

# Saint Xavier University Honors Program

## 2021 Honors Symposium



**April 24, 2021, 9 am – 1 pm**  
**Join via Zoom**

<https://zoom.us/j/96762845386>

Honors Scholars completed capstone research projects across a variety of disciplines during the 2020-2021 academic year.

Students conducted in-depth scholarly research, often supplemented by laboratory 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 all projects. The SXU Honors Program is directed by Dr. Julia B. Wiester.



**Welcome: Dr. Julia Wiester, Program Director, 9:00 am**

**Studies in the Natural Sciences, 9:15 am – 11:00 am**

**Jessica Flores:** The Science in *Curanderismo*: Extraction and Enzyme Assay of Medicinal Plants *H. inuloides*, *V. thapsus*, & *M. chamomilla*

**Alejandro Jimenez-Baeza:** Identification of *Rhodopseudomonas* isolate in *Sarracenia purpurea* pitchers: Evaluation of role in nitrogen economy of the pitcher inquiline community

**Sarah Kaley:** Examination of C-Fos Activity in the Brain of Male Red-Sided Garter Snakes Following Exposure to the Female Pheromone

➤ AUDIENCE DISCUSSION

**Erica Rojas:** mRNA Vaccines: Will the COVID-19 Pandemic Revolutionize Future Rapid Developments?

**Michael Kaminski:** Gold Nanoparticles: Synthesis, Stabilization, and Catalytic Activity for Reduction Reactions

➤ AUDIENCE DISCUSSION

**Studies in Human Behavior & Society, 11:15 am – 12:30 pm**

**Stephani Fabular:** Preparing Undergraduate Nursing Students to Provide End of Life Care: The Impact of the End of Life Simulation Experience

**Bridgid Truty:** Code-Switching and Bilingual Autobiographical Memory

**Lauren Banicki:** More Than Skin Deep? Skin Tone and Perceptions of Attractiveness and Health

**Yasmine Zavala:** Femicide in Latin America: Gendering the Underlying Political, Judicial, and Economic Factors in Honduras, Mexico, and Peru

➤ AUDIENCE DISCUSSION

**Presentation of Honors Students: Mentors**

**Presentation of Award for Best Project: Dr. Alaimo**

**Closing Remarks: Dr. Wiester**

# Saint Xavier University 2021 Honors Scholars

## Lauren Banicki

### **More Than Skin Deep? Skin Tone and Perceptions of Attractiveness and Health**

Mentor: Dr. Angela Pirlott, Psychology

Lauren is a psychology major with a minor in women and gender studies, and serves as president of the SXU Green Movement. Lauren chose this research topic after reading about how skin tone appears to be a salient marker of beauty for women of color, and sought to learn more about skin tone preferences and their implications. Supported by the Mamie Phipps Clark Research Grant and the Margaret Messer Student Research Grant, Lauren has presented her research findings at the Society for Personality and Social Psychology and the Midwestern Psychological Association. Lauren plans to pursue a graduate degree in psychology.

## Stephani Fabular

### **Preparing Undergraduate Nursing Students to Provide End of Life Care: The Impact of the End of Life Simulation Experience**

Mentor: Dr. Mary Tiberg, Nursing

Stephani is a nursing major with a minor in gerontology studies. She is a Nursing Peer Tutor/Mentor, Nursing Resource Lab Assistant, and the Student Nurses Association's Vice-President. Stephani chose this research topic because she believes effective patient-centered care at the End of Life is a vital skill set for nursing students to develop. Stephani volunteers at the University of Chicago Medical Center in Orland Park and after graduation she will join the Medical Intensive Care Unit at Advocate Christ Medical Center. Stephani is the recipient of the Dr. Agnes Polous Outstanding Undergraduate Nursing Student Award for 2021.

## Jessica Flores

### **The Science in *Curanderismo*: Extraction and Enzyme Assay of Medicinal Plants *H. inuloides*, *V. thapsus*, and *M. chamomilla***

Mentors: Dr. Sharada Buddha, Chemistry and Dr. Amanda Lopez, History

Jessica is a biology pre-health major with a minor in Latino and Latin American studies. She is a member of the Tau Sigma Honor Society and "Lead, Learn, Laugh and Self-Love," a group of Latinas who recently participated in Michigan State University's Dia de la Mujer conference. Jessica's topic grew out of her family and community experiences with curanderismo and a scientific impulse to investigate the science behind alternative medicine. After graduation, Jessica hopes to enroll in a graduate physician assistant program and work in pediatrics.

