

May 2, 2019



# The Saint Mary's Symposium

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Research and Creative Scholarship



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## Research and Creative Scholarship

### CONFERENCE SESSION

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**9 – 9:10 a.m.**

#### Welcome

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Opening remarks by **Laura Williamson Ambrose**, associate professor of humanistic studies

**9:10 – 10 a.m.**

#### Keynote Address

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*Rice Commons*

*"Who frames the questions? Why students' research matters."*

**Rebecca Stoddart**, professor of psychology

**10:15 – 11:30 a.m.**

#### Global Politics and Activism

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*Vander Vennet Theatre*

Moderator: **Andrew Pierce**, assistant professor of justice studies and philosophy

*"Gendered experiences of 'rightists': Female students and faculty in 1957's China"*

**Yidi Wu**, assistant professor of history

*"Internal migration, social marginalization, and the hukou system in China: Challenges and prospects for reform"*

**Cameron Moore '19**, global studies; international development concentration

*"Activism and music in literature: The case of Voces del Barrio (2007) by Robinson Posada"*

**Sandra Úsuga**, lecturer of modern languages

#### Forms of Knowledge

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*Earley Conference Rooms DEF*

Moderator: **Megan Zwart**, associate professor of philosophy

*"Faithful to life"*

**Phyllis Kaminski**, professor of religious studies

*"Indigenous knowledge and alternative approaches to climate change"*

**Emily Speybroeck '19**, global studies; international development concentration

*"Women's bodies, women's knowledge: An analysis of birth"*

**Katherine Wankelman '20**, gender and women's studies and social work

*"Bringing accompaniment to scale: The role of NGOs and policy in international development"*

**Annie McHugh '19**, global studies; international development concentration and Spanish minor

## Into the Woods: Interdisciplinary Perspectives on Nature

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*Rice Commons*

Moderator: **Julie Tourtillotte**, professor of art

*"Sexy scents: Plant volatiles as mediators of reproductive communication"*

**Cassie Majetic**, associate professor of biology

*"Ode to the blossom"*

**Aaron Moe**, assistant professor of English

*"The Church as 'Fidelity'"*

**Margaret M. Gower**, assistant professor of religious studies

*"Birds' nests as archive, natural history as memorial: Genevieve Jones's illustrations of nests and birds of Ohio"*

**Tiffany Johnson Bidler**, associate professor of art

12:45 – 2 p.m.

## Visualization

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*Vander Vannet Theatre*

Moderator: **Ranjan Rohatgi**, assistant professor of computer science and mathematics

*"The illustrated castle"*

**Mary Coleman '20**, humanistic studies and political science; philosophy minor

*"The image of nursing: How the media's portrayal of nurses affects the profession"*

**Grace Zablocki '21**, nursing

*"Blind as a bat? Tadarida brasiliensis adjusts echolocation calls in the presence of ambient light"*

**Kathryn McGowan '19**, biology; ecology, evolution, and environmental biology  
concentration and global studies minor

## Inclusive Campus

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*Earley Conference Rooms DEF*

Moderator: **Leslie Wang**, associate professor of sociology

*"Women's spaces versus feminist spaces: The replication of hierarchies in women's colleges"*

**Catherine Kehner '20**, gender and women's studies and sociology

*"Able-bodied vs. other: The unnoticed privilege and oppression of disability"*

**Natalie Davis '20**, English literature and writing and gender and women's studies

*"Dress codes, equality, and inclusivity: Why dress codes matter"*

**Madeleine Green '20**, psychology; gender and women's studies minor

## Twenty-first-Century Problems

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*Rice Commons*

Moderator: **Kristin Kuter**, associate professor of data science and mathematics

*"Tire pressure monitoring system"*

**Masarakufa Gumiro MS '18**, data science

*"Evidence-based quality improvement project: Analysis of medication error causation"*

**Josephine Bruni '19**, nursing; biology minor, **Lauren Richey '19**, nursing; biology minor, and **Catherine Sosnowski '19**, nursing; biology and studio art minors

*"Can social media ads facilitate retail therapy? An investigation of psychological outcomes of ad engagement in college females"*

**James Rogers**, lecturer of business and economics and **Alissa Russell**, assistant professor of psychology



2:15-3:30 p.m.

