteins" (Faculty sponsor: Son Nguyen)

Mary Rash '21 "C-Glycosylation Through Reductive Halide Atom-Transfer Reaction with

Photoirradiation"

(Faculty sponsor: Son Nguyen)

Apoorva Verma '22 "Are Grandiose and Vulnerable Narcissism Associated with Social Media Use?"

(Faculty sponsor: Bonnie Bowers)

SENIOR CLASS STUDIO ART MAJORS

Register in advance: https://hollins.zoom.us/webinar/register/WN kjbeNnO Tpu0xoooWOVdWw

Milo Bowles '21 (Faculty sponsors: Andrea Martens and Mary Zompetti)
Candice Housden '21

Taylor Kate '21 Kate Lydon '21

Shanna L. Wallingford '21

PANEL SESSION 4 | 4:10 - 4:55 P.M.

LEGACIES OF COLONIALIZATION, IMPERIALISM, AND RESISTANCE

Register in advance: https://hollins.zoom.us/webinar/register/WN v7jaLAI8QY-bln9eY0jsIA

Aysia Brenner '21 "And can I then but pray/Others may never feel tyrannic sway?': Patriotism and

National Identity in the Writing of Phillis Wheatley"

(Faculty sponsor: Rachel Nuñez)

Sophia Khan '22 "Shakespeare: Colonial Tool or Method of Expression?"

(Faculty sponsor: Lauren Brooke Ellis)

Savannah Scott '22 "The Practice of Clitoridectomies: Its Influence on the Gikuyu Tribe, Kenyan

National Identity, Cultural Nationalism, and British Powers"

(Faculty sponsor: Rachel Nuñez)

DISCOVERIES IN THE TIME OF COVID-19

Register in advance: https://hollins.zoom.us/webinar/register/WN WoJvBuY3RbiDcI4ACoo00Q

Alyssa Ennis '24 "Does Mask Wearing Affect Our Interpersonal Relationships?"

Jordyn Baker '24 (Faculty sponsor: Vlado Bratic)



POSTER PRESENTATION Q&As

On the Hollins Digital Commons: https://digitalcommons.hollins.edu/sparc/2021/presentations/

Kycel Butters '21 "Differences in Psychological Stigma and Help-Seeking Behavior between Asians

and Pacific Islanders"

(Faculty sponsor: Bonnie Bowers)

Hinza Batool Malik '21 "Psychological Distress, Stigma, and Help-Seeking Propensity Among

College Students"

(Faculty sponsor: Caroline Mann)

Soha Munir '23 "Understanding the Effects of Familiarity on Cross-Race Eyewitness Identification

Accuracy in Lineups"

(Faculty sponsor: Alex Wooten)

4:55 – 5 P.M.: CONFERENCE CLOSING

Register in advance: https://hollins.zoom.us/webinar/register/WN_m7XSMSvMQAOf-sYjQaeE1w

PRESENTATION ABSTRACTS, BY PANEL

PANEL: ECONOMIC HEALTH, INEQUALITY, AND RESILIENCE

Zoe Brooks '23 "Photographing Appalachia: A Coal-Mining Town"

(Faculty sponsor: Mary Zompetti)

"Photographing Appalachia: A Coal-Mining Town" centers around the presenter's hometown of Appalachia, Virginia. Utilizing photography, historical reference images, research, and interviews, the project will focus on the town's dependence on coal as its sole source of income and how this has impacted the culture of the area. Without coal mining, Appalachia would not exist, which is why the decline of the industry has so visibly taken a toll. The town itself is small with only around 1,400 residents, but its people are proud members of Appalachia as a region and identify as Appalachian culturally. Appalachia as a region is largely stereotyped and misrepresented—when represented at all. Movies and television depict the region and its people as backward and remote; the rest of the United States uses images from the 1960's "war on poverty" to depict an entire group of people. This project will serve to provide information on Appalachia from an insider's perspective. Will Appalachia be able to move on from coal—a source long past its prime? Or is it destined to be forever a shell of its former self?

