

## GRAS Spring 2026 General Schedule

HOURS	Gallery Chambers	Senate Chambers	Doña Ana Room	Fountain Room	West Ballroom	Central Ballroom	East Ballroom
10 AM -12 PM	<b>Group 1.</b> Exact and Applied Sciences <b>Hybrid</b>	<b>Group 1.</b> Life Sciences <b>Hybrid</b>	<b>Group 1.</b> Social Sciences <b>Hybrid</b>	<b>Group 1.</b> Data Sciences <b>Hybrid</b>			
12 PM - 2 PM			<b>ARTS session</b> <b>Hybrid</b>		<b>Session 1.</b> Interdisciplinary Forum <b>Hybrid</b>	Poster/ ARTS session <b>In person</b>	Lunch
2-3 PM	<b>Group 2.</b> Applied Sciences <b>Hybrid</b>	<b>Group 2.</b> Life Sciences <b>Hybrid</b>	<b>Group 2.</b> Social Sciences <b>Hybrid</b>	<b>Group 2.</b> Data Sciences <b>Hybrid</b>			
3-4 PM	<b>Group 3.</b> Exact and Applied Sciences <b>Hybrid</b>	<b>Group 3.</b> Life Sciences <b>Hybrid</b>	<b>Group 3.</b> Social Sciences <b>Hybrid</b>				

## GROUP 1. 10 AM -12 PM

### Exact and Applied Sciences - Gallery Chambers

Authors	Title
Sarahi Enriquez, Dr. Genoveve G. Gutierrez, Dr. Christopher A. Baker	Quantitative Study of Rolling Circle Amplification Kinetics Using a Droplet-on-Demand Microfluidic Platform
Aman Priyadarshi Kumar, Juie Shetye	Nowcasting Solar Flares from Ca II K Peaks: Dunn Solar Telescope Pilot Results
A. Camilo Munoz Pena, Scott Folkman	Tailoring Morphology in Transition Metal Nitrides through Template Development and Controlled Synthesis for Electrocatalysis
Oscar M Cabezas-Nivin, Eusebio Ingol-Blanco	Evolving drought in a changing southwest: Projections for the Rio Grande Basin
Samantha F. Escamilla, Kevin D. Houston, Jessica P. 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
Omar Alejandro Garcia Alcantara, Steven Sandoval, Ignacio Rubio Scola, Luis Rodolfo Garcia Carrillo, Eduardo Steed Espinoza Quesada	Geometric Algebra as a tool for performing Aerobatic Maneuvers on Drones
Lina Khiyara, Samantha Escamilla, Kevin D. Houston, Jessica P. Houston	Profiling estrogen-receptor-positive cell types using autofluorescence optical redox measurements and fluorescence lifetime imaging microscopy
John Agbetsi, Jiannong Xu	Gravid Anopheles stephensi Detects Indole for Oviposition Despite Ablation of Antennae and Maxillary Palps

### Life Science - Senate Chambers

Authors	Title
Gabriel Borg, Immo A. Hansen	Radiating Fitness: Hormetic Ethanol Exposure on Performance and Stress-Response Activation Following X-Ray Irradiation
Anna Harmon, Hormat Shadgou Rhein, Jennifer Randall	Gene Expression of Allergen Genes in Protandrous and Protogynous Cultivars of <i>Carya illinoensis</i>
Meig Dickson, Peter Houde, Teri Orr	Diversification of Modern Birds Driven by Early Paleogene Climate Patterns

April Lopez, Francisco Plenge, Immo Hansen	The Salvador-Warts-Hippo Signaling Pathway Regulates Primary Follicle Development in <i>Aedes aegypti</i> mosquitoes
Anjali Karki, Hailey A. Luker, Keyla R. Salas, & Immo A. Hansen	Small Mosquitoes – Large Implications: Effects of Larval Crowding and Starvation on Locomotor Activity, Adult Biting Frequency, and Insecticide Resistance in Two Strains of <i>Aedes aegypti</i>
Daniel Horton, Aaron Young, Martha Desmond, Fitsum Abadi	Pinyon Jay habitat use during the breeding season: insights from passive acoustic monitoring in southern New Mexico
Shakil Ahmed, Jaspreet Thind, Erik Lehnhoff and C. Donovan Bailey	Effects of Electrical Treatments on Total Phenolic Biosynthesis and Associated Gene Expression in Brassicaceae
Tetteh, R., Ojekanmi, A., Okunkenu, A. S., Fademi, I., Angadi, S. V., Darapuneni, M. K., Chorover, J., Kehlet, C., John, G., & Idowu, O. J.	Effects of Aquasteady Hydrogel Types, Application Rates, and Placement Methods on the Saturated Hydraulic Conductivity of Arid Soils

