

GRAS FAL 2025 List of presentations per room

GROUP 1 Advanced Research Talks (10:00 AM – 12:00 PM)

Ballon Room West – Applied Sciences

Authors	Title
Vahid Nourozi	Linear Scaling Quantum LDPC Codes via Balanced Products
Ram Singh Insa, Brian J. Schutte, and Erik A. Lehnhoff	Impacts of Sorghum Herbicide Programs Across Sorghum and Chile Pepper Growing Seasons
Isha Budha Magar, Dr. Kristen Bowers	Comparative Life History Study of Turkestan Cockroaches at 25 °C and 30 °C under solitary and group rearing conditions.
Zhe Wan, Craig M. Newtonson, Jesus Duran Varela, Jannatul Ferdous	Synthesis of Feasibility Analysis of Ultra-High Performance Concrete for Prestressed Concrete Bridge Application-Phases I to V
Hailey A. Luker, Keyla R. Salas, Delaram Esmaeili, Anjali Karki, April D. Lopez, Immo A. Hansen	The mosquito ribosome - ribosome heterogeneity after a blood meal and the role of the ribosomal P-stalk protein P1.
Khandokar Md Rifat Hossain, Dr. Zhe (Joe) Wan	Real-Time Terrain Mapping and Reinforcement Learning-Based Optimal Path Planning for Autonomous Ground Vehicles in Dynamic Environments
Luis Ochoa Cadena, Dr. Ricardo Ramirez.	The Impact of Predator Diversity and Phenology on Alfalfa Weevil Suppression.
John Agnew, Kristen Bowers	Efficacy of Insecticidal Dusts Against the Arizona Bark Scorpion (<i>Centruroides sculpturatus</i>) Through Direct Contact and Secondary Transfer via Entomophagy

Doña Ana Room - Social Sciences

Authors	Title
Qurrat ul ain Akram Zahid	Toward a Crip Translingual Inscrutability: Rethinking Disability Identities Through Rhetorical Opacity
Lauren Lee	Aestheticized Activism: The Rise of Performative and Toxic Feminism on Social Media
Cobe Wilson, Dr. David Trafimow	Probabilistic Inference Using Gain-Probability Analysis
Esosa Esezobor	The Color of Recognition: Racialized Listening in AI Speech Technologies
Palistha Ranjitkar	Double marginalization and Verbal Slippage: A Subaltern Reading of Hindu "child bride"

Colonel Fountain Room – Data Sciences

Authors	Title
Islam Omar, Abdel-Hameed Badawy	Classic Machine Learning and Large Learning Models for Prostate Cancer Detection
Atikul Hoque, Michaela Buenemann	Spatial Resolution Effects on Mapping Mesquite-Encroached Rangelands
Reza Ghanavati, Thomas A. Manz	Automating the construction and use of polarizable flexible forcefields to study gas separations in metal-organic frameworks, targeting hydrogen purification in solar water splitting
Taylor Cowell, Cabel McCandles, Christopher A. Aiken	Block specific attentional focus switching during a dart throwing task.
Kehinde Obidele, Christopher Aiken	Contextual Interference and Self-Controlled Feedback: Unique and Independent Contributions to Motor Skill Learning

Senate Chambers – Life Sciences

Authors	Title
Anjali Karki, Hailey A. Luker, Naga Narendra Reddy Potlapalli, F. Omar Holguin, Meenakshi Berwal, Patricia V. Pietrantonio, and Immo A. Hansen; My PI Dr. Immo A. Hansen along with all other authors agreed with my abstract submission.	SkitoSnack 2.0 - a Bloodmeal Alternative for Anopheles and Aedes Mosquitoes
Katharine Gottwald, Dr. Adriana L. Romero-Olivares	Impact of global change drivers on dryland microbes: Implications for public health and biodiversity
Aishat Alatishe, Therese Albert, Cameron Lee-Lopez, Md Rashedul Hasan, Pierre Moënne-Loccoz, Kelly N. Chacón, Erik Yukl	Oxidative Activation of the Heme Nitric Oxide/Oxygen-Binding Protein (H-NOX) from <i>Caulobacter crescentus</i>
Samantha Aguilar, Aaron Young, Jeanne Fair, Audrey Sanchez, and Martha Desmond	Nesting under pressure: Variation in climate and habitat drives nest box use by Western Bluebirds
Shakil Ahmed, C. Donovan Bailey	Investigating the Integration of Organelle-Derived DNA in the Nuclear Genomes of Fabaceae
Abdulqater Al-Nouman, Jennifer Curtiss	The <i>Drosophila melanogaster</i> TENT5 homolog, isep, is required for spermatogenesis
Samantha F. Escamilla, Jessica P. Houston, and Kevin D. Houston	Correlating NAD(P)H lifetime shifts to chemotherapeutic treatment in breast cancer: a metabolic screening study with time-resolved flow cytometry in breast cancer cells continually treated with tamoxifen
Thathmi H. Pathirana, Md Shariful Islam, Erik T. Yukl	Integrated Multi-Omics Reveals H-NOX and NosP as Central Regulators of Iron Homeostasis, Redox Balance, and Quorum Sensing in <i>Vibrio cholera</i>

