

30th

STUDENT
SCHOLARS DAY

th
annual

4.8.2026

REIMAGINING THE PURPOSE OF OUR SCHOLARSHIP



GRAND VALLEY
STATE UNIVERSITY
OFFICE OF UNDERGRADUATE
RESEARCH AND SCHOLARSHIP





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“Establishing comprehensive services and programs supporting students in their pursuit of inquiry, creativity, scholarship, and research.”



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Allendale, MI 49401

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Business Hours: Monday - Friday, 8:00 a.m. - 5:00 p.m.



Welcome to SSD 2026: Reimagining the Purpose of our Scholarship

We are thrilled to welcome you to the 30th annual Student Scholars Day. This year's theme, *SSD at 30: Reimagining the Purpose of Our Scholarship*, invites students to explore how academic knowledge can inspire, educate and catalyze when it is shared beyond traditional boundaries and platforms. This theme challenges presenters to rethink the goals and impacts of their research—not just as contributions to their field, but as accessible, engaging, and empowering information for audiences beyond academia. Whether through posters, oral presentations, or zines, participants are encouraged to creatively communicate their work to those outside their discipline, making scholarship a bridge rather than a barrier.

A day like this would not be possible without the dedication and hard work of many individuals. We express our deepest gratitude to the SSD Faculty Committee for their commitment, creativity, and support in organizing this event. We thank the many dedicated colleagues engaged in the work of planning, organizing and implementing this university-wide event.

A special thank you goes to our faculty mentors, whose guidance and collaboration make transformative research experiences possible for our students. We also appreciate the students, faculty and staff volunteers who contribute their time and energy to ensuring the success of SSD. And, of course, we celebrate our student presenters, whose curiosity, dedication and intellectual risk-taking embody the spirit of scholarship at Grand Valley.

Whether you are presenting research, sharing a creative project, or engaging as an audience member, we encourage you to challenge assumptions, push disciplinary boundaries, and contribute to a vibrant exchange of ideas.

Thank you for being part of this dynamic exploration. We look forward to an inspiring day of scholarship, discovery, and dialogue.

Welcome to Student Scholars Day 2026!
Susan Mendoza, Ph.D
Director, Center for Undergraduate Scholar Engagement
Chair, Student Scholars Day Planning Committee



History of Student Scholars Day

In the summer of 1995, faculty in the Science and Mathematics Division explored creating an event for students to present faculty-mentored research to a university-wide audience. With enthusiastic support from Dean P. Douglas Kindschi, Student Research Day (SRD) was born.

The inaugural SRD took place on April 12, 1996, alongside the dedication of the Seymour and Esther Padnos Hall of Science. Initially expecting 30 participants, the event drew over 150 students presenting nearly 100 projects. The overwhelming success raised questions about its sustainability as a stand-alone event, but the second SRD in April 1997 proved equally successful. Demand grew beyond science and mathematics, prompting efforts to make the event university-wide, supported by then-Provost Glenn Niemeyer.

To reflect its expanded inclusivity, the event was renamed Student Scholarship Day in 1998. That year, participation doubled, with nearly 300 students delivering almost 200 presentations. The first keynote speaker, Dr. Robert Powell of Avila College, spoke on “Student/Faculty Collaboration: Teaching and Scholarship.” In Fall 2009, another name change to Student Scholars Day (SSD) clarified the event’s purpose.

Originally focused on science and mathematics, SSD now showcases work from all disciplines, celebrating student scholarship across the university. The event fosters interdisciplinary collaboration, offering both individual focus and a broader picture of collective learning. The GVSU community continues to embrace SSD as an annual celebration of student achievement.



SSD Planning Committee

Feryal Alayont, Mathematics
Rene Ardila, Mathematics
Andrew Bixel, Institutional Advancement
Andrew Lantz, Chemistry
Jakia Marie, School of Interdisciplinary Studies
Susan Mendoza, Center for Undergraduate Scholar Engagement
Ross Reynolds, Physics (retired)
Mary Ruge, University Libraries
Kristi Scanlon, Employer Development
Michael Scantlebury, School of Community Leadership and Development
Brooke Scullark, Office of Undergraduate Research and Scholarship
Anthony Spencer, Communications
Brenda Tooley, Frederick Meijer Office of Fellowships
Jennifer Torreano, University Libraries
Glenn Valdez, Psychology
Richard Vallery, Physics
Brittany Ward, Geology



History of Undergraduate Research and Scholarship at GVSU

Student Scholars Day (SSD) and Student Summer Scholars (S3), originally established in the Division of Math and Science, have served as the anchors for undergraduate research for over twenty years. These programs have served thousands of students by encouraging original research and scholarship. SSD and S3 moved to the Brooks College of Interdisciplinary Studies and became part of the Office of Integrative Learning in 2006. During this time, both programs were expanded to support student research from all disciplines and majors.

In 2010, the Office of Undergraduate Research and Scholarship (OURS) was established as part of the Center for Scholarly and Creative Excellence. The mission and intent of the office is to establish comprehensive services and programs which support students in their pursuit of inquiry, creativity, scholarship, and research. In 2020, OURS joined the Frederik Meijer Office of Fellowships as one of two offices within the new Center for Undergraduate Scholar Engagement (CUSE). In addition to Student Scholars Day, the programs of OURS include:

Scholar & Fellowship Programs

- Alayont Undergraduate Research Fellowship in Mathematics
- GVSU Library Scholars Summer Program
- P. Douglas Kindschi Undergraduate Research Fellowship in the Sciences
- Seeger Undergraduate Research Fellowship in the Humanities
- Student Summer Scholars (S3) / Modified Student Summer Scholars (MS3)

Research Support and Recognition

- Academic Conference Fund (ACF)
- Academic and Professional Enrichment Fund (APEF)
- OURS Project Supplies Grant
- GVSU Undergraduate Research/Creative Scholar Transcript Designation
- Undergraduate Research Assistants Program (URA)

Outreach Programs & Events

- Student Scholars Day
- Chalk Art Symposium
- OURS Ambassadors
- Summer Research Orientation
- Undergraduate Research Fair



Types of Student Scholars Day Presentations

Poster Presentation: Poster presentations provide a common way to present information in classrooms, conferences, and workshops. The goal is to highlight the significance and originality of the work, showcasing the contributions of the presenter(s).

Oral Presentation: Oral presentations are a condensed version of a specific topic delivered to impart knowledge and stimulate discussion with the audience.

Session and Extended Sessions: Faculty mentor curated oral presentations around a general scholarly theme (ex: water conservation) or around a group of presenters (ex: a class, or a lab team).

Recorded Presentation: A recorded oral presentation is a pre-recorded video of a speaker delivering a presentation, typically using slides, which can be watched later by audiences.

Podcast Presentation: A podcast is a digital audio program designed to share ideas, stories, or information in an accessible and engaging way. A podcast can feature narratives, expert commentary, or interviews, offering an easy yet powerful platform to bring research to life and engage with listeners beyond the classroom or lab.

Zine Presentation: The term “zine” is short for magazine. Zines are an engaging way to present the outcome of research in vivid, condensed graphic form for people unfamiliar with the topic.



How to Review Presentation Abstracts

Scan the QR code

Every presentation is accompanied by an abstract. You can access the abstract in two ways: through the QR code for the SSD Schedule Builder or through the SSD website. The abstract will tell you what the presentation is about, who is presenting, when the presentation occurs, where the presentation is located, and the name of the presenter's mentor.



Use the Abstracts to Build your Schedule

We encourage attendees to read through the abstracts to identify presentations to visit (if a poster) or attend (if in-person) – you may find presentations available on topics of interest that you didn't anticipate! Be curious! Explore new topics – students will appreciate your interest. They will continue to learn and grow through sharing their knowledge with you.



How to Engage with Presentations

Provide Feedback

Every presentation has been assigned a QR code to facilitate feedback for the presenters from attendees. We encourage attendees to fill out the questionnaire to point out strengths within the presentation and suggest improvements for the future; any feedback is helpful.

Ask Questions

Ask presenters questions about their presentation to engage with their research. After oral presentations, there will be time for questions, and you should feel most welcome to use this time to engage in discussion.

Make Connections

Network with the presenter post-presentation. After the session, approach the presenter to discuss their research in more detail, share your insights, or ask for clarification on specific points that piqued your interest.



SSD Exhibition of Art

The SSD Exhibition of Art, curated by the Department of Visual and Media Arts, celebrates student excellence in creative work. The atrium gallery of the Calder Art Center will showcase exceptional student artwork from a variety of classes, reflecting the department's commitment to high standards of artistic practice and scholarship.

This exhibition highlights the importance of creativity, technical skill, and critical thinking in the visual arts while recognizing the outstanding achievements of our students.

Gabrielle Egnater: Sculpture

Title: *Trophies*

Artist: Morgan Davis

Artist Statement: This series of four was made in ART 372, each piece explores the relation between bones, glorification, and materiality. The works utilize bronze, iron, and aluminum in a way that communicates technical proficiency and a desire for metal to have its own unique voice.

Title: *Hybrid Castings*

Artists: Reese Coppe, Andie Kriger

Artist Statement: This exhibition presents two cast metal sculptures by students in the sculpture emphasis, each exploring hybrid forms through intimate objects that invite close looking. One work merges human and animal references, while the other considers the relationship between the hand and technology. Cast in aluminum and bronze, these small-scale pieces require viewers to actively engage with the work, encountering the tension between organic bodies and constructed systems through careful observation.

Jee Hwang: Sculpture

Title: *Painting: Structure, Materials, and Marks*

Artists: Mattee DeMott, Anna Graebner, Dawn Leach, Phaige Lothschutz

Artist Statement: *Painting: Structure, Material, and Marks* presents painting as a constructed field rather than just an image. Across these selected works, the canvas becomes a site where structure is deliberately organized, material is worked through, and marks function as evidence of thinking. Form unfolds through the interplay of value, color, spatial tension, and accumulated marks. Considerations of surface, density, and compositional resolution frame painting as an inquiry into how images are built. Together, these works foreground painting as a material and structural research process.

Hoon Lee: Ceramics

Title: *A Site of Inquiry*

Artists: Johanna Gair, Bella Minervino, Jacy Nichols, Sophia Nelson, Skyler Paige, Carly Richmond, Paige Voss

Artist Statement: Created by upper-level ceramics students during the Fall 2025 through Winter 2026 semester, these functional and sculptural works reflect perseverance and the emergence of personal voice. The surfaces retain the trace of the hand, and each mark carries both risk and intention. The works invite us to consider learning as something not only understood intellectually but deeply felt and lived. Formed through touch, time, and fire, the ceramic works in this exhibition make research visible through the act of making. Clay becomes a site of inquiry thrown on the wheel, sculpted, altered, and transformed as ideas are tested in the kiln and continually evolve. Each piece bears witness to process, holding moments of revision, hesitation, and discovery. Here, material and maker converge, and knowledge takes shape in form.



SSD Exhibition of Art

Vinicius Rebello Lima: Graphic Design

Title: From Abstraction to Information: Explorations in Typography

Artists: Isaac Anderson, Lily Bartley, Casie Bleyenbergh, Liv Chow, Taryn Conner, Taylor Copeland, James Davis, Naomi DeMott, Jen Harju, Hannah Kunc, Abigail Leming, Conner Popa, Abigail Schimmel, Cassidy Sincic, Jacob Thurau, Izabella Vasquez

Artist Statement: Created by students in *ART 210 - Graphic Design Studio I: Introduction to Typography*, these exploratory and informative works reflect the range of forms text can take when communicating messages. Starting with black-and-white compositions that investigate how typographic form shapes visual space, students progress through exercises that ask them to pair text and images, culminating in larger volumes of information to arrange. The works here invite you to consider the realm of possibilities that text can take, while asking you to challenge notions about the ways in which text must exist to communicate, often dictated by word processing applications or user interfaces. These exercises ask students to see letterforms for what they are: arresting forms with meaning attached to them when they begin their literacy studies.

Stafford Smith: Photography

Title: Constructed Realities

Artists: Benjamin Cadieu, Taylor Grifhorst, Demari Jennings

Artist Statement: With the decline of master narratives, authoritative voices and the ability to discern what is real and what is not, the constructed nature of photography becomes more apparent. These deliberate constructions and composites evoke alternative histories and realities that have never appeared before the lens.

Renee Zettle-Sterling: Jewelry and Metalsmithing

Title: Made You Look: Selected Work from the Jewelry and Metalsmithing program in VMA

Artists: Enrique Arana, Natalie Andrikides, Esther Carpenter, Bridget Cripps, Emma Dawson, Annabella Delano, Benjamin Degram, Johanna Gair, Aidan Georgelos, Amelia Giuffre, Jakkie Grogg, Reilly Krula, Anna Lilly, Elizabeth Morgan, Liz Pentecost, Clara Porter, Lindsay Postema, Nadia Rana, Daniel Rosales, Mae Rydingsward, Nevaeh Scrivnor, Cameron Sorrel, Riley Teunis, Callie Wynne, Sydney Yen Le

Artist Statement: The works presented in the SSD Exhibition represent selections from student projects created in the Jewelry and Metalsmithing courses (Art 245, Art 246, Art 347, Art 348, and Art 349). These pieces reflect the breadth and diversity of ideas, materials, and techniques explored by our students as they develop their creative voices and technical skills. Professors Natalie Lowe, Robyn Kane-Haberkorn, Mike Bair, Renee Zettle-Sterling are proud of the work they have produced and are grateful for the opportunity to share and celebrate their efforts and accomplishments



SSD Keynote Speaker

Keivan G. Stassun, Ph.D.

Tuesday, April 7, 2026, 4:00-5:30 p.m.

2204 Kirkhof Center, Pere Marquette Room

GVSU Allendale Campus



The Neurodiversity Revolution: Tapping the Human Diversity of Mind to Accelerate Scientific Discovery

Dr. Stassun holds the Stevenson chair in Astrophysics and secondary appointments in Computer Science and in Management at Vanderbilt University, where he has received an NSF CAREER award, a Cottrell Scholar award from the Research Corporation for Science Advancement, an HHMI Professor award from the Howard Hughes Medical Institute, and a Ford Foundation Fellowship from the National Academy of Sciences. Stassun is a member of the leadership team for NASA's Ultraviolet Explorer (UVEX) and Advanced X-ray Imaging Satellite (AXIS) space telescope missions, served as a co-investigator for NASA's Transiting Exoplanet Survey Satellite (TESS) mission, chairs the executive committee of the Sloan Digital Sky Survey, serves on the National Academy of Sciences Space Studies Board and Divisional Committee for Engineering & Physical Sciences, and recently served on the National Academy of Sciences Decadal Steering Committee for Astronomy & Astrophysics. An elected Fellow of the American Physical Society, the American Astronomical Society, the American Association for the Advancement of Science, Sigma Xi, and an elected Member of the American Academy of Arts & Sciences, his research on stars and exoplanets has appeared in more than 600 peer-reviewed journal articles, with an emphasis on understanding the fundamental physical properties of stars

and extrasolar planets. From 2004 to 2016, he served as founding director of the Fisk-Vanderbilt Masters-to-PhD Bridge Program, which has become one of the nation's top producers of PhDs to underrepresented groups in the physical sciences.

Having trained more than fifty PhD students and postdoctoral scholars from diverse backgrounds, Stassun is a leader and advocate and exemplar for training the next generation of American talent in STEM fields. He has served on NSF's Committee for Equal Opportunity in Science and Engineering, is a recipient of the American Physical Society's Nicholson Medal for Outreach, has been named Mentor of the Year by the American Association for the Advancement of Science, and has been honored with a Presidential Award for Excellence in Science Mathematics and Engineering Mentoring. Since 2017, Stassun serves as founding director of the Frist Center for Autism & Innovation in Vanderbilt's School of Engineering, focused on advancing science and engineering through the engagement and workforce development of autistic individuals and those with other forms of neurodiversity, and has awarded more PhDs to autistic scientists and engineers than any other program. In 2023, Stassun was appointed to a six-year term on the National Science Board, in 2024 was named a MacArthur Fellow, and in 2025 received the National Medal of Science.



SSD Events, Workshops, and Performances Schedule



Wednesday, April 8, 2026

Your Research, Your Future: Employer Panel and Networking

9:00 a.m. - 10:00 a.m.

Kirkhof Event Center, Pere Marquette 2204

The Employer Panel & Networking Breakfast is a special event within Student Scholars Day that connects students with employers who actively seek candidates with undergraduate research experience. The panel will highlight local employers committed to hiring students engaged in research and offer valuable insights into how research skills translate to key workplace competencies. Additionally, the event provides a unique opportunity for students to network with potential employers, while hearing inspiring success stories from former students who have successfully transitioned from research to professional roles in the community.

Sponsored by the GVSU Career Center and the Office of Undergraduate Research and Scholarship

Virtual Climate Change Student Symposium

10:00 a.m. - 1:00 p.m.

Climate change is broadly recognized as the most dangerous global problem of our times, causing negative repercussions for future generations. Standing on the crossroads of decisions that would determine our future, humanity is running out of time searching for and implementing viable and just climate solutions. This extended virtual session features undergraduate student research on all aspects of climate change, from climate change impacts assessments and scenarios to climate change mitigation and adaptation solutions.



