Volume 22, Issue 8



College of Agricultural, Consumer and Environmental Sciences New Mexico State University

08/02/2022

Keeping up with the College

Dean's Message

Greetings from the College of ACES!

July is over and we are now in full gear, ready to move forward and prepare for the school year. Field days will continue to take place at some of the Science Centers.

In the last week of July, we had the ACES College Leadership Retreat. In this retreat there was the opportunity to listen to advances and goals of the college to move forward and learn about progress in academics, research and extension. An update from the dean is that leadership will be involved in various activities.



Dean's Retreat on 07/25/2022

There was a very important session in regards to equity, diversity and inclusion directed by ACES EID Co-Directors Drs. Laura Bittner and Karim Martinez. This was a very interesting and applied session.

At the end of the meeting, different department heads presented their faculty needs for their respective programs which fall under the guidelines of the strategic plan and goals for the university and college. There is still a need for positions in the college, but we are working together to tackle the big issues that confront the state in terms of water scarcity, climate change, mental health of New Mexicans, training in agricultural literacy and developing value-added alternatives for the ranchers, farmers and other producers in the state. An update on the GO Bond facilities—images of the three buildings are presented in this newsletter to help us appreciate the advancement of the construction and the progress taking place.

Thank you for your support.

Rolando A Flores Galarza Dean & Chief Administrative Officer

Loland

SPECIAL INITIATIVES

Exploring Climate Smart Farming Options for Semi-Arid Southwest

As droughts and temperature extremes are increasing in recent years, climate-smart practices have been emphasized for securing agricultural sustainability in the arid and semi-arid

Southwest. Cover cropping could be a climate-smart strategy to improve soil health and increase crop production in these areas. <u>NMSU Agricultural Science Center, Clovis</u> researchers tested cover crop impacts on greenhouse gas, the gases that trap infrared radiation on earth and create a warmer environment, emissions, soil health, and forage production in semi-arid irrigated conditions.

Winter cover crops could serve as a climate-smart practice for the semi-arid southwest. In our study, cover cropping did not necessarily reduce GHG emissions, but the yield benefits from cover crop plots compared to no cover crops demonstrate its potential as a climate-smart strategy for arid and semi-arid agroecosystems. Cover crops increased crop yield by 13-30% compared to leaving land fallow during winter. To put this in another way, cover cropping can reduce the fertilizer and irrigation need by 15-20% and, at the same time, protects the environment if a farmer has the same yield goal with and without cover crops. Considering the environmental footprints and crop yield potential, we demonstrated the benefits of integrating cover crops in forage crop-fallow systems.

More information on this study can be found at <u>https://www.nature.com/articles/s41598-022-</u> <u>16719-w</u>, or please get in touch with Rajan Ghimire via email: <u>rghimire@nmsu.edu</u>





WATER FOR AGRICULTURE

Water Policies to Protect the Food Supply

New Mexicans face an important challenge in the search for sustainable food and water security, likely to be elevated with growing evidence of climate change. The Rio Grande ran dry in Albuquerque in July 2022 for the first time in 40 years.

A recent work published by a former NMSU Water Science and Management PhD student, Dr. Shokhrukh Jalilov, used data from Bangladesh. Dr Jalilov and his co-authors, including NMSU ACES Professor Frank A. Ward, performed a series of policy experiments to discover an affordable set of measures to protect food grain security as well as ensure profitability of high valued crops.

The authors found that policymakers can achieve both food grain security and farm income from high value crops at a minimum cost of economic welfare reduced. This work carries implications for New Mexico agriculture in the ongoing search for measures to protect farm income in the face of ongoing water supply fluctuations.

The research article is titled "Exploring strategies to control the cost of food security: Evidence from Bangladesh," and was published in the journal *Agricultural Systems* in February 2022, with a clickable summary at

https://www.sciencedirect.com/science/article/abs/pii/S0308521X21003048

Please contact Frank Ward at <u>fward@nmsu.edu</u> for more information.



ACADEMICS

Can I Study Climate Change in the College of Agricultural, Consumer and Environmental Sciences?

