

30th Annual Undergraduate Research and Creative Arts Symposium
Friday, April 25, 2025
Corbett Student Union
New Mexico State University

Time Slot	Session Title	Location	Presenters
8:30-9:30 Panels	1. Innovations in Robotics and Autonomous Systems Convener: Danial Anjum	Doña Ana Room	<ol style="list-style-type: none"> Lizbeth Karely Silva Chavez and Liliana Holguin, “Design and Development of a Low-Cost 3DOF Hover Platform for UAV Control System Testing” Fabian J. Talavera, “Structural Design and Prototyping of an Omnidirectional Unmanned Aerial Vehicle” Edward Rivota, “Neuromorphic Compatible Autopilot”
	2. Mathematics and Logic Convener: Dr. Ilya Shapirovskiy, with Dr. Sebastian Melzer	Curry Room	<ol style="list-style-type: none"> Hannah Himelright and Andrew Melendrez Zerwekh, “On Computing Quotients of Finite Kripke Frames” Remi Salinas Schmeis, “A Structural Difference in The Orthogonality Spaces of R^3 and C^3” Gabriel Agnew, Uzas Gutierrez-Hougardy, and Jackson West, “Modal Logic of Closeness in Euclidean Spaces”
	3. Mental Health & the Arts Convener: Dr. Anne Hubbell	Senate Chambers	<ol style="list-style-type: none"> Ariana Rael, “Neurodivergence, Mental Health, and Music” Cade Borner, “Portrayals of Masculinity in Metal Lyrics” Guinivere Mayse, “Yoga Through the Ages: Integrating Art History and Mindfulness”
	4. Social Sciences and Data Convener: Dr. Lori Keleher	Fountain Room	<ol style="list-style-type: none"> Lizzett Solis and Natalie Nguyen, “Quality Improvement Teaching Strategies in Family Medicine Residency” Joshua Wood, “Developing Future Leaders: The Impact of the ASNMSU Roadrunner Internship Program” Shabhan George, Zachary Carmichael, Michael Gremse, “Byte Bungalow: Webscraping for Rapid Data Visualization and Aggregation” (livestreamed)
9:40-10:40 Panels	1. Health and Disease Convener: Dr. Graciela Unguez	Doña Ana Room	<ol style="list-style-type: none"> Cristian Acosta, “Parvovirus Contraction in Dona Ana in Relation to Average Household Income, Population Density and Stray Dog Population” Gabrielle Baca, “Molecular Analysis of Triatomine Insects for <i>Trypanosoma cruzi</i> Infection and Bloodmeal Sources in Las Cruces, New Mexico” Matthew Ross, “The Effect of Game Format on Intramural Officials’ Physical Activity Levels”
	2. Engineering Design, Control Systems, and Imaging Technologies Convener: Dr. Rossana Villegas	Senate Chambers	<ol style="list-style-type: none"> Sevren Jackson, “Multi-axis Investigation of the Box Assembly and Removable Component” Elliot Cisneros, “Open-Source Inverted Pendulum for Affordable Control Systems Research” Mario Esteban Saenz Trejo, Valerie Guzman, and Arturo Rivera, “3D Reconstruction of Static Indoor Spaces Using an Intel® RealSense™ LiDAR and RGBD sensor”
	3. Publishing, Design, and Arts of Visualization Convener: Dr. Anne Hubbell	Fountain Room	<ol style="list-style-type: none"> Jessica Barrio, “Frigid Mornings and Other Stories” Jason Christopherson, “The Importance of Being Beautiful: The Aesthetics of Games” Kayla Blundell, “Illuminating the Cosmos: Bridging STEM and Art in Astronomy and Solar Physics”
	4. Agriculture and Environmental Sciences Convener: Dr. Niall Hanan	Curry Room	<ol style="list-style-type: none"> Jade Collins, “Evolutionary history of mimosine production in agriculturally significant legumes” Brooke Yehle and Mario Rodriguez, “Comparing Traditional Agave Production and Farming Practices with Modern Practices and its Effects on the Tequila Industry” Estevan Soto and Alfonso Hernandez-Barraza, “Natural Disasters: Long Term Effects”
10:50-12 Posters	Poster Session & Exhibits	Corbett Ballroom	120 group and individual undergraduate posters and exhibits. Presenters will be on hand to discuss their work with attendees.
10:50-12 Panels	1. Creativity and Culture Convener: Yooko Peters	Doña Ana Room	<ol style="list-style-type: none"> Jonathan Davis, “‘It was the best of times, it was the worst of times’: Ballet as Literature” Grafton Urbatsch, “Finite Value”
	2. Shakespeare Dr. Tyson Stolte	Senate Chambers	<ol style="list-style-type: none"> Eliza Phillips, “The Bard & the Gothic” Katie Mena, “‘Upon a True Contract’: The Shifting Landscape of Marriage Vows in Early Modern England and <i>Measure for Measure</i>” Angelina R. Mora, “A Comparison of the Ambitious Efforts of Lady Macbeth and Goneril” Frida Estrada, “Teaching <i>Macbeth</i> for 10th Grade
	3. Cultural and Geological Borderlands	Fountain Room	<ol style="list-style-type: none"> Julianna Hernandez, “Educational Anthropology in The Borderlands” Dolores Melchor, “A Recipe for Change: Transforming Traditional Foodways in Mesilla, New Mexico”

