

DEFIANCE COLLEGE



**McMaster
Symposium &
Academic
Colloquium**



PRESENTED BY MCMASTER
SCHOOL FOR ADVANCING
HUMANITY

WEDNESDAY, APRIL 26, 2023

McMaster Symposium & Academic Colloquium

8:00 - 8:10 AM: SCHOMBURG AUDITORIUM

Opening Remarks

Dr. Agnes Caldwell, Vice President of Academic Affairs

Dr. Richanne C. Mankey, President

8:10 - 8:50 AM: SCHOMBURG AUDITORIUM

McMaster Learning Community: Ghana

Fellow: Dr. Jeremy Taylor

Scholars: Samantha Bee, Logan Gray, Colton Nutter, Eleanor Pease, Adam Tobin

The Ghana McMaster initiative is a new project this year. The team will partner with the PKS Foundation, a non-profit group headquartered in Chicago, to address a number of issues in Ghana. Although this trip will be exploratory in nature, the student-researchers will be addressing a number of issues including career-readiness training, emotional resiliency, child nutrition, and education.

8:10 - 8:50 AM: DANA 22

Civil Religion and Monumentation in the Soviet Union

Presented by: Allie Bevins

Faculty Advisor: Dr. Kathryn Phillips

This presentation will consider civil religion in the Soviet Union with a focus on its expression through the built environment as both a representation of religious fidelity and dissemination of the state's collective memory.

8:10 - 8:50 AM: DANA 27

2022 Panama Initiative Reflection

Presented by: Grant Johnson, Lauren Criblez, Brianna Snider, Dr. Olivia Lozar, Dr.

Timothy Rickabaugh, Dr. Steve Bare

Faculty Advisor: Dr. Olivia Lozar

Our group traveled to Panama in May 2022. We impacted over 400 students, their parents, teachers, administrators, community members with our projects covering bone health, skin cancer education, pet safety, CPR training and more. We are going to reflect on the life-changing experiences and memories made in Panama.

9:00 - 9:50 AM: SCHOMBURG AUDITORIUM

McMaster Local Learning Community: PATH Center

Fellow: Dr. Sabrina Brown

Associate Fellows: Dr. Jim Sliwinski, Dr. Mollie Sorrell

Scholars: Mickenzie Blackburn, Lily Linke, Alivia Kruczkowski, Olivia Rayk, Autumn Saddler, Brianna Snider, Hallie Webb

The McMaster Local - PATH Center Learning Community will describe the community-based research projects that they have been implementing at the PATH Center. This panel discussion will guide the audience through the exciting work this local McMaster initiative has accomplished throughout the 2022-2023 academic year.

9:00 - 9:50 AM: DANA 22

Empty Bowls 2023

Presented by: Junior Social Work Class

Faculty Advisor: Professor Tess Salisbury

This will be a panel presentation covering the logistics and process behind organizing the Empty Bowls fundraiser and then the way in which we integrate this into CSWE Social Work curricular expectations. We will describe also how this fundraiser goes from the classroom outward to social work macro practice into the community.

9:00 - 9:50 AM: DANA 27

Designing and Building POTSCare: An App to Help Patients with Postural Orthostatic Tachycardia Syndrome

Presented by: Michaela Hunt

Faculty Advisor: Professor Aaron Napierala

Today, 1 out of every 100 teenagers have Postural Orthostatic Tachycardia Syndrome. Though a diagnosis is reassuring, there is no cure or treatment. The unfortunate reality of those with POTS is that they must find daily lifestyle habits that minimize their symptoms - and the right habits are different for everyone. The app POTSCare was built to assist patients in their journey to finding a lifestyle where living is effortless and symptom-free. The app helps the user track their condition throughout the day, provides them with resources to learn more about POTS, and even analyzes user data to inform patients about what habits reduce symptoms.

9:00 - 9:50 AM: HUBBARD BANQUET ROOM

IEC Student Council: Building Belonging Through Engagement

Presented by: Emily Vargo

Faculty Advisor: Dr. Clarissa Barnes

According to the administrators at the Independence Education Center, students who attend the school lack school pride and often do not feel a strong sense of belongingness. This presentation will provide a review of the literature related to belongingness and present evidence on a student activity council that was implemented at the IEC. Participants will have the opportunity to engage in interactive activities related to belonging.

