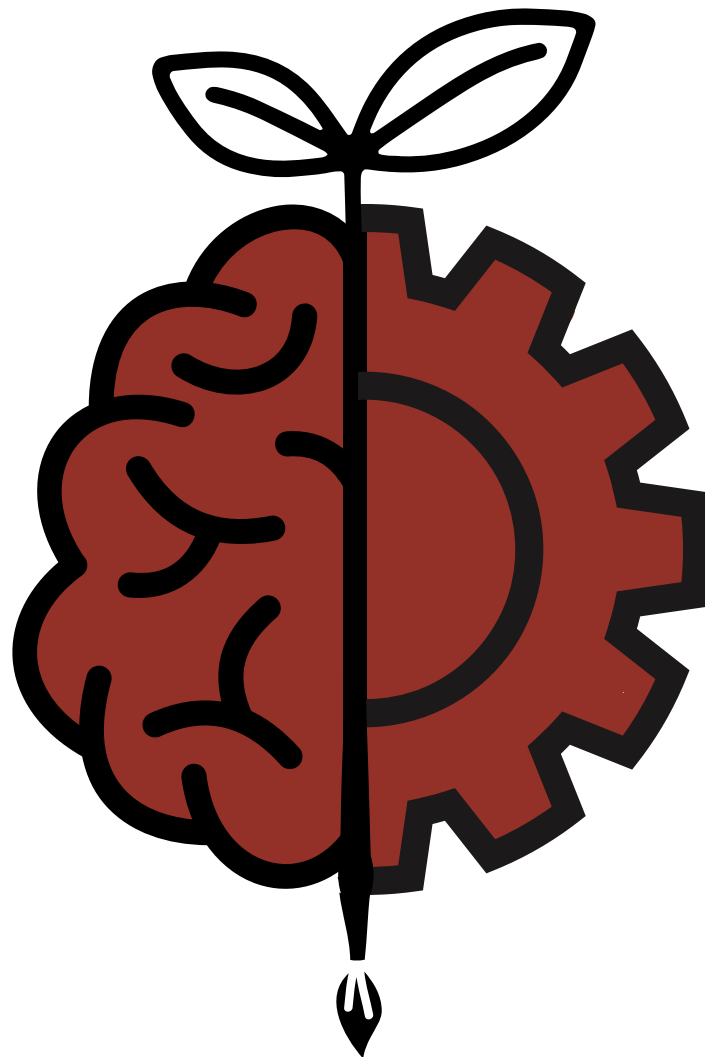


Graduate Research & Arts 2023 Symposium

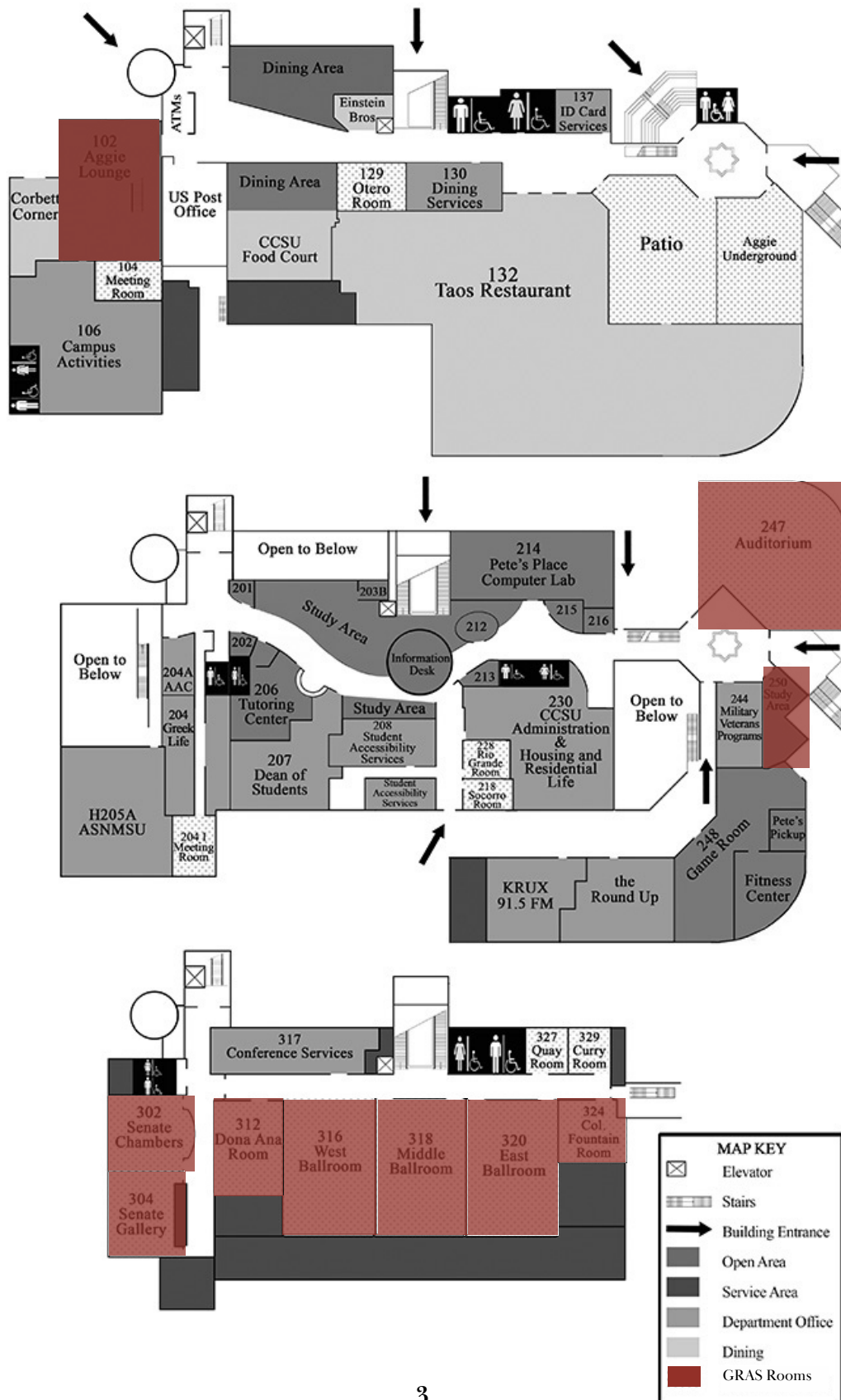


FRIDAY, NOVEMBER 10TH, 2023

NEW MEXICO STATE UNIVERSITY
Corbett Center Student Union, Las Cruces, NM

PRESENTED BY GRADUATE STUDENT COUNCIL

MAP OF LOCATIONS



AGENDA

MORNING

8:00 A.M. - 12:30 P.M.

8:45 A.M.: REGISTRATION OPENS
BALLROOM HALLWAY

9:00 A.M. - 9:30 A.M.: WELCOME SESSION
EAST BALLROOM

9:30 A.M. - 5:30 P.M.: POSTER SESSION
AGGIE LOUNGE

9:30 A.M. - 10:30 A.M.: LIGHTNING TALKS
WEST BALLROOM

9:30 A.M. - 11:00 A.M.: PRESENTATION SESSION I
SENATE GALLERY, SENATE CHAMBERS, WEST BALLROOM, CENTRAL BALLROOM
& COLONEL FOUNTAIN ROOM

11:00 A.M. - 12:30 P.M.: PRESENTATION SESSION II
SENATE CHAMBERS, WEST BALLROOM & COLONEL FOUNTAIN ROOM

AFTERNOON

12:30 P.M. - 6:30 P.M.

12:30 P.M. - 1:30 P.M.: LUNCH BREAK
EAST BALLROOMS

1:30 P.M. - 3:00 P.M.: PRESENTATION SESSION III
SENATE CHAMBERS, CENTRAL BALLROOM & COLONEL FOUNTAIN ROOM

3:00 P.M. - 4:00 P.M.: PRESENTATION SESSION IV
DONA ANA ROOM

3:00 P.M. - 5:30 P.M.: MUSIC AND OPEN MIC PERFORMANCES
CCSU AUDITORIUM

5:30 P.M. - 6:30 P.M.: CLOSING SESSION & AWARDS
CCSU AUDITORIUM

PRESENTATIONS

ORAL PRESENTATIONS I

9:30 A.M. - 10:30 A.M. Senate Gallery

RAYMOND TETTEH

ACES - Agricultural Extension and Education

Significant Support: Describing Work-Life Balance and Job Satisfaction of Agricultural Educators

