

# O.U.R. 2024 Fall Awards

## Outstanding ORAL Presentation Graduate Level

**Winner: Md Admay Amif**

**Quantification of Sub-Surface Wrinkles in Woven Carbon Fiber Reinforced Polymer Laminate Using High-Resolution Ultrasound.**

**Mentor: Dr. David Jack**

Department of Mechanical Engineering, Baylor University - Waco

**Winner: Kirtunia Rahul**

**Cohesive Zone Modeling Strategy to Simulate Progressive Delamination Failure in L-shaped CFRP Laminates with Varying Inter-ply Angle Difference.**

**Co-authors:** Arief Yudhanto and Pruthul Kokkada Ravindranath

**Mentor: Dr. David Jack**

Department of Mechanical Engineering, Baylor University - Waco

**Winner: S M Yeasin Habib**

**Effects of Al Addition on the Corrosion and Mechanical Properties of NbTaTiV High Entropy Alloy.**

**Co-authors:** Nafiz Ahmed Badhan and Zhe Fan

**Mentor: Dr. Xuejun Fan**

Department of Mechanical Engineering, Lamar University



**SEE FOR  
YOURSELF**

The abstract submission and  
registration deadline for the  
EXPO 2025 is April 10<sup>th</sup>, 2025



OFFICE OF UNDERGRADUATE RESEARCH  
**LAMAR UNIVERSITY**

**OFFICE OF UNDERGRADUATE RESEARCH  
LAMAR UNIVERSITY**

Undergraduate and  
Graduate students and all  
faculty/staff  
are invited to:

**The Spring  
2025 Research  
Expo**



**April 23 and 24th, 2025**  
Location: Setzer Center

 Begins 8 a.m.

For registration please send  
an email to [our@lamar.edu](mailto:our@lamar.edu)

**Submit  
Abstracts  
Due April 10, 2025**

**Guest Speaker**



**Larry Toups**  
Adjunct Associate Professor for the  
Space Architecture Graduate Program  
University of Houston  
*Space Architecture at NASA*  
Date: April 23, 2025 - from 6 to 7 P.M.  
Location: Live Oak Ballroom (Room 110A & 110B)





OFFICE OF UNDERGRADUATE RESEARCH  
**LAMAR UNIVERSITY**

## O.U.R. Awards Ceremony

Galloway bldg. — Landes 101

Dec. 2, 2024 — 11:00 — 1:30 pm

The O.U.R. 2024 Fall Conference continues a tradition that started more than a decade ago in showcasing research done over summer and fall at the undergraduate and graduate levels, from various STEM and HASBSEB academic areas. This year we had the privilege to welcome four special guest speakers: Dr. David Jack, Professor of Mechanical Engineer and Program Director of Materials Science & Engineering at Baylor University, Mr. Alexander Schiller, a Project Engineer at BOEING Company, Mr. Levi Snowden — R & D Project Manager at Atmospheric Plasma Solutions, and Mr. Caleb Gordon, a Supply Chain Specialist at BOEING Company. We had eighteen guests from University of Houston—Downtown, Baylor University, UTMB—Galveston, and UT Dallas presenting their research. We had a total of 36 talks and 24 poster presentations from various academic areas including engineering, medical research, artificial neural networking, material science, chemistry, communication and film, history, exercise science, political science, education, fundamental and applied science, and more. We enjoyed a delightful Short Films Showcase hosted by Profs. O'Brien Stanley and Andre Favors. Kudos to all presenters to our fall conference! We warmly welcomed a fine group of visitors from Galveston Community College led by Dr. Barbara Dover. *We thank heartily to all our sponsors, and in particular to the Center for Resiliency for the great support and excellent research presented, and to all judges for their fine work!* Dr. Cristian Bahrim

### Important Dates for Spring 2025

**January 24** — URG Kick-off Day

**April 5** — The deadline for submission of narratives at the EXPO 2025 for the O.U.R. Annual Paper Competition.

**April 10** — Abstract Submission deadline to EXPO 2025.

**April 23-24** — The EXPO 2025 hosted in the Setzer Student Center.

# O.U.R. 2024 Fall Awards

## Outstanding POSTER Presentation Undergraduate Level

**Winner: Jiya Khatri** <sup>§</sup>

**NMR Analysis of Lactate Production via Alanine Metabolism in Pancreatic Ductal Adenocarcinoma Cells.**

**Mentor: Dr. Llyod Lumata** <sup>§, #, %</sup>

<sup>§</sup> Department of Physics, University of Texas at Dallas, Richardson

<sup>#</sup> Department of Bioengineering, University of Texas at Dallas, Richardson