As Associate Dean I often get the question, "Does the College offer educational programs in climate change?" The short answer is "absolutely yes!" In fact, one of the College's core pillars is Environmental Stewardship, and this is actually reflected in our College name.



There are great opportunities for students to study climate in our College. Several

ACES majors have a focus on climate, namely: Conservation Ecology, Environmental Science, Natural Resources & Economic Policy, and Range Science. These majors equip students with the knowledge and experience to address issues related to protection of natural resources and tackle real world problems. We utilize integrated ecological approaches, study various evolutionary processes, engage multiple scientific disciplines, and consider economic and policy impacts. Therefore, graduates have the background to make an impact in climate-related areas. It is important to point out that all of our majors address contemporary issues, inclusive of climate change and sustainability.

Additionally, ACES is heavily engaged in climate-related research on a state, national and international level. Research efforts include climate mitigation and adaptation, alleviation of climate-related stressors to protect the well-being of rangeland livestock, and evaluation of the interface of agricultural practices and water utilization on cattle methane production...just to name a few. This research provides great opportunities for graduate students to be engaged in cutting-edge climate research.

Again, Yes! The College of ACES is addressing climate change to the betterment of current and future generations, and provides great educational programs for both undergraduate and graduate students.

For more information contact Dr. Donald Conner at deconner@nmsu.edu

SUCCESS OF ACES STUDENTS

Recent NMSU graduate to represent NM, Navajo Nation at national conference

A recent New Mexico State University graduate will represent New Mexico and the Navajo Nation at the first-ever Western Governors' Leadership Institute later this month in Idaho.

Sunshine Tso, who earned a bachelor's degree in agricultural economics and agricultural business from NMSU's College of Agricultural, Consumer and Environmental Sciences in May, will participate in the inaugural leadership institute from July 24–28. Jay Lillywhite, professor and head of the Department of Agricultural Economics and Agricultural Business, nominated Tso to the leadership institute.

The Western Governors' Association and its philanthropic arm launched the leadership institute this year to recognize and reward the effective exercise of leadership by young adults across the western United States and promote and encourage future development across the 22-state region. The association bills itself as an instrument for bipartisan policy development, information exchange and collective action on issues of critical importance to the western U.S. Tso is one of two NMSU students selected to serve as delegates in the leadership institute. The event begins with a forum of speakers, including governors, business leaders and presidents of various organizations. The delegates will also attend the Western Governors' Association annual meeting, where the cohort can observe the discourse between governors of different states and different parties engaging on significant issues.



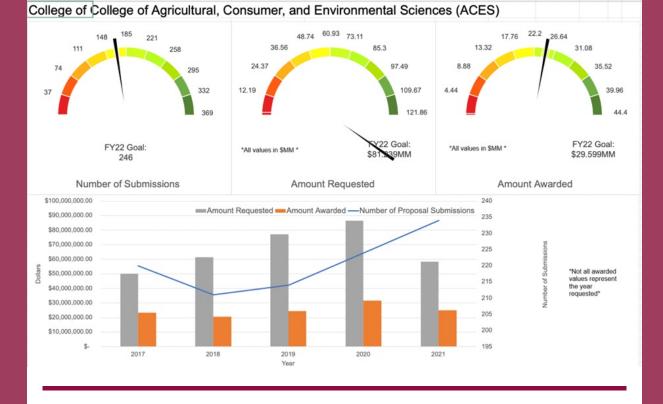
For more information contact Dr. Jay Lillywhite at lillywhite@nmsu.edu

AGRICULTURAL EXPERIMENT STATION

AES Grantsmanship

The <u>Agricultural Experiment Station (AES)</u> is the principal research unit of ACES. AES researchers work at NMSU's main campus and at twelve agricultural science centers throughout the state. The AES system supports fundamental and applied science and technology research to benefit New Mexico. The funding for AES is supported by state and federal appropriations, sales, and largely grants and contracts. ACES research has led NMSU for the sixth straight year in grants sought and secured. AES faculty, staff and student work hard to ensure New Mexico's investment in AES is matched by more than a 1:1 ratio.

