# CURRICULUM VITAE G.A. PICCHIONI

# **CONTACT INFORMATION**

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# **EDUCATION**

1989. Ph.D. Horticulture. Texas A&M University, College Station

1981. M.S. Horticulture. University of Arizona, Tucson

1979. B.S. Agricultural Science. University of Arizona, Tucson

# RESEARCH, TEACHING, COOPERATIVE EXTENSION POSITIONS

Professor Emeritus	Dept. of PES	NMSU	Las Cruces
Professor	Dept. of PES	NMSU	Las Cruces
Associate Professor	Dept. of PES	NMSU	Las Cruces
Assistant Professor	Dept. of Agronomy and Horticulture	NMSU	Las Cruces
Assistant Professor	Dept. of Agricultural Sciences,	Louisiana Tech	Ruston
	Technology, and Education	Univ.	
Postdoc	Horticultural Crops Quality	USDA/ARS	Beltsville
	Laboratory		
Postdoc	Dept. of Pomology	Univ. of	Davis
		California	
Grad. Research Assistant	Dept. of Horticultural Sciences	Texas A&M	College Station
		Univ.	
Grad. Teaching Assistant	Dept. of Horticultural Sciences	Texas A&M	College Station
		Univ.	
County Agric./4-H Agent	Cooperative Extension Service	NMSU	Los Alamos
Grad. Research Assistant	Dept. of Plant Sciences	Univ. of	Tucson
	_	Arizona	
	Professor Associate Professor Assistant Professor Assistant Professor Postdoc Postdoc Grad. Research Assistant Grad. Teaching Assistant County Agric./4-H Agent	Professor Dept. of PES Associate Professor Dept. of PES Assistant Professor Dept. of Agronomy and Horticulture Assistant Professor Dept. of Agricultural Sciences, Technology, and Education Postdoc Horticultural Crops Quality Laboratory Postdoc Dept. of Pomology  Grad. Research Assistant Dept. of Horticultural Sciences  Grad. Teaching Assistant Dept. of Horticultural Sciences  County Agric./4-H Agent Cooperative Extension Service	Professor Dept. of PES NMSU Associate Professor Dept. of PES NMSU Assistant Professor Dept. of Agronomy and Horticulture NMSU Assistant Professor Dept. of Agricultural Sciences, Technology, and Education Univ. Postdoc Horticultural Crops Quality USDA/ARS Laboratory Postdoc Dept. of Pomology Univ. of California Grad. Research Assistant Dept. of Horticultural Sciences Texas A&M Univ. Grad. Teaching Assistant Dept. of Horticultural Sciences Texas A&M Univ. County Agric./4-H Agent Cooperative Extension Service NMSU Grad. Research Assistant Dept. of Plant Sciences Univ. of

## **SPECIALIZATIONS**

Cell membranes, lipids, inorganic nutrition, solute translocation, salinity, HPLC, ICP

## **COURSES TAUGHT**

Plant mineral nutrition, plant propagation, freshman seminar, greenhouse management, ornamental plant production, vegetable production, pomology, floriculture crops judging and design, introductory environmental science, computers in life sciences, deciduous ornamental plant materials, evergreen ornamental plant materials, herbaceous ornamental plant materials, interior plants, graduate thesis and dissertation, horticultural externship and internship

# **TEACHING HIGHLIGHTS**

### TEACHING PHILOSOPHY IN BRIEF

- Provide plentiful experiential learning and participatory research opportunities.
- Show the students that you are keeping current by maintaining an active research program.
- Create extracurricular leadership opportunities through internships, externships, clubs, and competitions to add enjoyment and increase job competitiveness.

## SELECTED TEACHING INNOVATIONS

Adapted ASHS Outstanding Ornamental Publications Award to a living model for experiential learning on solute translocation in the plant mineral nutrition class.

Transitioned plant propagation labs from face-to-face to fully online to guide undergraduates in home propagation by seed, cuttings, layering, division, grafting, and tissue culture.

Created horticultural externship for 63 undergraduates to apprentice at private horticultural firms. Modified lecture-only plant mineral nutrition course with live "mini labs" featured by NMSU's Advocates for Scholarly Teaching at the annual "Teaching with the Stars" conference.

Awarded USDA-NIFA funding to develop international internship program with Universidad Autónoma de Ciudad Juárez, Chihuahua, Mexico in water reuse research.

Acquired USDA-NIFA funding to use cut flowers as a hands-on medium to teach water appreciation and the scientific method in the classroom.

### SAMPLES OF EXTRACURRICULAR ACTIVITIES AND SERVICE TO THE TEACHING PROFESSION

Awarded USDA-HSI funding to launch NMSU Floral Crops Team to become a permanent department program.

Served as faculty advisor for intercollegiate horticulture clubs for 28 years.

Advised an average of 35 undergraduate horticulture students per year since 1994.

Nominated over 100 undergraduate students for ASHS and university awards.

Coordinated over 75 internships for horticultural undergraduates.

