# Saint Xavier University Honors Program 2020 Senior Capstone Projects



Honors Senior Capstone research projects were completed during the 2019-2020 academic year and involved extensive research across the disciplines.

Students conducted applied research, laboratory research, library research, and survey research. Each student authored a substantial research paper reflecting the disciplinary standards of their field of study.

Faculty experts mentored each project and the Honors Program senior capstone project coordinator, Dr. Kathleen Alaimo, supervised the projects. The SXU Honors Program is directed by Dr. Julia Wiester.

View Video Presentations: https://app.vidgrid.com/content/Y whxFyR032MN

# **Biology and Chemistry**

Marina Martinez: The Prevalence of Antibiotic Resistance Among Bacterial Strains Isolated from Simple Compost Soil in the Chicagoland Area (Mentor: Dr. David Elmendorf)

**Michael Zarnowski**: Mycoremediation of Nicotine and Other Cigarette Pollutants: A Systematic Review (Mentor: Dr. Bindhu Alappat)

**Communication Sciences and Disorders Noor Al-Shrideh**: An Exploration of Assessment Practices of Speech-Language Pathologists Serving Arabic-Speaking Populations (Mentor: Dr. Giselle Núñez) **Iliana Caso**: The Importance of Early Childhood Language Development Among Deaf Children: An Evaluation of Assistive Services. (Mentor: Dr. William Sennett)

## **Computer Science**

Kamal Alshair: Bitty Bops: Using Animal-Assisted Therapy Concepts in a Video Game to Manage Depression (Mentor: Dr. James Vanderhyde)

Adam Badagliacco: Sax Savior: Designing and Creating a Video Game to Promote Saxophone Education (Mentors: Dr. James Vanderhyde and Professor Lara Regan)

#### Nursing

Alyssa Aurelio: More Social Media, Less Social Interaction, More Adolescent Depression: The Need for Continuing Mental Health Education for Pediatric Nurses (Mentor: Professor Tina Dorau and Dr. William Zic)
Gisselle Murillo: Closing the Health Literacy Gap: Strategies to Improve Medication Education in the Hispanic Community (Mentor: Dr. Charlene Bermele)

## Philosophy and Psychology

Tiffany Abrams: Perceptions of Prostitution: What Drives Opposition? (Mentor: Dr. Angela Pirlott) Tajah Thomas: Fighting Racism: A Philosophical and Practical Inquiry into Creating Change (Mentor: Dr. Forrest Perry)

# Saint Xavier University Honors Scholars Class of 2020

**Tiffany Abrams** is a double major in Criminal Justice and Psychology. Tiffany is president of Psi Chi and Vice President of Psychology Club, offering pre-professional opportunities for students as well as raising awareness about the importance of mental health. After graduation, she plans to apply to graduate programs in either clinical psychology or social work.

**Kamal Alshair** is a Computer Science major. After graduation, he plans to continue full time on the Master of Applied Computer Science degree as well as the MBA degree at Saint Xavier University. He also hopes to receive employment offers soon!

**Noor Al-Shrideh** is a Communication Sciences and Disorders major. After graduation, she plans to attend the speech-language pathology graduate program at SXU. In her free-time she enjoys reading, cooking, painting, and teaching Arabic to children on the weekends.

**Alyssa Aurelio** is a Nursing major. After graduation, she plans pass the NCLEX to finally become a registered nurse! She hopes to continue her education to become a Nurse Practitioner. During the COVID-19 quarantine, Alyssa and her family raised funds for over 100 nurse packs for UChicago Medicine at Ingalls. Alyssa plans to continue volunteer work through her church and through travel.

Adam Badagliacco is a Computer Science major and Music minor. He is currently pursuing a career in software engineering with a focus on game development. Adam also studies the alto saxophone, with an emphasis on solo and improvisational work. His senior project combined his two fields of study.

**Iliana Caso** is a Communication Sciences and Disorders major with a minor in Art and Design. Iliana is a member of the National Student Speech Language and Hearing Association (NSSLHA), serving as President of SXU's NSSLHA chapter in 2019-2020. She will attend Southern Illinois University-Carbondale to complete a Master of Science program in Speech-Language Pathology. The Deaf community has been a growing passion for Iliana and part of her project's inspiration.

**Marina Martinez** is a Biology/Pre-med major with a minor in Chemistry. After graduation, she plans to pursue a master's degree before applying to medical school. As an SXU student, Marina traveled to Dublin, Ireland where she visited the Sisters of Mercy original home. This experience not only helped her to develop her skills but also inspired her to become a better leader which she hopes to carry throughout her career and for the rest of her life.

**Gisselle Murillo** is a Nursing major. Gisselle is the senior class representative of the Student Nurses Association. After working as a nurse for about a year, she hopes to enroll in the Family Nurse Practitioner master's program at SXU. Gisselle volunteers at food pantries, fundraisers, and helps distribute food through Home Run Inn.

**Tajah Thomas** is a double major in International Studies and Philosophy. At SXU, she has worked as a resident assistant supporting first-year residents in navigating college life, a peer minister organizing service trips and a writing consultant for the Learning Center. Tajah also studied abroad in France, where she immersed herself in French language and culture. She hopes to attend law school to study international and human rights law.

**Michael Zarnowski** is a Chemistry major and a member of the Saint Xavier University student chapter of the American Chemical Society. He thanks Mark Westerhoff for assistance in setting up his laboratory experiment for the mycoremediation of nicotine. Michael plans to attend graduate school in the fall to pursue an advanced degree in environmental chemistry.