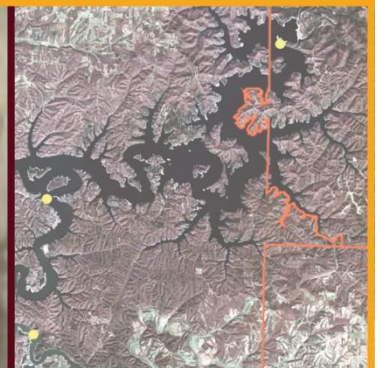
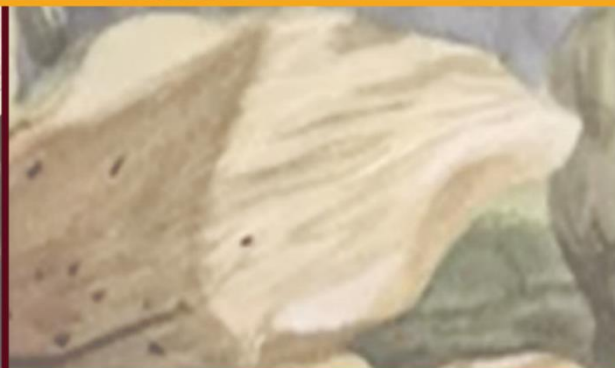


16TH ANNUAL STUDENT RESEARCH & CREATIVE ARTS SYMPOSIUM SPRING 2021



MONDAY APRIL 19, 2021

All Day – Art, Design, & Poster Presentations

12:30–2:30 PM – Oral Presentations

Zoom link: <https://park.zoom.us/j/98878223817>

2:30–2:45 PM BREAK

2:45–5:00 PM – Oral Presentations

Zoom link: <https://park.zoom.us/j/91018640593>

TUESDAY APRIL 20, 2021

All Day – Art, Design, & Poster Presentations

9:00–10:45 AM – Oral Presentations

Zoom link: <https://park.zoom.us/j/92109139363>

1:00–2:45 PM – Oral Presentations

Zoom link: <https://park.zoom.us/j/99441843420>

2:45–3:00 PM BREAK

3:00–4:30 PM – Oral Presentations

Zoom link: <https://park.zoom.us/j/92540232093>

Submissions are available for viewing at: <https://advancing.park.edu/events/srcas/>

ART & DESIGN PRESENTATIONS

Connectedness/Biophilia

Sarah Constance Anderson, Senior – BSE K–12 Art Ed & BA Fine Art

My recent work as a senior at Park captures my interest in human’s innate tendency to seek nature and connections with all that is alive.

Mentor: Elaina Michalski, Lecturer in Fine Art

Fall and Spring Creations

Claire “Charlie” Pierce, Junior – Fine Art

Artworks in various media, created throughout the Fall 2020 and Spring 2021 semesters.

Mentor: Elaina Michalski, Lecturer in Fine Art

You Are Not Your Illness

Brianna Winters, Senior – Graphic Design

You Are Not Your Illness is a series of photographs using flowers to convey my personal experiences with depression and anxiety.

Mentor: Elaina Michalski, Lecturer in Fine Art

Exploration

Blake Henry, Sophomore – K–12 Art Education

I have always just worked in pen and ink for a long time and I wanted to show the fruits of my labor with the different mediums that I explored over the last 1.5 years at Park.

Mentor: Andrea Lee, Asst. Prof. Art

The Wonders of Nostalgia

Novena Halona Houston, Senior – K–12 Art Education and Fine Arts

My recent artwork focuses on the idea of nostalgia and how in old age your childhood grows clearer.

Mentor: Andrea Lee, Asst. Prof. Art

Things from the Deep

Courtney Ross, Senior – Graphic Design & Fine Art

Creepy creatures and monstrosities from the dark places of the world.

Mentor: Andrea Lee, Asst. Prof. Art

Kierra’s 2020–2021 Projects

Kierra Taylor, Junior – Fine Arts

In this presentation I will be exhibiting projects from the Drawing, Painting, and Graphic Design courses I’ve created during the pandemic.

