

Student Research & Creative Scholarship Colloquium

Wednesday, Nov 29 10 a.m.-12:30 p.m. & Thursday, Nov 30 9:30 a.m-11:45 a.m.

SPONSORED BY

WRIGHT'S HONORS PROGRAM

Wednesday, November 29 in S-247

10:00 a.m. - 10:20 a.m. "Greening the City: Nurturing Chicago's Urban Harvest"

The purpose of this project is to both bring awareness and develop a deeper understanding of the efforts made by organizations, communities, and policy makers, towards conservation, sustainability, and naturebased solutions to climate change. Through volunteering and independent research, I will develop a strong understanding of the natural landscape of the Chicagoland area and learn how the people of this great city have worked towards preserving it, as well as developing their own methods of environmental sustainability within an urban environment. This will be a work in progress at presentation date.

Presenter: Helen Cavanagh, Political Science 201 **Faculty Sponsor:** Professor Merry Mayer

11:00 a.m. – 11:40 a.m. "School Reforms, 2008-2020: An Analysis of How the 10,000 Hour Rule and the Matthew Effect Improve Student Learning"

This class debate will develop from first three essays in this English 101 Honors course. These essays defined the 10,000 Hour Rule and the Matthew Effect and applied them to two case examples from Malcolm Gladwell's *Outliers* of students learning to improve their academic story and their chances at opportunities beyond the classroom. Renee is a 28-year-old student who has returned to school to get her associates. Marita is a 4th grader who agrees to attend a character school that has a strict schedule and set of expectations for students. Both students demonstrate for Malcolm Gladwell the ways in which students use education to pursue their sense of the American dream, that is, the opportunity to use their schools and the work they do in them to lift themselves out of poverty. Since many of these insights have become ingrained in the American education system, especially in Chicago's public schools, we will use this debate to determine ourselves the utilities and advantages, and the misunderstandings and exaggerations, that form the influence on education that Gladwell's nonfiction stories have had.

Presenter: English 101-Honors Students **Faculty Sponsor:** Professor Vincent Bruckert

11:40 a.m. - 12:20 p.m. "Mexico - U.S. Relation"

The U.S. relationship with Mexico is arguably one of its most important. The two countries share a 2000mile border with 47 active land ports of entry. Students in this project will put together a museum exhibit highlighting several key factors in this relationship: (1) the illegal flow of guns from the U.S. to Mexico; (2) the impact of NAFTA/USMCA on the two countries, particularly in regards to diet, health and farming; and (3) the flow of people currently coming north through Mexico to the U.S. from south central American countries.

Presenters: Political Science 204-Honors Students

Tyrese Gardley, Isabella Nathan, Quinn Avery, Emilio Torres, Gabriela Chumana, Yamylett Correa *Faculty Sponsor:* Professor Merry Mayer

Thursday, November 30 In S-247

9:30 a.m. - 10:20 a.m. "Moral Corruption in Literature"

In this session, students from Literature 115 HON9 will discuss the theme of moral corruption in literature. This theme can be traced throughout many works, and we will concentrate on several, including Christopher Marlowe's *Dr. Faustus*, William Shakespeare's *Macbeth*, Mary Shelley's *Frankenstein*, Fyodor Dostoyevsky's *Crime and Punishment*, Robert Louis Stevenson's *Dr. Jekyll and Mr. Hyde*, and Oscar Wilde's *The Picture of Dorian Gray*. (We will also touch on the Bible, John Milton's *Paradise Lost*, Samuel Taylor Coleridge's "The Rime of the Ancient Mariner," and Geoffrey Chaucer's "The Pardoner's Tale." Students will examine some of the specific themes and questions of these works, including those topics they will more fully address in their 2500-3000-word final research papers. Students will also include highlights from their powerpoints on specific works and themes of the course.