Senate Gallery – Exact sciences

Authors	Title
Prakash Timsina, Andres Chappa, Deema Alyones, Boris Kiefer, Ludi Miao (PI)	Monopole Traps for Position-Based Information Coding
Melissa Coronado Arrieta, Dr. Boris Kiefer	Hong-Ou-Mandel Effect Simulator
Dr. Michael Paolone, Thareendra Nanayakkara, Chathuri Priyadarshani Kekuluthotuwaage Don	Determination of The C-12 Charge Form-Factors for Excited States (2+, 0+, 3–, and 4+)
Daniel Reyes, Gavin Campos, Boris Kiefer	AI for Rapid and Reliable Materials Discovery
Felix S. Atsar, Hillary D. Bourger and Christopher A. Baker	Integration of Capillary Electrophoresis (CE) and Dual Detector Taylor Dispersion Analysis (TDA) via a 3D Printed Instrument for Structural Characterization of Biomolecules
John Agnew, Kristen Bowers	Efficacy of Insecticidal Dusts Against the Arizona Bark Scorpion (<i>Centruroides sculpturatus</i>) Through Direct Contact and Secondary Transfer via Entomophagy
Jacob Peyton, Dr. Michael Engelhardt	Exploring Color Flows in Particle Interactions: Disconnected Wilson Loops on the Lattice

GROUP 5 Open Mic Session - Doña Ana Room- 312 (12:00 – 2:00 PM)

Number	Student name	Title
OM 1	Jay Paine	Poetry Reading
OM 2	Madelyn Parker	"Lakehouse"
OM 3	Tia Credle	Dumpster Driving and I Found Virgin Mary in the Mountains
OM 4	Camdyn Bass	A Collection of Readings in Poetry
OM 5	Solé Hall-Hamilton	Linking-Delinking: A Process to Hospice Moderntiy
OM 6	Karissa Benson	"Corvus" (short fiction)

GROUP 4 Poster Session and Art Session - Middle Ballroom (12:00 – 2:00 PM)

Poster number	Student name	Poster Title
1	Miguel Eduardo Olivas Mendez	Ground Improvement by Large Amplitude Cyclic Penetration

2	Azeem Alvi	Effect of Protein Ratios on Rheology and Microstructure of Ice Cream
3	Hengameh Mirhajianmoghadam	Bringing Loop Closure To Event-based SLAM: A Place Recognition Approach
4	Alexandra Epperson	Looted Lithics: A Paleoindian and Archaic Collection from the Jornada Mogollon
5	Ana C Happle	When Languages Intertwine: How the Bilingual Brain Listens to Two Languages
6	Elisabeth Zeitz	Comparison of Data Cleaning Procedures for Gastrointestinal Temperature in an Occupational Setting
7	Taiwo Adesunloye	The Intersection of Community Culture Wealth and Science Resources as Indicators of Border Crossing in the Chemistry Classroom
8	Natasha Chapuma	Bilingual Student Experiences in Introductory Chemistry at a Hispanic-Serving Institution
9	Ifeanyi Mordi	Translingual Awareness and the Ethics of foregrounding Indigenous Literacies in Technical and Professional Communication: A Self-Reflective Study
10	Ashmita Guragain	Seasonal and Long-Term Trends of Hydrological Components in Dona Ana County
11	Chinenyenwa Onyeonwu	Food Insecurity Among Older Adults in The United States
12	Lina Khiyara	Flow Cytometric Profiling of Breast Cancer Cells: Establishing Methods for Cell Cycle Analysis in MCF-7 Cells
13	Shaylie Salopek	Effects of CXCL12 on Frozen and Fresh Embryo Transfer
14	Samantha Nava	Stories of Querencia from San Miguel del Bado
15	Alejandra I. Maese-Mora	Death of Curiosity? University Museums as descendants of Cabinets of Curiosity.
16	Uduwarage Perera	Evapotranspiration of Young Pecan Orchard in the Mesilla Valley, NM
17	Elissha Young	Empowering Educators: Evaluating the Impact of ULS Professional Development on Teacher Self-Efficacy