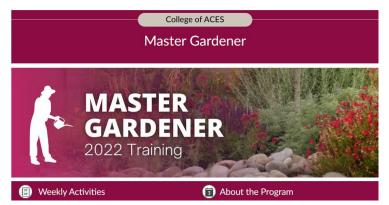
For more information contact Claire Montoya at ccortner@nmsu.edu



EXTENSION PLANT SCIENCES

Extension Master Gardener Training Goes Online with NMSU OnDemand

For Extension Master Gardener volunteers to meet public demand for science-based gardening and home food production information, ongoing training and mentoring is vital. A comprehensive training program is the



foundation for building volunteer horticulture knowledge and key to building confidence to serve as community educators.

For the first time in its 41-year history, the training went digital with the course housed in NMSU's OnDemand platform. Weekly recorded modules and a live question and answer session engaged trainees as well as volunteers. The course enrolled 210 trainees and 240 Extension Master Gardener Volunteers. With 88% of attendees over the age of 55 and 69% aged 65 to 75, for many it was their first experience with online learning. The flexibility of the training allowed those working fulltime an opportunity to participate. In 2023 a gardening course based on the Extension Master Gardener curriculum will be available to the public

For more information visit the Extension Plant Sciences home page at: EPS Home (nmsu.edu)

PLANT AND ENVIRONMENTAL SCIENCES

New DOE Support for Water Science at NMSU

Water is the lifeblood of watershed ecosystems. Because of the spatiotemporal distributed and patchy nature of water flow and biogeochemical reaction rates, watersheds present unique challenges for comprehensive and quantitative study, experimentation, and observation. To improve our conceptual understanding of the health and function of these critical ecosystems we need new ways to monitor the "pulse" and health of streams and rivers with an emphasis on the dynamics surrounding



hydrologic disturbances. To address this need, Dr. Kenneth "KC" Carroll's research group was just awarded a new DOE Office of Science grant (Project Title: Hydro-EKG: In-Stream Streaming-potential [SP] Electrical Monitoring of the Lifeblood of Watersheds during Disturbance) through the Research Development and Partnership Pilot (RDPP) program:

https://www.energy.gov/science/articles/department-energy-announces-47-millionresearch-and-development-partnership-pilots.

This is one of 35 new projects (https://science.osti.gov/-/media/ber/pdf/Awards/BER-RDPP-Awards-List-2022.pdf), which aim to position under-represented academic institutions to make major scientific contributions to support DOE's science mission. These partnerships involve collaborations with national laboratories and/or DOE user facilities to enhance institutional capacity while strengthening and diversifying US science.

Please contact Kenneth C. Carroll at kccarr@nmsu.edu for more information.



Left to right: Sabine Green, Sabrina Montoya, Rhiannon Rodriguez, Alexa Vermillion, Maxine Burford, Madison Baker

<u>NMSU Floral Team design their way to</u> <u>success at national competition</u>

The NMSU Floral team consisting of five undergraduate students and coach Sabine Green, participated in the American Institute of Floral Designers (AIFD) national student competition, which was held from July 4th to 9th, 2022 in Las Vegas, Nevada. This year was exceptional for competitors, as it was the first time since the inception of this contest that all students competing were first time competitors.

Overall, NMSU placed 5th out of 8 collegiate teams. In the People's Choice category, Madison Baker placed 6th and Sabrina Montoya placed 8th. In the Interpretive Design category, Madison Baker placed 2nd, Maxine Burford 4th, Alexa Vermillion 5th, and overall, the team placed 2nd in this category. In the wedding bouquet category, Madison Baker placed 7th. In the Sympathy category, Sabrina Montoya placed 4th.

Students spent a week working with designers from all over the world, watching educational programs, helping in the work room, and even serving as part of the "security team" checking badges and providing direction for the 800 plus attendees of the 2022 AIFD Symposium, which was called "Roots".

The team thanks the sponsors that helped them get to this competition. Sponsors included the Plant and Environmental Sciences Department, Dr. Don Cotter, Professor Emeritus in the Plant and Environmental Sciences Department, and the Power Center of Las Cruces.

