

St. Norbert College

## Digital Commons @ St. Norbert College

---

Undergraduate Research Forum Programs

St. Norbert Collaborative Center for  
Undergraduate Research

---

2023

## St. Norbert College The Forum 2023

St. Norbert College

Follow this and additional works at: [https://digitalcommons.snc.edu/collaborative\\_programs](https://digitalcommons.snc.edu/collaborative_programs)

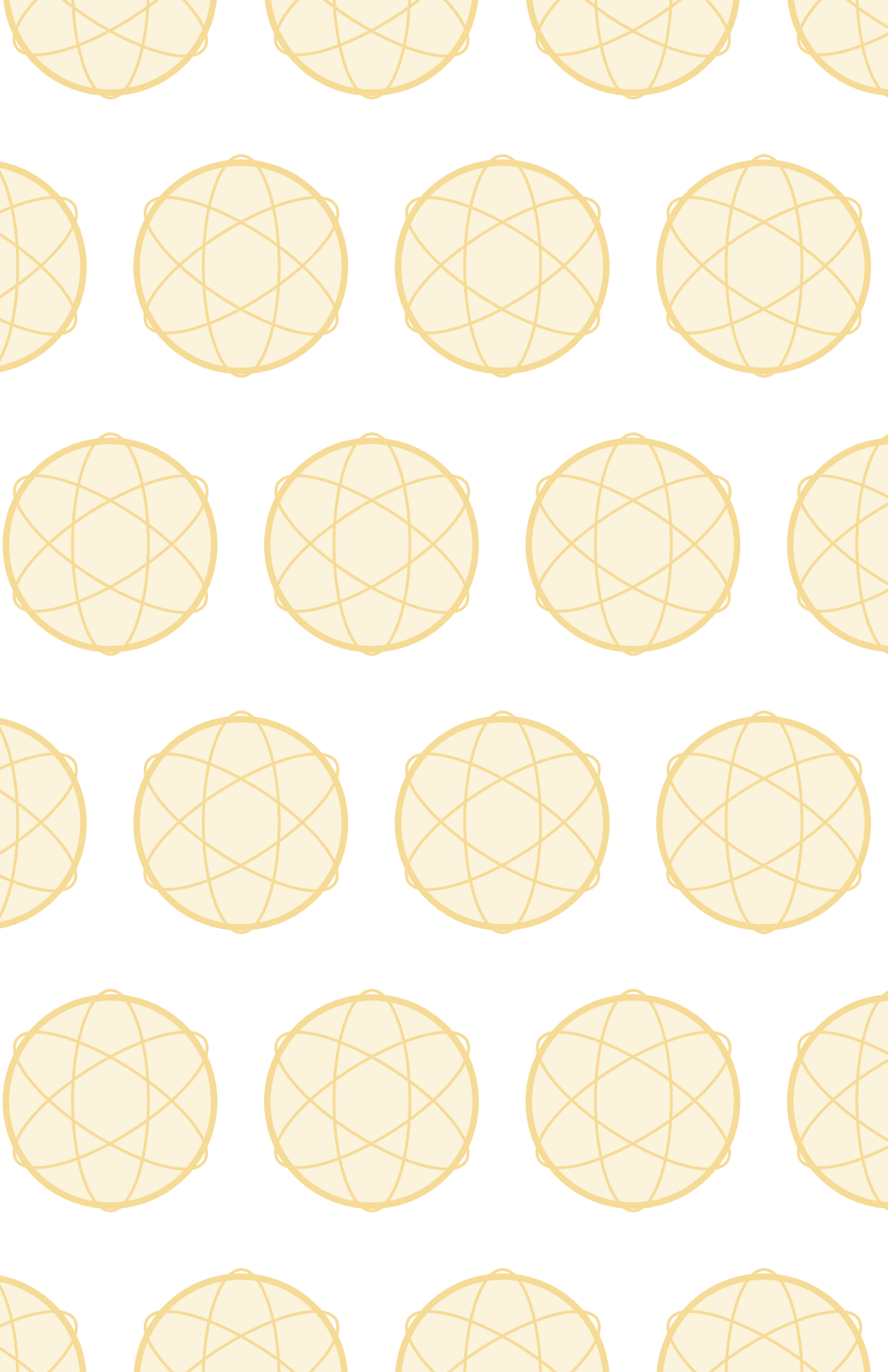
---

St. Norbert College



# THE FORUM 2023


Mulva Library  
Friday, April 28  
9:00 a.m.—3:30 p.m.