	Dr. Lori Keleher		3. Jordan Bell , “Geochemistry of Proterozoic Rocks in the Burro Mountains: Helping to Understand the Proterozoic History of the Mazatzal Province”
12-1 Lunch	Lunch for URCAS presenters and faculty mentors	Corbett Ballroom	Lunch for URCAS presenters and faculty mentors
12:30	Lightning introductions: Research Programs and Faculty Projects	Corbett Ballroom	McNair Scholars Program: Director Marko Mohlenhoff NM-AMP: Dr. Ruby Estrada Discovery Scholars in A&S and HEST: Dr. Mike Hout The Partnership for the Advancement of Cancer Research-U54: Dr. Graciela Unguez ACES UG Research Programs: Dr. Jennifer Hernandez Gifford Biology CURE course: Dr. Jiannong Xu NASA-Funded Here to Observe (H2O) program: Dr. Nancy Chanover Business/Marketing opportunities: Dr. K.T. Manis Genetic Improvement for Sustainable New Mexico Crop Production, Extension Agricultural Services: Dr. Israel Joukhadar, Jannatul Afroze, Dr. Stephanie Walker.
12:30	Preview of BFA Art Opening	Reg Desk	An Honors ambassador will lead a small group from Registration for this tour in Devasthali Hall.
1-2pm Panels	1. STEM Education Convener: Dr. Giovanna Del Sordo	Doña Ana Room	1. Fin Pelowitz and Astrid Montanez , “Supporting the development of a STEM identity in LGBTQ+ Students” 2. Ruby Corona and Liduvina Tolentino , “Translanguaging in STEM: Understanding Bilingual Student Experiences in Introductory Chemistry” 3. Sara Hips and Lacey Yates , “STEM Student Identity and Career Motivations at Hispanic Serving Institutions”
	2. Education & Outreach Convener: Cobe Wilson	Fountain Room	1. Geraldine Romero Tenorio and Itzel Cordova , “Auto ethnography: Our Perceptions of Errors in the Math Classroom” 2. Zenaida Mendoza Levario , “Mental Health and Agriculture: Investigating Agricultural Programming and Tools Supporting Veteran Mental Health”
	3. Chemistry of Life Conveners: Grace Olagunju and Naga Narendra Reddy Potlapalli	Senate Chambers	1. Molly Streich , “Development of High Sensitivity Quantitative Methods for Short Oligonucleotides in Biological Samples” 2. Ian Nelson , “Field-deployed passive trap methodology determines quality of insect molecular data” 3. Nicole Dozier , “Developing an eDNA Assay for Critically Endangered Butterfly <i>Euphydryas anicia claudcroftii</i> ”
	4. Exploring Faculty Mentorship Panel	Corbett Ballroom	Seasoned faculty mentors discuss best practices in faculty mentorship and share tips for students and faculty on how to get started and to work together more effectively. Conveners: Dr. Paola Bandini, NM AMP Director, and Dr. Ruby Estrada, NM AMP Panelists: Dr. Sergio Martínez Montegudo, Family and Consumer Sciences Dr. Graciela Unguez, Biology Dr. Catherine Brewer, Chemical Engineering
2-3pm Panel	Considering Graduate School	Doña Ana Room	What should you know if you are considering graduate school? Answers to your questions about graduate school and ideas about how to fund your degree. Short introductions followed by breakouts for discussion. Panelists: Dr. Carlo Mora-Monge, Associate Dean of Research for Business; Dr. Mike Hout, Associate Dean of Research for HES, Professor of Psychology in Arts and Sciences; Dr. Abdessattar Abdelkhefi, Professor of Mechanical and Aerospace Engineering; Dr. Ryan Ashley, Professor of Animal Science Dir. Marko Mohlenhoff, McNair Scholar Program Ms. Yvonne Franco, Student Success Center
Virtual Talks	Horticulture & Agronomy Instructors: Dr. Kulbushan Grover and Dr. Omar Holguin Comm.: Isha Budha Magar Testimonios from the Borderlands (Honors 336V) Instructor: Dr. Judith Flores Carmona Commentator: Tyler Sehnal Social Sciences Commentator: Carson Pharris	RCW Portal asynchronous	Chloe Roman and Maxine Burford , “Benefits of Using Nature and Landscape Design to Enhance the Health of Urban Populations” Amanda Velazco and Zachary Gurule , “Highs and Lows of Cannabis” ----- Latina Anonima , Animal Science Adriana Cardenas , Doctoral Student in Curriculum & Instruction Alexia Castillo , Criminal Justice Imperio Michelle Hernandez , Studio Arts in Metalsmithing Julianna Hernandez , Anthropology Culture and Language Ashley Rojas , Sociology ----- Camryn Wharff , “Adolescent Social Media: More Harm than It’s Worth?” Katherine Bursum , “Casa de Peregrinos: Fighting Hunger and Building Community” (poster)