## Alejandro Jimenez-Baeza

### **Identification of *Rhodopseudomonas* isolate in *Sarracenia purpurea* pitchers: Evaluation of role in nitrogen economy of the pitcher inquiline community**

Mentor: Dr. Liane Cochran-Stafira, Biological Sciences

Alejandro is a biology pre-health major with a minor in chemistry. He has been a Cougar Service Scholar for four years, logging over 500 volunteer hours, including at the Port Ministries' Bread Truck. Alejandro, a member of the honor society Tri Beta, has been involved in lab research for over three years, and chose this topic because of his fascination with microbiology. He plans a gap year to study for the MCAT, shadow in the medical field, pursue his lab research, and continue his volunteer work, especially around the issue of food insecurity.

## Sarah Kaley

### **Examination of C-Fos Activity in the Brain of Male Red-Sided Garter Snakes Following Exposure to the Female Pheromone**

Mentor: Dr. Randolph Krohmer, Biological Sciences

Sarah, a biology pre-health major with a minor in Chemistry, graduated in December. She served as an officer in both the SXU Pre-Medical Society and Tri Beta Honor Society, and as captain of the SXU Cheerleading Team. Sarah completed a clinical shadowing internship in Milan, Italy and is a volunteer in the Christ Hospital ER. Sarah's deep interest in neurology is inspired by her younger brother's autism and is driving her to pursue a medical degree. A recipient of the SXU Excellence in Biological Research Award and a grant from the Tri Beta Research Foundation, Sarah presented her research at the Society for Integrated and Comparative Biology.

## Michael Kaminski:

### **Gold Nanoparticles: Synthesis, Stabilization, and Catalytic Activity for Reduction Reactions**

Mentor: Dr. Julia B. Wiester, Chemistry

Michael is a chemistry major with a minor in mathematics. Landing a student worker position preparing chemistry labs for the General Chemistry lab course gave him the opportunity to not only learn a lot of hands-on chemistry but also helped him to become part of the STEM community at SXU. In turn, this led Michael to his current employment at the Medical Assay Laboratory where he plans to continue working after graduation, until moving on to graduate school. Michael credits his mentor with motivating him to pursue research on nanoparticles.

## Erica Rojas

### **mRNA Vaccines: Will the COVID-19 Pandemic Revolutionize Future Rapid Developments?**

Mentor: Dr. Bindhu Alappat, Chemistry

Erica is a biology pre-health major with a minor in Spanish. She is a member of, and serves as treasurer for, the SXU chapter of the national biological honor society, Tri Beta. Erica is also a STEM Peer Mentor, and recipient of the 2020 "Explore STEM Star" for the Estrellas de SXU Latinx Achievement Awards. Erica chose her research topic based on current events, a personal interest in mRNA vaccines, and a desire to link basic scientific research with medical applications. After graduation, she plans to take the MCAT and attend medical school.

## Bridgid Truty

### **Code-Switching and Bilingual Autobiographical Memory**

Mentor: Dr. Carissa Broadbridge, Psychology

Bridgid is a psychology major with a minor in social work. She is a member of the honor societies Psi Chi and Tau Sigma, as well as a member of Unidos and the Psychology Club. Bridgid is a Certified Professional Coder (CPC) and a member of the American Association of Professional Coders. She is also a certified Sexual Assault Advocate and volunteers weekly with Mujeres Latinas en Accion. She hopes to pursue a doctoral degree after graduation, while still nurturing her greatest accomplishment: her two children.

## Yasmine Zavala

### **Femicide in Latin America: Gendering the Underlying Political, Judicial, and Economic Factors in Honduras, Mexico, and Peru**

Mentor: Dr. Matthew J. Costello, Political Science

Yasmine is a double-major in political science and international studies, with a minor in Latino and Latin American Studies. She is president of Unidos, a Latinx student organization, and is SXU's Lincoln Academy of Illinois Student Laureate for the Class of 2021. She completed an internship at the US Department of State's Office for Monitoring and Combatting Trafficking in Persons. Yasmine decided to research femicide as a structural problem in Latin America in order to challenge the mainstream media's portrayal of femicides as isolated, albeit tragic, incidents.