9:00 - 9:50 AM: CULTURAL ARTS ROOM

Cancer Clusters in Ohio

Presented by: Abigail Teders

Faculty Advisor: Dean Bridgette Winslow

The Center for Disease Control and the Ohio Department of Health defines a cancer cluster as “a greater than expected number of cancer cases that occurs within a group of people in a geographic area over a defined period of time.” Cancer is the second most common cause of death in Ohio and the United States, accounting for nearly one of every four deaths. According to the Ohio Annual Cancer Report in 2022, Cancer claimed the lives of more than 25,000 Ohioans in 2019, at a rate (162.8 per 100,000 population) that was 12% higher than the U.S. rate (146.0 per 100,000). Why are cancer cases are so high in Ohio? Are there areas that appear to be more prone to cancer than others? What might lead to this? These are some of the questions addressed in this research project. This research is the beginning of what is planned to be a four year look at cancer clusters in Ohio. During this research, Ohio geographic areas, quality of life, important landmarks, and health care available are examined throughout Ohio to help determine possible trends in cancer outbreaks.

9:00 - 9:50 AM: SCHAUFFLER 121

Effort, Mastery and Mathematics in Decision Making

Presented by: Sherod Brooks, Natalee Cooper, Cole Mortemore

Faculty Advisor: Professor David Stuckey

Based on conversations with Professor Tim Green and data supplied by him, we are trying to find the best way to assign grades based on mastery and effort. How should individual assignments be weighted for these two concepts? We use the methods of linear programming and the Excel program to determine a reasonable ratio between mastery and effort. Other applications for these ideas will be considered.

9:00 - 9:50 AM: SCHAUFFLER DIX ROOM

Skin Cancer Education

Presented by: Grant Johnson

Faculty Advisor: Dr. Olivia Lozar

This project will focus on educating students about skin cancer, how to identify signs of skin cancer, and how to take preventive measures against skin cancer. This project will raise awareness of skin cancer and increase knowledge about UV protection.

9:00 - 9:50 AM: TENZER 303

Holiday Traditions in China

Presented by: Damien Weyer

Faculty Advisor: Dr. Don Buerk

An overview of the ways China celebrates their traditional holidays.

10:00 - 10:50 AM: SCHOMBURG AUDITORIUM

McMaster Learning Community: Belize

Fellow: Dr. Steven Engel

Associate Fellow: Mrs. Nicole Hoffman

Students: Mickenzie Blackburn, Ried Jury, Asa Moledor, Evan Park, Cassity Van Dyke, Kirsten Vanisacker

The McMaster Belize Learning Community differs from past years and is a learning community made up of first-year Defiance College students traveling to Belize. The group will present an overview of the various interdisciplinary projects that the team has been researching and working on during the Spring 2023 semester. The group will give detailed descriptions of what they intend to accomplish during their travels to Belize in May.

10:00 - 10:50 AM: DANA 22

Building Collaborative Research Experiences for Defiance College Students: Year 1 of the Defiance Research Alliance

Presented by: Dr. Sabina Brown

The Defiance Research Alliance is a partnership between Defiance College, the City of Defiance, and Defiance County schools to address water quality issues in the Upper Maumee Watershed. This collaboration harnesses student excellence and leverages community research and development assets to conduct applied water quality research. Both Defiance College and Defiance County secondary students have the opportunity to be involved in collaborative education, research, and training through this Alliance. This presentation will guide the audience through this progress this new partnership in its first year.

10:00 - 10:50 AM: DANA 27

Critical Race Theory: What Is It and Why Are People Afraid of It?

Presented by: Dr. Lisa Beringer, Reverend Jim Brehler, Dr. Steve Bare, Professor Tess Salisbury, Dr. Kathryn Phillips

Moderator: Mercedes Clay

Critical Race Theory (CRT) and other DEI topics have been at the center of conversations in the political world for the last two years prompting states to ban any discussion and books in school systems. Yet, if asked, many people still have difficulty defining CRT and why it is a hot-button issue. The Anti-Racism Subcommittee of B. REALL will be hosting a discussion on the topic of CRT. Our panel will be discussing the origins of CRT, how it is used politically, and how current Defiance College faculty use CRT/DEI in the classroom. Participants will leave with a basic understanding of CRT.

10:00 - 10:50 AM: CULTURAL ARTS ROOM

A Comparative Study of Athlete Participation Goals for Youth, High School, and NCAA DIII Sports Settings

Presented by: Alexis Coward and Brianna Snider

Faculty Advisor: Dr. Timothy Rickabaugh

Selected youth, high school, and intercollegiate coaches were surveyed to collect information on their top three sport participation outcome goals at each of the three levels (youth, HS, & NCAA DIII). The results of the survey were analyzed to determine the degree of alignment with the established outcome goals at each level.