Presentations in this session include:

1. "Understanding Climate Emotions and Critical Hope"
by Hannah Weller, Environmental and Sustainability Studies.
2. "Impacts of Climate Change on Cocoa Production in West Africa"
by Emily Felde, Hannah Weller, Kamiah Boone, and Maya Bajis.
3. "Impacts of Climate change on the Northwest Passage in the Arctic"
by Antonia Sigmon, Sara Conner, and Ava Wright.
4. "Impacts of Climate Change on Wildfires in Western United States"
by Connor Rugg, Augustus Ripple, and Evan Olson.
5. "Nature-Based Solutions and ADA Compliance of Green Infrastructure: GVSU Grand Ravines Case Study"
by Bryan Heiss.

Moderated by Elena Lioubimtseva. This synchronous session will be held on GVSU CCESN webinar.

Thursday, April 9

SSD Exhibition of Art Reception

5:00 p.m.

Calder Art Center

The SSD Exhibition of Art, curated by the Department of Visual and Media Arts, celebrates student excellence in creative work. The atrium gallery of the Calder Art Center will showcase exceptional student artwork from a variety of classes, reflecting the department's commitment to high standards of artistic practice and scholarship.

This exhibition highlights the importance of creativity, technical skill, and critical thinking in the visual arts while recognizing the outstanding achievements of our students.



SSD Presentation Schedule

Wednesday, April 8

9 a.m. - 5 p.m.

- **Zine Exhibit**
located on the 1st floor of the Mary Idema Pew Library
- **Extended Sessions and Sessions**
located in the Russel H. Kirkhof Center
- **Oral Presentations**
located in the Russel H. Kirkhof Center
- **Poster Presentations**
located in the Henry Hall Atrium and the Grand River Room
in the Russel H. Kirkhof Center
- **Recorded Presentations and Podcasts** available beginning on April 8, 2026 at gvsu.edu/ssd/

Recorded Presentations

From Conquistador to Cartoon: The Spanish Colonialism through the Animated Series *The Mysterious Cities of Gold*

Presenter: Hanae Piron

Mentor: Anthony Spencer, School of Communication



Survey-Weighted Sociodemographic Correlates of Probable Depression in U.S. Adults: NHANES 2017–2018

Presenter: Sai Sreyaa Krishna Mallemala

Mentor: Kevin Maupin, College of Computing

Dialogue with the Past: Aristotle on Change and Drama

Presenter: Phoenix Backus *Mentor: Melissa Morison, Classics*

Dialogue with the Past: Social Symbolism of Food in Roman Art

Presenter: Jameson Hoenicke *Mentor: Melissa Morison, Classics*

Dialogue with the Past: Domestic Art in Ancient Rome

Presenter: Westley Garnet *Mentor: Melissa Morison, Classics*

Dialogue with the Past: Balancing the Body

Presenter: Eliana Burgess *Mentor: Melissa Morison, Classics*

Dialogue with the Past: Food and Sex in Classical Antiquity

Presenter: Kelsey Meadows *Mentor: Melissa Morison, Classics*

Dialogue with the Past: Ancient Metaphors and the Responsibility of Innovation

Presenter: Lilian Hevron *Mentor: Melissa Morison, Classics*

Dialogue with the Past: Aristotle on Nature, Being, and Change

Presenter: Marcus Myers *Mentor: Melissa Morison, Classics*

Dialogue with the Past: Evolution of Maritime Warfare in Ancient Rome

Presenter: Kailey Washburn *Mentor: Melissa Morison, Classics*

Dialogue with the Past: Innovation Between Myth and Material

Presenter: Payton Schumacher *Mentor: Melissa Morison, Classics*

Dialogue with The Past: Ancient Health Care Priorities

Presenter: Sandra Mora *Mentor: Melissa Morison, Classics*

Dialogue with the Past: The Evolution of Ancient Theatrics

Presenter: Sydney Sturgis *Mentor: Melissa Morison, Classics*

Dialogue with the Past: The Uses of Olive Oil in Antiquity

Presenter: Enzo Arcamone *Mentor: Melissa Morison, Classics*

Dialogue with the Past: Mushrooms in Classical Antiquity

Presenter: Hayter Kennedy *Mentor: Melissa Morison, Classics*

Dialogue with the Past: Vitruvian Ideals versus Roman Reality

Presenter: Mikayla Ide *Mentor: Melissa Morison, Classics*

Dialogue with the Past: Innovation in Roman Concrete Construction

Presenter: Toni Gerencer *Mentor: Melissa Morison, Classics*

Dialogue with the Past: Dietary Resources and Health

Presenter: Samantha Thomure *Mentor: Melissa Morison, Classics*

The Monkeys of Suriname - A Science Communication Workbook For Young Children

Presenter: Trinity Kraus *Mentor: Cynthia Thompson, Biomedical Sciences*



Extended Sessions

12:00 p.m.

Cellular and Molecular Research Applications in Human Diseases

Location: Kirkhof Center 2263

Presenters: Nora Ryba, Brianna Hofman, Cayden Steinebach, Kamryn Wezeman, Sara Sietsema, Haley Powers, Lola Piper

Mentor: Sok Kean Khoo, Cell and Molecular Biology

2:00 p.m.

Mathematics and Applications

Location: Kirkhof Center 2263

Presenters: Karam Singh, Cameron Curtis, William Adkins, Alexander Paoletti, Bridget Rozema, Micah Dykhuis, Ava Thomson, Sydney Lipton, Andrew Kurmas, Isaac Root, Graham Boonstra, Zachary Hirsch, Jordan Edwards, Emily Arndt

Mathematics Faculty Mentors: David Clark, Firas Hindeleh, Filiz Dogru, Lauren Keough, Lora Bailey

3:00 p.m.

Psychology: Oral Presentations and Awards Ceremony

Mary Idema Pew Library Multipurpose Room

Presenters: Rachel Kamps, Broden Cantu, Walker Ratajczak, Iris Newton, Nathan Rich, Natalie Neville, Eldarah Sierra Brown Ton, Addison Bloss, Landon Bartlett, Christopher Khajira, Victoria Airo, Nadine Maldonado

Psychology Faculty Mentors: Mario Fific, Jacob Sawyer, Benjamin Swets, Todd Williams, Naomi Aldrich, Tara Cornelius, Wolfgang Friedlmeier, Randi Jiang, Thuy Simpson, Ali Raza

Oral and/or Visual Presentations

9:00 a.m.

- KC 1104 **Rooted in Hope: The Power of Spirituality in At-Risk Youth**
Presenters: Emma Baker, Ally Evans | Mentor: Dawn De Vries, School of Interdisciplinary Health
- KC 1142 **Mothers of the Mound: Female Divinity and Foundational Burials in the Neolithic Pontic Steppe**
Presenter: Sofia Svryrd | Mentor: Alexey Nikitin, Biology
- KC 2201 **Effects of Ketogenic Diet on Reproductive Parameters in Obese Male Mice**
Presenter: Camila Duarte | Mentor: Chris Pearl, Biomedical Sciences
- KC 2259 **The Military is Life-changing, but Not in the Way You Might Think: How the Sexuality System Affects High Rates of Military Sexual Trauma for LGBTQIA+ Members**
Presenter: Katherine Haynor | Mentor: Rachel Campbell, Sociology
- KC 2266 **African International Students as Informal Agents of Social Change and Public Diplomacy: A Communication Accommodation Theory Analysis**
Presenter: Valentine Zablon | Mentor: Anthony Spencer, School of Communications
- KC 2270 **Healing Systems: Community Insights to Transform Health Solutions for Youth in Foster Care**
Presenter: Kaili Miller | Mentors: Emily Bemben, Kirkhof College of Nursing, Christina Quick, Kirkhof College of Nursing

9:30 a.m.

- KC 1104 **No Limits, Just Adaptations: Sport After Limb Loss**
Presenters: Jadyne Arnett, Kylie DeJohn, Emily Gray, Carly Woodward | Mentor: Dawn De Vries, School of Interdisciplinary Health
- KC 1142 **A Statistical Consulting Experience: Predicting ASCP BOC Exam Success**
Presenter: Lena Compian | Mentor: John Gabrosek, Statistics
- KC 2201 **Meritocracy and Inequality: Public Beliefs, Political Narratives, and Redistributive Policy**
Presenter: Gino Gonzalez | Mentor: Jennifer Stewart, Sociology
- KC 2259 **Geologic Controls on Shoreline Morphology and Storm Response, San Salvador Island, Bahamas**
Presenters: Gracie Erdman, Karen Fey, Courtney Mais | Mentor: Ian Winkelstern, Geology
- KC 2266 **Rural Mid-Michigan Speech: An Exploration of Perception and Identity**
Presenter: Kayla Coats | Mentor: Dan Brown, English
- KC 2270 **Grazing for Good: How Sheep May Help Store More Carbon in Soil**
Presenter: Mollie Strunk | Mentor: Tara Kneeshaw, Geology

10:00 a.m.

- KC 1104 **Purpose in Practice: Montessori Approaches in Dementia Care**
Presenters: Lindsey Bush, Macie Dionne, Kathryn Solomons | Mentor: Dawn De Vries, School of Interdisciplinary Health
- KC 1142 **A Statistical Consulting Experience: GVSU Tutoring Long-term Benefits**
Presenters: Mars Bovee, Travis Link | Mentor: John Gabrosek, Statistics
- KC 2201 **Between Kings and Commoners: An Isotopic Study of the Animal Ecology of the 19th-century Zulu Kingdom**
Presenter: Isabella Tyler | Mentor: Elizabeth Arnold, Anthropology
- KC 2266 **Resisting Translation: Reading Transnational Migration in Paul Martínez Pompa's "While Late Capitalism"**
Presenter: Emma Cervantes | Mentor: Tierney Powell, English
- KC 2270 **Breaking Sovereignty: U.S. Intervention, Hypocrisy, and the 1953 Destruction of Iranian Self-Determination**
Presenter: Cailen McLea | Mentors: Chad Lingwood, Political Science, Thomas Walker, Political Science

10:30 a.m.

- KC 1104 **Currents of Hope: Examining Mindfulness and Aquatic Interventions in Breast Cancer Survivors**
Presenters: Faith Eaton, Ashlyn Stump | Mentor: Dawn De Vries, School of Interdisciplinary Health
- KC 1142 **Analysis of Jump Volume and Rally Duration over a Professional Volleyball Team's Season**
Presenters: Caleb Boerkoel, Liam Duncan | Mentor: John Gabrosek, Statistics
- KC 2201 **An Inquiry into the Reactivity of Two Ortho-Substituted Anilines**
Presenters: Jeremy Wyngarden, Aidan Zumbach | Mentor: John Bender, Chemistry
- KC 2259 **Embodied Inequality: How Your Mother's "Memories" Influence Generational Health**
Presenter: Morgan McEvoy | Mentor: Kristin Hedges, Anthropology

11:00 a.m.

- KC 1104 **Dance and Pediatrics with Cerebral Palsy**
Presenters: Mariah DePoy, Alyssa Wilson | Mentor: Dawn De Vries, School of Interdisciplinary Health
- KC 1142 **Analyzing Differences in Caregiver and Child Perspectives on Stuttering and Speech Development**
Presenters: Adeline Miller, Natalie Rodriguez | Mentor: John Gabrosek, Statistics
- KC 2201 **Ending the Self-Fulfilling Prophecy: Advocating for the Humanities and their Value as an Undertapped Spring**
Presenter: Richard Chan | Mentor: Tierney Powell, English

Oral and/or Visual Presentations

KC 2259 **National Student Advertising Competition (NSAC) - Client Presentation for NFL**
Presenters: Precious Assah, Nathan Coon, Gerrit Householder, Kaitlyn Valrie | Mentor: Robin Spring, School of Communications

KC 2266 **The Democratic Peace Theory and the American Civil War: A Measure of Democratic Institutions in the Confederacy**
Presenter: Julia Peuhl | Mentor: Thomas Walker, Political Science

KC 2270 **Pretreat Yourself: Potential Implications on Pretreatment Protocol for Isotope Analyses in Archaeology**
Presenter: Orion Davis | Mentor: Elizabeth Arnold, Anthropology

11:30 a.m.

KC 1142 **A Statistical Consulting Experience: Analysis of Students Perceptions on Voyage Experiential Learning**
Presenters: Michelle Buss, Daniel Vander-Meer | Mentor: John Gabrosek, Statistics

12:00 p.m.

KC 1142 **Exploratory Analysis of Math and Stats Tutoring Center's Navigate Data**
Presenters: Kian Ghiasvand, Sebastian Langenbach | Mentor: John Gabrosek, Statistics

KC 2266 **Option Pricing Models Using Fractional Calculus**
Presenter: Simon Vu | Mentor: Norma Ortiz-Robinson, Mathematics

12:30 p.m.

KC 1142 **A Statistical Consulting Experience: Analyzing Municipal Planning Priorities in the Great Lakes Region**
Presenters: Belmina Durakovic, Katherine Foster | Mentor: John Gabrosek, Statistics

KC 2201 **From Euclid to Today: Redefining Public Welfare in Great Lakes Planning**
Presenter: Amanda Daniels | Mentor: Jeroen Wagendorp, Geography and Planning

1:00 p.m.

KC 2201 **Letters Home: Transcribing and Translating German Post-War Narratives**
Presenter: Natalie VanAtta | Mentor: Regina Koehler, Modern Languages and Literatures

KC 2270 **Dear Alyssa**
Presenter: Alyssa Rottman | Mentor: Sané Bhattarai, School of Communications

1:30 p.m.

KC 2259 **Review of Ovarian Cancer with Emphasis on Modern Treatments**
Presenter: Jerilyn Anderson | Mentor: Francis Sylvester, Biomedical Sciences

2:00 p.m.

KC 2201 **The Impact of the Lung Screening Program on the Early Diagnosis of Cancer: A Systematic Review**
Presenter: Audrey Darling | Mentor: Chad Sutcliffe, College of Health Professions

KC 2266 **The Impact of Truck Traffic and Pollutant Exposure in Disadvantaged Communities - An Analysis of the Roosevelt Park Neighborhood**
Presenter: Lester Dominguez-Torres | Mentor: Heather Moody, Geography and Planning

2:30 p.m.

KC 2201 **Autonomous Spacecraft Docking Using Diverse Strategies With Reinforcement Learning**
Presenter: Marcos Sanson | Mentors: Loren Anderson, College of Computing, Alexander Lalejini, College of Computing

3:00 p.m.

KC 2201 **Cocreating Museum Spaces: A Postcolonial Approach in the American Midwest**
Presenter: Allison Bazaire | Mentor: Anthony Spencer, School of Communications

KC 2266 **Capitalism, Connectivity, Globalization: Dissecting the Capitalistic Virality in Ling Ma's Severance**
Presenters: Tessa Brumels, Halle Evans, Cynthia Wrzesinski | Mentor: Tierney Powell, English

3:30 p.m.

KC 2266 **Los Sonidos del Norte: Mexican Musical Culture in West Michigan amid Escalating Anti-Immigrant Policy**
Presenter: Cruz Pena | Mentor: Lisa Feurzeig, Music, Theater, and Dance

4:00 p.m.

KC 1142 **A Statistical Consulting Experience: Collecting and Studying Patterns in Customer Perceptions of International and Domestic Car Brands**
Presenters: Hunter Bogar, Emily VanderWagen | Mentor: John Gabrosek, Statistics

KC 2201 **Evaluating eDNA as a Monitoring Tool for Arctic Grayling in Michigan Streams**
Presenter: Eleanor Newcomb | Mentors: Charlyn Partridge, Robert B. Annis Water Resources Institute, Carl Ruetz, Robert B. Annis Water Resources Institute

KC 2259 **Computational Investigation of Mutiple Different Phosphoranes**
Presenter: Rachel Duford | Mentors: John Bender, Chemistry, Richard Lord, Chemistry

KC 2270 **AI Wives: Digital Misogyny in Translation**
Presenter: Sydney Kamps | Mentor: Alexander Nesterenko, Political Science

4:30 p.m.