Allison Goguen '23 "Relativity and Inequality: Redefining and Realigning America's Approach to Poverty"

(Faculty sponsor: Charles Lowney)

Considering the standard of living in America, it may seem as though poverty is a war we have been winning, but this view is misguided. This presentation discusses America's growing poverty problem and the steps needed to remedy it. Drawing on economic, sociological, and political research, this presentation examines the poverty particular to the United States, showing how income inequality is a major cause of modern poverty, together with the loss of mobility between income brackets. Rather than the standard absolute poverty measure currently employed, this presentation suggests a hybrid relative poverty measure that compares the economic distance between one person or family unit to the median income in America, relying on

a utilitarian approach of maximizing happiness to answer the question of why we should help. This philosophical approach also leads to the proposed solution: Universal Basic Income (UBI) distributed to each citizen. This will be funded through a wealth tax that will only marginally affect the wealthy, but will radically benefit the poor. This new approach to America's poverty will alleviate both absolute and relative poverty and generate greater happiness overall.

Pragya Khanal '21

"Gross Domestic Product Forecasting Using Linear Regression"

(Faculty sponsors: Molly Lynch and Giancarlo Schrementi)

Gross Domestic Product (GDP) is seen as the most conventional and comprehensive way of measuring the economic growth of a country. Using 20 different indicators, this presentation showcases a data-driven forecasting model of nominal GDP of the United States. The indicators (lagging, leading, and coincident) were chosen in relation to business, trade, market, health, labor, government, and pricing. Using the concept of machine learning, this project creates a testing and training set to create a linear regression model, which illustrates how accurate the model is in predicting the nominal GDP of the country for the next decade.

PANEL: GENDER IDENTITIES AND MOVEMENTS

Brooke Biastock '21

"Beth: The Virtuous Artist of Little Women"

(Faculty sponsor: Julie Pfeiffer)

This project discusses Beth's role within Louisa May Alcott's novel, *Little Women*, as an artist who is praised rather than punished for her artistic impulses, unlike her sisters. Beth is seldom discussed in scholarly work at large, but her story and character are critical in understanding Alcott's larger themes of girlhood and womanhood ambition in *Little Women*. The presentation will discuss the effect of Beth's girlhood ambition of the larger themes of female childhood and adult ambition in *Little Women*, building off a presentation at the English Senior Colloquium in Fall 2020 and incorporating new ideas and analysis.

Maya Flores '21

"Women Symbolic and Real: Situating Gender and Ethnicity in the Colonial Mexican Landscape"

(Faculty sponsor: Rachel Nuñez)

Social categorization influenced the outcome of each person's life path during colonial times in Mexico. The combinations of birthplace, birth order, family history, gender, race, and ethnicity all intersected to influence every individual's identity. Options for women were limited to marriage or the convent. The different hierarchies in colonial Mexico collided together and created a complicated web for women to navigate. However, some women were able to use the hierarchy of the Catholic Church as a means to change their own position to a more favorable one. The presenter argues that the symbolic alterations that the Catholic Church had to make in order to incorporate the multiplicity of identities that were shaping the colonial landscape opened up means in which women were able to circumvent some of the limitations of their own identities. This assertion will be explored through the writings of early feminist nun, writer, and scholar Sor Juana Inez de la Cruz. Looking at this example, the present will explore some of the ways in which powerful communities of women were able to shape their own circumstances despite oppressive patriarchal traditions.

Autumn Green '24

"Popular Misconstructions of Roe v. Wade"

(Faculty sponsor: Jon Bohland)

This project explores the societal impact of the Supreme Court decision Roe v. Wade, which is no longer considered good law as compared to the case Planned Parenthood of Pennsylvania v. Casey. Roe created a trimester-based system, where Casey implemented an undue burden standard, meaning that a government agency cannot place substantial obstacles to obstruct pre-viability abortion access. The Casey ruling built upon Roe, creating more substantial abortion protections. This project first seeks to prove that *Roe v. Wade* dominates conversations regarding abortion access. To achieve this, data from Twitter was collected by counting tweets with the phrase Roe v. Wade, excluding replies, links, and tweets from large news outlets, legal scholars, and political campaigns. These restrictions provide a clearer view of original, non-scholarly discourse. The process was repeated using the phrase Planned Parenthood v. Casey to compare frequencies. Secondly, this project seeks to demonstrate public misunderstanding of *Roe*'s legal standing. This is achieved by repeating the process with the phrase "Overturn Roe v. Wade." Large scale misinterpretations of abortion rights law are important because accurate understanding of law better informs abortion rights advocates where they should focus their energy and attention.