Mentor: Andrea Lee, Asst. Professor of Art

Nothing was Beautiful and Everything Hurt

Clara Elena Zarate, Senior – Graphic Design

A collection of visual media created over the course of the last year.

Mentor: Matthew Krawcheck, Instructor of Fine Art

Black Monarch

Jessica Turner, Freshman – Graphic Design

A brief presentation of my most recent work where I attempt to convey profound emotions.

Mentor: Jeff Smith, Assoc. Professor of Graphic Design

Glansevren Hall Winery

Claire Kitelinger, Senior – Interior Design

The projected re-design of historic Glansevren Hall in the United Kingdom if it were to be turned into a small batch winery.

Mentor: Roxann O'Rourke, Asst. Professor Art & Design

The Striped Chicken

Margaret Eiberger, Senior – Interior Design

This is a detailed interior design program featuring The Striped Chicken, a fresh take on Art Deco in a neighborhood restaurant and bar located in Gladstone, MO – researched and tailored for a future in safe dining.

Mentor: Roxann O'Rourke, Asst. Professor Art & Design

Park University Library

Phill Malanga, Senior – Interior Design

Senior thesis project for historical preservation.

Mentor: Roxann O'Rourke, Asst. Professor Art & Design

POSTER PRESENTATIONS

Discrete Mathematics Applications

Urangaigali Bayarjargal, Sophomore – Economics

Jesus (Noel) Cheda, Junior – Information & Computer Science

David Lamb, Junior – Information & Computer Science

Ryan Allsup, Junior – Information & Computer Science

Corrie Scobee, Senior – Mathematics

Danielle Adams, Junior – Information & Computer Science

In this poster, we showcase the live and creative applications that utilize the concepts and techniques we learned in CS208/MA208 Discrete Mathematics course.

Mentor: Professor Wen Hsin, Professor of Computer Science

Voice Technology in Malawi

Francis Muwalo, Junior – Information & Computer Science

This digital poster will introduce the country of Malawi using my new Amazon Alexa skill design and prototype.

Mentor: Professor Wen Hsin, Professor of Computer Science

Change and Resistance to Change during COVID-19

Mohamed Abualhaija – Associate Professor of Accounting

People generally hold the status quo and resist change. Under COVID, people are forced to change the status quo, which creates stress.

ORAL PRESENTATIONS MONDAY APRIL 19, 2021 12:30–5:00 PM

NS401: NATURAL SCIENCE SEMINAR

Mentor: Professor Alexander Silviu, Assoc. Prof. Physics

12:30 Bone Grafts

Parker Hoffman, Senior – Biology

An overview of modern bone grafting techniques along with a brief history and insights into the potential future of this field.

12:45 Promises of the Gut-Brain Axis

Quinlan Batcheller, Senior – Biology

How the gut-brain can be used to treat a myriad of diseases through the use of probiotics.

1:00 Deep Brain Stimulation for Parkinson's Disease and Schizophrenia

Codi Marrs, Senior – Biology

Deep brain stimulation is an upcoming technique to help alleviate the symptoms of both Parkinson's and Schizophrenia.

1:15 The Impact of Duchene Muscular Dystrophy on Mental Health

Morgan Laughlin, Senior – Chemistry

This presentation will look into how various aspects of Duchenne Muscular Dystrophy contribute mental health issues among patients and caregivers.

1:30 Genetic Influencers of Bipolar Disorder

Lindsey Penland, Senior – Chemistry

Genetics play an important role in many diseases, and bipolar disorder is no exception.

1:45 The effect of Ketamine on depression

Mikayla Pham, Senior – Biology

This talk will be over the effects of ketamine on depression.

2:00 Bright-Light Therapy

Allison Gibson, Senior – Biology

Bright-light therapy is a safe and effective treatment for many different disorders.

2:15 The Role of Neanderthal Heritage in the Response to COVID-19

Jael Díaz Nicolás, Senior – Biology

Genetic variant inherited from Neanderthals provides protection against severe COVID-19.

2:30–2:45 Break

2:45 How we Hear

Austin Spoor Biology

An exploration of the human auditory system.

