

RCW 2025 GRAS Schedule

Time Slot	Room	Session/Activity	In Person/Hybrid
12:00 - 1:00 PM	Middle Ballroom	Poster Session (1)	In Person
12:00 - 1:00 PM	West Ballroom	Oral Presentations (1)	Hybrid
12:00 - 1:00 PM	Senate Gallery	Oral Presentations (2)	Hybrid
12:00 - 1:00 PM	Colonel Fountain Room	Mixed Session - Water Science & Management (1)	Hybrid
12:00 - 1:00 PM	Colonel Fountain Room	Open Mic (1)	Hybrid
1:00 - 2:00 PM	Colonel Fountain Room	Open Mic (2)	Hybrid
1:00 - 2:00 PM	Colonel Fountain Room	Mixed Session - Water Science & Management (2)	Hybrid
1:00 - 2:00 PM	Middle Ballroom	Poster Session (2)	In Person
1:00 - 2:00 PM	East Ballroom	Oral Presentations (3)	Hybrid
1:00 - 2:00 PM	Senate Chambers	Oral Presentations (4)	Hybrid
2:00 - 3:00 PM	Middle Ballroom	Poster Session Break	(In Person)
2:00 - 3:00 PM	Senate Gallery	Lightning Talks	In Person
2:00 - 3:00 PM	East Ballroom	Oral Presentations (5)	Hybrid
2:00 - 3:00 PM	West Ballroom	Oral Presentations (6)	Hybrid
3:00 - 4:00 PM	Middle Ballroom	Poster Session (3)	In Person
3:00 - 4:00 PM	East Ballroom	Oral Presentations (7)	Hybrid
3:00 - 4:00 PM	Senate Chambers	Oral Presentations (8)	Hybrid
3:00 - 4:00 PM	Colonel Fountain Room	Art Session	In Person
4:00 - 5:00 PM	Middle Ballroom	Poster Session (4)	In Person
4:00 - 5:00 PM	West Ballroom	Oral Presentations (9)	Hybrid
4:00 - 5:00 PM	East Ballroom	Oral Presentations (10)	Hybrid

12:00 - 1:00 PM

Poster Session (1) - Middle Ballroom

- 1. Chukwuebuka Osuji - Relationship between Composite Motor Skill Competence and Physical Fitness among College-Aged Students
- 3. Aya Abdaljalil - Mental Health Help-Seeking Behaviors Among US College Students

- **5.** Adren Warling - Qualitative Social Ecological Analysis of Barriers to Tobacco Cessation Among People in New Mexico Who Identity as LGBTQIA+
- **7.** Dana Dorsey - Mosquitoes, Backyard Poultry, and Avian Disease: A One Health Approach in Rural Hawai'i
- **9.** Jasper McCormick - LiFT Resource Map For LGBTQ+ Individuals in the Southwest United States
- **11.** Lindsay Keeling - Evaluation of the Feasability and Utility of the Podcast Format for Increasing Knowledge on Health Equity
- **13.** Luke Burks - The Social Consequences of Christian Nationalism
- **15.** Nusrat Abdulla - One Health Approach in Mpox Outbreak Management: Integrating Human, Animal, and Environmental Health
- **17.** Janelle Valentine - Transportation and Aging in New Mexico: a mixed methods exploratory study
- **19.** Kazeem Abdulrazaq - Retrieving data. Wait a few seconds and try to cut or copy again.
- **21.** Dina Advani-Mahmood - Belonging on the Margins: Persistence, Identity, and Support in STEM Fields

Oral Presentations (1) - West Ballroom

- Ram Singh Insa - Two Applications of Postemergence Herbicides in Sorghum Maximize Reductions of Broadleaf Weeds in Chile Pepper Grown in the Subsequent Year
- Glory Iorliam - Investigating Aeolian Dust Emissions in Rangelands
- Aminou Saibou - Summer Cover Crops Ecosystem Services for Organic Transition under Limited Irrigation in Northwestern New Mexico
- Yusuf Anifowoshe - Irrigation Management in Chile Peppers and plant Susceptibility to Phytophthora capsici and Development of Phytophthora Blight
- Ehtisham Shakeel Khokhar - GWAS integrated with high-throughput phenotyping identifies candidate gene YABBY4 regulating fruit development in New Mexican chile pepper (*Capsicum annum* L.)