Presenters: Literature 115-Honors Students **Faculty Sponsor:** Professor Michael Petersen

10:20 a.m. – 10:40 a.m. Fostering Community of Practice (CoP): The Impact on Self-Efficacy and Belonging of Undergraduate Students

In 2021, college dropout rates increased by 3.6%, with 2.3 million students contributing to a 40.4 million Some College, No Credential (SCNC) population. Despite efforts to retain students, the growing SCNC population suggests a persistent issue. We hypothesize increasing community of practice (CoP) through participation in student organizations could increase belonging in college and consequently increase retention. CoP includes a group of people with a shared passion or concern who work towards a common endeavor. Our survey of 300 participants reveals that engagement in CoP-driven extracurricular activities empowers students, despite external barriers. Case study interviews investigate how students find added motivation to continue their programs. Identifying how participation can be cultivated into a CoP can help colleges create these spaces. These findings underscore the potential of CoP cultivated from extracurricular and cocurricular activities to fortify students' resolve, providing a pathway toward improved academic persistence, success, and retention.

Presenter: Viven Nguyen, Anthony Blanco, Andrew Steppan, and Juan Munoz, Chemistry 295 *Faculty Sponsor:* Professor Doris Espiritu

10:40 a.m.-11:00 a.m. "The Impact of STEM Volunteering on STEM Identity and STEM Efficacy"

Service through volunteerism correlates with growth in social behavior and academic aptitude. STEMrelated service has the potential to promote an individual's growth and belonging in the profession. Although beneficial, there are limited studies that address the impact of service with STEM-identity (ability to see oneself as a STEM professional) and STEM-efficacy (belief in one's ability to succeed in STEM). We hypothesize that students who participate in STEM-related services increase their STEM identity and efficacy. To test the hypothesis, we designed several short-, medium-, and long-term STEM-related service projects and designed surveys to measure impact. Preliminary results indicate an increase in STEM efficacy and STEM identity overall but a decrease in a long-term activity. Participants expressed willingness to continue providing STEM-related service. More service activities will be designed to expand the current sample size to enhance these findings and conduct case-study interviews to get the volunteers' perspectives.

Presenters: James Haller, Anna Le, Jimmy Peralta, The Center of Excellence for Engineering and Computer Science

Faculty Sponsor: Professor Doris Espiritu

11:00 a.m. – 11:20 a.m. "Developing a Research-Based Application for Effective Mentor-Mentee Matching"

In our research, we focus on the development of an application for effective mentor-mentee matching. The application uses an experimental algorithm consisting of four dimensions: personality type, demographics, career aspirations, and interests. A preliminary phase was conducted on 100 participants, with mentoring pairs formed based on matching percentages. A post-experience survey was answered by 18 participants, and results were mixed. 45% felt neutral about their match, 10% disagreed, and 45% agreed. The study is in a very preliminary stage, but we will refine the algorithm as we get more results with a larger sample size.

Presenters: Alondra Gonzalez, Bohan Ren, Alexis Alvarez, and Amara Moreno, Engineering Program at Wright

Faculty Sponsor: Professor Doris Espiritu

11:20 a.m. – 11:40 p.m. "Case Studies: Factors Affecting Reverse Transfer Students' Degree Completion"

This ongoing research investigates the factors influencing students' decisions to reverse transfer. This term refers to students shifting from 4-year institutions to community colleges without completing a degree. In a 19-month period, 1.9 million students dropped out of college, with 250K reverse transferring. In Illinois, only 16% of these students earn an associate degree, and 24% of the 16% attain a bachelor's degree. This research centers on case study interviews from Wright College using the appreciative inquiry method to explore barriers at 4-year institutions and motivations for reverse transfers. Preliminary findings suggest a focus on a sense of belonging may enhance academic success for reverse transfer students. The research aims to contribute insights for community colleges to design interventions supporting this population's short-term success and long-term degree attainment.

Presenters: Perla Bran, Luis Villanueva, Brenda Najjuma, Ava Piemontese *Faculty Sponsor:* Professor Doris Espiritu



Wright faculty sponsors: Professors Doris Espiritu, Michael Petersen, Vincent Bruckert, Merry Mayer Honors Program Coordinator: Professor Natasha Todorovich

Many thanks to our student presenters and to our faculty sponsors!