3:00 The Value of Shark Ecotourism

Nathan Baumann, Senior – Biology

What kind of impact does shark ecotourism really have on the promotion of shark conservation?

3:15 Preliminary Analysis of the Dental Ultrastructure of the Stingray *Dasyatis* from the Pungo River Formation (Miocene) of North Carolina

Sophia Gunther, Senior – Biology

Microstructural analysis of the common stingray genus *Dasyatis* was completed using scanning electron microscopy to evaluate the characteristics of enameloid present.

3:30 The Symbiotic Relationship Between Orchids and Fungi.

Lindsey James, Senior – Biology

Orchids need mycorrhizal fungi to survive and reproduce.

3:45 Health Impact of Dog Diets

Rebecca Newsome, Senior – Biology

An analysis on what type of diet is best for a dog's health with the options of a kibble-only diet, owner-prepared meals, or a mix of the two.

4:00 Stem Cell Treatment Approach for HIV

Camtu Nguyen, Senior – Biology

Researchers have developed numerous gene-based reagents capable of inhibiting HIV infection by intracellular immunization.

4:15 An Overview of Antibiotics

Haley Williams, Senior – Chemistry

This talk will go over what antibiotics are, where they originated from, how they are prescribed, and antibiotic resistance.

4:30 Using Surface-Enhanced Raman Spectroscopy to Identify Hair Dyes

Brittney Zimmerle, Senior – Chemistry

Hair is useful in forensics when determining if a suspect was at a crime scene. The current method for hair analysis is microscopic comparison which is often inconclusive and is not effective for comparing dyed hair. Instead, surface-enhanced raman spectroscopy can be used to identify if hair was dyed, the type of hair dye, and the brand of hair dye, providing more information for hair confirmation.

4:45 TBD

Joshua Goodloe, Senior – Chemistry

TBD

ORAL PRESENTATIONS
TUESDAY APRIL 20
9:00–10:45 AM

9:00 Co-dependency in *The Metamorphosis*

Estrella Hernandez, Senior – Sociology

This presentation explores the portrayal of abuse and mental health issues in Franz Kafka's *The Metamorphosis*, as well as highlights the importance of discussing such heavy topics in literature.

Mentor: Glenn Lester, Asst. Prof. English

9:15 Franz Kafka's *The Metamorphosis* as an Allegory for Disability

Emma Medill, Freshman – English

This presentation discusses how Franz Kafka's *The Metamorphosis* uses disabled coding to build an allegory for disability

Mentor: Glenn Lester, Asst. Prof. English

9:30 Hope for Underdevelopment in America

Tanner Wieser, Senior – Political Science

A coordinated fusion of civil society and public policy is required to adequately address the needs of struggling sectors in America.

Mentor: Jack MacLennan, Asst. Prof. Political Science

9:45 When They Come Home: Challenges of Prisoner Reentry - Meeting the Challenges of Reentry.

Chaniya Alioth, Senior – Criminal Justice

This research was conducted over ex-convicts and their return to society with special focus on prison reentry programs.

Mentor: Greg Plumb, Prof. Criminal Justice

10:00 Police Use of Body-Worn Cameras

James Peeler II, Senior – Criminal Justice

Research was conducted to determine the public's perception of police-worn body cameras.

Mentor: Greg Plumb, Prof. Criminal Justice

10:15 The Great Replacement Theory

Timothy Whittaker, Senior – Criminal Justice

A look into the growing far-right conspiracy theory motivating white supremacist terrorists in the United States.

Mentor: Greg Plumb, Prof. Criminal Justice

10:30 Training of Law Enforcement Officers Across the Nation

Braeden Perry, Senior – Criminal Justice

The training techniques used across the national for our law enforcement officers vary, and play a large part in our community's safety; Here we see what programs/techniques work, and what doesn't.

Mentor: Greg Plumb, Prof. Criminal Justice

ORAL PRESENTATIONS
TUESDAY APRIL 20, 2021
1:00–4:30 PM

HONORS ACADEMY PRESENTATIONS

1:00 Optical and Electron Microscopic Investigation of the Effect of Hair Products on Hair Follicle Development

Rebekah Rothacher, Junior – Chemistry

The goal of this project is to characterize hair loss via optical microscopy, electron microscopy, and chemical analysis.