<sup>%</sup> Department of Neuroscience, University of Texas at Dallas, Richardson

**Winners: Robert Reinartz, Christina Hamilton, Justin Cline, Jabari Fowler**

**Using Artificial Neural Network Models to Understand and Predict Baseball.**

**Mentor: Dr. Katarina Jegdic**

Scholar's Academy, University of Houston – Downtown

**Winner: Victoria Taylor** <sup>§</sup>

**Novel Organ-On-Chip Devices for Modeling Reproduction and Pregnancy-Related Organ.**

**Co-authors:** Briana Ortiz <sup>#</sup>, Ashley Driscoll <sup>#</sup>, Sungjin Kim <sup>%</sup>, Po Yi Pam <sup>%</sup>, Arum Han <sup>%</sup>, Ramkumar Menon <sup>#</sup>

**Mentor: Dr. Lauren Richardson** <sup>§</sup>

<sup>§</sup> Wellborn Middle School, College Station

<sup>#</sup> Department of Obstetrics & Gynecology, Division of Basic Science and Translational Research, The University of Texas Medical Branch at Galveston

<sup>%</sup> Department of Electrical and Computer Engineering, Department of Biomedical Engineering, Texas A&M University, College Station

## Graduate Level

**Winner: Kaitlyn Timmons** <sup>§</sup>

**Exosomal Interleukin-10 (eIL-10), a Novel Anti-Inflammatory Therapeutic for Preterm Birth: Evaluation of Cell-Secreted Metabolites at the Placenta and Fetal Membrane Fetal-Maternal Interfaces. Related Organ.**

**Co-authors:** Souvik Paul <sup>#</sup>, Rheanna Urrabaz-Garza <sup>#</sup>, Jeena Jacob <sup>#</sup>, Pilar Flores <sup>#</sup>, Ananth Kammala <sup>#</sup> and Ramkumar Menon <sup>#</sup>

**Mentor: Dr. Lauren Richardson** <sup>#</sup>

<sup>§</sup> John Sealy School of Medicine, The University of Texas Medical Branch at Galveston

# O.U.R. 2024 Fall Awards

## Outstanding POSTER Presentation Graduate Level

**Winner: Anusha Shahzeb Meghani**

**Zinc Oxide Nanoparticles Impede Reduce the Biosynthetic Production of Ergosterol in *Candida albicans*.**

**Mentor: Dr. Thuy Minh Nguyen**

Department of Chemistry and Biochemistry, Lamar University

**Winner: Ramya Gollamudi**

**Perfluorooctanoic Acid Monohydrate (PFOA-H<sub>2</sub>O) Studied by Molecular Rotational Resonance (MRR) Spectroscopy .**

**Mentor: Dr. Sylvestre Twagirayezu**

Department of Chemistry and Biochemistry, Lamar University

## Outstanding ORAL Presentation Graduate Level

**Winner: Luis Lemmen**

**Ethical Evaluation of Nuclear Deterrence on the Example of the Russo-Ukrainian War.**

**Mentor: Dr. Nicki Michalski**

Department of Communication and Media, Lamar University

**Winner: Kayla McKinley**

**Does Vaping Nicotine and/or THC Produce Different Levels of Oxidative Stress for Men and Women: An Examination of Markers of Oxidative Stress (8-Isoprostanes) in Expired Respiratory Condensate.**

**Mentor: Dr. Shannon Jordan**

Department of Health and Kinesiology, Lamar University

**Winner: Harvest Prater**

**Asexuals of Color: Experiences of an Invisible Identity.**

**Mentors: Mrs. Elizabeth Sanders <sup>#</sup> and Mr. Andre Favors <sup>%</sup>**

<sup>#</sup> Mary and John Gray Library, Lamar University

<sup>%</sup> Department of Communication and Media, Lamar University