PANEL: ENVIRONMENTAL IMPACT

Emily Bulifant '22

"Addressing Climate Change at Hollins University"

(Faculty sponsor: Mary Jane Carmichael)

Since the 2009-10 fiscal year, Hollins University has made headway toward a goal of carbon neutrality, but in a series of events involving the loss of several sustainability officers and energy managers, Hollins is no longer making the proper steps to annually update and move toward this objective. The purpose of this project is to act as a call to action for Hollins to continue working toward carbon neutrality, to increase the transparency and availability of applicable information regarding sustainability initiatives, and to update the campus' official carbon footprint. To do this, the future outlook of climate change in Virginia's Blue Ridge region will be discussed along with Hollins' current and past energy usage and costs. The presenter will propose more feasible solutions to reduce the campus footprint, focusing on those already accomplished by other sustainable college environments, such as taking advantage of rooftop space or installing solar photovoltaic technology. Finally, a costbenefit analysis will be conducted for each solution. As climate change becomes an increasingly dire situation, it is only harming us to not make sustainability a priority.

Bronte Hoefer '21

"The Role of Edge Effects in Emerald Ash Borer Infestation and Forest Responses"

(Faculty sponsor: Liz Gleim)

The emerald ash borer (EAB; *Agrilus planipennis*) is a buprestid beetle native to Asia that is now an invasive species in North America. EAB infests trees of the genus Fraxinus (ash), and has spread to 35 states since its introduction in the early-to-mid-1990s. EAB has the potential to functionally extirpate all native ash species within North America. The presenter's study aims to characterize the ecological impacts of EAB infestation in Southwest Virginia, quantify the impact of edge effects on forest invasion and subsequent mortality of ash trees, as well as define the role that forest edge effects play in forest regeneration post-ash tree mortality. In 2017, a total of 33 forest transects across 12 study sites located in the Roanoke Valley were established. Data was collected annually on woody species composition, growth, canopy position, and understory woody plant composition. Signs of EAB infestation and ash mortality

were tracked at ash sites across all study years. Although analyses are ongoing, initial findings indicate significant increases in dieback scores of large (>12cm DBH) and small (<12cm DBH) trees across all years, indicating progressive mortality of ash trees. Trees in the core had significantly higher average dieback scores than trees in the edge in 2019, and large trees died more rapidly than small trees, particularly in 2019 and 2020. Finally, the mean number of seedlings at ash sites at the edge and core significantly decreased from 2017 to 2020 as ash mortality progressed. Additional analyses are underway to determine whether this might indicate a depletion of ash seeds in the seed bank and the potential for ash to persist in forests across North America.

Simran Shrestha '22

"The Relationship Between Household Income and Desert Attitudes in Phoenix" (Faculty sponsor: Meg du Bray)

This presentation attempts to unravel the relationship between total household income level and desert attitudes. The data is based on the survey results of the 2017 Phoenix Area Social Survey which was taken by 65 respondents for each of 12 neighborhoods located near a variety of Central Arizona-Phoenix's ecological monitoring sites. Spearman correlation statistics were used to investigate the relationship between the household income and the attitude toward the desert. People from lower household income groups had more negative attitudes toward the desert. Implications of this study include how the city can potentially develop programs that improve the experiences of groups of people of certain household income ranges experiencing the desert negatively.

PANEL: TAKING A STAND AND CHANGING SYSTEMS

Megan Bull '21

"Examining Bias in Facial Recognition Programs"

(Faculty sponsor: Giancarlo Schrementi)

Facial recognition has been a breakthrough in the development of neural networks and artificial intelligence. However, when used in a real-world setting, rather than just a testing dataset, specific programs will misidentify women and people of color far more often than white men. As facial recognition becomes more widely deployed, these mistakes can have serious consequences. When police departments use biased technology to find suspects, it can lead to wrongful arrests and even convictions, as in the case of Robert Julian-Borchak Williams. The presenter plans to create a facial recognition program in which the algorithm is trained on a dataset that proportionally represents both men and women and people of color. To do this, the presenter will use Google Colab and TensorFlow to create neural networks to train on a proportionally representative dataset, aiming to create a more accurate program than one trained on a dataset that is disproportionately white men.