PATTY MULLANY

HEST - Kinesiology

"Even with the craziness, it worked": PE Teachers Working in and with an Activist Approach

CABEL MCCANDLESS

HEST - Kinesiology

Impact of Exercise Modalities on Dynamic Postural Stability

ADEBAYO ADEOTI

ACES - Agricultural Extension and Education

Exploring Employability Skills Among Agricultural Educators: Insights from Perkins Framework

HEN LIN

HEST - Kinesiology

Mental Imagery Intervention on Tennis Serving Performance on D1 Women's Tennis Team Athletes

ORAL PRESENTATIONS I

9:30 A.M. - 10:30 A.M. Senate Chambers

RUTH TORRES CASTILLO

Arts and Sciences - Computer Science

DEPICT: Enriching Creative Arts Education with Computational Thinking

DIEGO CHAVEZ ARANA

Engineering - Electrical And Computer Engineering

A Comparison of Classic and Neuromorphic PD Control Strategies for Real-time Stabilization of the Ball and Plate Balancer

HAMID DAVOUDI

Engineering - Electrical And Computer Engineering

Market Pricing and Settlements Analysis Considering Capacity Sharing and Reserve Substitutions of Operating Reserve Products

ISLAM OMAR

Engineering - Electrical And Computer Engineering

Forecasting Drought Impacts Using Machine Learning

PRESENTATIONS

ORAL PRESENTATIONS I

9:30 A.M. - 10:30 A.M. Senate Chambers

AKANKSHA VARMA SAGI

Arts and Sciences - Computer Science

Unleashing the Power of Cerebrospinal System
for a Better Computer Architecture

JIEFEI LIU

Arts and Sciences - Computer Science

Multi-Model-based Federated Learning to
Overcome Local Class Imbalance Issues

ORAL PRESENTATIONS I

9:30 A.M. - 11:00 A.M. Center Ballroom

TANNER GUSKEY

Arts and Sciences - Anthropology

What Sources of Copper did the Jornada People
utilize during the El Paso Phase?

KEELY YANITO

Arts and Sciences - Anthropology

Body Modifications within the Southwest through
Rock art and Ceramics

FELICIA LUNA

Arts and Sciences - Anthropology

Cupules: Rock Art, Ritual, or Something Else?

BRANDI WEISS

HEST - Sociology

Life in a Vacuum: A Network Analysis of
Adolescent Risk in Los Alamos, New Mexico

NOELLE FILOTEO YOUNG

HEST - Counseling Education Psychology

COVID-19 Blame Attribution, Anxiety, and Fear

ORAL PRESENTATIONS I

**9:30 A.M. - 11:00 A.M.
Colonel Fountain Room**

NAGENDRA KARKI

Arts and Sciences - Physics

Nitrogen Doped Co₂S₂ As The Promising
Electrocatalyst For Oxygen Evolution Reaction

MARCOS CALVA

Arts and Sciences - Physics

Effects of Radiation Damage on InSb

AUSTIN SHIPLEY

Arts and Sciences - Physics

Radiation Damage in GaSb: A Computational
Study

PRAKASH TIMSINA

Arts and Sciences - Physics

Entropy Induced Two-dimensionality Magnetic
Monopole gases

PRESENTATIONS

ORAL PRESENTATIONS I

9:30 A.M. - 11:00 A.M.
Colonel Fountain Room

BHISHM JOSHI

Arts and Sciences - Physics

Cobalt-Doped YNiO₃ (001) Surface: A Promising Electrocatalyst for Oxygen-Evolution-Reaction (OER) in Water Splitting

HASAN RAHMAN

Arts and Sciences - Physics

Calculating The Cherenkov Radiation Emitted by Low-Energy Proton In Liquid Argon (LAr) Near UV Resonance (~106.6 nm) And Comparing With Argon Scintillation Light At 128 nm.