10:00 - 10:50 AM: HUBBARD BANQUET ROOM

Research in Autism Spectrum Disorder: Autistic Women, Outdoor Recreation, and Anti-Ableism

Presented by: Taylor Greilich, Abbegail Rank, Autumn Saddler

Faculty Advisor: Dr. Clarissa Barnes

This presentation will provide a review of the literature related to three areas of autism research. First, the gender disparity in diagnosis will be explored. Variables such as masking, comorbid diagnoses, misdiagnosis, age at diagnosis, and self-diagnosis will be discussed. Then, inclusion in recreation and education will be explored through literature reviews on the accessibility of natural parks and outdoor recreational programs for neurodivergent people and addressing ableism in higher education. Recommendations for more inclusive practices will be provided.

10:00 - 10:50 AM: SCHAUFFLER 121

Collecting Digital Information: A Guide for Victim Advocates

Presented by: Thomas Coltrain, Devon Smith, Parker Tilse, Harmony Downing (Victim Advocate from Center for Child and Family Advocacy)

Faculty Advisor: Professor Timothy Wedge

21st century technology has given domestic abusers and stalkers new tools to use against their victims, and new challenges for the legal advocates who try to help them. DC Cyberforensics students developed, and tested low and no-cost methods, usable by laypeople, for extracting admissible evidence relating to illicit use of social media and personal messaging. The resulting manual has already been successfully used to provide evidence in court hearings that would otherwise have been absent. This panel discussion will discuss the challenges and benefits of this ongoing project, and addresses the potential for abuse.

10:00 - 10:50 AM: SCHAUFFLER DIX ROOM

Dribbling Around the Sportsbook

Presented by: Dylan King

Faculty Advisor: Dr. Seonguk Kim

We investigate the analysis of the best possible betting on sports teams in sports management. The primary mathematical tool and method are implied probabilities in data science, which are applied in the python code for the analysis. The python code provides several tables and graphs, indicating cleaned data, expected win probability, and betting profits.

10:00 - 10:50 AM: TENZER 303

The Axis Lost the War but Won the Peace

Presented by: Will Garlock

Faculty Advisor: Dr. Don Buerk

A brief overview of how Japan and Germany became economic powers after World War Two.

11:00 - 11:50 AM: SCHOMBURG AUDITORIUM

McMaster Local Learning Community: Worthington Cemetery Project

Fellows: Dr. Steven Bare and Ms. Angela Sosebee

Scholars: Allie Bevins, Caia Bevins, Tyler Taylor

This project focuses on historical research surrounding the Worthington Cemetery, a non-extant African-American cemetery in Defiance County. Scholars on this team collected historical data, including, but not limited to, documents, cadaver dog findings, and ground penetrating radar results. These findings were used to write an application for a state of Ohio historical marker to be placed at the cemetery site.

11:00 - 11:50 AM: DANA 22

Ancient Greek Religion and Its Impact on Society

Presented by: John Brancel

Faculty Advisor: Dr. Don Buerk

An in-depth of how religion impacted life in Ancient Greece.

11:00 - 11:50 AM: DANA 27

Student Learning During a STEM Summer Camp

Presented by: Noelani Schmidt, Clover Worrell, Emily Vargo

Faculty Advisor: Dr. Amanda Gilbert

A STEM summer camp was held during the summer of 2022 with elementary age students. Three different research projects were conducted to identify the impact of instructional decisions on student experiences and learning over the course of the camp.

11:00 - 11:50 AM: WOMEN'S COMMISSION ART GALLERY

Design Makes a Difference: Cincinnati Coffee Festival & Ohio River Foundation

Presented by: Daniel Aranovsky, Derrick Bonsu, Alejandro Castro, Lesly Fleurissaint, Shonjae Gibson, Erik Hecklinger, Damien Martinez, Matthew Wise, Lillian Worline, Sadie Worline

Faculty Advisor: Professor Beverly Fanning

Design Makes a Difference: Ankle Injury Awareness - A Multimedia Campaign for College Athletes*

Presented by: Brian Murat

Faculty Advisor: Professor Beverly Fanning

* Streaming in Women's Commission Art Gallery Throughout the Day

Design Makes a Difference: "Better Prepared; Better Equipped" Student-Led Academic Support Group*