Emily Lauletta '22

"'Radical Feminist Nuns': Spiritual Activism and the Power of (Sister)hood" (Faculty sponsor: LeeRay Costa)

This presentation discusses two major concepts related to spiritual activism: first, how Catholic nuns throughout history have served as spiritual activists and advocates of social justice based on the critical theoretical framework created by key feminist scholars such as Gloria Anzaldua and Leela Fernandes; and second, how Catholic sisters who participate in acts of social justice have recently been labeled as "radically feminist" by the Vatican. This research not only examines whether or not this is an appropriate label for these women, but also examines the dichotomy between performing feminist activism within a religious social institution, and how this division may or may not affect the way the sisters feel about their identities as both Catholic, and as advocates for social reform, equity, and justice. Rooted

in scholarship on spirituality, feminism, and its intersections, the project includes an additional interview conducted with Sister Emily TeKolste from the nonprofit organization NETWORK. NETWORK focuses on spreading awareness of social justice issues that the sisters believe accompany Catholic liturgy, centering activism within the Catholic institution.

Kaitlyn Phillips '21

"Mothers, Morals, and Godly Motivations: Women in American Conservatism from Anticommunism to The New Christian Right"

(Faculty sponsor: Rachel Nuñez)

This presentation focuses on conservative women's activism from the 1960s to the early 1980s, centering on women who were part of the larger focal shift on social issues that occurred in the American conservative movement in the middle of the 20th century. This project came out of a curiosity to better understand what conservative women gained from their involvement in social activism. This research utilizes books, newspaper articles, pamphlets, and journal articles to analyze and draw conclusions. A variety of groups and individuals are examined, including the anticommunist activism of the Minute Women, Phyllis Schlafly's anti-ERA, profamily, pro-life fight, and evangelical Beverly LaHaye, who used religion as her justification for active political involvement. Conservative women's activism proves that women can seek power and influence, even if the movement they supported limited women's autonomy.

PANEL: WORKING THROUGH IT: STRATEGIES FOR PUBLIC SPEAKING

(Faculty sponsor: Heather Derrick)

Maggie Gildersleeve '23 Saro Naomi Gakus '24 Chin Wai (Rosie) Wong '22 Three students who recently completed a public speaking course at Hollins University will be showcasing tips for developing student success skills during the pandemic, as well as discussing best practices for communicating to a virtual audience. Regardless of one's career path, creating a well-crafted presentation and then being able to publicly and effectively present in a way that engages with the audience is an important skill to develop. Unfortunately, very few classes give students the opportunity to craft and design creative presentations for an audience, much less a virtual audience. Every day audience members are consuming countless presentations, and speakers need to learn how to cut through the noise and form a direct connection between the audience and the message. Through modeling and discussing, members of the panel plan on sharing strategies for effective engagement in the Zoom environment, how to creatively relate scholarly research to an audience, and how to overcome the anxiety of public speaking for effective delivery.

PANEL: THE INTERSECTION OF ART. LITERATURE. AND TECHNOLOGY

Averi D. Greenstreet '21

"The Arc of a Scythe Series and the Dystopian Genre"

(Faculty sponsor: Rebecca Rosen)

Beginning with explaining the dystopian curve, this presentation will detail how the *Arc of a Scythe* (2016-2019) series changes and supports dystopian fiction, as well as the many unique writing facets of Neil Shusterman's style, such as the artful use of "temporary protagonist" and the embodiment of "protagonism." Many dystopian stories and series begin at a specific societal point, but *Arc of a Scythe* captures the events and people leading up to suspension in a dystopian state, where series like *The Hunger Games* (2008-2010) and *Divergent* (2011-2013) begin. This series also features a form of artificial intelligence unlike any other represented in the genre, a sentient cloud known as the Thunderhead, which manifests as a character rather than a piece of technology. Finally, the presenter will discuss the possible future and longevity of *Arc of a Scythe* on these qualifications.