### Social Sciences - Doña Ana Room

Authors	Title
Abeiku Arhin Tsiwah, Eric Magrane	Developing Ghanaian Geopoetics
Abdul Khaliq, Jamal Mamkhezri	Assessing the Impact of Eminent Domain Reforms on Renewable Energy Expansion: A U.S. State-Level Analysis
Elia Rybolt, Dr. Lacey Roberts-Hill, Dr. Kristopher Rankin III, Dr. Shannon Norris-Parish, & Dr. Duli Shi	Sprouting Connectivity: Exploring the Motivations, Retention, & Role of New Mexico Extension Master Gardener Volunteers
Palistha Ranjitkar	Colonial Medical Surveillance, Biopower, and the Double Marginalization of Women Under the Contagious Diseases Act of 1864.
Patricia Mullany and Dr. Kim Oliver	Learning an activist approach in physical education classes: Teacher professional development that furthers equity and change in kinesiology
Esosa Esezobor	Naming Violence and Building Feminist Resistance in Nigeria's Legal and Digital Landscapes
Natalie Snow and Kim Oliver with Esha Desai, Chau Hoang, Zohreh Keivan, Ruwa	"It Truly Feels like a Second Family": Building a Collaborative Community of Practice with Women Graduate Students in Mathematics

Mushen, Pavithra A. Mudiynaselag, Ranjitha Raviprakash, and Sarah Schott

Janelle Valentine, Dr. Rebecca Pearson

Integrating Public Health Infrastructure in Frontier (FAR) New Mexico

### Data Sciences - Fountain Room

Authors	Title
Albert Opare Agyei, Michaela Buenemann, Connie M. Maxwell, Kaustuv R Neupane	A Geospatial Framework for Erosion Modeling and Restoration Planning in Drylands
Taylor Cowell, Cabel McCandless PhD, Christopher A. Aiken PhD	Block specific attentional focus switching during a dart throwing task
Kehinde D. Obidele, Taylor Cowell, Christopher A. Aiken	Do the Benefits of Contextual Interference and Self-Controlled Feedback on Motor Skill Learning Depend on Sequence Length?

### Art session – Doña Ana Room 12-2 PM

Authors	Title
Tia Credle	The Circle of Us
Jayden Presley	The Lingering Bodies of Paris Jasmine - Short Story
Camdyn Bass	From the Gut of-- A Collection of Poetry
Karissa Benson	Presentation of Creative Work (Short-Form Fiction)

### Poster Session - Central Ballroom 12-2 PM

Authors	Title
Yvette Michalak	The beginning
Ezekiel Martey	"All That I Said"

### Poster Session - Central Ballroom 12-2 PM

Poster Number	Authors	Title
1	Luke Sury, Kevin Houston, Jessica Houston	Use of flow cytometry to characterize estrogen-receptor positive breast cancer by a suite of biomarker profiles in cells that are sensitive and resistant to tamoxifen treatment
2	Mujahid Ullah Khan Afridi, Calvin Cox, Janet Kwakye, Hansuk Sohn	An IoT-Enabled Predictive Digital Twin with Virtual Reality for Real-Time Monitoring and Decision Support in Smart Additive Manufacturing
3	Pushpa R. Dahal, Dale F. Rucker, Anderson Ward, Zachary Lepchitz, Kenneth C. Carroll*	Hydro-Geophysical Characterization of an Anthropogenic Perched Aquifer at the Waste Isolation Pilot Plant Site in New Mexico
4	Syed Ziaul Bin Bashir, Jesus Diaz, Chaitanya Mahajan, Satyajayant Misra	AutoSlice: A Fully Automatic LLM-driven Slicing Configuration Framework for Additive Manufacturing
5	Yiyang Zhang, Fengyu Wang, Di Shi, Chao Fan	Weather-Informed Scenario Generation and Robust Unit Commitment for Climate-Resilient Power System Planning
6	Alejandro Gallegos	Reversible Adhesion between Surfaces with Oppositely Charged Weak Polyelectrolyte Brushes
7	Sergio Ruiz, Emilia Marmolejo, Paola Bandini	Experimental Study of Enzyme-Induced Carbonate Precipitation (EICP) to Control Rainfall-Induced Erosion in Sloping Native Silty Sand
8	Chukwuebuka Ebenezer Osuji, Larissa True, PhD.	Relationship Among Composite Physical Fitness, Motor Competence, And Perceived Motor Competence in College Aged Students
9	Saheed Oyetunji, Johnson Ibukun, Michaela Buenemann	Cloud-Based Geospatial Analysis of Land Cover Changes in Akure (2004–2024)
10	Ram Singh Insa, Brian Schutte	Impacts of Sorghum-Barley Crop Rotation on Chile Pepper Growing Season
11	Shalini Rawat, Barbara Lyons	Parallel Drug Development Strategies for Fibrolamellar Hepatocellular Carcinoma and Proteasome-Dependent Multiple Myeloma
12	Alyssa Olivas Vanderlinden, PhD	Gait and Dual-Task Performance in Children with Autism Spectrum Disorder

