

**BOARD OF REGENTS**  
EASTERN MICHIGAN UNIVERSITY

**RECOMMENDATION**

**WINTER 2023 & SUMMER 2023 UNDERGRADUATE RESEARCH  
STIMULUS PROGRAM AWARDS.**

**ACTION REQUESTED**

It is recommended that the Board of Regents accept and place on file the Report on the Winter 2023 and Summer 2023 Undergraduate Research Stimulus Program Awards.

**STAFF SUMMARY**

The Undergraduate Research Stimulus Program is intended to facilitate research partnerships between undergraduate students and Eastern Michigan University faculty. Student awardees will receive a \$2,200 fellowship in support of their research efforts, which will be paid in bi-weekly installments throughout the award period. This award will be in the form of a credit to the student's university account. The collaborating faculty member may receive \$600 to be used for lab/studio supplies or equipment, professional travel, or other professional expenses.

**WINTER 2023:** The Provost and Executive Vice President of Academic and Student Affairs has awarded a total of \$15,400 to nine (9) undergraduate students (6 individual awards and one awarded to a team of three) and \$3,600 to seven (7) Eastern Michigan University faculty for Winter 2023 and research and creative projects under the Undergraduate Research Stimulus Program.

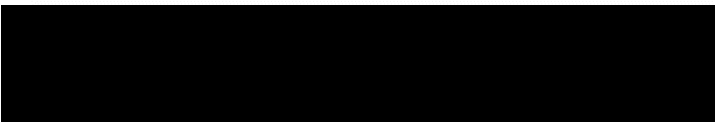
**SUMMER 2023:** The Provost and Executive Vice President of Academic and Student Affairs has awarded a total of \$28,600 to thirteen (13) undergraduate students and \$7,200 to thirteen (13) Eastern Michigan University faculty for Summer 2023 and research and creative projects under the Undergraduate Research Stimulus Program.

**FISCAL IMPLICATIONS**

The cost of Undergraduate Research Stimulus Program awards will be funded from the Provost's indirect cost recovery.

**ADMINISTRATIVE RECOMMENDATION**

The proposed Board action has been reviewed and is recommended for Board approval.

  
Rhonda Longworth, Ph.D.

5/25/23  
Date

Eastern Michigan University  
Division of Academic and Student Affairs

**WINTER 2023 UNDERGRADUATE RESEARCH  
STIMULUS PROGRAM AWARDS**

1. **Rose Allen** (majoring in Environmental Science and Society). “Comparison of Groundwater Nutrient Levels in a Bog and Kettles at Fish Lake Environmental Education Center.” Faculty mentor: Christopher Gellasch (Department of Geography and Geology).
2. **Brianna Davis** (majoring in TESOL). “Examining Preservice English as a Second/Foreign Language Teachers' Views on Gender across Cultural Contexts.” Faculty mentor: Zuzana Tomaš (Department of World Languages).
3. **Mari Horton** (majoring in Biochemistry). “Creating and Verifying New Mutants in Autophagy Related Protein 3.” Faculty mentor: Steven Backues (Department of Chemistry).
4. **William Jones** (majoring in Biochemistry). “UHRF2 Structural Exploration.” Faculty mentor: Brittany Albaugh (Department of Chemistry).
5. **Kifaya Nabils** (majoring in Neuroscience Interdisciplinary). “Assessing Validity of a Student Created Part-Task Trainer for Bony Landmark Palpation Skills.” Faculty mentor: Darren Bolger (School of Health Promotion & Human Services).
6. **Syed Wasiuddin** (majoring in Chemistry). “Delineating the reaction energy profile of the synthesis of a biologically-relevant compound.” Faculty mentor: Maria Milletti (Department of Chemistry).
7. **Hyde Wall, Kristi Gryp & Sarah Shafi** (majoring in Visual Art Education & Art History). “Computational Investigation of a Rhodium Catalyzed Amidation Reaction.” Faculty mentor: Tom Suchan (School of Art & Design).

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**SUMMER 2023 UNDERGRADUATE RESEARCH  
STIMULUS PROGRAM AWARDS**

1. **Hind Al Khashali** (majoring in Neuroscience Interdisciplinary). “Unravelling the mechanisms employed by heparanase in non-small cell lung cancer.” Faculty mentor: Hedeel Evans (Department of Chemistry).
2. **Catharine Dittrick** (majoring in Elementary-Early Childhood Teaching and Learning). “Lesson Planning: Bridging the Gap Between Pre-Service Teachers and First Year Teachers.” Faculty mentor: Jessica Grimone-Hopkins (Department of Teacher Education).
3. **Aminata Doumbouya** (majoring in Social Work/ Psychology). “Adverse Childhood Experiences, Socio-economic Status, and Child Outcomes.” Faculty mentor: Jamie Lawler (Department of Psychology).
4. **Liz Egerer** (majoring in Clinical Laboratory Sciences). “Determining the Mechanism a Plant Derived Compound Uses for Killing Microbes.” Faculty mentor: Lynne Shetron (School of Health Sciences).
5. **Nathan Guerra** (majoring in Physics). “It's Rocket Science: Simulating the Achievement of Low-Earth Orbit Via the SpinLaunch System.” Faculty mentor: Ernest Behringer (Department of Physics and Astronomy).
6. **Matthew Kostoff** (majoring in Chemistry). “Characterizing UHRF1 and UHRF2 Interaction with Nucleosomes.” Faculty mentor: Brittany Albaugh (Department of Chemistry).
7. **Francesca Licari** (majoring in Therapeutic Recreation). “Disability and Sense of Belonging Among College Students.” Faculty mentor: Heather Silander (School of Health Sciences).
8. **Miles Mercier** (majoring in Physics). “Technology Integration and Testing of NEBP Balloon Equipment” Faculty mentor: David Pawlowski (Department of Physics and Astronomy).
9. **Marina Paneque-Almeida** (majoring in Electrical and Computer Engineering, Computer Concentration). “Design of a Smart Alert System Based on EEG Signal Analysis.” Faculty mentor: Qin Hu (School of Engineering).
10. **Lada Protcheva** (majoring in Computer Science). “Helping Pedestrians with Special Needs to Cross the Roads using a Robot.” Faculty mentor: Suleiman Ashur (Department of Computer Science).

11. **Jacob Render** (majoring in Geospatial Information Science and Technology). “Mapping Housing Subdivision Development and Sustainability in Washtenaw County, Michigan between 1940 and 2022.” Faculty mentor: William Welsh (Department of Geography and Geology).
12. **Juan Salcedo** (majoring in Chemistry). “Mutation of Autophagic Protein and its Imaging by TEM.” Faculty mentor: Steven Backues (Department of Chemistry).
13. **Anne Shepherd** (majoring in Geology). “Improving Our Understanding of Schmidt Hammer Data in the Great Lakes with a Comparative Analysis of Measurement Methodologies.” Faculty mentor: Eric Portenga (Department of Geography and Geology).