Presented by: Sara Blausey

Faculty Advisor: Professor Beverly Fanning

Design Makes a Difference: POTSCare - Mobile App Design*

Presented by: Michaela Hunt

Faculty Advisor: Professor Beverly Fanning

* Streaming in Women's Commission Art Gallery Throughout the Day

12:00 - 12:50 PM: SCHOMBURG AUDITORIUM

McMaster Learning Community: Rome

Fellows: Dr. Kimberly Kuiper, Dr. Kathryn Phillips

Scholars: Ezekiel Baffour, Carmen Caldwell, Will Garlock, Eden Harter, Conner Pool, Rontonio Scott

The Rome McMaster Learning Community is focused on issues facing refugees around the world. Italy is currently in the middle of a humanitarian crisis, receiving more asylum seekers than any other country in Europe. According to the International Rescue Committee, Italy received an estimated 700,000 asylum seekers and migrants from 2014-2020. Many of these were escaping war, religious persecution, and environmental issues such as famine among other crises. These McMaster scholars have spent the academic year researching various issues refugees face such as access to education, health and mental health issues, and childhood development.

12:00 - 12:30 PM: PILGRIM LIBRARY

Poster Session 1

Establishing Long-Term Assessment Study on Water Quality of the Rivers Around Defiance, Ohio

Presented by: Riley Alcorn, Lauren Criblez, Jordan Nighswander, Seth Pearson

Faculty Advisor: Dr. Mollie Sorrell

The Impact of Prescribed Fire on Native and Non-Native Vegetation: Marshall County, Indiana

Presented by: Mackenzie Umbaugh

Faculty Advisor: Dr. Sabrina Brown

An Annual Assessment of Diatom Genera in Upper Maumee River Watershed Tributaries

Presented by: Katelyn Smith, Hallie Webb

Faculty Advisor: Dr. Sabrina Brown

A Short-Term Water Quality Assessment of the Upper Maumee River Watershed Utilizing Diatom Frustules in Defiance County, Ohio, USA

Presented by: Michaela Hunt, Sloane Livingston, Autumn Saddler

Faculty Advisor: Dr. Sabrina Brown

Immunological and Histological Analysis of Mice Spleens Following Acute Polyethylene Terephthalate Exposure

Presented by: Trisha Baldwin

Faculty Advisor: Dr. Nathan Griggs

Does Overconsumption of Ibuprofen and Naproxen Affect the Overall Health of Mice?

Presented by: Grant Johnson, Lily Linke

Faculty Advisor: Dr. Mollie Sorrell

How High Doses of Tylenol and Aspirin Affect the Overall Health of Mice

Presented by: Lily Linke

Faculty Advisor: Dr. Mollie Sorrell

12:30 - 1:00 PM: PILGRIM LIBRARY

Poster Session 2

Capture and Evaluation of Free-Floating Microplastics in the Upper Maumee Watershed

Presented by: Autumn Saddler

Faculty Advisor: Dr. Sabrina Brown

Method Development for Sulfite Determination in Wine

Presented by: Rylee George, Hannah Sanderson

Faculty Advisor: Dr. Mollie Sorrell

Colored Lighting's Effect on Stress and Anxiety in Zebrafish

Presented by: Lauren Criblez

Faculty Advisor: Dr. Mollie Sorrell

Analyzing Diatom Communities Across Different Coastal Environments of Lake Erie

Presented by: Hallie Webb

Faculty Advisor: Dr. Sabrina Brown

Soil Analysis of Defiance College Campus and Athletic Fields

Presented by: Clover Worrell, Trisha Baldwin, Kolbe Vanderleest, Hallie Webb

Faculty Advisor: Dr. Sabrina Brown

Amur Honeysuckle (*Lonicera Maackii*) Increases Abundance and Diversity of Shrub-Dwelling Arthropods and Birds in Forest Edge Habitats

Presented by: Cherokee Agnew, Paige Rohloff

Faculty Advisor: Dr. Linda Tucker-Serniak

Mental Health of Student Athletes: A Baseline Evaluation of Current Defiance
College Student Athletes