1KC 2201 **Designing and Implementing an Undergraduate Immunology Laboratory Manual for Open-access Publication**
Presenter: Kaley VanSuch | Mentor: Kristin Renkema, Biomedical Sciences

Poster Presentations

9:00 a.m. - 10:00 a.m. Henry Hall Atrium

- HRY 001 **Examination of Bilateral Asymmetry for Movement Skills Before and After Feedback**
Presenters: Moritz Hesse, John Visnovsky | Mentor: Heather Gulgin, Movement Science
- HRY 002 **Planting Seeds of Hope: Horticultural Therapy and Depression**
Presenter: Jaynie Seylhower | Mentor: Dawn De Vries, School of Interdisciplinary Health
- HRY 003 **Effectiveness of Mind-Body Interventions for the Treatment of Anxiety**
Presenter: Lauren Massa | Mentor: Dawn De Vries, School of Interdisciplinary Health
- HRY 004 **The Use of Aquatic Therapy for Individuals with Parkinson's Disease**
Presenter: Emily Hermanson | Mentor: Dawn De Vries, School of Interdisciplinary Health
- HRY 005 **Galloping Toward Comfort**
Presenter: Emily Robinson | Mentor: Dawn De Vries, School of Interdisciplinary Health
- HRY 006 **The Role of Mindfulness for Adults With Eating Disorders**
Presenter: Kylee Woodward | Mentor: Dawn De Vries, School of Interdisciplinary Health
- HRY 009 **LeDreamer: Regularized Joint Embeddings for Training Agents Inside of World Models**
Presenter: Jack Foreback | Mentor: Erin Carrier, College of Computing, School of Computing and Information Systems
- HRY 013 **Islamic Feminism in Iran**
Presenter: Maire Noonan | Mentor: Alice Chapman, History
- HRY 016 **Implantation of a Medtronic Interstim X Device and the Criteria for Implementation**
Presenters: Aerolyn Posthumus, Rose Pulte | Mentors: Natalie Laudicina, Biomedical Sciences, Chris Reed, Biomedical Sciences, Dawn Richiert, Biomedical Sciences, Laura Stroik, Biomedical Sciences
- HRY 018 **As You Are, Where You Are: A New Solution for Homeless Youth Outreach**
Presenter: Matthew Hubers | Mentor: Jamie Langlois, School of Social Work
- HRY 021 **Grand Rapids Pride, Women's Activism, and Local LGBTQ+ History**
Presenters: Christina Carriveau, Anthony Clark, Justin Fuller, Makenna Jones, Sofie Spitael | Mentor: Nora Salas, History, Kutsche Office of Local History
- HRY 022 **"Women Are Fighting Back": Impact of Women's Resource Centers in Michigan**
Presenters: Cassidy Benac, Benjamin Crowe, Jenna Hoving, Grace Klein, Julia Vucinaj | Mentor: Nora Salas, History, Kutsche Office of Local History
- HRY 023 **GVSU Ravine Trails**
Presenter: Bryan Heiss | Mentor: Elena Lioubimtseva, Environmental Studies, Geography and Planning
- HRY 024 **Music and Dementia**
Presenter: Emily Sullivan | Mentor: Jing Chen, Psychology
- HRY 025 **Removing the Mask: What Men Hide Beneath the Surface**
Presenter: Brandon Melnyk | Mentor: Jamie Langlois, School of Social Work
- HRY 028 **Beyond Compliance: A Neuro-Affirming Adaptation of the Transtheoretical Model for Social Work**
Presenter: Nicole Huber | Mentor: Jamie Langlois, School of Social Work
- HRY 038 **Peer to Peer Interventions: Mindset, Belonging, and Academic Outcomes; An Analysis of Student Experiences**
Presenters: Teagan Bayne, Angel Hughes, Vivian Tackett-Irwin | Mentors: Kristy Dean, Psychology, Courtney Kowalczyk, Psychology
- HRY 041 **The SS Edmund Fitzgerald: A 51 Year Mystery**
Presenter: Matthew Uthe | Mentor: Alice Chapman, History
- HRY 058 **History of Immigrant Labor in Detroit 1880-1900**
Presenter: Liam Magin | Mentor: Alice Chapman, History
- HRY 060 **Renaissance Court Dance and the Formation of Ballet**
Presenter: Kate Roelof | Mentor: Alice Chapman, History
- HRY 064 **Understanding the Chicano Movement: Youth Activism and the Fight for Educational Equality**
Presenter: Edith Juarez-Rodriguez | Mentor: Alice Chapman, History
- HRY 069 **Vision-Enhanced Closed-Loop Control System for Bioprinting**
Presenter: John Chikwe | Mentor: Abishek Balsamy Kamaraj, School of Engineering
- HRY 070 **The Molecular Mechanism for the Degradation of Dual-specificity Phosphatase 8 Protein**
Presenter: Lukas Macha | Mentor: Ruijie Liu, Biomedical Sciences
- HRY 074 **Can Consuming Red Beetroots Effectively Treat High Blood Pressure?**
Presenters: Tejaswini Balla, Landon Beiter, Alyssa Hussey, Faith Lutz, Connor Orlando | Mentor: Francis Sylvester, Biomedical Sciences

Poster Presentations

- HRY 080 **Fear of Reporting: How Toxic Work Climates Predict the Willingness to Report Mistreatment at Work**
Presenter: Zachary Spencer | Mentor: Benjamin Walsh, Seidman - Management
- HRY 081 **Understanding How Machine Learning Can Reduce Medication Error**
Presenter: Elise Tchieng | Mentor: Benjamin Walsh, Seidman - Management
- HRY 082 **Does a Perceived Overqualification Affect Interpersonal Deviance at Work, and Does Work Centrality Moderate this Effect?**
Presenter: Kyra Toburen | Mentor: Benjamin Walsh, Seidman - Management
- HRY 083 **To What Extent do Civility Climate, Perceived Organizational Support, and Perceived Supervisor Support Influence Employee Burnout?**
Presenter: Ava Cybulski | Mentor: Benjamin Walsh, Seidman - Management
- HRY 090 **Effects of Breast Milk Feeding on Immune Function in Newborns Within the First Year of Life: A Systematic Review**
Presenters: Abigail Azarovitz, Marissa Diotte, Jacklyn Kimball, Carly Krohn | Mentor: Chad Sutcliffe, College of Health Professions, School of Interdisciplinary Health
- HRY 094 **Sleeps Effect on University Students Performance**
Presenters: Matthew Brand, Olivia Clark, Faith DeHoop, Cora Elkins | Mentor: Madison Goodyke, Kirkhof College of Nursing
- HRY 099 **Visualization of the AANATL7 Protein in the Male Accessory Gland through Generation of a AANALT-7::mCherry Gene Fusion Using a co-CRISPR HDR Gene Conversion Approach**
Presenters: Joshua Eapen, Emily Patterson, Susanna Tsueda | Mentor: Martin Burg, Biomedical Sciences, Cell and Molecular Biology
- HRY 101 **The Role of Mindfulness in Processing Threatening Health Information Regarding Cellphone Use**
Presenters: Alyssa Noneman, Emily Shane | Mentor: Amanda Dillard, College of Liberal Arts and Sciences, Psychology
- HRY 104 **Plant-Geology Interaction in the Bahamas**
Presenters: Amanda Sexton, Temmy Williams | Mentor: Ian Winkelstern, Geology
- HRY 105 **The Controversial Jurassic Red Beds of the Michigan Basin**
Presenter: Jennifer Jones | Mentor: Reece Elling, Geology
- HRY 108 **Game or Gambling: A Discourse Analysis Surrounding Daily Streaks and Reward Systems**
Presenter: Nicholas Barberio | Mentor: Alisha Karabinus, Digital Studies, Writing
- HRY 109 **Relativistic Effects on GPS for an Arbitrary Planet**
Presenter: William Adkins | Mentor: Brett Bolen, Physics, Provost Office

9:00 a.m. - 10:00 a.m. Kirkhof Center Grand River Room

- GRR 002 **An Overview of Rheumatoid Arthritis**
Presenter: Emma Walker | Mentor: John Capodilupo, Biomedical Sciences
- GRR 013 **We Must Cultivate Our Garden: Interpreting Voltaire's *Candide* (1759)**
Presenter: Aner Schuyler | Mentor: David Eick, Frederik Meijer Honors College, Modern Languages and Literatures
- GRR 018 **Planarian Head Regeneration Following Silencing of Receptor Tyrosine-Protein Phosphatase-Type F Gene**
Presenter: Hope Palmer | Mentor: Osman Patel, Cell and Molecular Biology
- GRR 020 **Relative Energy Deficiency in Sport in Postpartum Populations**
Presenter: Samantha Purifoy | Mentor: Katie Treston-Torney, Physician Assistant Studies
- GRR 029 **Design and Validation of an Instrumented Lab-Scale Composting Test Bed to Quantify the Effect of Forced Aeration**
Presenter: Samantha Seneker | Mentors: Yunju Lee, Department of Mechanical and Manufacturing Engineering, School of Engineering, Seymour and Esther Padnos College of Engineering and Computing, Catherine Molloseau, School of Engineering
- GRR 033 **Social Media Addiction: A Neuroanatomical and Behavioral Perspective**
Presenter: Kate Krasin | Mentor: John Capodilupo, Biomedical Sciences
- GRR 034 **Flying through the Oxidative Stress Pathway: Orthologue Identification in the Course, "Introduction to *Drosophila* Genomics Research"**
Presenters: Jade Dawson, Babasola Fateye, Alena Rolo, Alondra Soto | Mentor: Martin Burg, Biomedical Sciences, Cell and Molecular Biology
- GRR 037 **Improvisation, Active Procrastination and Agility: How to Make Decisions When Plans Fail**
Presenter: Annie Patel | Mentor: Anton Fenik, Seidman - Marketing

Poster Presentations

- GRR 042 **Viability, Apoptosis and Cell Cycle Position of Cultured Endothelial Cells Grown in Media with Reduced FBS and Glucose**
Presenters: Koby Fraaza, Emily Seaman | Mentor: Dave Kurjaka, Biomedical Sciences
- GRR 043 **Synthesis of Potential Drugs to Treat Tuberculosis: The Impact of Electron Donating/Withdrawing Groups**
Presenters: Jacob Henk, Julia Meyer, Sarah Vuong, Aidan Zarou | Mentor: Matthew Hart, Chemistry
- GRR 054 **The Effect of Meditation on Nurses' Sleep Quality**
Presenters: Emma Elmore, Daniella LoPiccolo, Abigail Streight, Page Yancey | Mentor: Madison Goodyke, Kirkhof College of Nursing
- GRR 055 **How do Exercise and Physical Activity Affect Depression Rates in University Students?**
Presenters: Mary Dodaj, Johnathan Haefner, Kasey Jarrett, Grace Knoblock | Mentor: Madison Goodyke, Kirkhof College of Nursing
- GRR 058 **Synthesis of Alkene Compounds through the (P=C) Phosphorane Intermediate**
Presenters: Noah Bishop, Quinn Burgei | Mentor: John Bender, Chemistry
- GRR 065 **Ghrelin Receptor Regulation of Anxiety- and Depression-Related Behaviors Following Long-Term Alcohol Withdrawal**
Presenters: Sophia Bixler, Samantha Conn, Liam Knisley, Arnica Sheaffer, Ciara Young | Mentor: Glenn Valdez, Psychology
- GRR 066 **Enhancements of Radiologic Imaging Using Artificial Intelligence**
Presenter: Sophie Biazza | Mentor: Chad Sutcliffe, College of Health Professions, School of Interdisciplinary Health
- GRR 068 **Waterbirth: A Comparative Literature Review**
Presenter: Anna Whipple | Mentor: Kelli Damstra, Kirkhof College of Nursing
- GRR 071 **Spatial Variability of Chemical and Biological Components in an Experimental Filtration Well**
Presenters: Gabriel Essich, Olivia Steeves | Mentors: Rod Morgan, Biology, Peter Wampler, College of Liberal Arts and Sciences, Frederik Meijer Honors College, Geology
- GRR 072 **Assessing the Potential of the Laser Interferometer Space Antenna for Simulated Near-Earth Object Detection**
Presenter: Pablo Kohlmann Garcia | Mentor: Brett Bolen, Physics, Provost Office
- GRR 074 **FloARa**
Presenter: Keely Carlson | Mentor: Sara Alsum-Wassenaar, Visual and Media Arts
- GRR 082 **When Staffing Falls Short: Nurse Shortages Impact on Adult Patients in Acute Care**
Presenters: Amy La Fleur, Jonathan Partida, Kora Wakefield | Mentor: Kelly Aubry, School of Interdisciplinary Health
- GRR 084 **Using GIS to Analyze Spatial and Temporal Correlation between Wetland Loss and Endangered Species in Southwest Michigan**
Presenters: Sadie Brown, Alena O'Connor | Mentor: Peter Wampler, College of Liberal Arts and Sciences, Frederik Meijer Honors College, Geology
- GRR 088 **The Impact of *Halimeda* as an Indicator of Red Mangrove Health**
Presenters: Anna Fowler, Olivia Schneider, Hayden Troyer | Mentor: Timothy Evans, Biology
- GRR 092 **Cheap, Trendy Clothing Driving Overconsumption: Fast Fashion on TikTok**
Presenter: Victoria Biadala | Mentor: Anthony Spencer, School of Communications
- GRR 093 **'Mamma Mia! Here We Go Again!': A Look at Global Feminism**
Presenter: Aubree Pederson | Mentor: Anthony Spencer, School of Communications
- GRR 096 **Soccer in London: Where Football is Life**
Presenter: Francesca Petrucci | Mentor: Tara Hefferan, Anthropology
- GRR 098 **Sleep Deep: The Role of Magnesium in Adults Aged 18-40**
Presenter: Mackenzie Ford | Mentor: Chad Sutcliffe, College of Health Professions, School of Interdisciplinary Health
- GRR 099 **Descriptions of Gender Identity in Transgender Individuals**
Presenter: Tyler Peery | Mentor: Dan Brown, English
- GRR 101 **Investigating the Fas Apoptosis Inhibitory Molecule (FAIM) in *Drosophila melanogaster***
Presenter: Edgar Cedillo Aguilar | Mentor: Josie Mitchell, Chemistry
- GRR 116 **Probing the Superconducting Gap in BSCCO with a Low-Cost Cryogenic Z-Axis Tunneling Microscope**
Presenter: Archer Sagaskie | Mentor: Joshua Veazey, Physics
- GRR 118 **Synthesis and Antimicrobial Susceptibility Testing of (2E)-3-(4-fluorophenyl)-1-(4-methoxyphenyl)prop-2-en-1-one and (2E)-3-(2,4-methoxyphenyl)-1-(4-fluorophenyl)prop-2-en-1-one**
Presenter: Jessica Lukins | Mentors: Aaron Baxter, Biomedical Sciences, Nicholas Olle, Chemistry
- GRR 122 **Characterizing the Effects of Sampling in Digital Evolutionary Replay Experiments**
Presenter: Nikolai Escondo | Mentor: Austin Ferguson, College of Computing

Poster Presentations

- GRR 124 **Climate Reconstruction of Last-Interglacial South Carolina Using Carbonate Clumped Isotope Thermometry**
Presenter: Samuel Schwarze | Mentor: Ian Winkelstern, Geology
- GRR 125 **Modern Triple Oxygen Isotope Constraints on a Lake Mass-Balance in Big Pine Island Lake, Michigan**
Presenter: Delaney Novach | Mentor: Ian Winkelstern, Geology
- GRR 129 **Understanding the Effects of the COVID-19 Pandemic on Nurse Understaffing**
Presenters: Hailey Chycinski, Braden Patton, Demonae Powell, Christian Wagen | Mentor: Kelly Aubry, School of Interdisciplinary Health
- GRR 133 **Kent County Waste to Energy Incinerator Emissions**
Presenter: Amanda Sexton | Mentors: Kin Ma, Geography and Planning, Heather Moody, Geography and Planning
- GRR 138 **Takotsubo Cardiomyopathy**
Presenter: Khrystine Weesner | Mentor: John Capodilupo, Biomedical Sciences
- GRR 141 **Microfossil Analysis and Interpretations of Rare Aquatic Localities from the Uinta Basin, Utah**
Presenters: Sophia Bailey, Selah Bollinger, Jessica Frielink, Layla Hurst, Kristin Krink, Dylan Ruitter, Olivia Szewczyk | Mentor: Laura Stroik, Biomedical Sciences
- GRR 142 **Developing Methodology to Analyze the Impact of Stream Restoration Using LiDAR**
Presenter: Anna Griessel | Mentor: Alexandra Locher, Biology
- GRR 146 **Geology, Stratigraphy, and Paleoenvironment of San Salvador Island (Bahamas) Informs Pleistocene-Holocene Global Climate Peaks**
Presenters: Abraham Parsons, Grant Potter | Mentor: Ian Winkelstern, Geology
- GRR 156 **Extraction of Potential Vasoactive Proteins in Commercial Red Beet Powders**
Presenters: Matthew Engel, Thu Le, Stephen Mclenithan, Caleb Porter, Logan Tracia | Mentor: Francis Sylvester, Biomedical Sciences
- GRR 162 **Assessment of HPV Biomarkers and Screening Practices to Improve Cervical Cancer Detection in Underserved Communities**
Presenter: Sequoya Drilling | Mentor: Kristin Renkema, Biomedical Sciences
- GRR 167 **Do Similar Phosphatases Act on the Same Substrate?**
Presenter: Brady Curtin | Mentor: Ian Cleary, Biomedical Sciences
- GRR 169 **Effects of Dietary Sodium Butyrate on α -Synuclein Aggregation in Enteric Neurons in a *Drosophila* Model of Parkinson's Disease**
Presenter: Haley Powers | Mentor: Georgette Sass, Biology

10:00 a.m. - 11:00 a.m. Henry Hall Atrium

- HRY 010 **Collisions and Chemistry on Screen: Evaluating Kinetics Content on YouTube**
Presenter: Mya Hastings | Mentor: Deborah Herrington, Chemistry
- HRY 012 **Patient Satisfaction in Adult Prosthetic Users: Advanced Technology vs. Traditional Methods**
Presenters: Sophie Biazza, Nicholas Gibbons, Madilyn Smith, Riley Wells | Mentor: Jenny Baweja, College of Health Professions, School of Interdisciplinary Health
- HRY 016 **Implantation of a Medtronic Interstim X Device and the Criteria for Implementation**
Presenters: Aerolyn Posthumus, Rose Pulte | Mentors: Natalie Laudicina, Biomedical Sciences, Chris Reed, Biomedical Sciences, Dawn Richiert, Biomedical Sciences, Laura Stroik, Biomedical Sciences
- HRY 032 **Preventing Therapist Burnout: A Research-Informed Digital Resource for Ethical and Sustainable Practice**
Presenter: Shannon Jennings | Mentor: Jamie Langlois, School of Social Work
- HRY 038 **Peer to Peer Interventions: Mindset, Belonging, and Academic Outcomes; An Analysis of Student Experiences**
Presenters: Teagan Bayne, Angel Hughes, Vivian Tackett-Irwin | Mentors: Kristy Dean, Psychology, Courtney Kowalczyk, Psychology
- HRY 040 **Improving Urban Pollinator Habitat Conservation Efforts in Grand Rapids, Michigan**
Presenter: Liga Bergs | Mentor: Alexandra Locher, Biology
- HRY 047 **Nazi Propaganda in World War II**
Presenter: Olivia Stepanek | Mentor: Alice Chapman, History
- HRY 050 **Em-Power: Power Wheelchair Skills Capacity Outcomes of Children with Cerebral Palsy**
Presenter: Alejandra Brenes | Mentor: Lisa Kenyon, Physical Therapy and Athletic Training
- HRY 060 **Renaissance Court Dance and the Formation of Ballet**
Presenter: Kate Roelof | Mentor: Alice Chapman, History
- HRY 061 **The Spanish Inquisition: Punishment in the Face of Emerging New Ideas**
Presenter: Grace Sullivan | Mentor: Alice Chapman, History