For more information contact Dr. Rolston St. Hilaire at rsthilai@nmsu.edu

INNOVATIVE MEDIA RESEARCH AND EXTENSION

Foods & Moves: New Suite of Apps for Young Children

Parents, caregivers, Extension specialists and pre-school teachers have a new resource to help young children get physical activity and increase their willingness to try new foods. Four new mobile apps — Foods & Moves — were created with research from several universities led by Cornell, and were developed by NMSU's Innovative Media Research, and Extension Department.

In **Jungle Gym 1** and **Jungle Gym 2** children build specific gross motor skills as they jump, play and move along with friends through the jungle. These apps help children, and their care providers, experience the often overlooked but key movements essential for development. In **Tasting Party Express**, players feed various foods to different characters and monsters, and build their vocabulary for describing foods — one research-based strategy for encouraging food tasting. Players can **Spin n Move** as they randomly try new activities, such as wiggling like spaghetti or jumping like a frog.

The free apps are available for <u>Android</u> and <u>Apple</u> phones and tablets.



SCHOOL OF HOTEL, RESTAURANT, AND TOURISM MANAGEMENT (HRTM)

Internships for HRTM Students

Students need not only a degree, but also experience when vying for employment in the hospitality industry. The School of HRTM supports students' quest for experience with a three-class series that teaches professional development (HRTM 307), including 400 hours of work experience (HRTM 409), and written reflection on that experience (HRTM 409).

This summer 25 students held official internships overseen by Chef Pete Mitchell. Six were in New



Mexico while 19 were in other states. Students worked with industry partners such as The Lodge in Cloudcroft, JW Marriott Hill Country Resort, Hyatt Regency Lake Washington, Enchantment Resort and our local affiliate, Courtyard by Marriott Las Cruces. During this time, the students improve their ability to network with employers who may offer them future employment and/or provide references. Employers today are looking for individuals like our HRTM students who have strong cognitive and operations abilities, work ethic, and professionalism.

For more information contact Dr. Jean Hertzman at jhertzma@nmsu.edu

Kaitlyn Kircher at 4UR Ranch in Creede, Colorado



Luz Diaz at The Lodge at Cloudcroft

LET'S MEET THE ACES BUSINESS AND RESOURCES PLANNING TEAM



Since it was organized in March 1990, the Office of Business & Resource Planning in the College of Agricultural Consumer & Environmental Sciences (College Business Office) at New Mexico State University has worked to fulfill its mission. The College Business Office's mission includes creating routine and meaningful fiscal reports to meet the college executive management team's needs, coordinate budgeting efforts for all college organizational units – (the Agricultural Experiment Station (AES), the Cooperative Extension Service (CES), Instruction & General (I & G), Indian Resource Development (IRD), the NMSU Rodeo, the Center of Excellence, and the Anna Age Eight program – coordinate and communicate off–campus fiscal needs, provide guidance to college staff to ensure compliance with NMSU policy, procedure, practice, and federal and state regulations, provide pre–award support to professionals who seek sponsored funding, and interacting with the college's federal partner USDA/NIFA. This office also interacts with outside fiscal audits and program fiscal reviews annually as well as coordinates responses to reviews conducted by the Office of Audit Services here on campus.

Tim Nesbitt

Assistant Dean/Director

Tim has received a Bachelor of Accountancy and Masters of Arts. He began working at NMSU as a staff accountant in the central business office in July 1980 after spending two years in public accounting focused on personal income taxation and auditing banks and savings and loans and non-profit organizations. Tim came to the College of Agricultural Consumer & Environmental Sciences in March of 1990 to direct the newly created Office of Business and Resource Planning. Tim has three grown sons, Matthew, Samuel, and Peter, and an eleven-year-old daughter/granddaughter Addelynn.

Diane Pierce

Sr. Program Manager

Diane is in her second stint in the Office of Business and Resource Planning. Diane graduated in Jan. '89 with a Bachelor of Accountancy from NMSU. She worked for five years in public accounting with KPMG Peat Marwick out of Albuquerque before returning to NMSU to work on a master's in education in Feb. of '94. Diane has worked in many offices throughout campus, she has over 27½ years with NMSU in total. She's excited to be back in the College of ACES and looks forward to working with everyone.

