



April 28, 2021

Wheaton College Research & Creativity Symposium

Message from the Provost



Dear Students,

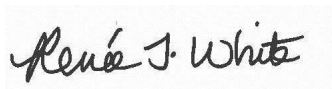
Together, we persevered through this year. From the many inequities laid bare by a devastating pandemic, to the social and political upheavals we witnessed, to the deep changes we have endured, we pressed on. And in doing so, we affirmed that our communities needed to be more just, our bonds more true, and our decisions more empathetic.

Every year, Academic Festival celebrates the outstanding work you accomplish. This year, in addition to doing so, we also applaud your tenacity. In the midst of so many upending and difficult moments, you found light and illuminated pathways for others, you sought meaning and gave purpose to others, you imagined better futures and offered hope to others. And it is our privilege to honor you and recognize your work.

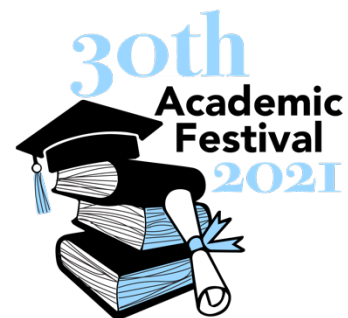
Two things can be true at once and while we can lament not gathering in person, we must rejoice in our ability to do so virtually and therefore with a much wider audience. I am certain that every person in this expanded audience is as heartened as I am by your commitment to upholding knowledge as a pillar of human generosity and at the core of collective equity.

With that in mind, it is my pleasure to have the opportunity to highlight you. I imagine there are many who are unaware that Wheaton's motto, "that they may have life, and have it abundantly" is emblazoned on the College seal as well as on the facade of Wallace Library. This saying is exemplified in your commitment to one another, to Wheaton, and to the work we are celebrating in this year's Academic Festival. I am inspired by your continued dedication to learning with humility and sharing with abundance.

With warm congratulations,



Renée T. White, Provost



Academic Festival Participants

Madison Joan Abdul '21

Anthropology and Theatre

Fear Itself

My research explores the anthropology of fear, as represented by objects present in Wheaton's permanent collection. The product of my research is a collection of short films, which delve into four main categories of fear; fear through ritual, fear of the physical, fear of change, and fear in our heads.

Dalton Adams '21

Classical Civilization

Numismatics

Over the last three years, I have worked to identify the over 300 ancient Greek and Roman coins in the Hendricks Collection. For my thesis, I catalog and photograph these coins and then discuss what should be done with them in the future.

Erin Bowes '23

Women's and Gender Studies and Philosophy

How 'The Good Place' Depicts the Most Desirable Form of Immortality

My name is Erin Bowes and I'm interested in including my paper "How The Good Place Depicts the Most Desirable Form of Immortality" in the Academic Festival Program. In my paper, I explore the desirability of immortality through examining the works of philosophers Bernard Williams and John Martin Fischer. I then apply their theories to the show The Good Place to demonstrate that the series displays the most desirable form of immortality possible. I determine that a vital part of what makes this version of immortality worth living is that there is a sort of antidote to immortality in the form of a gate one can enter to alter the state of their existence. Only with the presence of this gate can immortal lives be meaningful and enjoyable.

Allison Chaves '21

Film & New Media Studies

Documenting the History and Experiences of Trybe

In Stephanie Daniels' Wrestling History class, I am creating a documentary film about Trybe, of which I have been a member for four years. The film will discuss Trybe's history as well as inequities the group has faced and why Trybe is so valuable to the Wheaton community. To do this, I have been connecting with alumni and current members of Trybe as well as faculty and staff who have played key roles in Trybe's history.

Nina Christenson '23

Physics

Studying the Extreme Environment Near the Black Hole or Neutron Star in SS433

SS 433 is a unique X-ray binary system and micro-quasar characterized by its high speed jets that radiate in opposite directions. I will use data from multiple ground- and space-based observatories to better understand this enigmatic system.

Casey Dinga '21

Elementary Education and Sociology

Education in Diverse Settings

Have you experienced discrimination in the workplace because of a disability? Have you ever experienced an anxiety attack that left you mentally unable to complete your assignments? Or do you have a disability that hinders you from finding suitable employment or education opportunities? I was able to work with North Attleboro Enterprises this past fall through the winter specifically supporting high schoolers with cognitive and physical challenges by promoting opportunities for them to become contributing members of society and to achieve their life goals. I then took this knowledge and taught multiple classes, completed student intakes, attended IEP meetings and presented data to the CEO and funding department that ultimately led me to obtaining a part time job with AEI as an Administrative Assistant.