Poster Presentations

- HRY 070 **The Molecular Mechanism for the Degradation of Dual-specificity Phosphatase 8 Protein**
Presenter: Lukas Macha | Mentor: Ruijie Liu, Biomedical Sciences
- HRY 073 **Skills on Wheels at Home: Exploring the Effects of Short-term Pediatric Manual Wheelchair Skills Training in Everyday Contexts**
Presenter: Kennedy Maynard | Mentors: Lisa Kenyon, Physical Therapy and Athletic Training, Sango Otieno, Statistics
- HRY 074 **Can Consuming Red Beetroots Effectively Treat High Blood Pressure?**
Presenters: Tejaswini Balla, Landon Beiter, Alyssa Hussey, Faith Lutz, Connor Orlando | Mentor: Francis Sylvester, Biomedical Sciences
- HRY 078 **Epitope Labeling of the AANATL-7 Protein Using CRISPR/Cas9-mediated Homology Directed Repair in *D. melanogaster***
Presenter: Stephanie Michmerhuizen | Mentor: Martin Burg, Biomedical Sciences, Cell and Molecular Biology
- HRY 079 **Bridging the Gap: Healthcare Disparities in Underserved American Communities**
Presenters: Elizabeth Rafferty, Josephine Sellenraad | Mentor: Chad Sutcliffe, College of Health Professions, School of Interdisciplinary Health
- HRY 084 **Understanding How Nutrition Can Affect Active Job Performance**
Presenter: Noah Masen | Mentor: Benjamin Walsh, Seidman - Management
- HRY 085 **Mapping Trends in Michigan AI Data Centers**
Presenter: Joseph Portelli | Mentor: James Penn, Geography and Planning
- HRY 092 **Scapular Stability Muscle Activation During Multiplanar Shoulder Exercise Using Fiberglass Resistance Poles**
Presenters: Devin Ackerson, Avery Blair, Connor Brunskole, Savannah Carver, Andrew Clarent, Annalise Eppolito, Ella Gaylord, Riley Greene, Noah Hadley, Logan Kirkwood, Makenna Kuczynski, Morgan Righter, Alayna Shores, Elia Tasco, Zackarey Williams | Mentor: Stephen Glass, Movement Science
- HRY 095 **Does Yoga Relieve Stress in Nursing Students?**
Presenters: Grace Geiger, Charlotte Hartges, Avery Tolstyka, Ava Verkeyn | Mentor: Madison Goodyke, Kirkhof College of Nursing
- HRY 101 **The Role of Mindfulness in Processing Threatening Health Information Regarding Cellphone Use**
Presenters: Alyssa Noneman, Emily Shane | Mentor: Amanda Dillard, College of Liberal Arts and Sciences, Psychology
- HRY 104 **Plant-Geology Interaction in the Bahamas**
Presenters: Amanda Sexton, Temmy Williams | Mentor: Ian Winkelstern, Geology
- HRY 108 **Game or Gambling: A Discourse Analysis Surrounding Daily Streaks and Reward Systems**
Presenter: Nicholas Barberio | Mentor: Alisha Karabinus, Digital Studies, Writing

10:00 a.m. - 11:00 a.m. Kirkhof Center Grand River Room

- GRR 005 **Hidden Costs of the Game: Trauma, Coaching Practices, and Adolescent Athletes**
Presenter: Nevaeh Hemmes-Palms | Mentor: Dana Munk, Movement Science
- GRR 008 **The West Michigan Index: Understanding its Composition and Evaluating Performance**
Presenter: Sarah Cole | Mentor: Yatin Bhagwat, Seidman - Finance
- GRR 010 **Empowering Teachers and Students to Use a Real-Time Sensing Platform in their After School Programs to Integrate Computational Thinking**
Presenter: Colin Nagley | Mentor: Ali Raza, College of Computing
- GRR 014 **The Books that Made you are Illegal**
Presenter: Aner Schuyler | Mentor: Leigh Rupinski, University Libraries
- GRR 023 **A Comparative Study of Cadaveric Lungs Affected by Chronic Lung Disease and Lung Cancer**
Presenter: Alyssa Hussey | Mentors: Natalie Laudicina, Biomedical Sciences, Chris Reed, Biomedical Sciences, Dawn Richiert, Biomedical Sciences, Laura Stroik, Biomedical Sciences
- GRR 027 **Using Environmental DNA from Spiderwebs to Monitor At-risk Eastern Hemlocks (*Tsuga canadensis*) for Hemlock Woolly Adelgid (*Adelges tsugae*) in Northern Michigan**
Presenters: Zoe Gondeck, James Switzer-Moe | Mentor: Charlyn Partridge, Robert B. Annis Water Resources Institute
- GRR 029 **Design and Validation of an Instrumented Lab-Scale Composting Test Bed to Quantify the Effect of Forced Aeration**
Presenter: Samantha Seneker | Mentors: Yunju Lee, Department of Mechanical and Manufacturing Engineering, School of Engineering, Seymour and Esther Padnos College of Engineering and Computing, Catherine Molloseau, School of Engineering
- GRR 030 **Securing the Decentralized Edge: An Integrated Approach to Zero Trust and Endpoint Security Monitoring**
Presenter: Victor Bungei | Mentor: Sara Sutton, College of Computing

Poster Presentations

- GRR 031 **Anti-TB Drugs with Polar Groups**
Presenters: Brandon Lopez-Rebolledo, Lily Parsons, Abbey Ruby, Emily Vu | Mentor: Matthew Hart, Chemistry
- GRR 034 **Flying through the Oxidative Stress Pathway: Orthologue Identification in the Course, “Introduction to *Drosophila* Genomics Research”**
Presenters: Jade Dawson, Babasola Fateye, Alena Rolo, Alondra Soto | Mentor: Martin Burg, Biomedical Sciences, Cell and Molecular Biology
- GRR 035 **Impact of Receptor Tyrosine-Protein Phosphatase-Type V Gene Silencing on Planarian Head Regeneration**
Presenter: Sadie Buell | Mentor: Osman Patel, Cell and Molecular Biology
- GRR 036 **Quick Disarm: Researching the Chemical Weapons Convention of 1992**
Presenter: Andrew Medley | Mentor: Cayla Dwyer, University Libraries
- GRR 040 **Screening MMV Compounds as Chagas Disease Drug Candidates**
Presenter: Brookelyn Rought | Mentor: Viviane Correa Santos, Chemistry
- GRR 042 **Viability, Apoptosis and Cell Cycle Position of Cultured Endothelial Cells Grown in Media with Reduced FBS and Glucose**
Presenters: Koby Fraaza, Emily Seaman | Mentor: Dave Kurjiaka, Biomedical Sciences
- GRR 046 **Does an Allosteric Inhibitor, BIBR-1532, Bind similarly to Beetle and Human Telomerases? Implications for Anti-Cancer Therapies Targeting Human Telomerase**
Presenter: Angel Zoulek | Mentor: Agnieszka Szarecka, Cell and Molecular Biology
- GRR 047 **Dietary Influence and Neurodegenerative Disease Risk: Insight from Alzheimer’s and Parkinson’s Disease**
Presenter: Madison Wirt | Mentor: Natalie Laudicina, Biomedical Sciences
- GRR 053 **The Effect of Aromatherapy on Stress and Anxiety in Nursing Students**
Presenters: Megan Malkowski, Allison Postema, Jewlia Valeri | Mentor: Madison Goodyke, Kirkhof College of Nursing
- GRR 063 **Exploring the Effectiveness of AI Avatar Mediated Therapy in Virtual Reality: A Mixed-Methods Comparative Study**
Presenter: Tyler Fedototskin | Mentor: Haixia Liu, Brooks College of Interdisciplinary Studies
- GRR 064 **Substance Use and Mental Health Across the COVID-19 Arc: A Five-Year Analysis of NSDUH Data (2020–2024) with NLP-Augmented Social Media Validation**
Presenter: Sandra Osei | Mentor: Charitha Subrahmanya Kodumagulla, College of Computing
- GRR 065 **Ghrelin Receptor Regulation of Anxiety- and Depression-Related Behaviors Following Long-Term Alcohol Withdrawal**
Presenters: Sophia Bixler, Samantha Conn, Liam Knisley, Arnica Sheaffer, Ciara Young | Mentor: Glenn Valdez, Psychology
- GRR 066 **Enhancements of Radiologic Imaging Using Artificial Intelligence**
Presenter: Sophie Biazza | Mentor: Chad Sutcliffe, College of Health Professions, School of Interdisciplinary Health
- GRR 069 **Effects of Ketogenic Diet on Reproductive Parameters in Female Obese Mice**
Presenter: Cecilia Badalamenti | Mentor: Chris Pearl, Biomedical Sciences
- GRR 070 **Investigation of the Relationship Between Ocean Tide Changes and Water Chemistry in Lighthouse Cave**
Presenters: Hannah Krause, Mollie Strunk | Mentor: Ian Winkelstern, Geology
- GRR 071 **Spatial Variability of Chemical and Biological Components in an Experimental Filtration Well**
Presenters: Gabriel Essich, Olivia Steeves | Mentors: Rod Morgan, Biology, Peter Wampler, College of Liberal Arts and Sciences, Frederik Meijer Honors College, Geology
- GRR 076 **Separation and Detection of *Escherichia coli* and *Lactobacillus casei* in Mixed Cultures Utilizing Capillary Isotachopheresis**
Presenter: Addison Whitten | Mentor: Andrew Lantz, Chemistry
- GRR 078 **Riverscape Heterogeneity in Hg Concentrations: Relative Influences of Habitat and Trophic Position in a Macroinvertebrate Food Web**
Presenter: Erika Smyth | Mentor: Matthew Cooper, Biology
- GRR 085 **GIS Analysis of the Shape, Size and Distribution of Inland Lakes in Michigan’s Upper and Lower Peninsula**
Presenters: Noah Tenhagen, Noah Valentine | Mentor: Peter Wampler, College of Liberal Arts and Sciences, Frederik Meijer Honors College, Geology
- GRR 086 **Canopy Density and Growth Habit Distribution of *Encyclia altissima* on San Salvador Island**
Presenters: Olivia Constantino, Grace Kloeckner, Bee Scannell, Ayla Zambrano | Mentor: Timothy Evans, Biology
- GRR 088 **The Impact of *Halimeda* as an Indicator of Red Mangrove Health**
Presenters: Anna Fowler, Olivia Schneider, Hayden Troyer | Mentor: Timothy Evans, Biology

Poster Presentations

- GRR 091 **Using Geographic Information Systems to Predict Solar Energy Potential in Six Central Michigan Counties**
Presenter: Julia Eiler | Mentor: Peter Wampler, College of Liberal Arts and Sciences, Frederik Meijer Honors College, Geology
- GRR 092 **Cheap, Trendy Clothing Driving Overconsumption: Fast Fashion on TikTok**
Presenter: Victoria Biadala | Mentor: Anthony Spencer, School of Communications
- GRR 093 **'Mamma Mia! Here We Go Again!': A Look at Global Feminism**
Presenter: Aubree Pederson | Mentor: Anthony Spencer, School of Communications
- GRR 094 **Voices of Legacy: Black Women's Oral Histories and the Communication of Family Heritage Across the African Diaspora**
Presenter: Hannah Markham | Mentor: Anthony Spencer, School of Communications
- GRR 098 **Sleep Deep: The Role of Magnesium in Adults Aged 18-40**
Presenter: Mackenzie Ford | Mentor: Chad Sutcliffe, College of Health Professions, School of Interdisciplinary Health
- GRR 100 **The Impact of Eating Disorder Therapy on Anxiety in Individuals with Anorexia Nervosa: A Systematic Review**
Presenter: Devon Roy | Mentor: Chad Sutcliffe, College of Health Professions, School of Interdisciplinary Health
- GRR 107 **A Spatial Analysis of PFAS Pollution in Michigan**
Presenter: Nancy Odhiambo | Mentor: Andrew DiLernia, Statistics
- GRR 109 **CURE the Adults: An Autoethnographic Reflection of an Adult Student's Experience in CMB 400, a STEM Course-based Undergraduate Research Experience**
Presenter: Babasola Fateye | Mentor: Martin Burg, Biomedical Sciences, Cell and Molecular Biology
- GRR 118 **Synthesis and Antimicrobial Susceptibility Testing of (2E)-3-(4-fluorophenyl)-1-(4-methoxyphenyl)prop-2-en-1-one and (2E)-3-(2,4-methoxyphenyl)-1-(4-fluorophenyl)prop-2-en-1-one**
Presenter: Jessica Lukins | Mentors: Aaron Baxter, Biomedical Sciences, Nicholas Olle, Chemistry
- GRR 123 **Examining the Impact of Resveratrol on Aggregation of α -synuclein in *Drosophila* Testes**
Presenter: Kasey Loudermilk | Mentor: Georgette Sass, Biology
- GRR 128 **Accessibility in Video Games: A Framework for Developers**
Presenter: Tara Barnett | Mentor: Ira Woodring, College of Computing
- GRR 131 **Attachment Style and Conspiratorial Beliefs**
Presenters: Karis Gillen, Mya Hanna, Tessa Kramer, Dylan McGrath, Carley Mohny | Mentor: Mario Fific
- GRR 141 **Microfossil Analysis and Interpretations of Rare Aquatic Localities from the Uinta Basin, Utah**
Presenters: Sophia Bailey, Selah Bollinger, Jessica Frielink, Layla Hurst, Kristin Krink, Dylan Ruiter, Olivia Szewczyk | Mentor: Laura Stroik, Biomedical Sciences
- GRR 145 **Does Baby Aspirin Help or Harm? A Review of Reproductive Outcomes**
Presenter: Mitzi Morgan | Mentor: Jenny Baweja, College of Health Professions, School of Interdisciplinary Health
- GRR 146 **Geology, Stratigraphy, and Paleoenvironment of San Salvador Island (Bahamas) Informs Pleistocene-Holocene Global Climate Peaks**
Presenters: Abraham Parsons, Grant Potter | Mentor: Ian Winkelstern, Geology
- GRR 148 **Caffeine Consumption and Its Association with Sleep Quality and Mental Health Among College Students**
Presenter: Ava O'Brien | Mentor: Babasola Fateye, Biomedical Sciences
- GRR 153 **When Ratios Rise, Survival Falls: The Impact of Nurse Staffing in the ICU**
Presenters: Meagan Balenda, Phaedra Melinn | Mentor: Chad Sutcliffe, College of Health Professions, School of Interdisciplinary Health
- GRR 156 **Extraction of Potential Vasoactive Proteins in Commercial Red Beet Powders**
Presenters: Matthew Engel, Thu Le, Stephen Mclenithan, Caleb Porter, Logan Tracia | Mentor: Francis Sylvester, Biomedical Sciences
- GRR 157 **Classical Modeling of CO-N₂ Collisions and Their Effects on CO Spectral Line Broadening**
Presenter: Delaney Griffioen | Mentor: George McBane, Chemistry
- GRR 169 **Effects of Dietary Sodium Butyrate on α -Synuclein Aggregation in Enteric Neurons in a *Drosophila* Model of Parkinson's Disease**
Presenter: Haley Powers | Mentor: Georgette Sass, Biology