Misty Haynes

Sr. Program Manager

Misty Haynes holds an Associate Degree from New Mexico Junior College and both a Bachelor and Master's Degree in Business Administration from New Mexico State University. Misty started working with NMSU in August 1998 at the College of Education. In March of 2006 Misty accepted a Contract Administrator position in ACES and began her Pre-Award Administration career. In January 2012 Misty was promoted into her current role of Sr. Program Manager. Misty works directly with ACES faculty/staff and central administration on all externally submitted proposals and reviewing awards and modifications for acceptability.

Marlon L. Barrera

Intermediate Accountant

Marlon comes from a small town named Sunland Park in New Mexico. Marlon earned his Bachelor of Accountancy in May 2020 at New Mexico State University, but he did not think it was enough. He came back to earn his Master of Accountancy in May 2022. Marlon works on the post-award side of the office, which includes budget monitoring, and financial reporting. Marlon enjoys spending his free time with his friends and family.

Elisa M. Bradford

Accountant, Inter.

Elisa has a Bachelors in Accounting & Finance and a Masters of Science in Accounting & Information Systems. Elisa started a bookkeeping business while studying in 1996, which is still active today. She has worked both the private and public accounting sectors, state and university settings. Elisa is a member of the National Council of University Research Administrators. Elisa is blessed with three sons Rod, Lucius and Patrick and four grandsons Trent-14, Layne-10, Deven-18, and Luke-16.

Eva Cortez

Accountant - Intermediate

Have been employed at NMSU for over 34 years all through the College of Ag, 15+ years in the OBRP.

Diane D. Granados

Accountant - Intermediate

Diane earned her Bachelor of Accountancy degree from here at NMSU and began working here at NMSU at the Arts & Sciences Research Center in 1993. Diane also has worked 4 years each in Research Administrative Services and Sponsored Projects Accounting. Diane joined the College of Agricultural Consumer & Environmental Sciences in March of 2013. Diane and her husband Ronnie have three children, Jacob, Angela, and Alyssa.

Stephanie Mijares

Student Aid

Stephanie plans to graduate from NMSU with a Bachelor of Business Administration. Stephanie is the student aide for the Office of Business and Resource Planning. Stephanie enjoys spending her free time exploring and capturing photos of wildlife.

Kayleigh Getkin

Grants Coordinator

Kayleigh started working at the Office of Business and Resource Planning in the College of Agricultural, Consumer & Environmental Sciences as a student employee in 2017, while working on receiving her bachelor's degree in agricultural communications and minor in journalism and mass communications. After graduating in 2020, she worked as a temporary employee until she joined the staff as a full-time employee in January of 2022.

Celia T. Chavez

Administrative Assistant - Assoc.

Celia Chavez returned to us here in the college after enjoying a few years of retirement. Celia works hard to keep up with NMSU policy, procedure, and practice to ensure a smooth processing of college staff travel expense reports, deposits and other important business forms. Celia serves with a smile and a can do attitude.

2022 ACES AWARDS

The ACES Awards Selection Committee voted on the 2022 faculty and staff nominations that were submitted for our distinguished awards. Please join us in congratulating each one of these award winners for their dedication to NMSU-ACES.

To view the award winners visit the following link. <u>NMSU: ACES - Nominate Faculty & Staff for</u> <u>Awards</u>

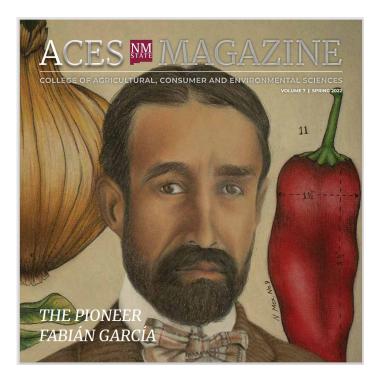
COLLEGE OF ACES 2021 ANNUAL REPORT

This report showcases the many achievements and the impacts accomplished throughout the College of ACES and its main areas and programs during 2021.