Sophie Dubois '21

Anthropology

The Way of the Woods: Experiences in the Wheaton Woods

My research project The Way of the Woods: Experiences in the Wheaton Woods, is about student, faculty and alumni experiences with the wheaton woods. There were over 50 interviews conducted ranging from 20-50 minutes each. There were several base questions to help guide conversation organically and prompt storytelling. The final goal of the project was to get a collection of experiences through the ages to be a legacy of the Wheaton Woods.

Emma Flesher '22

Anthropology

Examining the Influence of Wheaton's Racial Bias Incidents

Our group as part of Professor Torres's class Imagining a Just World examined the impact of Wheaton College's response to racial bias incidents on campus on the student body. We sent out a survey to current Wheaton students and recent alumni to take the temperature of Wheaton's student body. From the survey we conducted 13 interviews with current students and recent alumnus. We asked how incidents of racial bias affected students and their experience at Wheaton College. We also asked what they would change about how Wheaton deals with incidents of racial bias.

Oliver Hacker '24

What to Announce?

This is a video PSA about COVID-19 safety protocols. It explains what types of masks are most effective, how to properly wear a mask, and the other safety measures that should be practiced in conjunction with mask wearing.

Margot Hopkins '23

Biochemistry

White Recognition of Systemic Racism

When I was presented with the assignment of creating a PSA in Writing in Professional Contexts with Professor Lisa Lebduska, I decided to bring attention to the urgent problem of White Supremacy in this country in a way that white people specifically could absorb. Rather than lecturing, I wanted to make something that people could connect to and reflect on. With that in

mind, I used photos, comics, and graphics from various artists to expose the pieces of White Supremacy that people do not necessarily think about and understand in their everyday life.

Melissa Jernakoff '21

Environmental Science

Effects of land-use change on avian mixed-species flocks in southern Ecuador

Rebekah Lajoie '21

Economics and Latin

Analysis of Roman Trade and Economics

The Economics of Roman Trade Through the Lens of Virgil's 'Georgics' discusses Roman trade during the late Roman Republic and early Roman Empire. The project explores how Virgil alludes to the exchange of goods in his poems. Through the application of Ricardo's theory of comparative advantage, it can be explained how Rome maintained its size and sustained its power throughout many areas. This project reads the Georgics as a primary source to illustrate the role of trade in the Roman Economy, particularly focusing on foreign and domestic trade of goods along the coast of the Mediterranean Sea.

Ishaan Madan '22

Biochemistry

Long-term Stability of Glycine, Alanine and Phenylalanine on Titan's Surface Subject to Cosmic Ray Flux

James Margotta '21

Anthropology

The Forest for the Sites: Archaeological Heritage Production in the Gila National Forest

The national forests of the United States represent a highly contested cultural space, where narratives of archaeological heritage, stewardship, wilderness, and more intersect and clash in the present-day. Archaeological surveys conducted by the Upper Gila Preservation Archaeology (UGPA) field school (2018 & 2019) in the Gila National Forest has helped to establish the cultural history of the national forest and has greater implications for discussions of contemporary cultural heritage in the region. This project presents the results of research done using the UGPA survey data, alongside a myriad other methods such as discourse analysis and interviews of archaeologists relating to the Gila in order to examine the complicated relationship between the ongoing narratives. Beyond highlighting the place of national forest archaeology in cultural heritage discourse, this research offers insight into potential dialogic and practical improvement through the application of emergent frameworks, such as critical heritage theory and archaeological ethnography, to future work.

Joshua Mathew '24

First Year Writing: Message To New College Students

Brooke Musial '21

Anthropology, Minor: Peace and Social Justice

Increasing White College Students' Engagement with Anti-Racist Allyship

In order for the Wheaton Community to truly embody the principles of diversity, equity, inclusion, and belonging, all members of the community must engage in anti-racism work. My study is an effort to transcend the privilege and fragility that sometimes prevents white students from engaging in this work on campus. Using a community-based participatory research framework, I collaborated with members of the Wheaton Community to devise tangible strategies to increase the engagement of white students in anti-racism work.