Poster Presentations

11:00 a.m. - 12:00 p.m. Henry Hall Atrium

- HRY 007 **The Effect of pH on Arterial Responses to Cardiovascular Drugs**
Presenter: Autumn Simms | Mentor: Francis Sylvester, Biomedical Sciences
- HRY 012 **Patient Satisfaction in Adult Prosthetic Users: Advanced Technology vs. Traditional Methods**
Presenters: Sophie Biazza, Nicholas Gibbons, Madilyn Smith, Riley Wells | Mentor: Jenny Baweja, College of Health Professions, School of Interdisciplinary Health
- HRY 016 **Implantation of a Medtronic Interstim X Device and the Criteria for Implementation**
Presenters: Aerolyn Posthumus, Rose Pulte | Mentors: Natalie Laudicina, Biomedical Sciences, Chris Reed, Biomedical Sciences, Dawn Richiert, Biomedical Sciences, Laura Stroik, Biomedical Sciences
- HRY 017 **Using GIS to Analyze Isotopic Values for 39 Michigan Lakes**
Presenter: Raychel Fennell | Mentors: Peter Wampler, College of Liberal Arts and Sciences, Frederik Meijer Honors College, Geology, Ian Winkelstern, Geology
- HRY 019 **Estimating Uncertainties in Neutron Capture Rates for Various Fe Nuclei with TALYS**
Presenter: Lucas Chouinard | Mentor: Sofia Karampagia
- HRY 021 **Grand Rapids Pride, Women's Activism, and Local LGBTQ+ History**
Presenters: Christina Carriveau, Anthony Clark, Justin Fuller, Makenna Jones, Sofie Spitael | Mentor: Nora Salas, History, Kutsche Office of Local History
- HRY 038 **Peer to Peer Interventions: Mindset, Belonging, and Academic Outcomes; An Analysis of Student Experiences**
Presenters: Teagan Bayne, Angel Hughes, Vivian Tackett-Irwin | Mentors: Kristy Dean, Psychology, Courtney Kowalczyk, Psychology
- HRY 039 **Synthesis of Phosphine Substituted Azo Dyes using Various Aromatic Compounds for use in Future Trace Metal Detection**
Presenters: Annika Roy, Owen Smythe | Mentor: John Bender, Chemistry
- HRY 042 **Effects of Regular Exercise on Dysmenorrhea in Menstruating Adults: A Systematic Review**
Presenters: Livia Ellison, Samantha Knight | Mentor: Chad Sutcliffe, College of Health Professions, School of Interdisciplinary Health
- HRY 046 **How Faculty Engagement Impacts Student's Success**
Presenters: Aamira Rogers, Karly Roy | Mentor: Amanda Buday, Robert B. Annis Water Resources Institute, Sociology
- HRY 047 **Nazi Propaganda in World War II**
Presenter: Olivia Stepanek | Mentor: Alice Chapman, History
- HRY 048 **How Campus Environment Impacts Emotional Engagement**
Presenters: Nyla Vander Laan, Emma Yonker | Mentor: Amanda Buday, Robert B. Annis Water Resources Institute, Sociology
- HRY 052 **Sensory-Motor Neural Variability Predicts Social Behavior in Autism Spectrum Disorder**
Presenter: Karis Gillen | Mentor: Dustin Scheinost, Yale School of Medicine
- HRY 059 **Women's Labor During World War II**
Presenter: Michael Decator | Mentor: Alice Chapman, History
- HRY 060 **Renaissance Court Dance and the Formation of Ballet**
Presenter: Kate Roelof | Mentor: Alice Chapman, History
- HRY 061 **The Spanish Inquisition: Punishment in the Face of Emerging New Ideas**
Presenter: Grace Sullivan | Mentor: Alice Chapman, History
- HRY 066 **The Relationship Between Diabetes and Depression in Adults: A Systematic Review**
Presenters: Logan Brusak, Devon Roy | Mentor: Jenny Baweja, College of Health Professions, School of Interdisciplinary Health
- HRY 068 **Single Crystal X-ray Structures of Lanthanide Triflate Complexes with Thienyl-Substituted Phosphine Oxides**
Presenter: Evelyn Schab | Mentors: John Bender, Chemistry, Shannon Biros, Chemistry
- HRY 071 **Diversity in Spacecraft Trajectories with Deep Reinforcement Learning**
Presenter: Marcos Sanson | Mentors: Loren Anderson, Alexander Lalejini, College of Computing, School of Computing and Information Systems, Seymour and Esther Padnos College of Engineering and Computing
- HRY 074 **Can Consuming Red Beetroots Effectively Treat High Blood Pressure?**
Presenters: Tejaswini Balla, Landon Beiter, Alyssa Hussey, Faith Lutz, Connor Orlando | Mentor: Francis Sylvester, Biomedical Sciences
- HRY 088 **Synthesis of Thienyl Phosphine Oxides as Multifunctional Antennas for Lanthanide Luminescence and 102 Generation**
Presenter: Allison Doyon | Mentors: John Bender, Chemistry, Shannon Biros, Chemistry

Poster Presentations

- HRY 097 **Nurses in Motion**
Presenters: Abigail Jones, Marie Limo, Kaitlyn McKinney | Mentor: Madison Goodyke, Kirkhof College of Nursing
- HRY 098 **The Emotional Weight of Caring in Leadership: An Integrative Literature Review of Clinical and Social Work Populations**
Presenter: Zachary Spencer | Mentor: Courtney Williams, Seidman - Management
- HRY 101 **The Role of Mindfulness in Processing Threatening Health Information Regarding Cellphone Use**
Presenters: Alyssa Noneman, Emily Shane | Mentor: Amanda Dillard, College of Liberal Arts and Sciences, Psychology
- HRY 108 **Game or Gambling: A Discourse Analysis Surrounding Daily Streaks and Reward Systems**
Presenter: Nicholas Barberio | Mentor: Alisha Karabinus, Digital Studies, Writing
- HRY 109 **Relativistic Effects on GPS for an Arbitrary Planet**
Presenter: William Adkins | Mentor: Brett Bolen, Physics, Provost Office

11:00 a.m. - 12:00 p.m. Kirkhof Center Grand River Room

- GRR 021 **What Effect Does Early Prescribing of Birth Control Have on Fertility?**
Presenters: Kyndal-Rai Suber, Cleary Welsh | Mentor: Jenny Baweja, College of Health Professions, School of Interdisciplinary Health
- GRR 024 **Hyperbilirubinemia Point of Care Testing in Infants: Reliability, Accuracy, and Promise**
Presenters: Austin Clink, Annika Julcher, Joshua Patterson | Mentor: Lillian Nelson, College of Health Professions, School of Interdisciplinary Health
- GRR 028 **Measuring Student Engagement and *Scientific* Literacy by Developing and Publishing an Open-access Immunology Laboratory Manual**
Presenter: Lucy Groothuis | Mentor: Kristin Renkema, Biomedical Sciences
- GRR 029 **Design and Validation of an Instrumented Lab-Scale Composting Test Bed to Quantify the Effect of Forced Aeration**
Presenter: Samantha Seneker | Mentors: Yunju Lee, Department of Mechanical and Manufacturing Engineering, School of Engineering, Seymour and Esther Padnos College of Engineering and Computing, Catherine Molloseau, School of Engineering
- GRR 031 **Anti-TB Drugs with Polar Groups**
Presenters: Brandon Lopez-Rebolledo, Lily Parsons, Abbey Ruby, Emily Vu | Mentor: Matthew Hart, Chemistry
- GRR 033 **Social Media Addiction: A Neuroanatomical and Behavioral Perspective**
Presenter: Kates Krasin | Mentor: John Capodilupo, Biomedical Sciences
- GRR 034 **Flying through the Oxidative Stress Pathway: Orthologue Identification in the Course, "Introduction to *Drosophila* Genomics Research"**
Presenters: Jade Dawson, Babasola Fateye, Alena Rolo, Alondra Soto | Mentor: Martin Burg, Biomedical Sciences, Cell and Molecular Biology
- GRR 036 **Quick Disarm: Researching the Chemical Weapons Convention of 1992**
Presenter: Andrew Medley | Mentor: Cayla Dwyer, University Libraries
- GRR 038 **Modeling Multi-messenger White Dwarf Binaries Within the Milky Way**
Presenter: Ryan Beam | Mentor: Brett Bolen, Physics, Provost Office
- GRR 039 **Microfluidic Technology for Rapid Antimicrobial Susceptibility Testing in Clinical Microbiology**
Presenters: Brodey Falbe, Damilola Oyewole, Hannah Royston | Mentor: Lillian Nelson, College of Health Professions, School of Interdisciplinary Health
- GRR 046 **Does an Allosteric Inhibitor, BIBR-1532, Bind similarly to Beetle and Human Telomerases? – Implications for Anti-Cancer Therapies Targeting Human Telomerase**
Presenter: Angel Zoulek | Mentor: Agnieszka Szarecka, Cell and Molecular Biology
- GRR 060 **Adaptive Management of Grand River Park for North American Beaver (*Castor canadensis*)**
Presenter: Delaney Morrin | Mentor: Alexandra Locher, Biology
- GRR 067 **Analyzing the Dusp8 Gene Expression in the Diabetic Mouse Tissues**
Presenter: Mia Swartz | Mentor: Ruijie Liu, Biomedical Sciences
- GRR 071 **Spatial Variability of Chemical and Biological Components in an Experimental Filtration Well**
Presenters: Gabriel Essich, Olivia Steeves | Mentors: Rod Morgan, Biology, Peter Wampler, College of Liberal Arts and Sciences, Frederik Meijer Honors College, Geology
- GRR 078 **Riverscape Heterogeneity in Hg Concentrations: Relative Influences of Habitat and Trophic Position in a Macroinvertebrate Food Web**
Presenter: Erika Smyth | Mentor: Matthew Cooper, Biology

Poster Presentations

- GRR 087 **Study of How Climate Change Impacts Weather Patterns**
Presenter: Cole Oliver | Mentor: Benjamin Holder, Physics
- GRR 088 **The Impact of *Halimeda* as an Indicator of Red Mangrove Health**
Presenters: Anna Fowler, Olivia Schneider, Hayden Troyer | Mentor: Timothy Evans, Biology
- GRR 089 **The Impact of PCR on Weak and Variant Blood Group Antigen Identification**
Presenters: Jessie Kailing, Luke Markley, Allison Miller | Mentor: Lilianne Nelson, College of Health Professions, School of Interdisciplinary Health
- GRR 093 **'Mamma Mia! Here We Go Again!': A Look at Global Feminism**
Presenter: Aubree Pederson | Mentor: Anthony Spencer, School of Communications
- GRR 095 **Polyglutamine Peptide Aggregation and Disaggregation**
Presenter: Corine Elian | Mentor: Laura Hawk, Chemistry
- GRR 097 **Anatomical and Clinical Considerations in a Cadaver with Ostomy Diversions**
Presenter: Soifa Svyryd | Mentors: Natalie Laudicina, Biomedical Sciences, Chris Reed, Biomedical Sciences, Dawn Richiert, Biomedical Sciences, Laura Stroik, Biomedical Sciences
- GRR 098 **Sleep Deep: The Role of Magnesium in Adults Aged 18-40**
Presenter: Mackenzie Ford | Mentor: Chad Sutcliffe, College of Health Professions, School of Interdisciplinary Health
- GRR 104 **Screening the Global Health Priority Box for Chagas Disease Drug Candidates**
Presenter: Jai Escobar | Mentor: Viviane Correa Santos, Chemistry
- GRR 105 **Development of Noncommunicable Diseases in College-Aged People: Diets High in Ultra-Processed Foods**
Presenter: Haidyn Adams | Mentor: Chad Sutcliffe, College of Health Professions, School of Interdisciplinary Health
- GRR 107 **A Spatial Analysis of PFAS Pollution in Michigan**
Presenter: Nancy Odhiambo | Mentor: Andrew DiLernia, Statistics
- GRR 108 **Changing Portrayals of LGB Sexual Orientations in Sex and Gender Textbooks**
Presenter: Samantha Makowski | Mentor: Robert Deaner, Psychology
- GRR 109 **CURE the Adults: An Autoethnographic Reflection of an Adult Student's Experience in CMB 400, a STEM Course-based Undergraduate Research Experience**
Presenter: Babasola Fateye | Mentor: Martin Burg, Biomedical Sciences, Cell and Molecular Biology
- GRR 111 **How is the Immune System Function Impacted by Physical Activity or Exercise in Young Adults?**
Presenter: Olivia Brodie | Mentor: Babasola Fateye, Biomedical Sciences
- GRR 113 **Morphology of Orchid Mycorrhizal Associations in Ram's-head Lady's-slipper Orchid (*Cypripedium arietinum*)**
Presenter: Lucy Heim | Mentors: Priscilla Nyamai, Biology, Jennifer Winther, Biology
- GRR 120 **Analyzing Abortion Legislation across the United States as it Correlates to Educational Attainment**
Presenter: Olivia Brown | Mentor: Kin Ma, Geography and Planning
- GRR 123 **Examining the Impact of Resveratrol on Aggregation of α -synuclein in *Drosophila* Testes**
Presenter: Kasey Loudermilk | Mentor: Georgette Sass, Biology
- GRR 127 **A Glimpse at the Upper Harz Dialect in Germany**
Presenter: Kayla Coats | Mentor: Regina Koehler, Modern Languages and Literatures
- GRR 131 **Attachment Style and Conspiratorial Beliefs**
Presenters: Karis Gillen, Mya Hanna, Tessa Kramer, Dylan McGrath, Carley Mohney | Mentor: Mario Fific
- GRR 134 **School Phone Bans and Adolescent Outcomes: A Review of Emerging Evidence**
Presenters: Madeline Armanini, Abigail Austin, Nevaeh Hemmes-Palms, Sarah Milam | Mentor: Mihaela Friedlmeier, Psychology
- GRR 135 **Potential Protective Effects of the Individual and Combined Effects of EHT and Caffeine on Parkinson's Disease**
Presenters: Allison Doran, Sydney Kekel | Mentor: Natasha Swalve, Psychology
- GRR 144 **Design and Synthesis of Potential Antibiotics with Polar Functional Groups**
Presenters: Jacquelyn Adema, Isabella Moreno | Mentor: Matthew Hart, Chemistry
- GRR 146 **Geology, Stratigraphy, and Paleoenvironment of San Salvador Island (Bahamas) Informs Pleistocene-Holocene Global Climate Peaks**
Presenters: Abraham Parsons, Grant Potter | Mentor: Ian Winkelstern, Geology
- GRR 152 **Emerging Resistance of Pesticide Treatments in *Pediculus humanus capitis***
Presenters: Kaitlin Banaszak, Anh Tran, Christine Tran | Mentor: Lilianne Nelson, College of Health Professions, School of Interdisciplinary Health
- GRR 154 **Examining Micro-, Mezzo-, and Macro-Level Variables Associated with Burnout in Law Enforcement Officers**
Presenter: Laura Andres | Mentor: Joshua Bishop, College of Education and Community Innovation, School of Social Work

Poster Presentations

- GRR 155 **Implementing an Interactive Exit Ticket System to Enhance Learning in Engineering and Computing Education**
Presenter: Tapanga Witt | Mentor: Ira Woodring, College of Computing
- GRR 156 **Extraction of Potential Vasoactive Proteins in Commercial Red Beet Powders**
Presenters: Matthew Engel, Thu Le, Stephen Mclenithan, Caleb Porter, Logan Tracia | Mentor: Francis Sylvester, Biomedical Sciences
- GRR 158 **Mapping the Landscape of Artificial Intelligence Applications in Hemophilia: A Systematic Review of Clinical Readiness in a Rare Disease Context**
Presenter: Swarna Bharathi Kathi | Mentor: Suhila Sawesi, School of Computing and Information Systems
- GRR 165 **Seed Bank Assay to Inform Restoration of a Lake Superior Coastal Marsh**
Presenters: Zachary Danevicz, Nadia Jones | Mentor: Sarah Johnson, Biology
- GRR 166 **A Review of New Developments in Detection of Lyme Disease in Acute Stage Borreliosis**
Presenters: Daniel Heeren, Keaton Kval, Israel Ruiz | Mentor: Lillian Nelson, College of Health Professions, School of Interdisciplinary Health
- GRR 169 **Effects of Dietary Sodium Butyrate on α -Synuclein Aggregation in Enteric Neurons in a *Drosophila* Model of Parkinson's Disease**
Presenter: Haley Powers | Mentor: Georgette Sass, Biology

12:00 p.m. - 1:00 p.m. Henry Hall Atrium

- HRY 014 **RNAi Knockdown of the CDC20 Gene and Its Effect on Regeneration in Planaria**
Presenter: Qasim Ali | Mentor: Matthew Christians, Cell and Molecular Biology
- HRY 015 **ADC-217, a Cephalosporinase Variant from *Acinetobacter baumannii* that Hydrolyzes Cefepime**
Presenter: Julianna Cornwell | Mentor: Bradley Wallar, Chemistry
- HRY 017 **Using GIS to Analyze Isotopic Values for 39 Michigan Lakes**
Presenter: Raychel Fennell | Mentors: Peter Wampler, College of Liberal Arts and Sciences, Frederik Meijer Honors College, Geology, Ian Winkelstern, Geology
- HRY 021 **Grand Rapids Pride, Women's Activism, and Local LGBTQ+ History**
Presenters: Christina Carriveau, Anthony Clark, Justin Fuller, Makenna Jones, Sofia Spitael | Mentor: Nora Salas, History, Kutsche Office of Local History
- HRY 037 **Food Accessibility as a Human Right for Youth Experiencing Homelessness**
Presenter: Ella Kage | Mentor: Jamie Langlois, School of Social Work
- HRY 038 **Peer to Peer Interventions: Mindset, Belonging, and Academic Outcomes; An Analysis of Student Experiences**
Presenters: Teagan Bayne, Angel Hughes, Vivian Tackett-Irwin | Mentors: Kristy Dean, Psychology, Courtney Kowalczyk, Psychology
- HRY 049 **Bridging Success and Diversity: The Impact of High-Impact Practices on Student Engagement, Learning, and Cross-Cultural Connection**
Presenters: Megan Bennett, Lanesha Spencer | Mentor: Amanda Buday, Robert B. Annis Water Resources Institute, Sociology
- HRY 053 **Emotional Mysticism and Medieval Authority: Margery Kempe and Catherine of Siena in Comparative Perspective**
Presenter: Hannah Duran | Mentor: Alice Chapman, History
- HRY 059 **Women's Labor During World War II**
Presenter: Michael Decator | Mentor: Alice Chapman, History
- HRY 060 **Renaissance Court Dance and the Formation of Ballet**
Presenter: Kate Roelof | Mentor: Alice Chapman, History
- HRY 061 **The Spanish Inquisition: Punishment in the Face of Emerging New Ideas**
Presenter: Grace Sullivan | Mentor: Alice Chapman, History
- HRY 074 **Can Consuming Red Beetroots Effectively Treat High Blood Pressure?**
Presenters: Tejaswini Balla, Landon Beiter, Alyssa Hussey, Faith Lutz, Connor Orlando | Mentor: Francis Sylvester, Biomedical Sciences
- HRY 087 **Synthesis of Novel Amides with Halogens to Treat Tuberculosis**
Presenters: Jacob Batha, Andrew Medley, Shawn Millner | Mentor: Matthew Hart, Chemistry
- HRY 092 **Scapular Stability Muscle Activation During Multiplanar Shoulder Exercise Using Fiberglass Resistance Poles**
Presenters: Devin Ackerson, Avery Blair, Connor Brunskole, Savannah Carver, Andrew Clarent, Annalise Eppolito, Ella Gaylord, Riley Greene, Noah Hadley, Logan Kirkwood, Makenna Kuczynski, Morgan Righter, Alayna Shores, Elia Tasco, Zackarey Williams | Mentor: Stephen Glass, Movement Science