Oral Presentations (2) - Senate Gallery

- John Agbetsi - *Anopheles stephensi* gravid mosquitoes: leg odor detection and oviposition site selection
- Anjali Karki - Small Mosquitoes – Large Implications: Effects of Larval Crowding and Starvation on Locomotor Activity, Adult Biting Frequency, and Insecticide Resistance in Two Strains of *Aedes aegypti*
- Carleen Silva - Burning down the mouse: Fire effects on deer mouse density and prevalence of Sin Nombre Virus
- Dylan Osterhaus - Demographic variation in speed and timing of fall migration shapes community composition of migrating North American passerines
- Lawrence Zhou - Into the Wild: Searching for sylvatic vesicular stomatitis virus (VSV) transmission in its endemic region in Chiapas, Mexico.
- Taiwo Adesunloye - Automated vs Reflexive Qualitative Approaches a Case Study

Mixed Session - Water Science & Management (1)

- Kaustuv Neupane - Where Should We Place Nature-Based Structures for Aridland Watershed Restoration?
- Thanushan Kirupairaja - Spatially Distributed Reservoir Evaporation Depletion using Remote Sensing and Ground-based Meteorological Data
- Lalmani Wagle - Assessing Recharge Decline and Identifying Flood Recharge Potential in Northern Rio Grande Basin
- Sinchan Bohara - Hydroeconomic Optimization of Drought Policy in a Multi-Use Watershed: Evidence from a Headwater Region
- Pushpa Raj Dahal - Geophysical Characterization of an Anthropogenic Perched Aquifer at the Waste Isolation Pilot Plant (WIPP) site in New Mexico

1:00 - 2:00 PM

Mixed Session - Water Science & Management (2)

- Anushka Perera - Assessing Consumptive Water Use of a Drip-Irrigated Young Pistachio Orchard in the Mesilla Valley, New Mexico.
- Sandesh Karki - The Effect of Forest Thinning on Wildfire Risk and Watershed Health in North Central New Mexico
- Jorge Preciado - Climate Resilient Irrigation for Pecan Production to Manage Water Shortage in Arid Regions: Implications to the Sustainability of Mesilla Valley, Southern New Mexico.
- Ujjwal Marasini - Snow Water Equivalent Prediction for Northern New Mexico Using the Convolutional LSTM Machine Learning Method

Poster Session (2) - Middle Ballroom

- **2.** Joy Agbawodike - A Clean Label Approach: Effect of Natural Gums on Ice Cream Meltdown Behavior
- **4.** Aman Priyadarshi Kumar - The Dynamics of Solar Swirls: Rotation, Magnetic Fields, and Plasma Flows
- **6.** Dona Samanthrika Jayapoorni - Investigating the effect of lower sucrose on the development of malaria parasites in Anopheles stephensi mosquitoes.
- **8.** Jaime Arroyo - Modeling chemical induced tissue damage and nociception
- **10.** Md Rashedul Hasan - Investigating the Role of Pyruvate Dehydrogenase (PDH) Phosphorylation in Biofilm Formation in *Δhnx* *Caulobacter crescentus*
- **12.** Ilse Tolentino - Reduction and Characterization of Cerium and Neodymium d-f-Heterometallic Clusters
- **14.** Sumanth Reddy Nandhikonda - Spot the Fake: Using AI to Detect Manipulated Videos
- **16.** Vamsi Ravi - Real-Time Applications of a Multimodal Emotion and Sentiment Analysis Model
- **18.** Olivia Russell, **Jenavieve Wheeler** - Exploring the Complexities of Violence and Abuse: Narratives from a University Community

- **20.** Md Jakirul Islam Jony Prothan - Two Decades of Change: Linking Land Use, Socioeconomic Shifts, and Urban Heat in the Phoenix Metropolitan Area
- **22.** Polito Walters - Mapping and Geochemistry of the Black Mountain-Santo Tomas chain, Potrillo Volcanic Field, southern New Mexico
- **24.** Kacie Bauer - What Mediates the Relationship Between

Oral Presentation (3) - East Ballroom

- Jakob Plante - Incubation at Below-Background Radiation Levels Reduces Growth and Longevity in *D. melanogaster*
- Meig Dickson - Filling the Gaps: Determining Ranges of Fossil Birds using Machine Learning
- Noelle Molina - DNA Methylation and Its Role in Homologous Gene Expression in Tetraploid *Leucaena trichandra*
- Scarlet Sellers - Functional traits in bees predict landscape genetic patterns: A meta-analysis of population differentiation
- Fatima Mahmoud Muhammad - Interacting Partners of H-NOX and their Role in the Regulation of Biofilm Formation in *Paracoccus denitrificans*
- Natasha Rhema Chapuma - "Chemistry is academic therefore I think about it in English" : A study on how translanguaging decreases in academic spaces