Gia Orsino '23

Philosophy

Life, Death, Meaning, and Conversation

For my submission, I made a podcast for the final project of my Life, Death, and Meaning Class in which I spoke to my friends and family about the philosophical concepts of death, immortality, and meaning. This meant not only doing my own research on the topics and thinkers I would be discussing, but also learning how to make a podcast, and most importantly how to effectively talk about and teach philosophy to people who are completely unfamiliar with it. Though it started as a fun way to involve the people in my life in one of the most personal branches of philosophy I have studied, it ended up being a practice in research, teaching, empathy, and project management that I never would have imagined!

Ben Osborn '22

Physics

Using Machine Learning to Determine Sky Conditions Above Wheaton

My project aims to accurately determine whether the sky is clear or not for the purpose of automating Wheaton's telescope hood. To this end, I am using TensorFlow, an open-sourced machine learning platform, to train a model that can take the available data points and calculate a probability distribution representing the estimated weather conditions. As of now the model can determine the clarity of the sky based on images from the all-sky camera with >95% accuracy, and this will improve as more data is incorporated into the model.

Lauryn Parent '21

International Relations and Political Science

The Responsibility to Protect

My research examines the Responsibility to Protect (R2P), a set of principles that commit countries to protect civilian populations from genocide, war crimes, ethnic cleansing, and crimes against humanity, including through prevention and intervention by the United Nations Security Council. I explore the extent to which powerful states' narrow political interests override the call to protect civilian populations by looking at how three permanent members of the Security Council - China, Russia, and the United States - have responded to various crises where the R2P could be invoked. I ultimately conclude that these three countries invoke R2P only when it concurs with their narrow security or economic interests, rather than on the basis of a threat to civilian populations.

Sierra Proft '21

Classics--Latin and Greek

The Boy Who Would Have Been King: Saving Astyanax

Jackson Reed '21

Music, Computer Science

"Confrontations" for Piano Quintet and Percussion

With the instruction of professor Del Case, I composed a piece for strings, piano and percussion titled "Confrontations". This was the culmination of my study of composition at Wheaton and gave me the opportunity to work with a longer form and an unfamiliar instrumentation. It will be premiered by the orchestra at the end of the semester.

Melanie Romero '22

Political Science and Sociology

Human Trafficking and Institutional Deficiencies

Human trafficking is an issue that affects over 24.9 million people globally, with the number consistently fluctuating. My project dives into deficits within the United Nations (UN) in trying to prevent this crisis and the limited resources available to survivors. The UN requires a major reform if human trafficking is ever to be stopped, and it starts by modeling after more successful institutions.

Jeanne Specht '23

Biochemistry and Hispanic Studies

Quantitative Analysis of Sprouting Angiogenesis in the Zebrafish Fin

Transforming an interesting qualitative observation into a reproducible quantitative finding is a frequent challenge in biological research. To address this problem, we have developed a consistent set of protocols for analyzing and quantitating blood vessel branching in the zebrafish fin. The methods we have established create a valuable toolkit that can be applied to the study of angiogenesis by future researchers.

Group Participants

Sara Al Yasin and Emiliano Herrera-Rosa

Sugar, Stress, and Sex (S.S.S.): Impact of Stress on Reward Pathways in Female Rats

In this research study, we investigated the effects of stress in female rats and the reward pathways in the brain. Despite the fact that women are twice as likely to develop stress-related disorders, it's still unclear as to why this sex difference in prevalence exists. We hope to further examine these sex differences in our animal model of stress-induced anhedonia, the loss of pleasure often associated with depression.

Angel Bird, Sha-neek Roper, Kiara Curet, Marcia Mendes

Hair and Hiring: An Examination of Afrocentric & Eurocentric Hair Styling

Negative stereotypes around Afrocentric hairstyles as unprofessional affect Black American women in the work environment and have physical, psychological, and financial consequences. In order to better understand this issue and improve the lives and survival of Black American women, we conducted an experiment with the goal of understanding bias in the hiring process, since that may be the first place bias can be encountered.

Mallory Sheridan, Avery Gluchacki, Taylor Pimentel, and Mikayla Titus

Biology/Secondary Education

Single Mothers Experiencing Homelessness Within the United States

While homelessness rates are rising in the United States, it is imperative that an outside of the box strategy is implemented to address growing concerns affecting the people home to the community. We developed a social business model to address homelessness among single women within America, called Home that empowers women and provides them with the necessary treatments and mental health care they need. Our approach utilizes a structure that helps women back up onto their feet by providing them housing at a small cost and employing them within our company to harvest and produce CBD sourced from locally grown hemp.

