

2026 S.U.R.F. Winners



College of Education and Human Development

Dean Johnny O'Connor, Ph.D.

13

Chelsey Gallagher | Interdisciplinary Studies ELAR 4-8 |

Mentor Dr. Yan Yan

HASBSEB Project in the Department of Curriculum and Instruction

"Effects of AI-Generated Visual Support on Reading Motivation and Comprehension"

14

Anna Rodriquez | Interdisciplinary Studies EC-6 General Education |

Mentor Dr. Yan Yan and Dr. Jill Killough

HASBSEB Project in the Department of Curriculum and Instruction

"Summer Nutrition Assistance Programs Impact on Student Outcomes"

15

Madison Ridenour | American Sign Language Teaching |

Mentor Dr. Millicent Musyoka

HASBSEB Project in the Department of Deaf Studies and Deaf Education

"Deaf Individuals' Experiences with Sign Language Interpreters in High Schools"

College of Business

Dean Joby John, Ph.D.

16

Sohanur Rahman | Management BBA |

Mentor Mr. Paul E. Howell

HASBSEB Project in the Department of Management and Marketing

"Immigration Law Volatility and Educational Access Redistribution:

An Empirical Analysis"

Important Dates for Summer 2026

May 27 — S.U.R.F. Kickoff Day - Brief presentation of the summer projects.

June 16-17 — Mid-term report (discussion with the Director of the O.U.R. about state of the research project).

June—July — Each S.U.R.F. fellow will participate to one New Student Orientation session and one summer camp activity sheltered by Lamar University.

August 4 — submission deadline of your summer research report.

September 11 — S.U.R.F. Symposium following the O.U.R. Orientation.



OFFICE OF UNDERGRADUATE RESEARCH
LAMAR UNIVERSITY

EXPO 2026

S.U.R.F. Award Ceremony

April 30, 2026

Live Oak Ballroom of the Setzer Student Center

Dear S.U.R.F. Students and Mentors,

Congratulations for being a winner of the Summer Undergraduate Research Fellowship (S.U.R.F.) program. This year, 57 reviewers have selected sixteen winning projects. We awarded ten STEM and six HASBSEB proposals from five academic colleges, plus the Reaud Honors College and the Texas Academy. Each S.U.R.F. proposal has been reviewed by at least four faculty members of Lamar University, among whom at least three were experts in the research area assessed. The proposals were reviewed and scored based on a set of rigorous criteria, using a rubric published in the Request for Proposals (RFP). The S.U.R.F. winners scored 86.3% or above, which makes this selection to be the most competitive ever. My warmest congratulation go to all of you for the exceptionally competitive projects you have generated together!

Each S.U.R.F. team will receive from our university funds \$2,700 stipend, \$1,400 in research support, \$500 in travel support over this summer, as well as free housing in our Cardinal Village for the whole summer, as well as another \$500 in travel support to disseminate your findings and results to conferences elsewhere. Also, the faculty mentors will receive a summer stipend of \$1,000.

The results of your S.U.R.F. projects will be presented at the Annual O.U.R. Fall Conference on November 13, 2026.

The O.U.R. Advisory Board members of the Office of Undergraduate Research and all faculty reviewers, heartily congratulate the 2026 S.U.R.F. winners and their mentors for this achievement, wishing to everyone a great summer research experience. "Good luck!" in developing a quality and exiting research.

Dr. Cristian Bahrim, Director of the O.U.R.



LAMAR UNIVERSITY
MEMBER THE TEXAS STATE UNIVERSITY SYSTEM™



2026 S.U.R.F. Winners



College of Engineering

Dean Tracy Benson, Ph.D.



1

Jacob Barrera | Mechanical Engineering |

Mentors **Dr. Baisravan HomChaudhuri** and **Dr. Wenhao Yang**

STEM Project in the Department of Mechanical Engineering

"Predictive and Safe Human-Aware Mobile Robot Navigation"

2

Carmen Flores and **Jacob Hardy** | Mechanical Engineering |

Mentor **Dr. Ebrahim Seidi**

STEM Project in the Department of Mechanical Engineering

"Process Optimization for 3D Printing of Carbon Fiber-Reinforced PPA"

3

Alejandra Castro-Huerta | Chemical Engineering |

Mentor **Dr. Sidney Lin**

STEM Project in the Dan F. Smith Department of Chemical and Biomolecular Engineering

"Graphite-Reinforced Bio-Based Phase Change Inserts Enhancing Thermal Transport in Packaging"

4

Kasey Kuch% | Electrical Engineering |

Mentor **Dr. Hassan Zargarzadeh**

STEM Project in the Phillip M. Drayer Department of Electrical and Computer Engineering

"Comparative Evaluation of Algorithms and Techniques on a Mobile Manipulator"

5

Christopher Lowe | Chemical Engineering |

Mentor **Dr. Cristian Bahrin**

STEM Project in the Department of Physics

"Interference between two laser beams on a flint glass surface."

6

Cole Williams | Mechanical Engineering |

Mentor **Dr. Baisravan HomChaudhuri**

STEM Project in the Department of Mechanical Engineering

"Graphite-Reinforced Bio-Based Phase Change Inserts Enhancing Thermal Transport in Packaging"

*Reaud Honors College Student

%Texas Academy Student



2026 S.U.R.F. Winners



College of Arts and Sciences

Dean Rebecca Boone, Ph.D.



7

Gabriel Kalala | Computer Science & Mathematics |

Mentor **Dr. Iván Ojeda-Ruiz**

STEM Project in the Department of Mathematics

"Low-Rank Truncation in Dynamic Mode Decomposition for Stock Market Analysis."

8

Homero Tijerina* | Biochemistry |

Mentors **Dr. Susantha Ganegamage** and **Dr. Ashwini Kucknoor**

STEM Project in the Department of Chemistry and Biochemistry

"An advanced analog of epinephrine for optimized stress performance"

9

Adam Tsan | Computer Science |

Mentor **Dr. Tauhidul Alam**

STEM Project in the Department of Computer Science

"Small Language Model Planning for Safe Natural-Language Robot Navigation"

10

Chloe Wallace | Political Science |

Mentor **Dr. Bianca Easterly**

HASBSEB Project in the Department of Political Science

"Women's Political Participation and Abortion Restrictions in the United States"

11

Caryna Wyman% | Biochemistry |

Mentor **Dr. Shannon Jordan**

STEM Project in the Department Health and Kinesiology

"Atopic Dermatitis: Exploration of Common Symptoms for Effective Medical Care"

College of Nursing and Health Professions

Dean Joseph W. Tacy, Ph.D., RN, CNE

12

Natalie Bean and **Kelly So** | Nursing |

Mentor **Dr. J.T. Seaman**

HASBSEB Project in the JoAnne Gay Dishman School of Nursing

"Implications of Generative Artificial Intelligent in Mental Healthcare"