Oral Presentation (4) - Senate Chambers

- Felix Atsar - Online Integration of Capillary Electrophoresis (CE) and Dual Detector Taylor dispersion analysis (TDA) via a 3D printed Instrument for Protein Size Characterization
- Thathmi Wathsara Herath Pathirana - Comparative Proteomic Analysis of Nitric Oxide Sensing Mutants: $\Delta hnoX$ and $\Delta nosP$ in *Vibrio cholerae*
- Aishat Alatishe - Bacterial Biofilms: Investigating the functional interaction between H-NOX and DgcA and their influence on biofilm formation in *Paracoccus denitrificans*
- Bipin Khanal - Concise Synthesis of SuFExable Pyrazolo[1,5-a]quinoxalinones
- Oluwatosin Saibu - Impact of the V659E Mutation on HER2 Dimerization Dynamics: Insights from Molecular Dynamics Simulations
- Sarahi Enriquez - Development of a multivariate calibration model for microRNA 219 quantification via real-time observations of rolling circle amplification

2:00 - 3:00 PM

Poster Session Break - Middle Ballroom

Lightning Talks - Senate Gallery

- Jonathan Alexander - Snp-it: A Personalized Health Recommendation Platform
- Jeffrey Dominguez - Subtle Infections, Significant Consequences: How Low-Dose Endotoxins Impact Sheep Offspring Growth

- Anna Harmon - Behind the Sneeze: Decoding Pecan Pollen Allergies
- Karime L. Luna - The Impact of Crude Glycerin Supplementation on the Onset of Puberty in Ewe Lambs and Its Influence on Wool Quality
- Lydia Boateng - Crisis Rhetoric and Relational Ethics: Reimagining Emergency Aid Localization Through Ubuntu
- Diana C. Bautista Tovar - Measurement of Metabolic Changes in Breast Cancer Spheroids by Fluorescence Lifetime Imaging Microscopy of NADPH
- Timothy McQuaid - Measuring the Properties of High Velocity Clouds with Stellar Tomography
- Youssef Aly - A New Way To Predict Computer Program Run Time
- Paras Khanal - Machine Learning for Early Detection of Pneumonia: Bridging the Gap Between Advanced Technology and Real-World Problem
- Sara Gurule - Timing is Everything: How Immune Stress Disrupts Hormonal Signals and Fertility
- Nora Carolina Nava - Gas Physical Conditions around Fading Active Galactic Nuclei
- Indronil Bhattacharjee - GLOSS: An LLM-Guided Tutoring System for Social Skills Training

Oral Presentation (5) - East Ballroom

- Fuad Ahmad - Leveraging Large Language Models for Summarizing Ecological Drought Data
- Olaoluwasubomi Oyewole - Machine Learning and Computer Vision in Solar Physics: From Solar Cycle Patterns to Magnetic Bright Point Tracking
- Sayantan Maity - Injecting Logical Constraints into Neural Networks via Straight-Through Estimators
- Abigail Vernium - Cultivating Meaning: The Allegory of the Plow in Revision
- Emmerson Cramer - Harvesting Heroism: Consumptive Chivalry in "The Knight's Tale"
- Qurrat ul ain Akram Zahid - Conjuring Histories: Epistemic Reclamation and Spiritual Resistance in Alice Walker's In Search of Our Mothers' Gardens

Oral Presentation (6) - West Ballroom

- James Boadu Frimpong - Relationship among motor skill competence, physical fitness and subjective well-being among in-school adolescents in selected schools in Las Cruces, NM
- Kehinde Obidele - The Effects of Self-Controlled Feedback and Contextual Interference on Motor Skill Learning
- Elisabeth Zeitz - Cardiovascular Drift during Continuous and Interval Exercise in the Heat
- Taylor Cowell - How internal and external focus of attention affect clutch performances in golf putting
- Chinenyenwa Onyeonwu - Obesity Disparity among Elderly Hispanics 65 Years and Above in Dona Ana County

3:00 - 4:00 PM

Poster Session (3) - Middle Ballroom

- 1. Elia Rybolt - Digital Green Thumbs: A Content Analysis of Instagram Gardening Influencers
- 3. Adebayo Adeoti - Preparing for the Future: Evaluating the Employability Skills of 4-H Extension Agents
- 5. Marisol Olivas - An Assessment of Farm Succession and Transition Programs Across the United States
- 7. Ankita Khatiwada - Phytophthora capsici Disease Risk Management: An Empirical Approach
- 9. Samantha Aguilar - Long-term climate trends and their influence on Western Bluebird nestbox occupancy in New Mexico
- 11. Emile Tannous - Responses of diverse guar genotypes to salinity stress
- 13. Laura Vanesa Rodriguez Arcila - Cultivar evaluation of short-day onions suitable for mechanical harvesting in New Mexico
- 15. Sangam Panta - Soil Water Infiltration Under Various Regenerative Farming Practices in Semi-Arid Region: The Role of Soil Properties
- 17. Piumi Ishara Madhuwanthi - Unraveling Diurnal Dynamics of Greenhouse Gas Emissions: The Interplay of Soil Amendments, Moisture, and Temperature