Imagine a Just World Class Website

Students in the class Imagine A Just World Through Action have learned about social justice this semester through reading, researching and attempting to make change on Wheaton's campus. Students have worked on group projects throughout the semester examining the different types of diversity equity, inclusion and belonging that students experience on campus. We hope to bring more insight to the student experience at Wheaton College.

Imagine a Just World Participants:

Hannah Abernethy	Katie Hubbard
Erin Bowes	Kenz Hubbard
Mosi Bullers-Shah	Catherine Le
Emily Edds	Delia MacLaughlin
Anna Fairbairn	Alex Mason
Ashanti Faye Ferris	Dani McConnell

Emma Flesher
William Gan
Sophie Garland-Dore
Sinead Garvey

Jojo Mitchell
Mia Murray
Brooke Musial

Paul Prue '21, Brian Ashley, Brian Holmes, Gavin Reily

Employee's Perception of Benefits and The Effect They Have on Productivity

We as a group were able to dissect the workplace and get a true idea of what employees today wanted. Although our study was focused on college students, we were able to prove our hypothesis that employees who had more incentive with benefits had more productivity in the workplace. We later hope to expand our study to a larger age group and get a larger scale response to our hypothesis that specific benefits have a positive impact on the workplace.

Wheaton X Series

Through various mediums of visual art, song, dance, music and poetry, students both on campus and off came together to present their work. This production will be submitted into the Wheaton Archives; it was truly an experience for the books, with students making the impossible possible, one submission at a time.

The process to create the incredible art featured on the evening of April 8-9, 2021, was developed in collaboration with a production team of students, alumni, faculty and staff. Over 80 members of our community came together across artistic disciplines and interests to support the telling of our collective stories. This event also speaks to our departments' efforts in providing more access points for our community to engage in the creative process. This project was not simply about the glorious pieces of artistic reflection that were created, but developing a process and practices that build community and trust. This was a transformative event in the life of Wheaton College.

Wheaton X Series: Company

Madison Joan Abdul	Pierce Gillim	Caroline Pike
Elijah Akindolie	Emma Girouard	Jackson Reed
Ibraheem Ayinde	Emily Gray	Clara Reyes
Samantha Billet	Nora Gross	Larah Rizk
John Billings	Ellie Guerin	Chantelle Roddy
Sara Boucher	Grace Hamel	Allie Roth
Jules Calcaterra	Ian Hamilton	Mariela Saver
Ben Campbell	Kneeco Hanton	Gyana Srivastava
Ramya Charurvedi	Katie Hubbard	Krystal Ssonko
Allison Chaves	Isabelle King	Catriona Stewart
Carlos Corrada	Morgaine Kmen	Mary Swansburg
Vu Do	Matt Lambert	Saachi Tapse
Olivia Doherty	Emmanuel Leal	Yanasia Tarr
Siobhán Dowd	Tessa Lopresti	Bethany Tetreault

Erica Drufva
Liz Dusza
Liz Eaton
Anna Fairbairn
Elizabeth Faulkner
Ashanti Ferris
Jia Fitzgerald
Faith Freeman
Abigail Gangl
Kayla Garabedian
Veda (VanDeusen) Garrett
Mia Garza

Ishaan Madan
Tori Mattie
Victoria Mattie
Isabel Mayers
Elisabeth Merritt
Dakota Monegro
Meghan Moran
Amina Morgan
Maggie Morey
Ayanbi Naylor Ojurongbe
Celeste Nobrega
Whitney O'Reardon

Emily Thomas
Abigail Twigg
Alison Violette
Samzok Wangdi
Sophie Waters
Anthony Wiafe
Julia Wilkinson
Shanai Williams
Graeme Wojtowicz
Debora Yohou

Wheaton X Series: Faculty/Staff/Visiting Artists/Alumni:

Meg Donnelly '07
Taylor Kaufman '20
Jessica Kuszaj
Colin McNamee
Nicole Tetreault '20
Joe Wilson, Jr.
Ethan Wood

Wheaton Academic Festival Acknowledgements

For Academic Festival 2021, we would like to express our gratitude for the efforts of Sydney Beck '16 for her design of the Academic Festival logo.

Special thanks are especially due to the staff who dedicated their time and energy to make this event possible: Jessica Kuszaj, Ally Baldwin, Primrose Boynton, Jonathan Chow, William Mason, Touba Ghadessi and Rachel McElaney.