Marie Gruver '24

"Alfred Sisley: The French Industrial Revolution and its Effect on Impressionist Art"

(Faculty sponsor: Genevieve Hendricks)

Throughout the 19th century, all aspects of life were experiencing an unprecedented revolution. Technology and innovation were rapidly changing, impacting the very fabric that tied together the art world. This phenomenon has since been labeled the Industrial Revolution, a time where the very way people expressed themselves, connected with one another, and even lived their own lives was quickly evolving. It is therefore no coincidence that the revolutionary French Impressionist Movement was centered right in the middle of it. Alfred Sisley was one of the most prominent out of these impressionists, based on his rendition of the French countryside. This time period of technological, societal, and environmental change is clearly evident in Sisley's works throughout his career. This project details Sisley's artistic evolution in line with the movement through six of his most notable works that span the length of time of 40 years and will explore the influence that the French Industrial Revolution had on impressionism, but more closely, on the life and career of Alfred Sisley.

Tate Hurley '21

"Tarsila do Amaral: The Queen of Modern Brazilian Art"

(Faculty sponsor: Genevieve Hendricks)

In early 20th-century Latin America, the work of Brazilian artist Tarsila do Amaral was essential to the development of the modern art scene. She and her fellow Brazilian artists created a type of edgy and provocative work that was able to take off in Latino culture. The climate of Brazil at the time of Tarsila's creative upbringing was extremely conservative and restrictive of cultural representation. Therefore, she studied abroad, where she learned the techniques needed to escape this view of caution and promote radical change not only in the fine art realm, but in the political one, as well. This urban mindset allowed for subcultures and traditions of Brazilian society to be showcased to a larger audience. The evolution of the art movements Pau-Brasil and Antrpofagia she established with the help of the infamous "Grupo dos Cinco" pushed the boundaries of past art techniques through the use of avantgarde practices. Because of this unique movement, Brazilian culture was showcased in the truest form, as Amerindian and Afro-Brazilian values were finally normalized and incorporated into society. Over time, her efforts ultimately led to the complete transformation of the Latin artscape and provided minority communities with a venue to express their traditions.

PANEL: OPPOSING VIEWS AND PARADOXES

Mary-Leigh Biastock '23 "Life's Meaning"

(Faculty sponsor: James Downey)

This presentation analyzes the logical argument in Nagel's philosophical theory that life has no meaning. The presenter will question his arguments and provide a counter assertion addressing the logical fallacies that result in a false conclusion. Nagel's position removes the possibility that purpose originates from within or outside of life. Accepting his position, hope could be lost and meaning would have to derive from elsewhere. The presenter will provide views as to why Nagel's certain inferences are not valid.

Clairanne Johnson '21

"Happy as a Wife, Happy with Life?: A Cluster Rhetorical Analysis" (Faculty sponsor: Chris Richter)

What is the #TradWife movement? A #TradWife is a woman who embraces the fundamentals of being a traditional housewife in the modern world. Alena Kate Pettitt is a British lifestyle blogger and author who created "The Darling Academy" blog to celebrate "the role of the housewife, traditional family dynamics, and great homemaking." Conducting a cluster analysis of 14 of her blog posts, the presenter aims to answer how Alena Kate Pettitt showcases her understanding of being a #TradWife via her blog "The Darling Academy." Pettit's following consists of thousands of women from around the world, indicating that her teachings are making an impact. The cultural impact of the #TradWife movement as a whole, combined with this unique following, makes "The Darling Academy" worthy of analysis.

Emma Thomas '22

"Free Will: A Paradox in Paradise"

(Faculty sponsor: Julie Pfeiffer)

"I made him just and right, / Sufficient to have stood though free to fall (III.98-99)." These two lines from *Paradise Lost* by John Milton are God's justification for why humanity lives in the world it does today, instead of the paradise of Eden. But there is a wrinkle in this justification. In the same book of the same poem, the author asserts that hypocrisy is visible to God alone and Uriel, "the sharpest sighted spirit" falls for Satan's deception. So, how can God's creations be at once "sufficient to stand" through their free will and unable to stand against hypocrisy, Satan's chosen weapon? This presentation will explore what the poem accomplishes by holding these two paradoxical views to be true at the same time. Through careful analysis of the text itself and secondary sources on the subject of free will, the present will examine these competing views of God's creatures as both "sufficient" and insufficient and find what the poem accomplishes by presenting both views.

