



Monmouth
COLLEGE

Dear readers,

Undergraduate research has become an important component of higher education today. We tell ourselves, each other, and you—our students—that it generates self-discipline and initiative while allowing you to practice the research skills which will set you apart when you enter the wide world of work.

All true. We also tell ourselves that the emphasis on undergraduate research is new, which is not quite the case. Undergraduates have long been encouraged to conduct research and to write up their findings, whether in the sciences, the social sciences, or the humanities, in senior seminars. The capstone course is a product of the late eighteenth century, when college presidents led seminars on philosophy and religion for students on the cusp of graduation. These courses were general rather than discipline-based, designed to prepare seniors by spanning the breadth of the Liberal Arts. But they languished in the 1930s and after, only reappearing in the 1970s. By the end of the 1980s, they had become commonplace, and today virtually every degree has a culminating experience in the form of a senior seminar, hence the emphasis on undergraduate research as a qualitatively different experience.¹

So what makes undergraduate research as we currently practice it unique? Unlike capstone courses, it involves a one-on-one or small-group mentoring relationship with an expert in the field of study. The outcome is an original piece of scholarship. This is excellent preparation for graduate school, for employment requiring close working relationships, and for the type of intensive, accountability driven labor expected in today's workplace. But of course there is more than a vocational rationale for undergraduate research. The practice as we know it today was probably pioneered by a group of chemists at Liberal Arts colleges across the United States. These faculty wanted to generate meaningful and widespread support for undergraduate research. The original ten members (including three ACM schools, Carleton, Grinnell, and Lawrence) created, in 1978, the Council on Undergraduate Research to promote collaborative undergraduate research across the United States.²

This tenth issue of *Midwest Journal of Undergraduate Research* shows how widely the aims of the Council on Undergraduate Research have been adopted. It demonstrates the depth and scope of topics and approaches. The articles could nominally be placed in psychology, educational studies, sociology, women's studies, disability studies, demography, gender studies, history, and ethics, but they take a rich range of interdisciplinary perspectives. Each article crosses one or more disciplinary boundaries, evidence of the collaborative, transgressive nature of research today.

1. Robert C. Hauhart and Jon E. Grahe, *Designing and Teaching Undergraduate Capstone Courses* (San Francisco: Jossey-Bass, 2015), 2-3.

2. <https://www.cur.org/who/organization/history/>

Undergraduate research is thriving. It is an expected element of almost every baccalaureate program and helps promote a healthy understanding of and experience in original research and writing. Much of it is transitory, but the peer-reviewed, published articles in the journal you hold in your hands or read on your screen will stand the test of time. You can be justly proud of your achievement. As a member of the first advisory board of the *Midwest Journal of Undergraduate Research*, I am pleased to see how this publication continues to flourish and to serve as an important platform for student research.

Congratulations to all of our authors!

Simon Cordery
Professor and Chair
Department of History
Iowa State University

Editorial Office

Monmouth College
700 East Broadway Ave. Monmouth, Illinois 61462
mjur@monmouthcollege.edu

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Special Thanks...

The editorial board of the *Midwest Journal of Undergraduate Research* extends a special thanks to the faculty and deans of the ACM colleges for encouraging students to submit to this issue of our journal. We would also like to thank President Clarence Wyatt, Dean Mark Willhardt, the Monmouth College Board of Trustees, and our anonymous reviewers for providing the resources to make this journal possible. Finally, we would like to thank Monmouth College alumna Caitlin Mehta Dodge (2011) for designing our logo.

Call for Papers

The editors of the *Midwest Journal of Undergraduate Research* invite undergraduate students at any college or university to submit manuscripts from any discipline to be considered for publication in our journal's eleventh issue (2020).

Works may be submitted at:

<http://research.monm.edu/mjur/call-for-papers/#submission-form>

Deadlines

The submission deadline for the 2020 issue is January 15, 2020. Submissions received after this date will be reviewed for publication consideration in the 2021 issue.

For questions you may contact us at:

mjur@monmouthcollege.edu

Requirements

- Abstract of no more than 200 words
- 5–35 pages in length
- 12pt Times New Roman or Calibri font, double spaced
- Name at front of manuscript only—no header or footer
- Sequential page numbers required on all pages
- No track changes (mark-ups)
- Submit as a single Microsoft Word (.doc or .docx) file unless the text of your manuscript requires a different format (such as extensive mathematical notation, tables, or figures)
- If your manuscript includes figures or images, include a list of figures and identify the file format (e.g., JPEG, TIFF, PDF) of any graphics and images submitted
- Submissions may be from any discipline as long as they are research based
- May use MLA, APA, or Chicago Style
- Accompanying your submission, you must provide the following information:
 - Name
 - School/Graduating class
 - Major
 - Discipline of paper
 - Citation style used
 - Phone number
 - Email address
 - Mailing address
 - The name and contact information of a sponsoring professor
- Research involving human subjects requires documentation of Institutional Review Board approval or exemption.