Poster Presentations

- HRY 101 **The Role of Mindfulness in Processing Threatening Health Information Regarding Cellphone Use**
Presenters: Alyssa Noneman, Emily Shane | Mentor: Amanda Dillard, College of Liberal Arts and Sciences, Psychology
- HRY 103 **Predictive Algorithm Bias Detection Through Unsupervised Learning**
Presenter: Brian Rowe | Mentor: Jie Du, College of Computing, School of Computing and Information Systems

12:00 p.m. - 1:00 p.m. Kirkhof Center Grand River Room

- GRR 001 **Sediment Deposition and Benthic Uptake of Mercury in Muskegon Lake**
Presenter: Emma Van Eerden | Mentor: Matthew Cooper, Biology
- GRR 003 **Characterization of β -lactamase ADC-172 Exhibiting Increased Cephalosporinase Activity with Novel BATSI Inhibitors**
Presenter: Sophie Wildemann | Mentor: Bradley Wallar, Chemistry
- GRR 004 **Measuring Redox Activity of Individual *S. saprophyticus* in Iodide Solutions Using Single-Entity Electrochemical Collisions**
Presenter: Grace Connelly | Mentor: Scott Thorgaard, Chemistry
- GRR 011 **Modular Approaches Towards the Synthesis of Ergot Alkaloids and Novel Reference Materials**
Presenter: Gracie Willett | Mentors: John Bender, Chemistry, Daryl Staveness, Exiplex
- GRR 015 **Do Financial Literacy Programs Advance College Accessibility?**
Presenter: Landon Abbott | Mentor: Jake Laveggi
- GRR 017 **Female Pelvic Organ Prolapse (POP)**
Presenter: Molly Konzen | Mentor: Natalie Laudicina, Biomedical Sciences
- GRR 021 **What Effect Does Early Prescribing of Birth Control Have on Fertility?**
Presenters: Kyndal-Rai Suber, Cleary Welsh | Mentor: Jenny Baweja, College of Health Professions, School of Interdisciplinary Health
- GRR 022 **Rescuing *Candida albicans* Adhesion and Stress Resistance Defects in *brg1* and *tet-NRG1* Strains**
Presenter: Chad Britton | Mentor: Ian Cleary, Biomedical Sciences
- GRR 024 **Hyperbilirubinemia Point of Care Testing in Infants: Reliability, Accuracy, and Promise**
Presenters: Austin Clink, Annika Julcher, Joshua Patterson | Mentor: Lilianne Nelson, College of Health Professions, School of Interdisciplinary Health
- GRR 026 **Impact of Intrauterine Device Contraceptive Use on Bacterial Vaginosis**
Presenters: Hannah Diamond, Jessica Dole, Adrienne Parker | Mentor: Lilianne Nelson, College of Health Professions, School of Interdisciplinary Health
- GRR 029 **Design and Validation of an Instrumented Lab-Scale Composting Test Bed to Quantify the Effect of Forced Aeration**
Presenter: Samantha Seneker | Mentors: Yunju Lee, Department of Mechanical and Manufacturing Engineering, School of Engineering, Seymour and Esther Padnos College of Engineering and Computing, Catherine Molloseau, School of Engineering
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- GRR 039 **Microfluidic Technology for Rapid Antimicrobial Susceptibility Testing in Clinical Microbiology**
Presenters: Brodey Falbe, Damilola Oyewole, Hannah Royston | Mentor: Lilianne Nelson, College of Health Professions, School of Interdisciplinary Health
- GRR 045 **Beyond the Diagnosis: The Effects of ADHD on Self-Esteem in Adolescents**
Presenter: Ava Genschaw | Mentor: Jenny Baweja, College of Health Professions, School of Interdisciplinary Health
- GRR 048 **Prospect-Refuge Theory and Social Belonging**
Presenters: Kadin Beck, Rikki Hein | Mentor: Kristy Dean, Psychology
- GRR 057 **Does Kin Selection Explain Food Transfer Behavior in White-faced Saki Monkeys (*Pithecia pithecia*)?**
Presenter: Sophia Bixler | Mentor: Cynthia Thompson, Biomedical Sciences

Poster Presentations

- GRR 061 **Clinical Associations of “Death Crystals” in Peripheral Blood Smears**
Presenters: Madelyn Haldane, Claire Peyerk | Mentor: Lilianne Nelson, College of Health Professions, School of Interdisciplinary Health
- GRR 071 **Spatial Variability of Chemical and Biological Components in an Experimental Filtration Well**
Presenters: Gabriel Essich, Olivia Steeves | Mentors: Rod Morgan, Biology, Peter Wampler, College of Liberal Arts and Sciences, Frederik Meijer Honors College, Geology
- GRR 079 **Collaborative Event Segmentation and its Effects on Event Memory**
Presenters: Levi Gatza, Liam Knisley | Mentor: Christopher Kurby, Psychology
- GRR 080 **Observing the Effects of High NaCl Intake and α -Synuclein in Gut Cell Nuclei of *Drosophila melanogaster***
Presenter: Elena Romero | Mentor: Georgette Sass, Biology
- GRR 083 **Effects of Parental Substance Abuse on a Child's Cognitive and Behavioral Development**
Presenters: Ella Glenn, Karlie Schlaud, Madison Walker | Mentor: Chad Sutcliffe, College of Health Professions, School of Interdisciplinary Health
- GRR 088 **The Impact of *Halimeda* as an Indicator of Red Mangrove Health**
Presenters: Anna Fowler, Olivia Schneider, Hayden Troyer | Mentor: Timothy Evans, Biology
- GRR 089 **The Impact of PCR on Weak and Variant Blood Group Antigen Identification**
Presenters: Jessie Kailing, Luke Markley, Allison Miller | Mentor: Lilianne Nelson, College of Health Professions, School of Interdisciplinary Health
- GRR 093 **‘Mamma Mia! Here We Go Again!’: A Look at Global Feminism**
Presenter: Aubree Pederson | Mentor: Anthony Spencer, School of Communications
- GRR 097 **Anatomical and Clinical Considerations in a Cadaver with Ostomy Diversions**
Presenter: Sofia Svyryd | Mentors: Natalie Laudicina, Biomedical Sciences, Chris Reed, Biomedical Sciences, Dawn Richiert, Biomedical Sciences, Laura Stroik, Biomedical Sciences
- GRR 103 **Green Infrastructure**
Presenter: Sarah Sexton | Mentor: Jeroen Wagendorp, Geography and Planning
- GRR 106 **Synthesis and Antimicrobial Susceptibility Testing of (2E)-1,3-Bis(4-hydroxyphenyl)-2-propen-1-one**
Presenter: Rose Pulte | Mentors: Ian Cleary, Biomedical Sciences, Nicholas Olle, Chemistry
- GRR 120 **Analyzing Abortion Legislation across the United States as it Correlates to Educational Attainment**
Presenter: Olivia Brown | Mentor: Kin Ma, Geography and Planning
- GRR 130 **Does Grand Rapids Provide Adequate Housing for its Residents Living in Historically Redlined Neighborhoods?**
Presenters: Xavier Clark, Madelyn Graham, Chloe Martin | Mentor: Sean Woznicki, Robert B. Annis Water Resources Institute
- GRR 132 **Biological Processes Influence Shell Formation in Planktonic *Foraminifera*: Is This a Climate Proxy Issue?**
Presenter: Abraham Parsons | Mentor: Figen Mekik, Geology, Physics
- GRR 134 **School Phone Bans and Adolescent Outcomes: A Review of Emerging Evidence**
Presenters: Madeline Armanini, Abigail Austin, Nevaeh Hemmes-Palms, Sarah Milam | Mentor: Mihaela Friedlmeier, Psychology
- GRR 135 **Potential Protective Effects of the Individual and Combined Effects of EHT and Caffeine on Parkinson's Disease**
Presenters: Allison Doran, Sydney Kekel | Mentor: Natasha Swalve, Psychology
- GRR 137 **Assessing Traffic Associated Health Risks: Volume, Accidents, Pollution Exposure, and Asthma Rates in Grand Rapids, Michigan**
Presenter: Nicholas Lanting | Mentor: Kin Ma, Geography and Planning
- GRR 139 **Neurogenesis of Retinal Cells Using a 2-step Culture System: Effects of Selective Nicotinic Compounds on RPE vs. Retinal Cells**
Presenters: Nia Aboolsaman, Esther Bard, Addison Erickson, Aliyah Springer, Stephen Warner | Mentor: David Linn, Biomedical Sciences
- GRR 141 **Microfossil Analysis and Interpretations of Rare Aquatic Localities from the Uinta Basin, Utah**
Presenters: Sophia Bailey, Selah Bollinger, Jessica Frielink, Layla Hurst, Kristin Krink, Dylan Ruiter, Olivia Szewczyk | Mentor: Laura Stroik, Biomedical Sciences
- GRR 143 **Investigation of the Relationship Between Height of Epiphytes on their Hosts and Species Composition**
Presenters: Ava Brownfield, Dustin Kosbar, Jordan Lorencz | Mentor: Timothy Evans, Biology
- GRR 149 **A Comparative Analysis of Oral and Subcutaneous Semaglutide on HbA1c Reduction in Type 2 Diabetes**
Presenters: Avery Kline, Zoe Korson, Gwendolyn Russell | Mentor: Lilianne Nelson, College of Health Professions, School of Interdisciplinary Health

Poster Presentations

- GRR 152 **Emerging Resistance of Pesticide Treatments in *Pediculus humanus capitis***
Presenters: Kaitlin Banaszak, Anh Tran, Christine Tran | Mentor: Lillian Nelson, College of Health Professions, School of Interdisciplinary Health
- GRR 159 **Docking of Echinocandins to the FKS1 Wild-Type and Resistant Mutant Reveals Binding Interactions with Hotspot Regions**
Presenter: Devin Chung | Mentor: Agnieszka Szarecka, Cell and Molecular Biology
- GRR 161 **Additional Roles for Moesin- PKN Interactions in *Drosophila* Oogenesis**
Presenter: Emilee Smith | Mentor: Georgette Sass, Biology
- GRR 164 **Variation in Epiphyte–Host Plant Community Composition Across Contrasting Habitats on San Salvador Island, Bahamas**
Presenters: Catherine Chappell, Lauren Gray, Elizabeth Oldenberg, Emma Smolek | Mentor: Timothy Evans, Biology
- GRR 165 **Seed Bank Assay to Inform Restoration of a Lake Superior Coastal Marsh**
Presenters: Zachary Danevich, Nadia Jones | Mentor: Sarah Johnson, Biology
- GRR 166 **A Review of New Developments in Detection of Lyme Disease in Acute Stage Borreliosis**
Presenters: Daniel Heeren, Keaton Kval, Israel Ruiz | Mentor: Lillian Nelson, College of Health Professions, School of Interdisciplinary Health

1:00 p.m. - 2:00 p.m. Henry Hall Atrium

- HRY 008 **Study of Alpha-Synuclein-Related MicroRNAs in a Parkinson's Disease Cell Model**
Presenters: Malavika Ravuri, Castro Walunywa | Mentor: Sok Kean Khoo, Cell and Molecular Biology
- HRY 011 **Parents' Experiences and Perceptions of Toddlers Use of the Explorer Mini**
Presenter: Luke Hulsmann | Mentors: Naomi Aldrich, Psychology, Lisa Kenyon, Physical Therapy and Athletic Training
- HRY 026 **Social Justice Begins with ME! Curriculum Development**
Presenters: Nathan Broek, Derek Portillo, Adelaide Windsor | Mentor: Jamie Langlois, School of Social Work
- HRY 033 **Understanding Adolescent's Social-Emotional Development in the Aftermath of COVID-19 Lockdown**
Presenter: Nicholas Stevenson | Mentors: Jamie Langlois, School of Social Work, Melissa Villarreal, School of Social Work
- HRY 034 **Próxima Generación Youth Workforce Development Program**
Presenter: Christina Williams | Mentor: Jamie Langlois, School of Social Work
- HRY 036 **The Advantage of Children's Books in Strengthening the Single Mom Household**
Presenter: Kelli Hiwale | Mentor: Jamie Langlois, School of Social Work
- HRY 038 **Peer to Peer Interventions: Mindset, Belonging, and Academic Outcomes; An Analysis of Student Experiences**
Presenters: Teagan Bayne, Angel Hughes, Vivian Tackett-Irwin | Mentors: Kristy Dean, Psychology, Courtney Kowalczyk, Psychology
- HRY 045 **The Reception of Pelagianism and Original Sin in the Pre-Chalcedonian East**
Presenter: Marcus Myers | Mentor: Alice Chapman, History
- HRY 056 **The Action and Complicity of Ordinary People and Officers in Ukraine and Crimea during the Holocaust**
Presenter: Hannah Kaye | Mentor: Alice Chapman, History
- HRY 062 **Mutational Analysis of Aminoglycoside Nucleotidyltransferase(6)-Ib from *Campylobacter fetus subsp. fetus***
Presenter: Catey Engel | Mentor: Brian Smith, Chemistry | Mentor: Brian Smith, Chemistry
- HRY 063 **Getting to Know West Michigan Anglers**
Presenters: Joseph Cherechinsky, Katie Davis, Wyatt Merritt, Madilyn Roy | Mentor: Amanda Buday, Robert B. Annis Water Resources Institute, Sociology
- HRY 067 **Novel Halogenated Antibiotic Compounds to Treat *Mycobacterium tuberculosis***
Presenters: Ryan Henk, Samuel Petrovich, Angel Zoulek | Mentor: Matthew Hart, Chemistry
- HRY 074 **Can Consuming Red Beetroots Effectively Treat High Blood Pressure?**
Presenters: Tejaswini Balla, Landon Beiter, Alyssa Hussey, Faith Lutz, Connor Orlando | Mentor: Francis Sylvester, Biomedical Sciences
- HRY 076 **Exploring Dietary Effects on Renal Stone Formation in *Drosophila melanogaster***
Presenter: Brianna Rhodea | Mentor: Josie Mitchell, Chemistry
- HRY 077 **Assay Validation of Non-Invasive Heat-shock Protein (HSP) Measurement in Mammalian Feces**
Presenter: Lauren Koski | Mentor: Cynthia Thompson, Biomedical Sciences
- HRY 089 **Influence of Repeated Predator Odor on Anxiety-Like Behavior in Outbred Mice**
Presenters: Arnica Sheaffer, Liam Small | Mentor: Elizabeth Flandreau, Psychology

Poster Presentations

- HRY 090 **Effects of Breast Milk Feeding on Immune Function in Newborns Within the First Year of Life: A Systematic Review**
Presenters: Abigail Azarovitz, Marissa Diotte, Jacklyn Kimball, Carly Krohn | Mentor: Chad Sutcliffe, College of Health Professions, School of Interdisciplinary Health
- HRY 091 **Exploration of Resonance in Vinyl Silyl Anions**
Presenter: Ciara Keenan | Mentor: William Winchester, Chemistry
- HRY 103 **Predictive Algorithm Bias Detection Through Unsupervised Learning**
Presenter: Brian Rowe | Mentor: Jie Du, College of Computing, School of Computing and Information Systems
- HRY 106 **Designing a Sustainable City Center for Allendale, Michigan**
Presenter: Amanda Daniels | Mentor: Chad Frederick, Geography and Planning