Mentor: Gregory Claycomb, Prof. Chemistry

1:15 An Analysis of Time Spent Charting in Kansas City-Area Hospitals Based on a Likert Scale Survey.

Jack Lindgren, Junior – Biology

This project investigates the hours spent charting by nurses in local Kansas City hospitals in an attempt to identify areas that may be taking excess effort and time that could be better spent providing care to patients.

Mentor: Gregg Krumme, Lecturer in Biology

1:30 Inflammation of Neurodegenerative Diseases

Alba Myshketa, Junior – Biology

The purpose of my research paper is to look into the various factors that trigger the process of neuroinflammation and discuss the outcomes from the multiple research studies I looked into.

Mentor: Brenda Royals, Lecturer in Biology

1:45 Gene Therapy as a Treatment Method for Various Eye Diseases

William Hess, Junior – Biology

Gene therapy methods that have been shown to help treat and alleviate common ocular ailments will be critically reviewed for both treatment efficacy and safety in various models.

Mentor: Brenda Royals, Lecturer in Biology

2:00 The Effects of Cannabis Usage on Oral Health

Reid Evers, Junior – Biology

An examination of the results of chronic cannabis smoking on the tissues of the mouth.

Mentor: Patricia Ryberg, Assoc. Prof. of Biology

2:15 Thesis Presentation: Basics of Machine Learning

Peter Boyer, Junior – Computer Science

A thesis presentation about my research on the basics of machine learning.

Mentor: Yongzhi Wang, Asst. Prof. of Computer Science

2:30 Ethicality of Data Mining and Predictive Analytics

Sophie Roper, Junior – Logistics & Computer Information Management

The uses of data mining and predictive analytics within the fields of marketing, law enforcement, and healthcare are analyzed to determine ethicality and potential improvements.

Mentor: Adrian James, Program Chair, School of Business

2:45 – 3:00 BREAK

3:00 Housing Satisfaction in America

Michael Willis, Junior – Business Administration

We explored U.S. census data to identify the relationship self-reported housing satisfaction has with selected potential influences.

Mentor: Nicholas Miceli, Assoc. Prof. Human Resource & Healthcare Management

3:15 Mentoring Groups in (Harry Potter) House System: Welcoming Students and Making Workplace Leaders.

Johnathan Rizzi, Junior – Communication Studies

A research update – This presentation explores how private secondary schools are taking a new approach to an old method of organizing their student body and the effects that this structure is having on student relationships and student leadership.

Mentor: Samantha Quinn, Asst. Prof. Communication Studies

3:30 Progress Report: Online Interaction in Relation to Black Women

Kalani Earls, Junior – Sociology

A research update on how intersectional identities are used to harass black women in online spaces, such as Twitter

Mentor: Chelsea Platt, Asst. Prof. Sociology

3:45 Biofilm Prevention Through the Use of Drugs or Homeopathic Compounds

Rochelle Garciano, Junior – Biology

I will take you through how homeopathic compounds such as cajeput, clove, lavender and thyme effect the growth of biofilms.

Mentor: Brenda Royals, Lecturer in Biology

4:00 Straightening Identities in the Onsager Algebra for sl_3

Deanna Clayton, Junior – Mathematics

In this talk we will discuss some straightening identities we have formulated and proved in a generalization of the Onsager algebra for sl_3 .

Mentor: Samuel Chamberlin, Assoc. Prof. Mathematics

4:15 Comparing Gender Role Attitudes of Young Adults and Middle-Aged Adults

Hailey Rawhouser, Junior – Social Work

As part of the honors program I have conducted a survey that compares the gender role attitudes of young adults (ages 18 – 25) and middle-aged adults (ages 45 – 65).

Mentor: Brian Cowley, Prof. Psychology

2021 Symposium

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Blake Miller, Digital Storytelling Coordinator

We would like to thank the Park University students, faculty, and staff who participated to make this event possible



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