PANEL: PSYCHOLOGICAL AND CHEMICAL PROCESSES

Maria Jdid '21

"Synthesis and Evaluation of the Rhodamine- and Biotin-Probes for Detection of Cysteine Containing Proteins"

(Faculty sponsor: Son Nguyen)

Along with glutathione, the biological thiol cysteine (Cys) plays important roles in many biological processes such as cellular detoxification and metabolism in living organisms. Changes in intracellular Cys concentration have profound effects on these biological processes. Given the critical importance of Cys homeostasis in biological systems, a strong interest has emerged in developing effective probes to detect and image Cys-rich proteins. This presentation focuses on the synthesis and evaluation of probes which are used to labeled Cys-rich proteins in biological systems, especially in redox systems, and in some diseases. Future examination will aim to understand the functions and activities of these proteins in some specific diseases.

Mary Rash '21

"C-Glycosylation Through Reductive Halide Atom-Transfer Reaction with Photoirradiation

(Faculty sponsor: Son Nguyen)

The central theme of this presentation focuses on developing a new C-glycosylation method via reductive halide atom transfer with photoirradiation with high stereoselectivity and yield and understanding the mechanism of the method. Unlike previous radical glycosylation methods, this one does not use a chemical radical initiator but is carried out under irradiation using a low-pressure Hg lamp. The scope of reaction with a number of different donor/acceptor pairs will be studied.

Mechanistic study of these methods will provide valuable insight into the factors that help to improve the efficiency of the reaction as well as stereoselectivity. This method will be applied in the total synthesis of some valuable natural products containing C-glycosidic bonds.

Apoorva Verma '22

"Are Grandiose and Vulnerable Narcissism Associated with Social Media Use?" (Faculty sponsor: Bonnie Bowers)

Narcissism has been linked with various maladaptive behaviors, especially on social media. However, previous literature has relied on measures of grandiose narcissism. To close the gap, the present study examines the relationship between grandiose and vulnerable narcissists and their online-self presentation on Instagram. Keeping in mind its complexity, the construct of grandiose narcissism was further divided into its adaptive and maladaptive sub-parts. Online self-presentation on Instagram was assessed through individuals' overall self-presentation behaviors, their deliberation over the photos they post on Instagram, the authenticity of their self-presentation, and the depth of their self-presentation. A Qualtrics survey was conducted on 63 participants recruited from Hollins University. Spearman rho correlations revealed that grandiose narcissism was positively associated with the depth of online presentations and deliberate photo selection, whereas vulnerable narcissism was positively associated with overall self-presentation. Moreover, the rivalry subset of grandiose narcissism, but not overall grandiose narcissism or the admiration subset of narcissism, was negatively associated with the authenticity of self-presentation. Therefore, both grandiose and vulnerable narcissists tend to engage in self-promotional behaviors on Instagram. This study also sheds light on the relevance of specific social media platforms as moderators of narcissism-social media relationships.

PANEL: SENIOR CLASS '21 STUDIO ART MAJORS

Faculty sponsors: Andrea Martens and Mary Zompetti)

This panel will be 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, printmaking, drawing, and ceramics. The seniors worked with faculty in Fall 2020 to develop their studio practice and visual work, as well as research artist references and further refine their ideas.

Milo Bowles '21

The artist's work in drawing and printmaking relies on light and shadow and how they intersect in interesting ways, exploring spiritual undertones. The exhibition will include six to 12 lithographs, each 11" by 15" in scale.

Candice Housden '21

The artist's project includes five to eight monotype prints, each print size 11" x 15," unframed. Within the prints, witness a conversation about vulnerability and taking up space through self-portraits. To do so, she creates context through directional and somewhat linear shapes that appear within the faces of her self-portraits.

Taylor Kate '21

The artist utilizes dramatic perspective and multiple planes to depict a layered void space out of charcoal and acrylic gouache. The mediums combined allow them to work vigorously with the focus on emotive color as they interpret their mindscape into linear space. This body of work belongs to the intersections of memories, dreams, and desires. They work to better understand that their perception of the past and of the future exist only in the present moment and to know intimately that it is so.

Kate Lydon '21

Farm animals are not what immediately come to mind when one thinks of threatened or critically endangered species. Through this series, the artist hopes to raise awareness of the conservation status of a few of the many livestock breeds that have been pushed to the brink of extinction by the artificial selection of industrial agriculture. The five to seven pieces are trace monotypes printed in blue and red, reminiscent of the red reveal hidden message puzzles enjoyed as a kid; with the idea that these pieces do stand alone, but also have a deeper meaning should one have the proper lens with which to view them.