13	Chinyere Awaogu, Charles Shuster, Angela korte, Fran Montenegro	Muscular regulatory mechanism in larval development using Sea Stars
14	Ayodeji M. Fajoye, Koffi Djaman, Murali K. Darapuneni, Maryfrances Miller	Effects of Seeding Rate and Row Spacing on Tepary Bean Crop Growth, Biomass, and Yield.
15	Gowthami, D., Lujan, P., Guzman, I., Vilasko-Cruz, C., & Sanogo, S.	Evaluation of Genetic Soil Disinfestation for Managing Phytophthora capsici in Chile Pepper
16	Luisa Alvarez-Chacon, Leslie Gonzalez, Efren Delgado, Govinda Sapkota, Jorge Gamero-Barraza, Jaya Shankar Tumuluru, Gonzalo Miyagusuku-Cruzado	The New Caramel: Using New Mexico Pecan (Carya illinoensis) Shells as a Source for Caramel Colorant Alternatives for Food Applications.
17	Megan Lemmo, Brian Millsap, Martha Desmond, Fitsum Abadi	Post-fledging survival of American kestrels in the Chihuahuan Desert
18	Saeid Zehtab Salmasi *, Lovepreet Singh, Robert Heyduck	Can we grow Saffron in Northern New Mexico?
19	Niklas Kronlein, Ryan Ashley	Elucidating the role of the CXCL12/CXCR4 chemokine axis in regulating vascular endothelial growth factor (VEGF) across sheep pregnancy.
20	Yusuf Anifowoshe, Koffi Djaman, Soum Sanogo, Dennis Lozada	Irrigation Management in the Growth and Yield of Chile Peppers
21	Selim Reza Tony, Abdulqater Al-Nouman, Jennifer Curtiss	Interplay between ORB2 and Isep (CG46385) in regulating spermatid individualization during Drosophila melanogaster's spermatogenesis
22	Athena Omidian, Dr. Ram Acharya	Heterogeneous Risk Preferences and Mechanization Decisions: A SERF Analysis of Farm Size Effects
23	Anjila Devkota, Piumi Madhuwanthi, Sundar Sapkota, Rajan Ghimire	Modified Biochar Amendments and Moisture Levels Affected CO2 Emission, Soil Health, and Cotton Growth: A Laboratory and Greenhouse Study