1:00 p.m. - 2:00 p.m. Kirkhof Center Grand River Room

- GRR 004 **Measuring Redox Activity of Individual *S. saprophyticus* in Iodide Solutions Using Single-Entity Electrochemical Collisions**
Presenter: Grace Connelly | Mentor: Scott Thorgaard, Chemistry
- GRR 009 **Association Between Hormonal Birth Control and Alcohol**
Presenter: Natasha Vaughn | Mentor: Natasha Swalve, Psychology
- GRR 015 **Do Financial Literacy Programs Advance College Accessibility?**
Presenter: Landon Abbott | Mentor: Jake Laveggi
- GRR 016 **The Role of α -Synuclein in Parkinson's Disease**
Presenter: Arash Kordbacheh | Mentor: John Capodilupo, Biomedical Sciences
- GRR 019 **Exploring the Relationship Between Hyperlipidemia and the Distribution of Adipose Tissues Throughout the Body**
Presenter: Van Dim | Mentors: Natalie Laudicina, Biomedical Sciences, Chris Reed, Biomedical Sciences, Dawn Richiert, Biomedical Sciences, Laura Stroik, Biomedical Sciences
- GRR 021 **What Effect Does Early Prescribing of Birth Control Have on Fertility?**
Presenters: Kyndal-Rai Suber, Cleary Welsh | Mentor: Jenny Baweja, College of Health Professions, School of Interdisciplinary Health
- GRR 025 **Driving Change: Fidelity Measurement in Pediatric Powered Wheelchair Skills Training**
Presenter: Sawyer Crum | Mentor: Lisa Kenyon, Physical Therapy and Athletic Training
- GRR 026 **Impact of Intrauterine Device Contraceptive Use on Bacterial Vaginosis**
Presenters: Hannah Diamond, Jessica Dole, Adrienne Parker | Mentor: Lillian Nelson, College of Health Professions, School of Interdisciplinary Health
- GRR 029 **Design and Validation of an Instrumented Lab-Scale Composting Test Bed to Quantify the Effect of Forced Aeration**
Presenter: Samantha Seneker | Mentors: Yunju Lee, Department of Mechanical and Manufacturing Engineering, School of Engineering, Seymour and Esther Padnos College of Engineering and Computing, Catherine Molloseau, School of Engineering
- GRR 031 **Anti-TB Drugs with Polar Groups**
Presenters: Brandon Lopez-Rebolledo, Lily Parsons, Abbey Ruby, Emily Vu | Mentor: Matthew Hart, Chemistry
- GRR 033 **Social Media Addiction: A Neuroanatomical and Behavioral Perspective**
Presenter: Kates Krasin | Mentor: John Capodilupo, Biomedical Sciences
- GRR 039 **Microfluidic Technology for Rapid Antimicrobial Susceptibility Testing in Clinical Microbiology**
Presenters: Brodey Falbe, Damilola Oyewole, Hannah Royston | Mentor: Lillian Nelson, College of Health Professions, School of Interdisciplinary Health
- GRR 041 **Impact of Oxygenated Substituents on Tuberculosis Treatments**
Presenters: Katie Coles, Natalie Manzo, Erynn Moloney | Mentor: Matthew Hart, Chemistry
- GRR 043 **Synthesis of Potential Drugs to Treat Tuberculosis: The Impact of Electron Donating/Withdrawing Groups**
Presenters: Jacob Henk, Julia Meyer, Sarah Vuong, Aidan Zarou | Mentor: Matthew Hart, Chemistry
- GRR 044 **The Role of Several *Candida albicans* Genes in Multidrug-resistant *Candida auris***
Presenter: Makenna May | Mentor: Ian Cleary, Biomedical Sciences
- GRR 049 **Physiological Mechanisms and Management of Vasovagal Syncope**
Presenter: Lilly Helsel | Mentor: John Capodilupo, Biomedical Sciences
- GRR 050 **How Language Affects Patient Provider Relationships**
Presenter: Alondra Soto | Mentor: Carmen Fernandez Florez, Modern Languages and Literatures

Poster Presentations

- GRR 056 **Successive Syntheses to Study Trifluoromethyl and Cyano N-Phenyl Maleimide Alkene Products**
Presenters: Madeline Arthur, Alyvia Long | Mentor: John Bender, Chemistry
- GRR 059 **Sustainability in Action**
Presenter: Paetyn Bentley | Mentor: Jamie Langlois, School of Social Work
- GRR 062 **Synthesis of New Alkene Products Utilizing Ortho-Substituted Phosphorane Compounds**
Presenters: Natalia Bouwens, Paul Towler | Mentor: John Bender, Chemistry
- GRR 065 **Ghrelin Receptor Regulation of Anxiety- and Depression-Related Behaviors Following Long-Term Alcohol Withdrawal**
Presenters: Sophia Bixler, Samantha Conn, Liam Knisley, Arnica Sheaffer, Ciara Young | Mentor: Glenn Valdez, Psychology
- GRR 071 **Spatial Variability of Chemical and Biological Components in an Experimental Filtration Well**
Presenters: Gabriel Essich, Olivia Steeves | Mentors: Rod Morgan, Biology, Peter Wampler, College of Liberal Arts and Sciences, Frederik Meijer Honors College, Geology
- GRR 075 **Stroke Sign Awareness on Campus: Knowledge and Impact of Visual Interventions**
Presenter: Austin Lincoln | Mentor: Eric Ramsson, Biomedical Sciences
- GRR 079 **Collaborative Event Segmentation and its Effects on Event Memory**
Presenters: Levi Gatza, Liam Knisley | Mentor: Christopher Kurby, Psychology
- GRR 081 **A GIS Analysis of Ravine Systems Along the Illinois River in Illinois and the Grand River in Michigan**
Presenters: Ashley Amirault, Maria Gonsch | Mentor: Peter Wampler, College of Liberal Arts and Sciences, Frederik Meijer Honors College, Geology
- GRR 088 **The Impact of *Halimeda* as an Indicator of Red Mangrove Health**
Presenters: Anna Fowler, Olivia Schneider, Hayden Troyer | Mentor: Timothy Evans, Biology
- GRR 097 **Anatomical and Clinical Considerations in a Cadaver with Ostomy Diversions**
Presenter: Sofia Svyryd | Mentors: Natalie Laudicina, Biomedical Sciences, Chris Reed, Biomedical Sciences, Dawn Richiert, Biomedical Sciences, Laura Stroik, Biomedical Sciences
- GRR 106 **Synthesis and Antimicrobial Susceptibility Testing of (2E)-1,3-Bis(4-hydroxyphenyl)-2-propen-1-one**
Presenter: Rose Pulte | Mentors: Ian Cleary, Biomedical Sciences, Nicholas Olle, Chemistry
- GRR 112 **Reshaping Research: Ongoing Refinements in a Course-Based Undergraduate Research Experience**
Presenter: Samantha Muzia | Mentor: Amanda Karsten, Psychology
- GRR 117 **Synthesis of (2E)-3-(4-Hydroxyphenyl)-1-phenyl-2-propen-1-one (4-Hydroxychalcone) and Derivatives with Antimicrobial Evaluation**
Presenter: Molly Jerome | Mentors: Aaron Baxter, Biomedical Sciences, Nicholas Olle, Chemistry
- GRR 119 **Enhanced Sensitivity of Fast Scan Cyclic Voltammetry**
Presenters: Celia Kingscott, Sadie McCann | Mentor: Eric Ramsson, Biomedical Sciences
- GRR 121 **Using Geographic Information Systems to Identify Potential Sites for Wetland Restoration and Feasibility in Five West Michigan Counties**
Presenter: Emma Thompson | Mentor: Peter Wampler, College of Liberal Arts and Sciences, Frederik Meijer Honors College, Geology
- GRR 126 **Examining the Prevalence, Incidents, and Characteristics of Domestic Violence in the State of Michigan: A Descriptive Study**
Presenter: Jaelyn West | Mentor: Tonisha Jones, College of Education and Community Innovation, School of Criminology, Criminal Justice, and Legal Studies
- GRR 130 **Does Grand Rapids Provide Adequate Housing for its Residents Living in Historically Redlined Neighborhoods?**
Presenters: Xavier Clark, Madelyn Graham, Chloe Martin | Mentor: Sean Woznicki, Robert B. Annis Water Resources Institute
- GRR 135 **Potential Protective Effects of the Individual and Combined Effects of EHT and Caffeine on Parkinson's Disease**
Presenters: Allison Doran, Sydney Kekel | Mentor: Natasha Swalve, Psychology
- GRR 140 **Synthesis, Purification and Antimicrobial Susceptibility Testing of (2E)-3-(4-Hydroxyphenyl)-1-(4-methoxyphenyl)-2-propen-1-one (4-methoxy-4-hydroxychalcone)**
Presenter: Lizette Solorio | Mentors: Aaron Baxter, Biomedical Sciences, Nicholas Olle, Chemistry
- GRR 141 **Microfossil Analysis and Interpretations of Rare Aquatic Localities from the Uinta Basin, Utah**
Presenters: Sophia Bailey, Selah Bollinger, Jessica Frielink, Layla Hurst, Kristin Krink, Dylan Ruitter, Olivia Szewczyk | Mentor: Laura Stroik, Biomedical Sciences
- GRR 149 **A Comparative Analysis of Oral and Subcutaneous Semaglutide on HbA1c Reduction in Type 2 Diabetes**
Presenters: Avery Kline, Zoe Korson, Gwendolyn Russell | Mentor: Lillian Nelson, College of Health Professions, School of Interdisciplinary Health

Poster Presentations

- GRR 150 **Telehealth Patient Satisfaction**
Presenters: Andrew Baker, Haley Grobe, Emily Redman, Emme Van Poppel | Mentor: Jenny Baweja, College of Health Professions, School of Interdisciplinary Health
- GRR 151 **Exploring the Visibility and Accessibility of Down Syndrome Medical Care Centers in the U.S.: A Content Analysis**
Presenter: Nia Aboalsaman | Mentor: Julia VanderMolen, College of Health Professions, Frederik Meijer Honors College, School of Interdisciplinary Health
- GRR 168 **Do Size and Plumage Dimorphism Correlate with High Territoriality in Female Kingfishers?**
Presenter: Paige Hollander | Mentor: Daniel Goldberg, Biology
- GRR 173 **Investigation of Phosphorane Formations with N-Phenyl Maleimides from 2,4-Dibromoaniline and 2-Iodoaniline**
Presenters: Alyssa Rivette, Nicole Vyse | Mentor: John Bender, Chemistry

2:00 p.m. - 3:00 p.m. Henry Hall Atrium

- HR Y 008 **Study of Alpha-Synuclein-Related MicroRNAs in a Parkinson's Disease Cell Model**
Presenters: Malavika Ravuri, Castro Walunywa | Mentor: Sok Kean Khoo, Cell and Molecular Biology
- HR Y 011 **Parents' Experiences and Perceptions of Toddlers Use of the Explorer Mini**
Presenter: Luke Hulsman | Mentors: Naomi Aldrich, Psychology, Lisa Kenyon, Physical Therapy and Athletic Training
- HR Y 020 **A Woman's Place in (West Michigan) Law**
Presenters: Hope Dubois, Liam Magin, Grace Sullivan, Adam Walsworth, Layne Weatherwax | Mentor: Nora Salas, History, Kutsche Office of Local History
- HR Y 026 **Social Justice Begins with ME! Curriculum Development**
Presenters: Nathan Broek, Derek Portillo, Adelaide Windsor | Mentor: Jamie Langlois, School of Social Work
- HR Y 035 **Big Feelings Toolkit**
Presenter: Lea Louie | Mentor: Jamie Langlois, School of Social Work
- HR Y 038 **Peer to Peer Interventions: Mindset, Belonging, and Academic Outcomes; An Analysis of Student Experiences**
Presenters: Teagan Bayne, Angel Hughes, Vivian Tackett-Irwin | Mentors: Kristy Dean, Psychology, Courtney Kowalczyk, Psychology
- HR Y 051 **Mediated: A Thematic Visual History of Digital Connection**
Presenters: Christina Bilko, Anna McMartin, Daniel Pavelich, Wyatt Szarejko, Kristi Weaver, Miranda Willer | Mentor: Alisha Karabinus, Digital Studies, Writing
- HR Y 054 **Trial and Error: Urban Redevelopment in Grand Rapids' Downtown and Neighborhoods from 1970 - 2000**
Presenter: Ava Politi | Mentor: Matthew Daley, History
- HR Y 056 **The Action and Complicity of Ordinary People and Officers in Ukraine and Crimea during the Holocaust**
Presenter: Hannah Kaye | Mentor: Alice Chapman, History
- HR Y 057 **The Influence that Frightened an Autocrat**
Presenter: Caiden Donnelly | Mentor: Alice Chapman, History
- HR Y 064 **Understanding the Chicano Movement: Youth Activism and the Fight for Educational Equality**
Presenter: Edith Juarez-Rodriguez | Mentor: Alice Chapman, History
- HR Y 065 **Receptor Tyrosine-Protein Phosphatase-Type D Gene Knockdown and Planarian Head Regeneration**
Presenter: Logan Clausen | Mentor: Osman Patel, Cell and Molecular Biology
- HR Y 067 **Novel Halogenated Antibiotic Compounds to Treat Mycobacterium tuberculosis**
Presenters: Ryan Henk, Samuel Petrovich, Angel Zoulek | Mentor: Matthew Hart, Chemistry
- HR Y 070 **The Molecular Mechanism for the Degradation of Dual-specificity Phosphatase 8 Protein**
Presenter: Lukas Macha | Mentor: Ruijie Liu, Biomedical Sciences
- HR Y 074 **Can Consuming Red Beetroots Effectively Treat High Blood Pressure?**
Presenters: Tejaswini Balla, Landon Beiter, Alyssa Hussey, Faith Lutz, Connor Orlando | Mentor: Francis Sylvester, Biomedical Sciences
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- HR Y 089 **Influence of Repeated Predator Odor on Anxiety-Like Behavior in Outbred Mice**
Presenters: Arnica Sheaffer, Liam Small | Mentor: Elizabeth Flandreau, Psychology
- HR Y 092 **Scapular Stability Muscle Activation During Multiplanar Shoulder Exercise Using Fiberglass Resistance Poles**
Presenters: Devin Ackerson, Avery Blair, Connor Brunskole, Savannah Carver, Andrew Clarent, Annalise Eppolito, Ella Gaylord, Riley Greene, Noah Hadley, Logan Kirkwood, Makenna Kuczynski, Morgan Righter, Alayna Shores, Elia Tasco, Zackarey Williams | Mentor: Stephen Glass, Movement Science

Poster Presentations

- HRY 100 **Impact of M223S Mutation on Catalysis, Structure and Inhibition of OXA-24 Beta-lactamase**
Presenter: Ashpreet Kaur | Mentor: Rachel Powers, Chemistry
- HRY 102 **Molecular Collision Modeling: Evaluating Convergence Behavior in the LD-Kohn Approach**
Presenter: Grady Miller | Mentor: Erin Carrier, College of Computing, School of Computing and Information Systems

2:00 p.m. - 3:00 p.m. Kirkhof Center Grand River Room

- GRR 006 **Opening the Black-Box of Mental Disorders: An Actor-Network Theory Analysis of Schizophrenia**
Presenter: Brandalyn Morris | Mentor: Teresa Castelao-Lawless, Philosophy
- GRR 007 **Assessing Seedbank Composition to Support Ecological Restoration of Degraded Oak Savannas in West Michigan**
Presenter: Chelsea Krum | Mentor: Priscilla Nyamai, Biology
- GRR 015 **Do Financial Literacy Programs Advance College Accessibility?**
Presenter: Landon Abbott | Mentor: Jake Laveggi
- GRR 016 **The Role of α -Synuclein in Parkinson's Disease**
Presenter: Arash Kordbacheh | Mentor: John Capodilupo, Biomedical Sciences
- GRR 021 **What Effect Does Early Prescribing of Birth Control Have on Fertility?**
Presenters: Kyndal-Rai Suber, Cleary Welsh | Mentor: Jenny Baweja, College of Health Professions, School of Interdisciplinary Health
- GRR 022 **Rescuing *Candida albicans* Adhesion and Stress Resistance Defects in *brg1* and *tet-NRG1* Strains**
Presenter: Chad Britton | Mentor: Ian Cleary, Biomedical Sciences
- GRR 025 **Driving Change: Fidelity Measurement in Pediatric Powered Wheelchair Skills Training**
Presenter: Sawyer Crum | Mentor: Lisa Kenyon, Physical Therapy and Athletic Training
- GRR 029 **Design and Validation of an Instrumented Lab-Scale Composting Test Bed to Quantify the Effect of Forced Aeration**
Presenter: Samantha Seneker | Mentors: Yunju Lee, Department of Mechanical and Manufacturing Engineering, School of Engineering, Seymour and Esther Padnos College of Engineering and Computing, Catherine Molloseau, School of Engineering
- GRR 032 **MedMCP: The First Model Context Protocol Framework Purpose-Built for AI-Augmented Pharmacovigilance and Medication Safety in Co-Occurring Substance Use and Mental Health Populations**
Presenter: Ken Muchira | Mentor: Charitha Subrahmanya Kodumagulla, College of Computing
- GRR 049 **Physiological Mechanisms and Management of Vasovagal Syncope**
Presenter: Lilly Helsel | Mentor: John Capodilupo, Biomedical Sciences
- GRR 065 **Ghrelin Receptor Regulation of Anxiety- and Depression-Related Behaviors Following Long-Term Alcohol Withdrawal**
Presenters: Sophia Bixler, Samantha Conn, Liam Knisley, Arnica Sheaffer, Ciara Young | Mentor: Glenn Valdez, Psychology
- GRR 071 **Spatial Variability of Chemical and Biological Components in an Experimental Filtration Well**
Presenters: Gabriel Essich, Olivia Steeves | Mentors: Rod Morgan, Biology, Peter Wampler, College of Liberal Arts and Sciences, Frederik Meijer Honors College, Geology
- GRR 073 **Study of Structural Changes in Bone from *Osteogenesis Imperfecta* Using Positron Annihilation Lifetime Spectroscopy**
Presenter: Pablo Kohlmann Garcia | Mentor: Richard Vallery, Physics
- GRR 075 **Stroke Sign Awareness on Campus: Knowledge and Impact of Visual Interventions**
Presenter: Austin Lincoln | Mentor: Eric Ramsson, Biomedical Sciences
- GRR 079 **Collaborative Event Segmentation and its Effects on Event Memory**
Presenters: Levi Gatza, Liam Knisley | Mentor: Christopher Kurby, Psychology
- GRR 088 **The Impact of *Halimeda* as an Indicator of Red Mangrove Health**
Presenters: Anna Fowler, Olivia Schneider, Hayden Troyer | Mentor: Timothy Evans, Biology
- GRR 097 **Anatomical and Clinical Considerations in a Cadaver with Ostomy Diversions**
Presenter: Soifa Svryyd | Mentors: Natalie Laudicina, Biomedical Sciences, Chris Reed, Biomedical Sciences, Dawn Richiert, Biomedical Sciences, Laura Stroik, Biomedical Sciences
- GRR 110 **Refined Green Synthesis of Coumarins for College Laboratory Use**
Presenter: Gabrielle Lampe | Mentor: Dalila Kovacs, Chemistry, College of Liberal Arts and Sciences
- GRR 114 **The Impact of Night Shift Work on the Risk of Diabetes and the Cardio System**
Presenter: Austin Klein | Mentor: Babasola Fateye, Biomedical Sciences