ORAL PRESENTATIONS I

9:30 A.M. - 11:00 A.M. West Ballroom

ALONDRA VILLALBA

Arts and Sciences - Biology

Effects of Chronic Stress on the Physiological Stress Response of Budgerigars

PAUL OLADIMEJI GABRIEL

Arts and Sciences - Molecular Biology

Nutrient Uptake Channels/Genes of Pecans Allow Crosstalk between Pecan and Its Immediate Environment

MOLLY AUSTIN

ACES - Animal and Range Sciences

Effect of lipopolysaccharide Induced Immune Response on Reproductive Parameters in Breeding Ewes

DELARAM ESMAEILI

Arts and Sciences - Biology

Rancid Rumors or Native Wisdom? Evaluating the Efficacy of Insect Repellents Attributed to Historic-period American Indians.

AQSA MUZAMMIL

Arts and Sciences - Biology

Exploring Role of Nep1 and Nep15 in Drosophila Melanogaster Adult Muscle

PRESENTATIONS

ORAL PRESENTATIONS II

11:00 A.M. - 12:30 P.M.
Senate Chambers

SUMAN SHARMA

ACES - Plant and Environmental Sciences

Extraction and Identification of Antifungal Steroidal Saponins to Combat Fusarium Basal Rot in Short-Day Onion Cultivars

ABDULQATER AL-NOUMAN

Arts and Sciences - Biology

The Drosophila Melanogaster TENT5 Homolog is Required for Individualization of Spermatids

BATOOL AL-KHATIB

Arts and Sciences - Molecular Biology

Immunolocalization of Beet Curly Top Virus AND GroEL Chaperon Protein of Endosymbionts in Vector Tissue

NINA DROPCHO

ACES - Plant and Environmental Sciences

Expanding Methods for Identifying Plant Hosts of the Beet Leafhopper

DEBLINA MISRA

Arts and Sciences - Biology

Navigating Signaling Pathways: A Phosphoproteome Study of Resistant and Susceptible Biomphalaria Glabrata Snails

ORAL PRESENTATIONS II

11:00 A.M. - 12:30 P.M. West Ballroom

CALLIE BURROW

Arts and Sciences - Criminal Justice

A Mixed Methods Analysis Comparison Between National Media and Border Media News Articles about Immigration at the US-Mexico Border

ADITYA GHALSASI

Arts and Sciences - Government

India and the Chagos Sovereignty Dispute

CINDY AFOAKWA-ACHEAMPONG

Arts and Sciences - Communication

The Impact of COVID-19 Protocols on Membership Negotiation and Activity Coordination in a Health Center

JESSICA AFFUL TULEASSI

Arts and Sciences - Communication

The Intersection of Gender Identity and Organizational Identity in the Female Military Profession

PRESENTATIONS

ORAL PRESENTATIONS II

11:00 A.M. - 12:30 P.M. West Ballroom

ISAAC NEWTON NYATUAME

Arts and Sciences - English

Toward Environmental Rhetoric and Justice:
Examining the Ethic of Expediency in Ghana's
Illegal Mining Galamsey' Practice

SANDRA ODURO

Arts and Sciences - English

Towards a Social Justice Approach: The
Adoption of Multimodality and User Participation
in the Design of New Mexico State's Drivers'
Manual

ORAL PRESENTATIONS II

**11:00 A.M. - 12:30 P.M.
Colonel Fountain Room**

HONOR BEESON

Arts and Sciences - History

Mis Memorias: An Oral History of the Mesquite
Historic District

JOSHUA VENEGAS

Arts and Sciences - History

Beyond the Scene: The Rise of BTS as a Global
Pop Sensation

RICHARD LEWIS

Arts and Sciences - History

The Nestor Armijo House

RYAN DEFRONZO

Business - Marketing

Trendy or Trying Too Hard: The Interaction
Between Brand Heritage Cues and Social Media
Platform Logos on Attitudes and Behavioral
Intentions

ABDUL KHALIQ

*Business - Economics, Applied Statistics, and
International Business*

Environmental Impacts of Natural Resources and
Electricity Distribution Losses in Pakistan: A
Dynamic ARDL Assessment

AMIT MILLO

Arts and Sciences - Geology

Using Modern Field Techniques to Understand
New Mexico's Geologic History

PRESENTATIONS

ORAL PRESENTATIONS III

1:30 P.M. - 3:00 P.M.
Senate Chambers

JUAN SOLIS

Engineering - Civil Engineering

Evapotranspiration Reduction in an Engineered Natural System to Manage Saltcedar (Tamarisk spp.) in Riparian Areas of Arid Environments