## Systems and Metrics

*Vander Venet Theatre*

Moderator: **Ari Farshbaf**, assistant professor of business and economics

*"Equal pay in America: The need for an intersectional approach"*

**Zoie Clay '19**, gender and women's studies and political science

*"Prevention of non-ventilator healthcare-associated pneumonia"*

**Morgan Chichester '20**, nursing, **Kathryn Hansen '20**, nursing, and **Abigail Mengel '20**, nursing

*"England's arithmetic schools in the sixteenth and seventeenth centuries"*

**Cheryl Periton**, visiting assistant professor of math

## Stress and Behavior

*Earley Conference Rooms DEF*

Moderator: **Sue Anderson**, associate professor of nursing science

*"A qualitative investigation into the effect of childhood emotional and physical trauma on mental health in college-aged individuals"*

**Mary Carper '19**, social work; biology minor and **Haley Coghlan '19**, social work; religious studies minor

*"The influence of dogs on stress and anxiety in college students"*

**Angela Bozik '18**, psychology

*"The behavior of Swainson's Hawks (*Buteo swainsoni*) during predation of Brazilian free-tailed bats (*Tadarida brasiliensis*) in flight"*

**Lillias Zusi '19**, biology; ecology, evolution, and environmental biology concentration and English literature minor

4 - 5:30 p.m.

## Senior Showcase and Social Hour

*Carol Ann Mooney Fieldhouse*

### WELCOME

Opening remarks by **Interim President Nancy Nekvasil**

## POSTER SESSION

### ART

*"Circle"*

**Hope Marinkovich '19**, art and communication studies; public relations and advertising minor

*"Helios"*

**Cara Givens '19**, art; studio art concentration

### BIOLOGY

*"A volatile in time: The scent emission of dichogamous *Canella winterana* through its sexual stage transition"*

**Paige Schurr '19**, biology and psychology; environmental studies minor

*"The expression of *FGF5* in chick cochlear and vestibular neurons"*

**Darby Auckland '19**, biology

### BUSINESS AND ECONOMICS

*"jetBlue"*

**Abigail Fleming '19**, business administration; international business and marketing concentration, **Erin Maloney '19**, accounting; finance concentration, **Brianna Nichols '19**, accounting; finance concentration, and **Emmalee Schulte '19**, accounting

*"Marriott"*

**Grace Burchett '19**, accounting; finance concentration, **Mackenzie Hamman '19**, business administration; marketing concentration, **Anna Kerper '19**, business administration; marketing concentration, and **Kaitlin King '19**, accounting; finance concentration

### CHEMISTRY

*"HPLC verification of paper analytical devices to screen for low-quality albendazole"*

**Heather DiLallo '19**, chemistry; mathematics minor

*"Multiple Cu(I) and Cu(II) binding sites on human copper transporter 1 ectodomain"*

**Erica Slogar '19**, chemistry; mathematics minor

### COMMUNICATION STUDIES

*"Effects of taekwondo: Leadership skills and self-confidence"*

**Kerry Rose McDonald '19**, communication studies; public relations and advertising minor

*"Drag discourses: Doing drag in South Bend"*

**Anna Carpenter '19**, communication studies; film and gender and women's studies minors

## COMMUNICATIVE SCIENCES AND DISORDERS

*"Roles of genre, vocals, and instrumentation in perceived music quality with limited frequency information"*

**Emily Miron '18**, communicative sciences and disorders

*"A survey of portrayals of autism in TV and movie characters"*

**Claire Conlon '20**, communicative sciences and disorders, **Natalie Dock '19**, communicative sciences and disorders; business administration and psychology minors, **Jalyn Doyle '20**, communicative sciences and disorders; religious studies minor, **Meghan Egierski '20**, communicative sciences and disorders; neuroscience and psychology minors, **Haley Mitchell '20**, communicative sciences and disorders; gerontology minor, **Elizabeth Preister '19**, communicative sciences and disorders, **Emma Snodgrass '20**, communicative sciences and disorders, **Taylor Szabo '20**, communicative sciences and disorders; psychology minor, and **Sophia Wittenberg '20**, communicative sciences and disorders; English as a second language and/or bilingual/bicultural minor