St. Norbert College

# THE FORUM 2023



The Undergraduate Research Forum highlights the valued tradition at St. Norbert College of collaboration taking place in laboratories, studios, and other scholarly or creative settings between our students and our faculty and staff, resulting in a rich array of scholarly research and creative work. This celebration features projects that evolved out of independent studies, directed research, class assignments, and casual interactions as well as formal collaborations supported by internal and external grant funding.



# POSTER PRESENTATIONS

Mulva Library Flex Space • 9 a.m.-1:50 p.m.

**Session One** • 9-9:50 a.m.

Elaine Schumacher, Biology 2024 • *Characterization of Stem Cell Regeneration in Schmidtea Mediterranea*  
mentored by Ryan King, Associate Professor of Biology

Lauren Chiappetta, Psychology & Sociology 2023 • *Effects of Organization Type and Roe v. Wade Statement on Gender Diversity*  
mentored by Danielle Geerling, Assistant Professor of Psychology

Morgan Fimreite, Biology 2025 and Harrison Williams, Biology 2025 • *Physiological Effects of Artificial Light At Night on Two Cavity-Nesting Passerines*  
mentored by Stephen Ferguson, Assistant Professor of Biology and Elizabeth Danka, Assistant Professor of Biology

Paris Riggle, Biology 2024 • *Expression and Dynamics of Planarian RPE-spondin Following Injury and Tissue Loss*  
mentored by Ryan King, Associate Professor of Biology

Kevin Schill, Chemistry & Spanish 2024 • *Synthesis of Methacrylonitrile and Deuteriated Isotopologues of Thiophene and Furan*  
mentored by Bob McMahon, Professor, Chemistry, UW-Madison; Madeleine G. Atwood, PhD student Chemistry, UW-Madison; and Brian J. Esselman, Organic Chemistry Lecturer and Assistant Laboratory Director, Chemistry, UW-Madison

Abigail Genal, Biology (biomedical) 2025 • *Determining the Role of Temperature on vgrG Promoter Expression in Burkholderia Cepacia*  
mentored by Elizabeth Danka, Assistant Professor of Biology

Reagan Engels, Psychology 2023 and Crystal Schuster, Psychology & Communication and Media Studies 2023 • *The Relationship Between Procrastination and Mental Health*

mentored by Danielle Geerling, Assistant Professor of Psychology

Brenna Cisler, Psychology 2023 • *Canine Perception of Human Effort and Exerted Persistence Thereafter*

mentored by Laurie Santos, Professor of Psychology

Lilia Shallow, Chemistry 2024; Samantha Pardini, Biology 2024; and Collin Sylvain, Chemistry 2025 • *Exploration of Wisconsin Endophytic Species in Search of New Natural Product Antibiotic Scaffolds*

mentored by Katie Garber, Assistant Professor of Chemistry

## Session Two • 11-11:50 a.m.

Carlos Herrada, Chemistry 2023 • *Kinetic Modeling of Dopamine Transport Protein Inhibition by Indole Based Modafinil Analogs Using Rotating Disk Voltammetry*

mentored by Cyndi Ochsner, Associate Professor of Chemistry

Kaitlin Foley, Political Science & Communication and Media Studies 2023 • *Visual Communication in Politics*

mentored by Mark Glantz, Associate Professor of Communication and Media Studies

Lexie Matte, Biology 2024 • *T6SS Effector and Immunity Pairs: Contributions to Burkholderia Cepacia Virulence*

mentored by Elizabeth Danka, Assistant Professor of Biology

Melanie Nielsen, Biology 2023 • *Exploring the Effects of  $\beta$ -N-methylamino-L-alanine on Schmidtea Mediteranea's GluN1/GluN2A NMDA Receptor*

mentored by Ryan King, Associate Professor of Biology

Andrew Gaetano, Biology 2023 • *Optimized and Shortened Planarian In Situ Hybridization*

mentored by Ryan King, Associate Professor of Biology

Elizabeth Allen, Biology 2023 • *Monitoring Ecosystem Health of Kelly Creek, South Beloit, IL, USA, During Restoration*

mentored by Carrie Kissman, Associate Professor of Biology

Kyle Ruhland, Physics & Mathematics 2025 and Cordell Umland, Physics & Mathematics 2025 • *Investigating the Flow Behavior in a Radial Gate/Crump Weir System*

mentored by Terry Jo Leiterman, Associate Professor of Mathematics

### **Session Three • 1-1:50 p.m.**

Lindsey Roloff, Business Administration & Political Science 2023 • *A Comparison of Institutional Legitimacy Among Undergraduate Students*

mentored by Jamie Lynch, Associate Professor of Sociology & Director of the Strategic Research Institute