18	Paras Khanal	Machine Learning for Early Detection of Pneumonia: Bridging the Gap Between Advanced Technology and Real-World Problem
19	Luke Sury	Developing a Four Marker Flow Cytometry Panel to identify Stem-Like and Resistance Associated Subpopulations in ER Breast Cancer Cells
20	Juliemar Cuevas-Hernandez	Twenty years of change: declining wintering bird abundance and diversity within the northern Chihuahuan Desert
21	Dona Samanthrika Jayapoorani De Silva Wickramarathne	Investigating the effect of lower sucrose supply on the development of malaria parasite in Anopheles stephensi mosquitoes
22	Thanushan Kirupairaja	Development of a Remote Sensing-Driven Bulk Aerodynamic Evaporation Model for Reservoir Management
23	Jason Pena	Low-Cost Stereo Image Streamflow Monitoring System for Ephemeral Streams
24	Carlos Uccles	Narratives of Identity along the U.S.-Mexico Borderlands in Middle Eastern Communities
25	Khagendra Katuwal	Fire from the Sun: How Solar Flares Touch Our Lives
26	David Akindele	Does questioning before and after reading help you remember what you read?
27	Sara Gurule	Circulating dynamics of lipopolysaccharide binding protein following repeated low-dose lipopolysaccharide exposure in ewes
Arts 1	Ezekiel Martey	Still Waiting
Arts 2	Jacob Gyamfi	Breath and Steel

GROUP 2 Intermedia Research Talks (2:00 – 3:00 PM)

Ballon Room West – Applied and Exact Sciences

Authors	Title
Alessandro Apolinario-Lainez, Eusebio Ingol-Blanco	Assessing Climate Sensitivity of Snow-Driven Hydrology via Dynamic Calibration in the Upper and Middle Rio Grande Basin

Oscar Cabezas-Nivin, and Eusebio Ingol-Blanco	A Comparative assessment of weather patterns shifts using multi-model ensemble methods for projecting climate change impacts in the Rio Grande Basin
Ujjwal Marasini, Huidae Cho, Dulith Rajapakshe, Runwei Li	Fate and Transport Modeling Using HYDRUS-1D: Deterministic and Probabilistic Analysis Using ISPSO, Monte Carlo Simulation, and GLUE
Akshit Mehta, Dr. Michael Paolone	Coherent ϕ Meson Electroproduction off Helium-4 nuclei.
Abdullah Azzam, Huidae Cho	Assessing Water Availability and Acequia Resilience in the El Rito Watershed Using SWAT+ and Parameter Regionalization
Kashi Ram Panday, Prakash Khatri, Narayan Prasad Adhikari	A FIRST-PRINCIPLES STUDY OF ELECTRONIC, MAGNETIC, AND THERMOELECTRIC PROPERTIES OF HALF HEUSLER NbXB _i COMPOUNDS (X=Ru,Os)
Hari Shreesh, Abdullah Azzam and Huidae Cho	Assessing Water Availability and Acequia Resilience in the El Rito Watershed Using SWAT+ and Parameter Regionalization
Amber Diaz, Steve Stochaj	Applying Model Predictive Control to an In-Orbit Electromagnetic Docking Maneuver

Doña Ana Room - Social Sciences

Authors	Title
Elia Rybolt, Dr. Lacey Roberts-Hill, Dr. William Norris	Branching Out: A Content Analysis of Master Gardener Program Websites
Bethany Miller	Standardization in Fremont Painted Ceramics
Dina Advani	Persistence Pathways: Understanding Women of Color in STEM at New Mexico
James Geier	Bio/Necropower, (De)Coloniality, and Trans*formation in Disney's The Owl House (2020)