24	Ramsheena Ambalathu Rasheed, Dr. Sangu Angadi, Dr. John Idowu, Dr. Brian Schutte	Split Root Method to Analyze the Effect of Hydrogel on Root Development, Physiology and Water Use in Pepper ( <i>Capsicum annum</i> L.)
25	Davor Beltran, Kevin D. Houston, Jessica P. Houston	Exploring the Function of DDX60 in Cancer Related RNA Regulation
26	Isela Garcia, Celia Acosta, Rebecca Palacios	Evaluating the Acceptability of the Conexiones Program for Latina Mothers with Advanced Cancer.
27	Olivia Martinez B.A., Mari- Esther Edwards Ph.D., Carlos Posadas Ph.D., Gabriela Moreno Ph.D.	Race, Gender, Crime, and Media Representation
28	Soyoung Jeon, Jianxian Zhang	Characterization of Pathway-Level Proteomic Alterations in Lung Adenocarcinoma Using Paired Tumor–Normal Samples
29	Shivam Chawla, Dr. Soyoung Jeon, Dr. Lucas Sullivan	Pathway-Focused Analysis of Paired ccRCC Transcriptomes: Deciphering the Trade-off Between Metabolism and Immune Evasion
30	Soyoung Jeon	Biological Pathways Associated with Metabolic Changes in Pancreatic Ductal Adenocarcinoma
31	Md Jakirul Islam Jony Prothan, Chao Fan	Comparing Rule-Based and AI-Driven Methods for Active Fire Detection: A Case Study of the 2022 Calf Canyon–Hermits Peak Wildfires
32	Jennifer Kuchle Ituarte, M. S., Hansuk Sohn, PhD	Using Machine Learning to Detect Cyber Sabotage in 3D Printing
33	Shahriar Rahman Dipon, Jessica Peterson, Christopher Aiken, and Hillary Yoder	Subjective and Physiological Responses for Core Temperature Prediction and Heat Risk Thresholds: A Machine Learning Approach
34	Ralynne Benally	Collaborating for Change: Exploring Phonological Awareness Practices through Participatory Action Research in Mixed-Age Pre-K Classrooms
35	Agyei Baffour, Abigail	Media Consumption and Political Trust in Ghana: Evidence from Afrobarometer Data
36	Sierra, Miya	Pottery Types and Trade Networks in Eighteenth-Century New Mexico
37	Ian Schiefelbein	Caregiving as a Professional Competency in ECE: A Review of Frameworks, Factors, and Possibilities

38	Ana Arslan, Gabriela Montano, Laura Linggi, Stacien Ballard & Elsa Arroyos	Support Groups for Parents of Children with Special Needs
39	Pryonti Bhattacharja	From Farmgate to Market: How Technology, Extension Services, and Women's Empowerment Influence Choice of Sales Location – Evidence from Bangladesh
40	Khatiwada, Ankita; Acharya, Ram	Harvest Timing Concentration and Agricultural Labor Demand in the US
41	Samriddhi Ghimire, Qianyun (Gloria) Zhang	Multiscale Topology Optimization of Lightweight Beams with Embedded Tailored Unit-Cells
42	Elora N. Roberts, Diana M. Tapia, Govinda Sakopta, Gonzalo Miyagusuku-Cruzado	A Drought Resilient Oil Source: Optimizing Yellowhorn Pressing for Sustainable Production

## GROUP 2. 2-3 PM

### Applied Sciences - Gallery Chambers

Authors	Title
Ujjwal Marasini, Ashmita Guragain	damflownet: An Open-Source Finite-Difference Framework for Seepage Modeling in Dam-foundation Systems
Nelson Kandel, Huidae Cho	Quantum Algorithms for Nonlinear Flood Routing: Gate-Based and Annealing Approaches
Md Omar Faruque, Peter Jamieson, Ahmad Patooghy, and Abdel-Hameed A. Badawy	Gate-Breaker: An LLM-Powered Netlist-to-RTL Reverse Engineering Tool
Samriddhi Ghimire, Qianyun (Gloria) Zhang	Toward Multifunctional, Sustainable, and Reliable Infrastructure: Self-Recognizing Composite Structural Elements (SR-CSEs)
Madan Pokhrel, Huidae Cho	Remote Sensing-Based Assessment of Groundwater-Induced Subsidence in the Mesilla Aquifer System in New Mexico
Indronil Bhattacharjee, Christabel Wayllace	Addressing Cold Start Problem in Knowledge Tracing for New Students via Few-Shot Model-Agnostic Meta Learning
Samuel T Orozco, John P Nolan	Engineering Cells to Produce EVs for Biomarker and Therapeutic Applications
Mariam Kareem, Jordan Garcia, John Idowu, Jose Ortega-Carranza, Anowar Islam*, Xiufen Li*	Nutrient Dynamics During A 100-Day Microbial Decomposition of Organic Amendment

### Life science - Senate Chambers

Authors	Title
Temitope C. Olasunkanmi and Christopher S. Cramer	Evaluation of Selection Progress for Fusarium Basal Rot Resistance in Onions
Diana C. Bautista Tovar, Kevin D. Houston	Insulin-like growth factor binding protein-3 a protein with a metabolic fuel role in breast cancer cells
S. Salopek, M. Mullins, E. Alvarez, R. Ashley	Effects of Treated Produced Water on Murine Reproduction

