#### College of Agricultural, Consumer and Environmental Sciences

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### Western Pecan Growers Association

## **Opening Address**



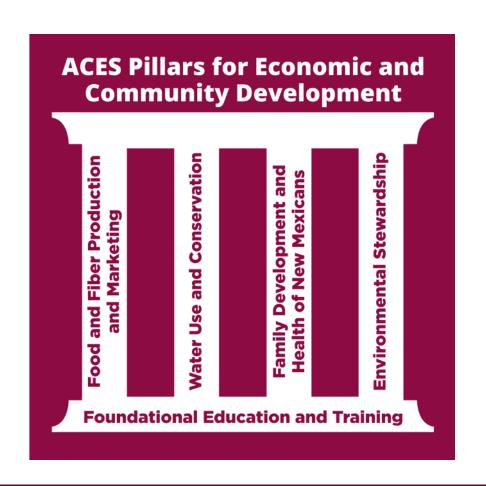
Natalie Goldberg
Interim Associate Dean and Director
Agricultural Experiment Station

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# The College of Agricultural, Consumer and Environmental Sciences (ACES)

- ACES is an engine for economic and community development in New Mexico, improving the lives of New Mexicans through academic, research, and Extension programs
- The work of ACES is centered around these four pillars
- ACES positively impacts:
  - Foundational Educational and Training
  - Food and fiber production and marketing
  - Water usage and conservation
  - Family development and health of New Mexicans
  - Environmental stewardship



#### Food and Fiber Production and Marketing

- Production, protection and marketing of plant and animal products
- Foster technological innovation to enhance competitiveness and security of New Mexico agriculture
- Increase value-added (processing) in the state









## NMSU Pecan Research Highlight "Coordinated Development of Genetic Tools for Pecan"

 NMSU lead institution with 6 others on a \$4 Million+ USDA – NIFA funded project

- Pecan genome sequenced
- Genetic markers assist breeders in developing varieties and rootstocks for specific regions and conditions
  - Salinity tolerance
  - Tree size control
  - Disease management
  - Alternate bearing
  - Nutrient uptake efficiency
  - Water use efficiency
- Potted tree and field testing rootstocks for tolerance to a wide variety of environmental stresses
- This work will greatly improve the pecan industry in all regions of the United States



#### Water Use and Conservation

- Water is the most limiting resource for New Mexico
- All aspects of water use affect agricultural efficiency, profitability, and human health
- Water management is becoming more critical as water demands for urbanization and industrialization increase



### NMSU Research Highlights

- USDA funded research at the Leyendecker Plant Sciences Research Orchards
- Developing irrigation techniques and technologies, including drip irrigation, that will help pecan growers in the west optimize:
  - Irrigation efficiency
  - Increase production and profitability for farmers per acre-inch of water applied





#### Family Development and Health of New Mexicans

- The family is the fundamental institution of society
- ACES conducts research on:
  - human behavior, child and adolescent development
  - Human nutrition and food science
    - Nutrition and wellness programs (prevent sickness)
    - Development of functional foods
  - Clothing and textiles
  - Family resource management
  - Learning development and educational training





#### Nutrition and Food Science

- Consuming pecans has numerous health benefits
  - High in antioxidants
  - High in unsaturated oils ("good fat")
- NMSU is a leader in human health research related to pecans
- NMSU researcher was the first to show a link between pecan consumption and cardiovascular health
- Current work is showing how orchard practices may further improve the health promoting qualities of pecans



# "Center of Excellence in Sustainable Food and Agricultural Systems" (CESFAS)

- 2019 New Mexico Legislative Initiative (not finalized yet)
- "Sustainable agriculture is at the core of NMSU's identity" Chancellor,
   Dan Arvizu
- Research, education and Extension on all aspects of agriculture "from farm to gut"
- Collaboration across public and private entities
- Support innovation that creates value-added industries, creates jobs, improves profitability, and protects our natural resources
- Pecans are a big part of this effort: water use efficiency, higher productivity, value-added industries, and higher profitability!

#### NMSU Update

- 2018 passage of GO Bond D Agricultural modernization and educational facilities
  - Modern feed mill
  - Biomedical research facility
  - Food Science, safety and processing facility
- Along with the CESFAS, a great opportunity to build a state-of-the-art research and education facility to address critical issues related to food security
  - Nutraceutical and functional foods program
  - Specialty markets for meat and produce
  - Food safety program
  - Hemp research and development program
  - Biomedical research
  - Specialty animal feeds





# NMSU Extension – A Leading Authority on Pecan Production

- Western Pecan Production Short Course
- Comprehensive course held every other October
- Attracts participants from all over the world
- Beginners learn a solid foundation for success
- Experienced growers brush up on the basics and learn new information and techniques
- The next short course will be October 2020 mark your calendars!