## EDUCATION

*"Perceptions of the daily 5 literacy framework in primary classrooms"*

**Christina McGuire '19**, elementary education; reading minor

*"Picture books benefit readers in grades 4-8"*

**Kaylee Briggs '19**, elementary education

## ENGLISH WRITING

*"Ghost trees"*

**Molly Vogele '19**, English writing and French

*"A prayer for solace"*

**Catherine Grady '19**, communication studies and English literature and writing

## ENGLISH LITERATURE

*"A spasm of rebellion": Challenging the construction of history through non-masculine time in Virginia Woolf's Orlando"*

**Elaine Albaugh '19**, English literature and writing

*"The empathetic art of storytelling: An intimate conversation between The Canterbury Tales and The Refugee Tales"*

**Anna Byrnes '19**, English literature and secondary education



## ENVIRONMENTAL STUDIES

*"Utilization of social media as a tool for education and encouragement of environmental practice in college-aged students"*

**Sophia Johnson '19**, biology; environmental studies minor

*"The effects of religion and spirituality on environmental stewardship"*

**Ellen Johnson '19**, biology; ecology, evolution, and environmental biology concentration and environmental studies minor

## GENDER AND WOMEN'S STUDIES

*"The Women's March on Washington: An intersectional movement, or a display of white feminist outrage?"*

**Ashley Hovorka '19**, history, political science, and Spanish; gender and women's studies minor

*"Class perceptions: How the perceived social class of victims and perpetrators influences victim blaming"*

**Jordan Lolmaugh '19**, gender and women's studies and psychology; US history minor

## GLOBAL STUDIES

*"Shopping in the social media age: Should Pull&Bear enter the US market in the city of Chicago?"*

**Ashlyn Maes '19**, global studies and Spanish; mathematics minor

*"Pursuing health and spirituality through hatha yoga in Seville, Spain"*

**Angeline Barthel '19**, global studies; anthropology concentration and Spanish minor

## HISTORY

*"Radio Rwanda: How broadcast journalism weaponized hatred (1993-1994)"*

**Sarah Allen '19**, history and political science

*"Family troubles: Women's changing identities in the Northern Irish conflict"*

**Megan Temple '19**, education and history

## HUMANISTIC STUDIES

*"Gender and religion in the representation of Queen Elizabeth I"*

**Jordan Cockrum '19**, communication studies and humanistic studies

*"Witch, mother, murderer: Interpretations of Medea from the antiquity to the present"*

**Allie Johnston '19**, humanistic studies and psychology

## MATHEMATICS AND COMPUTER SCIENCE

*"Partisan gerrymandering and the efficiency gap"*

**Maria Escobedo '19**, statistical and actuarial mathematics; business administration and Spanish minors

*"Transfinite numbers"*

**Monica McGrath '19**, statistical and actuarial mathematics; computer science minor

## MODERN LANGUAGES

*"Ma Voix: A collection of Francophone women's poetry"*

**Riley Harber '19**, English writing and French; gender and women's studies minor

*"Neoliberalism: The modern imperial force in Latin America"*

**Ashley Hovorka '19**, history, political science, and Spanish; gender and women's studies minor

## MUSIC

*"Making a musician"*

**Grace Haase '19**, English writing and music

*"Draw my life (in music)"*

**Jennie Liu '19**, music and philosophy; business administration minor

## NURSING SCIENCE

*"Evidence-based quality improvement project: Cell phones as a potential vector of transmission of healthcare-associated infections"*

**Madelyn Kostielney '19**, nursing; biology minor, **Sarah Mead '19**, nursing; biology minor, and **Riley Schlais '19**, nursing; biology minor

*"Physical restraint use in geriatric populations: Evidence-based quality improvement project"*

**Emma Vielee '19**, nursing; biology minor, **Johanna Pinto '19**, nursing, **Annabelle Paulson '19**, nursing; biology minor, and **Meghan Baker '19**, nursing; biology minor