Presented by: Abbegail Rank

Faculty Advisor: Dr. Olivia Lozar

Bone Health and Why it Matters

Presented by: Brianna Snider

Faculty Advisor: Dr. Olivia Lozar

1:00 - 1:30 PM: PILGRIM LIBRARY

Poster Session 3

History of Steam Engines in Europe

Presented by: Levi Dirig

Faculty Advisor: Dr. Don Buerk

Unit 731

Presented by: Branden Durkee

Faculty Advisor: Dr. Steven Bare

Japan's Remembrance of World War II

Presented by: Kayla Boettger

Faculty Advisor: Don Buerk

The British Raj

Presented by: John Brancel

Faculty Advisor: Dr. Don Buerk

The History of Nintendo

Presented by: Arik Huffman

Faculty Advisor: Dr. Don Buerk

Feminism in Asia

Presented by: Camryn Bekkering

Faculty Advisor: Dr. Don Buerk

Prenatal and Perinatal Experiences of Women with Autism Spectrum Disorder
Pertaining to Medical and Mental Healthcare

Presented by: Logan Gray

Faculty Advisor: Dr. Clarissa Barnes

Evaluating Athletic Training Practices for Individuals with Autism Spectrum
Disorder

Presented by: Kylie Brinkman

Faculty Advisor: Dr. Clarissa Barnes

1:30 - 2:00 PM: SCHOMBURG AUDITORIUM

Outstanding Inquiry Paper in FYE

Allie Bevins, Caia Bevins, Taylor Bates, Ried Jury, Jacob Saxby

2:00 - 2:50 PM: SCHOMBURG AUDITORIUM

Outstanding Orator in World Issues

Camren Martin, Mickenzie Blackburn, Kate Laukhuf, Taylor Boger, Hannah Feldman, Mallory Timbrock, Tayvon Wilson

3:00 - 3:50 PM: SCHOMBURG AUDITORIUM

Krieger Visiting Scholar in Religious Studies

Presented by: Dr. Kathryn Phillips

Queer and transgender Christian histories have largely been erased from the historical record. This presentation first demonstrates how the erasure of sexual and gender variance has occurred using the example of the Roman Catholic church and its construction of gender and sexual norms. Then, it discusses how scholars of queer and trans histories within Christianity are bringing visibility back to gender and sexual variance. This visibility often directly contradicts arguments made by homo- and transphobic rhetoric, which can impact queer and trans people beyond the academic circle.

4:00 - 4:50 PM: SCHOMBURG AUDITORIUM

Distinguished Faculty Presentation

Presented by: Dr. Don Buerk

5:00 PM: DEFIANCE HALL ATRIUM

Faculty Reception

6:00 - 7:00 PM: CULTURAL ARTS ROOM

Arts & Humanities Division Awards

By invitation only

6:00 - 7:00 PM: BUCHMAN BOARD ROOM

Business, Education, and Social Work Division Awards

By invitation only

6:00 - 7:00 PM: HUBBARD BANQUET

Natural & Applied Sciences and Mathematics Division Awards

By invitation only

7:15 PM: SCHOMBURG AUDITORIUM

Honors Convocation

By invitation only

ABOUT THE MCMASTER SCHOOL FOR ADVANCING HUMANITY

The McMaster School for Advancing Humanity was founded to serve as a focal point for teaching service, scholarship, and action to improve the human condition worldwide. The mission of the McMaster School is:

- To educate students for responsible citizenship;
- To produce committed global citizens and leaders who understand the importance of individual liberties in improving the human condition worldwide;
- To encourage graduates to take an active role in addressing these issues in whatever professions they may choose.

The School serves as a catalyst for innovative, interdisciplinary, community-based work by creating and supporting opportunities for teams of faculty, students, and staff to use their academic and professional skills to address a community need.

ABOUT DEFIANCE COLLEGE

Defiance College, founded in 1850, is a private liberal arts college affiliated with the United Church of Christ. Building on a strong foundation of more than a century of educating citizens for lives of leadership and service, Defiance College provides opportunities for its students to make meaningful impact on society in the twenty-first century with an educational experience of engagement. Defiance's spirit of service through leadership sets us apart.

Defiance College's role as a national and innovated leader in service learning and engagement was recognized by the Corporation for National and Community Service which named Defiance among the top 20 schools in the nation for community service and engagement. This designation was made by naming Defiance College as a Presidential Award Finalist for the 2013 President's Higher Education Community Service Honor Roll.

The Princeton Review features Defiance College in Colleges with a Conscious: 81 Great Schools with Outstanding Community Involvement. Defiance is accredited by the North Central Association of Colleges and Schools, the National Council of Teacher Education, Commission on Collegiate Nursing Education, the Council on Social Work Education, the Commission on Accreditation of Athletic Training Education, and the International Assembly of Collegiate Business Association.

As a national leader in the field of service learning and engagement, DC teaches students to take the knowledge they have gained and use it to change lives for the better - in their communities, in their careers, and in the world.