Kaitlyn Kulick, Psychology & Sociology 2023 • *Effects of Writing about Egalitarianism on Perceptions of a Company's Diversity*

mentored by Danielle Geerling, Assistant Professor of Psychology

Kylie Bennett, Mathematics 2023 and Elizabeth Heil, Mathematics 2023 • *Secondary Derivations And The Universal Property*

mentored by Jacob Laubacher, Associate Professor of Mathematics

Benjamin Stafford, Physics 2025 and Benjamin Spaude, Physics 2023 • *An Investigation Into the Effects on Fluid Toss Geometry Over the Spillway & Ski-Jump Weir*  
mentored by Terry Jo Leiterman, Associate Professor of Mathematics

Isaac Leiterman, Geology & Mathematics 2024 and Jonah Koleske, Psychology & Mathematics 2023 • *Hydraulic Jumps in Laterally Constricted Open-Channel Flows*  
mentored by Terry Jo Leiterman, Associate Professor of Mathematics

Crimson Groh, Mathematics 2023 and Emily Jerovetz, Mathematics 2023 • *Analysis of Free Surface Shape and Toss Width with a Broad-Crested Weir*  
mentored by Terry Jo Leiterman, Associate Professor of Mathematics

Emily Landolt, Organismal Biology 2024 and Lexie Matte, Biomedical Sciences 2024 • *Characterizing the Role of the *B. cepacia* T6SS in Interbacterial Competition*  
mentored by Elizabeth Danka, Assistant Professor of Biology

Sebastian Noskowiak, Biology 2023 • *Flavobacterium Columnare Cyclase Knockout Displays Promising Results for Vaccine Development Against Columnaris Disease*  
mentored by David Hunnicutt, Professor of Biology

Madilyn Kolarik, Biology 2023 and Emily Corrigan, Biology 2023 • *Discovery of Three New Species of Notoparamys (Rodentia; Ischyromyidae), Early Eocene Rodents from the Willwood Formation, Bighorn Basin, Wyoming*  
mentored by Deborah Anderson, Professor of Biology

Antonio Reguilon, Physics 2023 • *A Low-Cost Confocal Microscope*  
mentored by Erik Brekke, Associate Professor of Physics



Kayla Koenig, Biomedical Sciences, 2025 • *Techniques for Monitoring Cell Migration Following Interspecies Stem Cell Transplantation*

mentored by Ryan King, Associate Professor of Biology

Robert Ciccicarelli, Psychology 2023 and Alexia Ballard, Psychology 2023 • *The Impact of Social Organizations on Campus*

mentored by Danielle Geerling, Assistant Professor of Psychology

## TALKS SESSION

Mulva Library Room 101 • 1-1:50 p.m.

Jack Klahr, Biology 2023 • *LPS as a Virulence Factor of Burkholderia Cepacia During Plant and Human Infection*

mentored by Elizabeth Danka, Assistant Professor of Biology

Andrew Gaetano, Biology 2023 • *Optimized and Shortened Planarian In Situ Hybridization*

mentored by Ryan King, Associate Professor of Biology

# GUEST SPEAKER

*Friday, April 28*

*Awards Ceremony • Mulva Library Room 101*

**Thomas Kunkel**, *Interim President, St. Norbert College*

Thomas Kunkel is currently serving as interim president of St. Norbert College during the 2022-23 academic year. Previously he was president of the college from 2008 until his retirement in 2017.

During his presidency, Kunkel oversaw numerous academic innovations (including its partnership with the Medical College of Wisconsin-Green Bay), increased enrollment, and improved student and faculty diversity. He raised more than \$150 million, much of which went toward new and renovated campus infrastructure.

He is the author or editor of seven books. The most recent was "Man on Fire: The Life and Spirit of Norbert of Xanten," a biography of the college's patron and namesake, which was published in 2019 and named Best Book of the Year (by a small publisher) by the Catholic Book Awards.

Prior to his time at SNC, Kunkel was dean of the Philip Merrill College of Journalism at the University of Maryland. There he also served as president of American Journalism Review, a national magazine published by the college. His previous books include "Man in Profile: Joseph Mitchell of The New Yorker," published by Random House in 2015 to wide acclaim and winner of the prestigious Sperber Prize for best books about media. His first book was "Genius in Disguise," a biography of New Yorker founding editor Harold Ross and a New York Times Notable Book of 1995. Three years later he published "Enormous Prayers: A Journey into the Priesthood," an ethnographic portrait of 28 Catholic priests.

As a journalist, Kunkel worked for the Miami Herald, New York Times, San Jose Mercury News and other publications. When he was named executive editor of the Columbus (Ga.) Ledger-Enquirer at age 29, he became the youngest top editor in the history of Knight-Ridder Newspapers.

Kunkel and his wife, Debra, have four grown daughters and seven grandchildren.