Submission Policy

As a journal dedicated to undergraduate scholarship, the *Midwest Journal of Undergraduate Research* only accepts submissions from current or recent undergraduate students (see below for “authorship exceptions”). For recent graduates, your submission must be received within 8 months of conferral of your first undergraduate degree.

Manuscripts that have been published or have been accepted for publication elsewhere, or are under review with another publication, are not eligible for review or publication.

“Submission guidelines of all academic journals require that authors vouch for the originality of their work and that the manuscript is not currently under review by any other publication. While the lengthy review and publication cycle of an academic journal may be frustrating, offering a manuscript to one journal at a time is compulsory. Authors will also need to guarantee to the editor that the copyright for the material is held by no other entity.”—Henscheid, Jean and Jennifer Keup. *Crafting and Conducting Research on Student Transitions*. Columbia, SC: National Resource Center for The First Year Experience & Students in Transition, 2011 (96).

Authorship Exceptions

We understand that some faculty wish to include themselves as co-author on student projects, especially if the student’s independent work was generated from a larger project that originated with the faculty advisor. In disciplines where the practice of including the faculty advisor as co-author is customary, we will accept the faculty recognized as such. The author must provide written permission of acknowledgement from those faculty advisors being recognized as contributors or co-authors in the manuscript.

Acknowledgments

In instances where students wish to acknowledge a faculty advisor, they may do so by prominently recognizing the faculty advisor as a contributor at the bottom of the first page of the manuscript in both the online and hard copy published versions. Here, the faculty advisor’s contribution may be specified.

For questions you may contact us at:

mjur@monmouthcollege.edu

Publication: The *Midwest Journal of Undergraduate Research* (ISSN: 2160-9357) is published annually by Monmouth College, 700 East Broadway Ave., Monmouth, Illinois 61462.

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About the Editors ...

Savannah Ball

Savannah Ball is a sophomore at Monmouth College. She is a double major in economics and mathematics. She is a member of the softball team and Alpha Lambda Delta. She works as a tutor in the Writing Center and as an editor for *MJUR*. In her free time, she enjoys spending time with her friends and family, reading, and watching Netflix. She plans on pursuing a career as an actuary.

Jamie Donahue

Jamie Donahue is a senior psychology major/human services minor from Peoria, Illinois. In addition to her work with *MJUR*, she is a writing tutor for the Monmouth College Writing Center, as well as an academic coach for the Teaching and Learning Center. Jamie is a member of the Garden Club, an active member of Psi Chi, and is on drumline for marching and concert band, in addition to percussion ensemble. Her interests involve playing video games and watching movies with her friends. Her favorite restaurant is Five Guys Burgers and Fries. After receiving her bachelor's degree, she plans to get a Master's in Social Work to pursue a career in counseling.

Logan Evans

Logan is a sophomore biochemistry major, with plans to go to either graduate school or medical school. This is his second year with *MJUR*. Logan is also involved in the American Chemical Society, the Pre-Health Society, and the Alpha Lambda Delta honor society. He is also the president of the Sigma Phi Epsilon fraternity. In his free time, Logan enjoys reading, hanging out with his friends, and working on his research in the chemistry department.

Matthew Franciscovich

Matthew Franciscovich is a sophomore physics major from Kewanee, Illinois. When he has completed his undergraduate degree, he plans to pursue further education in the field of astrophysics. Using his studies of astrophysics and cosmology, he hopes to further investigate the origin and the future of the universe. In addition to his work at *MJUR*, he is an executive member of the Epsilon Nu chapter of the Alpha Tau Omega fraternity, a member of Alpha Lambda Delta, and an athlete on the Monmouth College swim team. His interests include conducting thought experiments, solving puzzles, and playing chess with his brothers.

Sobhi Kazmouz

Sobhi is a senior biochemistry major and Monmouth College's Lincoln Laureate for the class of 2019. Apart from *MJUR*, Sobhi has been the supplemental instructor for the general chemistry and organic chemistry courses at Monmouth College. He has also served as a resident assistant and an international student orientation leader previously. His community service work involves volunteering at OSF Healthcare and the Monmouth Nursing Home. Sobhi's research interests range from elucidating the various protein interactions that control the function of transcription factors to understanding the mechanisms that control the immune system and immune tolerance. His aspirations are about bettering human health, and he plans on fulfilling those aspirations by pursuing a career as a medical doctor.