Oral Presentation (7) - East Ballroom

- S M Yahea Mahbub - Image Imputation: A mmWave 3D SAR Imaging Application
- Noah Bia - Measuring turbulence height profiles in different environments
- Stefan Zamurovic - Simulation and performance of partially coherent beams propagating through turbulence over vertical and slant paths By: Stefan Zamurovic, Professor van Iersel
- Rohan Thakur - Laser Beam Propagation through Turbulence in Free-Space Optical Communication
- Amber Diaz - Analysis of Electromagnetic Interference for a Satellite Using Solenoids in Low Earth Orbit
- Sadeqh Hadipour Lakmesari - Chile Pepper Plant Detection for Robot-enabled Remote Imaging

Oral Presentation (8) - Senate Chambers

- Agnes Duah - Metabolic Reprogramming and Pathway Dynamics of Protein Expression in Colon Adenocarcinoma
- Farzaneh Karimi - Identifying Key Metabolic Pathways Driving Protein Expression Changes in Clear Cell Renal Cell Carcinoma (ccRCC)
- Athena Omidian - Consumers Response to Internal and External Sources of Social Media Posts about Firms
- Noelle Filoteo Young - Lived Experiences and Coping Skills of Immigrant Faculty Women in the United States

- Martha Chavez - The Immigrant Identity: Legal and Social Challenges of the 1.5 Generation

Art Session - Colonel Fountain Room

- Elham Sabri - Unraveled Heritage
- Julieanna Lerma - Low and Slow
- Ezekiel Martey - Home

4:00 - 5:00 PM

Poster Session (4) - Middle Ballroom

- **2.** Reza Ghanavati - SAVESTEPS protocol to construct flexibility parameters for classical forcefields
- **4.** Nicholas Alexander Daviet - Optimization of Acoustically Focused Flow Cytometer
- **8.** Md Arifin Arif - Locational Marginal Emissions Estimation in US Electricity Markets Using Machine Learning
- **10.** Hengameh Mirhajianmoghdam - Event-based RatSLAM: Enhancing RatSLAM with Event-Aligned Velocity Estimation and Kalman Filtering for Mapping
- **12.** Ricky Trevino - Affordable Innovation: Jewelry Techniques in Practical Engineering
- **14.** Ana Happle - Cortical Tracking of Code-Switching in Naturalistic Speech Perception: Insights from Spanish-English Bilinguals.
- **16.** Faith A. Hardy - Ecologically Valid Patterns: How Young Adults Communicate Electronically Based on Their Presentation of Low or High Levels of Autistic Traits
- **18.** Stephanie Zackery - Rural BIPOC College Students' Experiences of Mentorship
- **20.** Syeda Naziya Begum - Secure and Scalable Execution of OS-Interactive Workloads on Hardware Enclaves

Oral Presentation (9) - West Ballroom

- Andres Perea - Use of LoRa WAN wireless sensor data transmission and machine learning models to classify the behavior of beef cows grazing desert rangelands in the southwest United States
- Andrea Gissell Soler Sanchez - Towards the Rheological Fingerprint of Protein-enriched Yogurts
- Atikul Hoque - Optimizing Spatial Resolution of UAS Imagery for Dryland Vegetation Classification
- Cobe Wilson - Experimental Evidence for the Theoretical Expansion of the Two-Baskets Theory of Self Cognitions
- Sadeghrasoul Rouhbakhsh - AI-Driven Robotic Inspection System for Submerged Infrastructure in Turbid Waters

Oral Presentation (10) - East Ballroom

- Khagendra Katuwal - Characterization of Plasma Parameters at Coronal Hole Boundaries: Insights from Multi-Instrument Observations

- Jacob Peyton - Exploring Color Flows in TMDs: Disconnected Contributions Using Wilson Loops on the Lattice
- Umme Kawsar Alam - Multi-Tasking and Adaptive-Tasking Physical Reservoir Computing for Simultaneous Estimation of Contact Force, Joint Angle, and Stiffness in a Soft Robotic Exo-Digit
- James Flesner - Design and Analysis of a Robotic Vacuum Arm for the Collection of Submerged Golf Balls
- Ayla Valles - Multi-Objective Co-Design Optimization of Pneumatic Artificial Muscle (PAM)-Driven Snake-Like Robots