To view the full annual report click on the link below: <u>2021-aces-annual-report_r.pdf (nmsu.edu)</u>



COLLEGE OF ACES MAGAZINE - SPRING 2022 ISSUE



ACES Magazine Spring 2022 - Issue

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NEW HIRES OF THE COLLEGE

<u>June, 2022</u>

Name 🚽	Department	Title 🔽
Angela M. Prada	Admin and Pgm Unit Los Alamos Cnty	Ext Assoc I
Bonnie S. Mikkelson	Admin and Pgm Unit Guadalupe Cnty	Ext Agric/4H Agent
Brian. Hinds	Extensn Computer Supp Svcs	Systems Analyst,Sr
Chad L. Begay	Ag Science Ctr at Farmington	Ag Science Center Laborer
Christy. Green	Cooperative Extension Service	Program Manager
Elvira. Esparza	Animal and Range Sciences	Fiscal Asst,Sr
Eric J. Nez	Leyendecker Plant Sci Res Ctr	Mgr,Farm Ranch
Evan E. Evans	Innovative Media Research & Exten	Multi-Media Spec
Jessica R. Chacon	Extensn Home Ec Pgm Unit	Program Specialist,Sr
Julie M. Hughes	Cooperative Extension Service	Program Operations Director
Lauren E. Baker	Admin and Pgm Unit Grant Cnty	Ext Assoc I
Linda. DeMarino	Extensn Home Ec Pgm Unit	Program Manager
Lynda. Moore	Extensn Home Ec Pgm Unit	Program Manager,Sr
Marwah A. Sobhan Neyaz	Plant and Environmental Sciences	Post Doctoral
Pedro H. Rodrigues de Moraes Martinez	Jornada Exper Range Headquarters	Post Doctoral
Rachel E. Zweig	Admin and Pgm Unit Sandoval Cnty	Ext Agric Agent
Rebecca. Tarango-McCabe	Extensn Home Ec Pgm Unit	Program Manager,Sr
Suzanne. Porter-Bolton	Extensn Home Ec Pgm Unit	CES Ext Program Educator,Sr
Teresa C. Salas	Admin and Pgm Unit Otero County	Admin Asst,Assc
Timothy W. Hand	Extensn Home Ec Pgm Unit	Assc Dir,Anna Age 8
Yi. Zhu	Plant and Environmental Sciences	Post Doctoral
Yvette N. Navarro	Innovative Media Research & Exten	Web Developer,Assc
I VELLE IN. INAVAILO	IIIIOvative Media Research & Exten	Web Developer,Asse

<u>July, 2022</u>

Name 🚽	Department 🗾	Title 🗾
Bo D. Segerman	Agricultural,Consumer & Env Sci Col	Asst Coach,Rodeo Team
Bryce Bitsie	Admin and Pgm Unit Taos Cnty	Ext Agric Agent
Hui Yang	Plant and Environmental Sciences	Post Doctoral
Patricia H. Westfall	Admin and Pgm Unit Chaves Cnty	Admin Asst, General

<u>August, 2022</u>

Department 🗾	Title 🗾
AEAB	Ext Specialist/Ag Markets
AEAB	Asst Professor
Hotel, Restaurant & Tourism Mgmt	Asst Professor
Agricultural, Consumer & Env Sci Col	Planning Officer
	AEAB AEAB Hotel, Restaurant & Tourism Mgmt

ADVANCES ON THE NEW AG BUILDINGS TO DATE



Biomedical Research Center

Food Science, Security, and Safety Facility



Animal Nutrition and Feed Manufacturing Facility

To view a live progress of the construction click on the link below: <u>NMSU: ACES | About -</u> <u>WebCam</u>

SUMMER NEWSLETTERS

To view the Summer 2022 Newsletter from <u>Indian Resources Development</u> click on the link below: <u>Summer 2022 IRD Newsletter (mailchi.mp)</u>

To view the Summer 2022 Newsletter from the <u>Department of Plant and Environmental Sciences</u> click on the link below: <u>Summer 2022 Newsletter (lucidpress.com)</u>

OPEN POSITIONS

For available vacant positions in the College of ACES, please visit, New Mexico State University Applicant Portal | Home (nmsu.edu)

The College of Agriculture, Consumer and Environmental Sciences is an engine for economic and community development in New Mexico, improving the lives of New Mexicans through academic, research, and Extension programs.



College of Agricultural, Consumer and Environmental Sciences New Mexico State University