## PHILOSOPHY

*"The agora of the digital age"*

**Deirdre Cawley '19**, English writing and philosophy; studio art minor

## PHYSICS

*"CdSe-metal oxide quantum dot solar cells: The effect of conduction band matching on voltage and efficiency"*

**Sam Ayala '19**, physics; mathematics minor

## POLITICAL SCIENCE

*"Taking action after tragedy: A comparative analysis of gun reform in the wake of mass shootings"*

**Maeve McMahon '19**, global studies and political science; economics minor

## PSYCHOLOGY

*"Conformity to masculine norms in female athletes at single sex and co-ed institutions"*

**Kathleen Shaffer '19**, history and psychology; biology minor

*"Loneliness in the twenty-first century: The effects of social media"*

**Londy Avila '19**, psychology; biology minor

## SOCIAL WORK

*"A qualitative analysis on the effect of childhood trauma on mental health in college-aged individuals"*

**Mary Carper '19**, social work; biology minor and **Haley Coghlan '19**, social work; religious studies minor

*"The effect of violent crime on the overall self-report of physical and mental health and well-being of older adults"*

**Jane Henry '19**, social work; gerontology minor

## SOCIOLOGY

*"Navigating a 'good ol' boys' system: A qualitative analysis of the experiences of female police officers"*

**Mikaela Gohn '18**, sociology

## STUDENT INDEPENDENT STUDY AND RESEARCH (SISTAR) AWARDS

*"Ma Voix: A collection of Francophone women's poetry"*

**Riley Harber '19**, English writing and French; gender and women's studies minor and **Dionne Bremyer**, former assistant professor of English

*"Implementing data analytics technology for vital statistics evaluation in Uganda"*

**Samantha Schickel '19**, nursing; biology minor, **Adele Edmonds '19**, nursing; biology minor, and **Tracy Anderson**, associate professor of nursing

*"Listening to transgender voices"*

**Jordan Lolmaugh '19**, gender and women's studies and psychology; US history minor and **Jamie Wagman**, associate professor of gender and women's studies and history

*"Assessing divided attention in a rodent model of Attention Deficit Hyperactivity Disorder"*

**Alicia Twisselmann '19**, psychology; biology and neuroscience minor and **Teresa Aubele-Futch**, assistant professor of psychology



## Nourishing a Rich Intellectual Life

Saint Mary's students and faculty have long been engaged in meaningful research and creative work. For the third year, we celebrate their hard work at Saint Mary's Symposium. With a series of conference-style talks, panels, and interactive sessions by both faculty and students, the day-long event then culminates at our popular social hour and a poster session featuring projects of Saint Mary's seniors and summer Sistar teams.

Here students have opportunities to delve into a field of study, explore new topics through research, and examine creative approaches. And because of all these opportunities, they are forever changed and are stronger women when they leave.

It was in 1991 that the College began awarding Student Independent Study and Research (Sistar) grants to support student-faculty collaboration. The early teams looked at tourism in Hawaii, the neuropsychology of driving ability, original drawings of the eighteenth and nineteenth centuries, and Sister Madeleva's legacy, which resulted in Gail Mandell's *Madeleva: A Biography*.

The collaborative relationship between faculty and student is one of the hallmarks of a Saint Mary's education. The late Jerome McElroy, professor of economics, told the *Courier* in 1991 that he wanted to work with students because of their genuine interest in a topic. So when Angelique Dioguardi '92 came to him with the idea to study tourism in Hawaii, her home state, he thought they would make a good team, as his research looked at tourism in the Caribbean.

It's this spirit of collaboration along with mutual respect and learning from each other that our faculty and students enjoy and benefit from. As the College celebrated 150 years in 1994, the Center for Academic Innovation (CAI) was endowed to nourish the intellectual life of Saint Mary's by providing faculty development and student enrichment programs. Sistar grants are part of this, along with funding that providing travel and teaching grants for faculty.

With resources like these, it's no surprise that Saint Mary's is in the top 25 percent of institutions for the rate of graduates who go on to earn research doctorates. Students are engaged in the classroom, and they can network with Saint Mary's alumnae, women who are accomplished researchers, scholars, inventors, creators, artists, and entrepreneurs – across the country and the globe.

## NOTES

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