Delaram Jafari, Jennifer Curtiss	The Role of Rap1 in Primary Pigment Cell Development in the Drosophila melanogaster Eye
Mst Tasrin Aktar, Vinavi A. Gamage and C. Donovan Bailey	Using Differential Gene Expression Analysis to Investigate Heteropsylla cubana Herbivory Responses in the Genus Leucaena
Latifat Jimoh, Andres Perea, Lara Macon, Rick Estell, Micah Funk, Maxi Spetter, Mehmet Bakir, Sheri Spiegel, Brandon Bestelmeyer and Santiago Utsumi	Transition of Rarámuri Criollo and Angus-Hereford cattle herds to low-pressure virtual fencing containment applied to arid rangelands
Hemant R. Awasthi, Juan P. Frene, Sundar Sapkota, Sangamesh V. Angadi, Prakriti Bista, and Rajan Ghimire	Increasing Sub-Soil Carbon Storage and Soil Health with Circular Grass Buffer Strips of Perennial Grasses in Limited-Irrigation Cropping System

### Social sciences - Doña Anna Room

Authors	Title
Matilda Bekoe	Spatial Patterns of Vegetation Around Bus Stops in Las Cruces, New Mexico
Rigesh Krishnaraj, Suparna Chatterjee, Sumanth Reddy Nandhikonda	"I would like to learn more about design." A Professional Development on Additive Manufacturing
Chandima Weerakondabaduge, Qin Zhou, Carol Flinchbaugh	AI education in a case analysis approach: A quasi-experimental investigation
Saba Omidian, Dr Marshal Taylor, Dr Heather Harper	Institutional Framing and Contextual Meaning in United States Public Health Tweets During Covid-19

### Data sciences - Fountain Room

Authors	Title
Dina Advani-Mahmood	Still Here: Structural Barriers and Persistence Pathways for Women of Color in STEM in New Mexico
Francis Isionu Anagah	Firm Size, Infrastructure Constraints, and Performance: A Composite Index Approach.

Mawutor Agbenor-Efunam, Soyoung Jeon, Lucas Sullivan	Protein-Level Insights into Metabolic Reprogramming in Head and Neck Squamous Cell Carcinoma
Crispin Awodanzo Ajugu, Dr. Chao Fan	Mapping Healthcare Access Deserts and Compound Heat–Socioeconomic Vulnerability in New Mexico Using Density and Spatial Cluster Analysis

### GROUP 3. 3-4 PM

#### Exact and applied Sciences - Gallery Chambers

Authors	Title
Innocentia Ijeoma, Brian Gold	From Flatland to Curved $\pi$ -Systems: Harnessing Pericyclic Reactions for the Synthesis of N-Doped Polycyclic Aromatics
Ruwa Abdel Muhsen, Adina Oprisan	Bridging the Gap: The Convergence of Cox–Ingersoll–Ross to Reflected Ornstein–Uhlenbeck Models
Pavithra Sewvandi Adhikari, Dr. Adina Oprisan	Asymptotic behavior of a time change Wiener process
Shradda Bhandari, Dr. Vimal Chaitanya	A Predictive Tool for Optimizing Various Parameters Used in LPBF for 316L Stainless Steel
Qianyun (Gloria) Zhang	Integrated Mechanical Metamaterials and Nanogenerator for Strain Sensing and Measurement

#### Life science - Senate Chambers

Authors	Title
Sushila Bhusal, Ganesh Lamichhane, Kanti Shrestha, Usha Kunwar	Bioactive Compounds and Proximate Composition in Fruit Peels and Pulps: Comparative Biological Activities and Molecular Docking Insights
Elisabeth Zeitz, Hillary Yoder	Self-selected exercise intensity during different subphases of the menstrual cycle
Beatrice Oyeyemi, John Idowu, Murali Darapuneni	The effects of nitrogen, phosphorus, and biochar fertilization on prickly pear growth and yield.

## Social sciences - Doña Ana Room

Authors	Title
Yi Wu	Increased Cognitive Loading in Job Postings Leads to Decreased the Intension of Application- an Empirical Study
Md Safiullah Kayesh	Married Before Eighteen: Quantifying the Drivers of Child Marriage Among Rural Women in Bangladesh
Diana O'Brien, Dr. Rhianna Thomas	Centering Young Children and Families: A Proposed Photovoice Study of Family-School-Community Partnerships
Esther Korsah	To Cross a Border Is To Build a Border: Grounding Students' Experiences
Arra Carbajal	Negotiating Belonging: Queer Families in Early Childhood Education
Jackie Shipley, Dr. Sarah Wiegand	Staying in the Work: Meaning, Stress and Retention Among Infant and Toddler Educators