Gunnar Leaf

Gunnar Leaf is a sophomore English major from Knoxville, Illinois. Alongside being an editor for *MJUR*, Gunnar works as a writing tutor. He had perfect attendance throughout the entirety of junior high and high school. Outside of academia, he loves to go on walks, play cards with friends and family, as well as analyze and discuss film. After graduation, Gunnar hopes to move on to graduate school and continue to pursue his passion for writing both poetry and fiction.

Lily Linder

Lily is a junior English major from Morton, Illinois. When not attending to *MJUR* duties or studies, Lily is very involved on campus as a varsity women's soccer captain, the academic chair of Pi Beta Phi women's fraternity, a writing tutor, a Wackerle Career and Leadership Center assistant, and an inaugural member of the Stockdale Fellows leadership program. In spring of 2019, Lily is travelling to study abroad in London and Florence and hopes to create more endearing memories of her undergraduate experience. Until then, Lily will continue to start and end every day with a cup of coffee.

Ashlyn Maher

Ashlyn Maher is a junior biopsychology major and global public health minor from Brimfield, Illinois. She has done her own research within the field of narrative psychology on the relationship between depression and narrative tone and has presented research at several undergraduate conferences. In addition to working on this journal, she is also a teacher's assistant for research methods in psychology. When not studying, she spends her time playing with her and her fiancé's German Shepherd, trying to tackle her ever-growing "to read" pile of books, and watching movies. She plans on pursuing a Ph.D. in clinical psychology.

Zoe Meyer

Zoe Meyer is a political science and international studies student graduating in May of 2019. She is a member of several honor societies including Pi Sigma Alpha (Political Science Honor Society), Blue Key Honor Society, and Order of Omega. She is a member of Kappa Kappa Gamma and has been in leadership roles that have included the Risk Management Chairman, Marshall, New Member Chairman, and Nominating Chairman. Zoe has previously done research at the University of Maryland College Park in the Government and Politics Department. Her research included looking at terrorist attacks in the Sahel region of Africa and their influence on religion. Zoe has been an RA on campus and has also been an Associate College of Illinois First Generation Mentor. In addition, she interned at the Office of Intercultural Life. Zoe studied abroad in Amsterdam in Fall of 2017. She is a copy editor and publicity editor for the *Midwest Journal of Undergraduate Research*.

Grant Miller

Grant Miller is a freshman math major from Aurora, Colorado. In addition to being a part of *MJUR*, Grant sings in the Monmouth Chorale and Chamber Choir, plays lacrosse, and is a member of the Stockdale Fellows Leadership Program. Grant is exploring majors and career options for the future.

Luna Noofoory

Luna is a junior majoring in political science and minoring in French. She is a reviewer as well as the design editor for *MJUR*. She also plays the violin and is a member of the Monmouth College chamber orchestra. Luna has previously volunteered as a teacher for refugee children in Lebanon and plans to volunteer overseas in the future. After graduating from Monmouth College, Luna plans on obtaining her master's degree in international relations. She aspires to work for the United Nations, and despite having lived in five countries, she plans on traveling and learning more languages.

Hadley Smithhisler

Hadley Smithhisler is a junior studying history and French at Monmouth College. Outside of her work with *MJUR*, Hadley is a French tutor, a writing tutor, a cellist, an employee of the Wackerle Career and Leadership Center, and president of Monmouth's Rotaract chapter. She is passionate about yoga, gray lipstick, grammar, politics, and gender history. In the spring, Hadley will be studying abroad in Besançon, France, at the Université de Franche-Comté where she will be studying French language and culture. Hadley intends to study international or human rights law after graduation.

Shannon Wilbourne

Shannon Wilbourne is a freshman accounting and Spanish double major at Monmouth College. When asked, Shannon will say she's from the Southwest side of Chicago, but she was born and raised for most of her still rather short life in Appleton, WI. Before graduating, Shannon hopes to study abroad for two semesters in two separate continents. In addition to her role as associate editor of *MJUR*, Shannon is highly involved around campus, including but not limited to: Stockdale Fellows, Rotaract, and the honors program. Shannon also serves as the treasurer for her dorm hall. That being said, Shannon is best known on campus for remembering people's names and always saying "hi" when she sees them. She is a strong believer that the sweetest sound to anyone is their name.

Hunter Wollwert

As a senior English and Spanish double major, Hunter is committed to language and its use in every form she can find. She is a Spanish tutor on campus and a clarinet section leader in the school's marching band. In her nonexistent free time, she enjoys walking through campus searching for dogs. Still undecided on what her future after graduation will hold (besides buying a cat), she simply wishes to be happy wherever life takes her.