Senate Chambers – Life Sciences

Authors	Title
April D. Lopez, Francisco Plengue, Immo A. Hansen	An Old Pathway in a New Context: The Salvador-Warts-Hippo Signaling Pathway Regulates Vitellogenesis and Oocyte Development in <i>Aedes aegypti</i>
Grace V. Olagunju and Elba E. Serrano	Lipidomic Analysis of Glial Cells
Rashedul Hasan, Erik Yukl	Role of Pyruvate Dehydrogenase (PDH) Phosphorylation in Biofilm Formation in Δ nox <i>Caulobacter crescentus</i>
Chukwuebuka Osuji, James Frimpong, Larissa True	Understanding the Relationship Between Motor Skills, Fitness, Self-Discipline, Gender, and Persistence in College Students.
Niklas Kronlein, Ryan Ashley	The Role of the CXCL12/CXCR4 Chemokine Axis in Regulating Vascular Endothelial Growth Factor (VEGF) During Ovine Embryo Implantation

Laura Vanesa Rodriguez Arcila,
Christopher Cramer

Evaluation of Short-Day Onion Cultivars for Bulb Firmness and Associated Traits

GROUP 3 Early-stage Research Talks (3:00 – 4:00 PM)

Ballon Room West – Applied Sciences

Authors	Title
Madan Pokhrel, Huidae Cho	Hydrological Modelling for the Resilient Agriculture-Water_Community Systems Initiative
Koirala Sudhan, Neupane Damodar, Ghimire Rishi Ram, Mulmi Deepandra Das	PHOTOCATALYTIC DEGRADATION OF ANIONIC AND CATIONIC DYES BY Bi ₂ WO ₆ /ZnO NANOCOMPOSITE UNDER VISIBLE LIGHT IRRADIATION AND STUDY OF ITS ANTIMICROBIAL ACTIVITY
Kaverinathan Dhanapal, Dr. Rebecca Scott	PERCEIVED ACCEPTANCE OF AUTONOMOUS DELIVERY ROBOTS (ADRS) BY INCIDENTALLY CO-PRESENT PERSONS (INCOPS).
Nelson Kandel, Huidae Cho	A Quantum Computing Approach to Hydraulic Flow Routing
Samriddhi Ghimire, Qianyun (Gloria) Zhang	Self-Recognizing Composite Structural Elements (SR-CSEs): Multifunctional, Sustainable and Reliable
Boxiao Li, A. Salim Bawazir	Deriving and Validating Standardized Pistachio Crop Coefficients by Converting FAO-24 Reference ET to ASCE-EWRI Reference ET in Mesilla Valley, New Mexico.
Fatima Muhammad*, Aishat Alatishe* Md Shariful Islam*, and Erik Yukl*	Interacting Partners of H-NOX and Their Role in the Regulation of Biofilm Formation in Paracoccus denitrificans.
Rasana Maharjan and Dr.Qianyunz(Gloria) Zhang	Nanogenerators- Integrated Mechanical metamaterials for multidimensional strain sensing and measurement

Doña Ana Room - Social Sciences

Authors	Title
Iqbal Uddin Pervez	The Role of Technology in Reducing Income Inequality in Developing Economies: Analysis of the Impact of Technological Adoption on the Income Distribution and Economic Growth in Developing Countries.
Olivia Martinez	Race, Gender, Crime, and Media Representation
Diana Dávila Silva, Solé Hall-Hamilton, Rose Marie A. Lopez, María Sofia Ugarte, Alexander Warner-Garrett - not all group	Our Retablos de la HSI: An Inquiry of Re-Existence towards an Otherwise

members will be present, but all group members agree with the submission.

Ian Schiefelbein

Md Safiullah Kayesh (single author)

Saba Omidian

Ehsan Batyar, Athena Omidian, Saba Omidian

Reconceptualizing the Role of Care in Early Childhood Professionalism

Examination of the Impact of Maternal Weight and Child Malnutrition in Bangladesh.

Authentic or Commercial? What Makes Instagram Femvertising Credible

Religious Consumers in a Liquid World: Behavioral Evidence from a Quantitative Study