Shanna L. Wallingford '21

The artist explores oil-painted self-portraits as self-reflections. The circular frame of her pieces is not just a material to paint on, but it acts as a node in a web of other nodes that is her conscious mind. The first step of the process is stretching the canvas through an embroidery hoop. The frame offers a sense of homeliness and tension.

PANEL: LEGACIES OF COLONIALIZATION, IMPERIALISM, AND RESISTANCE

Aysia Brenner '21

"And can I then but pray/Others may never feel tyrannic sway?": Patriotism and National Identity in the Writing of Phillis Wheatley" (Faculty sponsor: Rachel Nuñez)

This project analyzes the poetry and letters of Phillis Wheatley to understand how she claimed an American national identity and advocated for American independence when society around her was fundamentally built on white supremacy and the enslavement of Black individuals. By harnessing the patriotic rhetoric of freedom and metaphorical slavery touted by white Americans and paying particular attention to the emotional and religious facets of this rhetoric, Wheatley not only incorporated African Americans into the body of the emerging American nation but also made powerful arguments for the abolition of slavery. In writing and publishing her poetry, Wheatley served as a powerful counterargument to the idea that patriotism was the sole provenance of white men, reclaimed the humanity denied to her and other African-Americans, and forcibly brought the contradictions and tyranny of slavery to the attention of a white public who would have preferred to keep them buried under their own purely rhetorical use of slavery.

Sophia Khan '22

"Shakespeare: Colonial Tool or Method of Expression?"

(Faculty sponsor: Lauren Brooke Ellis)

Does Shakespeare in South Asian societies exist as a colonial tool or a method of expression? This presentation will discuss bringing in Western literature as a means to entertain British expatriates and colonize the minds of South Asians in effort to westernize them. There is emphasis on how exactly this was achieved by the British using different methods including making English the official language of instruction in India, forcefully inserting Shakespearean texts into curriculums, and associating the study of Shakespeare with upward social mobility. The adaptability and malleability of Shakespeare's works also led to the creation of plays that fused more traditional South Asian narratives with Shakespearean concepts to appeal more to the Indian audiences. Through research obtained from several academic papers and the findings of South Asian Shakespeare scholars, the relatability of Shakespeare's work is addressed and how Shakespeare can be viewed as a reclaimed medium to further South Asian issues and concerns.

Savannah Scott '22

"The Practice of Clitoridectomies: Its Influence on the Gikuyu Tribe, Kenyan National Identity, Cultural Nationalism, and British Powers"

(Faculty sponsor: Rachel Nuñez)

Within the Western world, the practice of clitoridectomies is infamous for its associations with infertility, hemorrhaging, and irreversible complications that affect the fertility and life of mothers and young women. In contrast, select tribes in the Eastern hemisphere uphold the practice with historical and cultural significance promoting its continuation in modern day; amongst these select tribes is the Gikuyu tribe in Kenya, Africa. The Gikuyu tribe, commonly known as the Kikuyu, has a long cultural history with clitoridectomies as the practice originated in ancestral tribal groups and is performed annually in a rite of passage ceremony called *irua*. Jomo Kenyatta, a Kenyan nationalist leader who fought for independence and sovereignty from European powers, was raised in the Gikuyu tribe and supported the practice of clitoridectomies. Through the eyes of the Indigenous people, the presenter examines Gikuyu tribal history and culture, the influence of nationalist leader Jomo Kenyatta, and the adverse effects of European colonialism and imperialism to discover why the continuation of clitoridectomies occurred and why the practice was deemed essential to the preservation of Kenyan national identity, tribal history, and culture.

PANEL: DISCOVERIES IN THE TIME OF COVID-19

Alyssa Ennis '24 Jordyn Baker '24

"Does Mask Wearing Affect Our Interpersonal Relationships?"