W. M. LAKMA KALPANI ABEYRATNE

Engineering - Civil Engineering

Recovery of Energy and Nutrients from Domestic Wastewater Sludges

POUYA ALMASI

Engineering - Civil Engineering

A General Method for Pre-flight Preparation in Data Collection for UAV-based Bridge Inspection

ZADA TAWALBEH

Engineering - Civil Engineering

Spatiotemporal Variability of Alfalfa ET Under Farming Practices in the Mesilla Valley

ROSHIRA DIMALKA PREMADASA

Engineering - Civil Engineering

EcoCFTrack: Advanced Diagnostic, Monitoring, and Tracking Device for Affordable Cystic Fibrosis Care

ORAL PRESENTATIONS III

1:30 P.M. - 3:00 P.M. Center Ballroom

KEENAN FLYNN

Arts and Sciences - Chemistry and Biochemistry

IGF-binding Protein-4 Requires Wild-type p53 to Inhibit Breast Cancer Cell Progression

ARSLAN ATANGULOV

Arts and Sciences - Chemistry and Biochemistry

Computational Study of DUSP5 Phosphorylation Process

GODWIN TEYE

Arts and Sciences - Chemistry and Biochemistry

Pursuit of Biorelevant Uranyl Complexes

PRESENTATIONS

ORAL PRESENTATIONS III

1:30 P.M. - 3:00 P.M. Center Ballroom

FRANCISCO LARIZ

Arts and Sciences - Chemistry and Biochemistry

Progesterone Induces IGFBP-6 As a Regulator of Progesterone Receptor Mediated Signaling

MARK ALDREN M. FELICIANO

Arts and Sciences - Chemistry and Biochemistry

Oxa-Azabenzobenzocyclooctynes (O-ABCs): Heterobiaryl cyclooctynes Bearing an Endocyclic Heteroatom

ORAL PRESENTATIONS III

**1:30 P.M. - 3:00 P.M.
Colonel Fountain Room**

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The Nestor Armijo House

RYAN DEFRONZO

Business - Marketing

Trendy or Trying Too Hard: The Interaction Between Brand Heritage Cues and Social Media Platform Logos on Attitudes and Behavioral Intentions

ABDUL KHALIQ

Business - Economics, Applied Statistics, and International Business

Environmental Impacts of Natural Resources and Electricity Distribution Losses in Pakistan: A Dynamic ARDL Assessment

AMIT MILLO

Arts and Sciences - Geology

Using Modern Field Techniques to Understand New Mexico's Geologic History

PRESENTATIONS

ORAL PRESENTATIONS IV

3:00 P.M. - 4:30 P.M. Dona Ana Room

ALI HYDER

Arts and Sciences - Astronomy

Moist Convection Induced Local Enhancement of CO - Implications for the Deep-Water Abundance

EZRA HUSCHER

Arts and Sciences - Astronomy

The Mystery of Carbon in the early Universe

UMME KAWSAR ALAM

Arts and Sciences - Mechanical and Aerospace Engineering

Automated Harvesting of Green Chile Peppers with a 6-DoF Robotic Arm

SAMIR KUSMIC

Arts and Sciences - Astronomy

Linking Galaxies to Absorbers in the Epoch of Reionization

ASIF ABBAS

Arts and Sciences - Astronomy

Mass Density Evolution of Mg-II Absorbers

AYLA VALLES

Arts and Sciences - Mechanical Engineering

Dynamics and Velocity-Based Optimization of a Planar Muscle-Driven Snake Robot

ONLINE PRESENTATIONS

ELIZABETH TREVIZO

ACES - Agricultural Extension and Education

Mejorando El Estado Grande: A needs Assessment of Educational Resources for Cattle Producers in Chihuahua

STEPHANIE REINERT (POSTER)

Arts and Sciences - Computer Science

Differentiation in Hematopoiesis: Two Distinct Stages of Erythroid Fate Commitment

HANNAH SUN MELICK

HEST - Counseling Education Psychology

School Based Personnel Perspective on Transborder Students