Poster Presentations

- GRR 126 **Examining the Prevalence, Incidents, and Characteristics of Domestic Violence in the State of Michigan: A Descriptive Study**
Presenter: Jaelyn West | Mentor: Tonisha Jones, College of Education and Community Innovation, School of Criminology, Criminal Justice, and Legal Studies
- GRR 130 **Does Grand Rapids Provide Adequate Housing for its Residents Living in Historically Redlined Neighborhoods?**
Presenters: Xavier Clark, Madelyn Graham, Chloe Martin | Mentor: Sean Woznicki, Robert B. Annis Water Resources Institute
- GRR 135 **Potential Protective Effects of the Individual and Combined Effects of EHT and Caffeine on Parkinson's Disease**
Presenters: Allison Doran, Sydney Kekel | Mentor: Natasha Swalve, Psychology
- GRR 147 **Mutualism Can Constrain the Evolution of Complexity in Hosts**
Presenters: Owen Hillary, Delaney Kelley | Mentor: Alexander Lalejini, College of Computing, School of Computing and Information Systems, Seymour and Esther Padnos College of Engineering and Computing
- GRR 163 **Planning from a School's Perspective: Providing Geospatial Data Driven Planning for Wayland Union Schools**
Presenter: Evan McGhee | Mentor: Kin Ma, Geography and Planning
- GRR 167 **Do Similar Phosphatases Act on the Same Substrate?**
Presenter: Brady Curtin | Mentor: Ian Cleary, Biomedical Sciences
- GRR 171 **Adaptive Preconditioners in Iterative Solvers for Systems of Linear Equations**
Presenter: Adam Opperman | Mentor: Erin Carrier, College of Computing, School of Computing and Information Systems

3:00 p.m. - 4:00 p.m. Henry Hall Atrium

- HRY 012 **Patient Satisfaction in Adult Prosthetic Users: Advanced Technology vs. Traditional Methods**
Presenters: Sophie Biazza, Nicholas Gibbons, Madilyn Smith, Riley Wells | Mentor: Jenny Baweja, College of Health Professions, School of Interdisciplinary Health
- HRY 020 **A Woman's Place in (West Michigan) Law**
Presenters: Hope Dubois, Liam Magin, Grace Sullivan, Adam Walsworth, Layne Weatherwax | Mentor: Nora Salas, History, Kutsche Office of Local History
- HRY 022 **"Women Are Fighting Back": Impact of Women's Resource Centers in Michigan**
Presenters: Cassidy Benac, Benjamin Crowe, Jenna Hoving, Grace Klein, Julia Vucinaj | Mentor: Nora Salas, History, Kutsche Office of Local History
- HRY 029 **Getting Hired 101**
Presenters: Taylor Budd, Jordan Caples, Katheryn Karas | Mentor: Jamie Langlois, School of Social Work
- HRY 030 **Domestic Violence and Sexual Assault Support Group: A Curriculum**
Presenter: Sarah Lewin | Mentor: Jamie Langlois, School of Social Work
- HRY 038 **Peer to Peer Interventions: Mindset, Belonging, and Academic Outcomes; An Analysis of Student Experiences**
Presenters: Teagan Bayne, Angel Hughes, Vivian Tackett-Irwin | Mentors: Kristy Dean, Psychology, Courtney Kowalczyk, Psychology
- HRY 043 **Targeting Cruzain Using Compounds from the Global Health Priority Box for Drug Development in Chagas Disease**
Presenter: Elena King | Mentor: Viviane Correa Santos, Chemistry
- HRY 044 **Effects of Physical Exercise on Approving Depressive Symptoms: A Systematic Review**
Presenter: Maxwell Tussing | Mentor: Chad Sutcliffe, College of Health Professions, School of Interdisciplinary Health
- HRY 050 **Em-Power: Power Wheelchair Skills Capacity Outcomes of Children with Cerebral Palsy**
Presenter: Alejandra Brenes | Mentor: Lisa Kenyon, Physical Therapy and Athletic Training
- HRY 055 **Mass Rocks and Collective Memory of Irish Identity During Penal Laws in Ireland: 1675-1750**
Presenter: Ava Politi | Mentor: Alice Chapman, History
- HRY 056 **The Action and Complicity of Ordinary People and Officers in Ukraine and Crimea during the Holocaust**
Presenter: Hannah Kaye | Mentor: Alice Chapman, History
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- HRY 059 **Women's Labor During World War II**
Presenter: Michael Decator | Mentor: Alice Chapman, History
- HRY 070 **The Molecular Mechanism for the Degradation of Dual-specificity Phosphatase 8 Protein**
Presenter: Lukas Macha | Mentor: Ruijie Liu, Biomedical Sciences

Poster Presentations

- HRY 074 **Can Consuming Red Beetroots Effectively Treat High Blood Pressure?**
Presenters: Tejaswini Balla, Landon Beiter, Alyssa Hussey, Faith Lutz, Connor Orlando | Mentor: Francis Sylvester, Biomedical Sciences
- HRY 086 **Cross-Linguistic Influence and Rhotic Pronunciation in Additional Language Acquisition**
Presenter: Ash Godin | Mentor: Dan Brown, English
- HRY 092 **Scapular Stability Muscle Activation During Multiplanar Shoulder Exercise Using Fiberglass Resistance Poles**
Presenters: Devin Ackerson, Avery Blair, Connor Brunskole, Savannah Carver, Andrew Clarent, Annalise Eppolito, Ella Gaylord, Riley Greene, Noah Hadley, Logan Kirkwood, Makenna Kuczynski, Morgan Righter, Alayna Shores, Elia Tasco, Zackarey Williams | Mentor: Stephen Glass, Movement Science
- HRY 096 **The Effects of Animal-Assisted Therapy on Nursing Students' Anxiety Levels**
Presenters: Avery Huisman, Baylee Koski, Shania Womack | Mentor: Madison Goodyke, Kirkhof College of Nursing
- HRY 106 **Designing a Sustainable City Center for Allendale, Michigan**
Presenter: Amanda Daniels | Mentor: Chad Frederick, Geography and Planning
- HRY 107 **Functional Dynamics of 1,3-Beta-Glucan Synthase Using Normal Mode Analysis**
Presenter: Katherine Waker | Mentor: Agnieszka Szarecka, Cell and Molecular Biology
- HRY 110 **Using GIS to Evaluate the Impacts of Mercury Contamination Near Energy Plants in Michigan**
Presenter: Caleb Hasapis | Mentor: Peter Wampler, College of Liberal Arts and Sciences, Frederik Meijer Honors College, Geology

3:00 p.m. - 4:00 p.m. Kirkhof Center Grand River Room

- GRR 029 **Design and Validation of an Instrumented Lab-Scale Composting Test Bed to Quantify the Effect of Forced Aeration**
Presenter: Samantha Seneker | Mentors: Yunju Lee, Department of Mechanical and Manufacturing Engineering, School of Engineering, Seymour and Esther Padnos College of Engineering and Computing, Catherine Molloseau, School of Engineering
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Presenters: Sophia Bixler, Samantha Conn, Liam Knisley, Arnica Sheaffer, Ciara Young | Mentor: Glenn Valdez, Psychology
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Presenters: Gabriel Essich, Olivia Steeves | Mentors: Rod Morgan, Biology, Peter Wampler, College of Liberal Arts and Sciences, Frederik Meijer Honors College, Geology
- GRR 074 **FloARa**
Presenter: Keely Carlson | Mentor: Sara Alsum-Wassenaar, Visual and Media Arts
- GRR 079 **Collaborative Event Segmentation and its Effects on Event Memory**
Presenters: Levi Gatza, Liam Knisley | Mentor: Christopher Kurby, Psychology
- GRR 088 **The Impact of *Halimeda* as an Indicator of Red Mangrove Health**
Presenters: Anna Fowler, Olivia Schneider, Hayden Troyer | Mentor: Timothy Evans, Biology
- GRR 090 **West Michigan Urgent Care Capabilities And Its Effect On Emergency Department Overcrowding**
Presenter: Jonathon Deal | Mentor: Babasola Fateye, Biomedical Sciences
- GRR 097 **Anatomical and Clinical Considerations in a Cadaver with Ostomy Diversions**
Presenter: Sofia Svyryd | Mentors: Natalie Laudicina, Biomedical Sciences, Chris Reed, Biomedical Sciences, Dawn Richiert, Biomedical Sciences, Laura Stroik, Biomedical Sciences
- GRR 102 **Fear of Immigration Enforcement as a Barrier to Homelessness Services in Michigan**
Presenter: Elisabeth Grinder | Mentor: Jamie Langlois, School of Social Work
- GRR 115 **Awake at Night: The Effects of Caffeine on Sleep**
Presenters: Audrey Darling, Caden Ladd | Mentor: Chad Sutcliffe, College of Health Professions, School of Interdisciplinary Health
- GRR 130 **Does Grand Rapids Provide Adequate Housing for its Residents Living in Historically Redlined Neighborhoods?**
Presenters: Xavier Clark, Madelyn Graham, Chloe Martin | Mentor: Sean Woznicki, Robert B. Annis Water Resources Institute
- GRR 141 **Microfossil Analysis and Interpretations of Rare Aquatic Localities from the Uinta Basin, Utah**
Presenters: Sophia Bailey, Selah Bollinger, Jessica Frielink, Layla Hurst, Kristin Krink, Dylan Ruitter, Olivia Szewczyk | Mentor: Laura Stroik, Biomedical Sciences

Poster Presentations

- GRR 160 **Algorithmic Audit of Artificial Intelligence in Hemophilia: Assessing Methodological Integrity and Clinical Safety in Rare Disease Care**
Presenter: Pravallika Manchu | Mentor: Suhila Sawesi, College of Computing, School of Computing and Information Systems
- GRR 163 **Planning from a School's Perspective: Providing Geospatial Data Driven Planning for Wayland Union Schools**
Presenter: Evan McGhee | Mentor: Kin Ma, Geography and Planning
- GRR 170 **Computationally Modeling the Evolutionary Dynamics and Long-Term Spread of Patch-Based Invasive Species**
Presenter: Marcus Abad-Dominguez | Mentor: Austin Ferguson, College of Computing

4:00 p.m. - 5:00 p.m. Henry Hall Atrium

- HRY 012 **Patient Satisfaction in Adult Prosthetic Users: Advanced Technology vs. Traditional Methods**
Presenters: Sophie Biazza, Nicholas Gibbons, Madilyn Smith, Riley Wells | Mentor: Jenny Baweja, College of Health Professions, School of Interdisciplinary Health
- HRY 026 **Social Justice Begins with ME! Curriculum Development**
Presenters: Nathan Broek, Derek Portillo, Adelaide Windsor | Mentor: Jamie Langlois, School of Social Work
- HRY 027 **Kent County Community Resource Guide**
Presenter: Brittney Wade | Mentor: Jamie Langlois, School of Social Work
- HRY 029 **Getting Hired 101**
Presenters: Taylor Budd, Jordan Caples, Katheryn Karas | Mentor: Jamie Langlois, School of Social Work
- HRY 031 **Forward Movement: Health Curriculum for Students with a Cognitive Impairment**
Presenter: Sarah Cline | Mentor: Jamie Langlois, School of Social Work
- HRY 038 **Peer to Peer Interventions: Mindset, Belonging, and Academic Outcomes; An Analysis of Student Experiences**
Presenters: Teagan Bayne, Angel Hughes, Vivian Tackett-Irwin | Mentors: Kristy Dean, Psychology, Courtney Kowalczyk, Psychology
- HRY 056 **The Action and Complicity of Ordinary People and Officers in Ukraine and Crimea during the Holocaust**
Presenter: Hannah Kaye | Mentor: Alice Chapman, History
- HRY 057 **The Influence that Frightened an Autocrat**
Presenter: Caiden Donnelly | Mentor: Alice Chapman, History
- HRY 070 **The Molecular Mechanism for the Degradation of Dual-specificity Phosphatase 8 Protein**
Presenter: Lukas Macha | Mentor: Ruijie Liu, Biomedical Sciences
- HRY 072 **Is the Expression of Dual Specificity Phosphatase 8 Dependent on Mitogen-Activated Protein Kinaseactivity?**
Presenter: Chloe Vo | Mentor: Ruijie Liu, Biomedical Sciences
- HRY 074 **Can Consuming Red Beetroots Effectively Treat High Blood Pressure?**
Presenters: Tejaswini Balla, Landon Beiter, Alyssa Hussey, Faith Lutz, Connor Orlando | Mentor: Francis Sylvester, Biomedical Sciences
- HRY 075 **Women's Labor and Cultural Identity in the Preservation of Food Traditions and Comfort Meals**
Presenters: Hailey Hentz, Bee Scannell | Mentor: Jennifer Stewart, Sociology
- HRY 092 **Scapular Stability Muscle Activation During Multiplanar Shoulder Exercise Using Fiberglass Resistance Poles**
Presenters: Devin Ackerson, Avery Blair, Connor Brunskole, Savannah Carver, Andrew Clarent, Annalise Eppolito, Ella Gaylord, Riley Greene, Noah Hadley, Logan Kirkwood, Makenna Kuczynski, Morgan Righter, Alayna Shores, Elia Tasco, Zackarey Williams | Mentor: Stephen Glass, Movement Science
- HRY 093 **Nursing Healthcare Staffing**
Presenters: Natalie Nichols, Angelica Quiroz, Kheylya Rose | Mentor: Madison Goodyke, Kirkhof College of Nursing
- HRY 106 **Designing a Sustainable City Center for Allendale, Michigan**
Presenter: Amanda Daniels | Mentor: Chad Frederick, Geography and Planning
- GRR 012 **Scoping Review on Practice-Based Pedagogy in Speech-Language Pathology Education**
Presenter: Alana Maffesoli | Mentor: Mary Bair, CECI - Literacy, Educational Foundations, and Technology
- GRR 051 **Synthesis of Anilines with Mono-Deactivating and Di-Deactivating Substituents**
Presenter: Kayla Shook | Mentor: John Bender, Chemistry
- GRR 052 **Synthesis of Phosphorane Reagents from 2-Nitro-aniline and 2-Cyano-3-chloroaniline**
Presenters: Samantha Bilicki, Kayla Shook | Mentor: John Bender, Chemistry
- GRR 065 **Ghrelin Receptor Regulation of Anxiety- and Depression-Related Behaviors Following Long-Term Alcohol Withdrawal**
Presenters: Sophia Bixler, Samantha Conn, Liam Knisley, Arnica Sheaffer, Ciara Young | Mentor: Glenn Valdez, Psychology

Poster Presentations

- GRR 071 **Spatial Variability of Chemical and Biological Components in an Experimental Filtration Well**
Presenters: Gabriel Essich, Olivia Steeves | Mentors: Rod Morgan, Biology, Peter Wampler, College of Liberal Arts and Sciences, Frederik Meijer Honors College, Geology
- GRR 077 **From Prescription to Pollution: Investigating Carbamazepine and Crayfish Behavior**
Presenters: Jalen Aftimos, Romy Kus, Grace Smith | Mentor: Daniel Bergman, Biomedical Sciences
- GRR 079 **Collaborative Event Segmentation and its Effects on Event Memory**
Presenters: Levi Gatza, Liam Knisley | Mentor: Christopher Kurby, Psychology
- GRR 085 **GIS Analysis of the Shape, Size and Distribution of Inland Lakes in Michigan's Upper and Lower Peninsula**
Presenters: Noah Tenhagen, Noah Valentine | Mentor: Peter Wampler, College of Liberal Arts and Sciences, Frederik Meijer Honors College, Geology
- GRR 088 **The Impact of *Halimeda* as an Indicator of Red Mangrove Health**
Presenters: Anna Fowler, Olivia Schneider, Hayden Troyer | Mentor: Timothy Evans, Biology
- GRR 118 **Synthesis and Antimicrobial Susceptibility Testing of (2E)-3-(4-fluorophenyl)-1-(4-methoxyphenyl)prop-2-en-1-one and (2E)-3-(2,4-methoxyphenyl)-1-(4-fluorophenyl)prop-2-en-1-one**
Presenter: Jessica Lukins | Mentors: Aaron Baxter, Biomedical Sciences, Nicholas Olle, Chemistry
- GRR 131 **Attachment Style and Conspiratorial Beliefs**
Presenters: Karis Gillen, Mya Hanna, Tessa Kramer, Dylan McGrath, Carley Mohney | Mentor: Mario Fific
- GRR 134 **School Phone Bans and Adolescent Outcomes: A Review of Emerging Evidence**
Presenters: Madeline Armanini, Abigail Austin, Nevaeh Hemmes-Palms, Sarah Milam | Mentor: Mihaela Friedlmeier, Psychology
- GRR 136 **Literature Review: Creativity as a Key to Health in Old Age**
Presenter: Malarie Johnson | Mentor: Jing Chen, Psychology
- GRR 141 **Microfossil Analysis and Interpretations of Rare Aquatic Localities from the Uinta Basin, Utah**
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