(Faculty sponsor: Vlado Bratic)

With widespread mask wearing mandated in many places, the ability to accurately identify what emotions are being portrayed has become more difficult. Nonverbal communication is a leading factor in building reliable connections in an academic setting. Widespread mask wearing hinders meaningful academic connections by impacting one's ability to read and interpret facial expressions. During the Fall 2020 semester, the presenters surveyed professors and students at Hollins University on how mask mandates have affected their communication with others. Respondents were a combination of first-year and upper-class students living on campus and taking at least two in-person classes, and professors teaching at least two in-person classes. The presenters conclude that most people think mask wearing is affecting their social experiences in some way, and many felt their perception of others has changed since widespread mask wearing. The social impact of masks will be seen even when mask wearing decreases post-pandemic, as people are becoming conditioned to rely on nonverbal cues and verbal communication to connect.

POSTER PRESENTATIONS

Kycel Butters '21

"Differences in Psychological Stigma and Help-Seeking Behavior between Asians and Pacific Islanders"

(Faculty sponsor: Bonnie Bowers)

Mental health stigma is prevalent among U.S. minority groups who have higher stigma toward mental illnesses and exhibit lower help-seeking behaviors compared to the majority (Narendorf, et. al, 2018). Many such studies combine Asians and Pacific Islanders into one demographic group despite their cultural differences. Consequently, less is known about mental health stigma in Pacific Islanders compared to that of Asians. This project treats Asians and Pacific Islanders as separate population groups in order to compare them on: 1) their attributions and attitudes toward mental health disorders, and 2) the barriers they face seeking help for mental health issues. An online survey was distributed to colleges in Saipan

and Guam (Pacific Islands and U.S. territories), which included a vignette and two inventories to measure mental health stigma, attributions of mental illness causation, preferred social distance from a person with a mental disorder, and barriers toward help-seeking in the two groups. These data will help further the limited research on Pacific Islanders and mental health stigma and could help mental health organizations provide more targeted help toward each group rather than one service for two different populations.

Hinza Batool Malik '21

"Psychological Distress, Stigma, and Help-Seeking Propensity Among College Students"

(Faculty sponsor: Caroline Mann)

National epidemiological research shows that roughly half of the college population have a psychiatric disorder, but less than 25% of the students sought treatment in the past year (Blanco et al., 2008). According to the 1999 Surgeon General's Report and numerous subsequent studies, mental health stigma remains the number one barrier to seeking mental health treatment. Reducing barriers to help-seeking among college students is essential because approximately 75% of lifetime mental health disorders have their onset before the age of 24 (Kessler et al., 2005). Therefore, this project explores help-seeking propensity, psychological distress, and mental health stigma among undergraduate students at Hollins University. A total of 111 participants completed the online survey. The Kessler psychological distress scale's mean score was in the range indicative of "likely" to have a mild disorder. This elevation may be related to collecting data during the COVID-19 pandemic. Results showed that personal stigma and perceived peer stigma were significantly associated with helpseeking, whereas perceived public stigma was not. Moreover, Asian-American/Asian and non-psychology majors had a higher personal stigma. 50 respondents reported having received treatment for mental health problems in the past year, whereas three refused treatment and 58 reported they did not receive any treatment. The majority of students indicated they would speak with mental health professionals or faculty if mental health problems were affecting their academic performance. Only 20 participants indicated that they would talk with "no one." The results can help guide future stigma reduction campaigns.

Soha Munir '23

"Understanding the Effects of Familiarity on Cross-Race Eyewitness Identification Accuracy in Lineups"

(Faculty sponsor: Alex Wooten)

To date, there have been 375 National DNA exonerations, with over 70% of cases involving eyewitness misidentification (Innocence Project, 2020). An alarming number of these cases have involved cross-race identifications. In eyewitness research, this phenomenon is known as the cross-race effect (CRE) in which participants are typically better at identifying suspects of their own race, compared to identifying suspects of a different race (e.g., Meissner & Brigham, 2001). One potential issue that has not been previously explored is the role of prior familiarity and its effect on the CRE in a lineup procedure. The purpose of this study is to test whether the cross-race effect will be influenced by prior familiarity between white and Black suspects in a lineup. Participants will study faces of white and Black individuals to create familiarity and later attempt to identify them from lineups where the suspect will be either familiar (studied earlier) or unfamiliar (completely new). This research will examine how eyewitnesses process and recognize unfamiliar and familiar faces for suspects of a different race in order to determine the reliability of such identifications for future cases and prevent more wrongful incarcerations as a result of cross-race identifications.