Published five peer-reviewed publications on classroom and lab experiential learning in nursery crop water use, canopy light microenvironments, recycling biosolids and wood chips in nursery potting media, and floricultural fundraising in the classroom.

Two undergraduate research methods papers are currently in preparation

Mentored undergraduate student co-authors of ten peer-reviewed articles.

#### SELECTED STUDENT COMMENTS

- "Possesses expert knowledge of subject"
- "Passes his excitement on to students through 'hands-on' activities"
- "Makes his classes applicable to the real world"
- "Gets us involved in research"

### **EXAMPLES OF STUDENT CAREER PLACEMENT**

University faculty (Arizona, Colorado State, Texas A&M, Angelo State, Tennessee State, Costa Rica, others), high school vo-ag horticulture instructors, community college instructors, private consultants, commercial greenhouse and nursery production managers, cannabis growers, botanic garden horticulturists, horticultural supply sales representatives, retail garden center buyers, forest rangers, range management specialists

# **REFEREED JOURNAL ARTICLES** (Grads/Undergrads in Italics)

- *Lucker, A.O.S.*, G.A. Picchioni, J.D. Consford, R.L. Steiner, I. Guzman, B.J. Schutte, M.K. Shukla, and R.B. Young. 20XX. Brackish groundwater and its desalination brine effects on secondary metabolites of selected native and domesticated halophytes. <u>In preparation</u>.
- Lucker, A.O.S., G.A. Picchioni, J.D. Consford, R.L. Steiner, I. Guzman, B.J. Schutte, M.K. Shukla, and R.B. Young. 2023. Gypsiferous groundwater and its desalination brine concentrate: Biomass, water use, and salt "mining" of three southwestern USA native halophytes. Agricultural Water Management. <a href="https://doi.org/10.1016/j.agwat.2023.108553">https://doi.org/10.1016/j.agwat.2023.108553</a>.
- *Kankarla, V., M.K.* Shukla, and G.A. Picchioni. 2021. Root growth, architecture, and ion uptake of alfalfa and triticale irrigated with brackish groundwater and reverse osmosis concentrate. *Agrosystems, Geosciences, Environment.* https://doi.org/10.1002/agg2.20180.
- *Kankarla, V.*, M.K. Shukla, G.A. Picchioni, D. VanLeeuwen, and B.J. Schutte. 2020. Germination and emergence responses of alfalfa, triticale and quinoa irrigated with brackish groundwater and desalination concentrate. *Agronomy* 10(549), 17. https://doi.org/10.3390/agronomy10040549.
- Picchioni, G.A., *T.N. Hooks*, B.J. Schutte, M.K. Shukla, and D.L. Daniel. 2020. Halophyte ion regulation traits support saline adaptation of *Lepidium latifolium*, *L. draba*, and *L. alyssoides*. *Plant Ecology* 221:295-308. https://doi.org/10.1007/s11258-020-01012-5.
- *Kankarla, V.*, M.K. Shukla, D. VanLeeuwen, B.J. Schutte, and G.A. Picchioni. 2019. Growth, evapotranspiration, and ion uptake characteristics of alfalfa and triticale irrigated with brackish groundwater and desalination concentrate. *Agronomy 9*(789), 17. <a href="https://doi.org/10.3390/agronomy9120789">https://doi.org/10.3390/agronomy9120789</a>.
- Hooks, T.N., G. A. Picchioni, B.J Schutte, M.K. Shukla, and D.L. Daniel. 2018. Sodium chloride effects on seed germination, growth, and water use of *Lepidium alyssoides*, *L. draba*, and *L. latifolium*: Traits of resistance and implications for invasiveness on saline soils. Rangeland Ecology and Management 71:433-442. https://doi.org/10.1016/j.rama.2018.04.001.
- Ozturk, O.F., M.K. Shukla, B. Stringam, G.A. Picchioni, and C. Gard. 2018. Irrigation with brackish water changes evapotranspiration, growth and ion uptake of halophytes. *Agricultural Water Management* 195:142-153. <a href="https://doi.org/10.1016/j.agwat.2017.10.012">https://doi.org/10.1016/j.agwat.2017.10.012</a>.
- *Hooks, T.N.*, G.A. Picchioni, B.J. Schutte, M.K. Shukla, D.L. Daniel, and J. Ashigh. 2018. Salinity an environmental "filter" selecting for plant invasiveness? Evidence from the indigenous *Lepidium alyssoides* on Chihuahuan Desert shrublands. *Rangeland Ecology and Management* 71:106-114. https://doi.org/10.1016/j.rama.2017.07.007.
- Flores, A.M., M.K. Shukla, B.J. Schutte, G.A. Picchioni, and D.L. Daniel. 2017. Physiological response of six plant species grown in two contrasting soils and irrigated with brackish groundwater and RO concentrate. *Arid Land Research and Management* 31:182-203. https://doi.org/10.1016/j.jaridenv.2016.04.003.
- Flores, A.M., M.K. Shukla, D. Daniel, A.L Ulery, B.J. Schutte, G.A. Picchioni, and S. Fernald. 2016. Evapotranspiration changes with irrigation using saline groundwater and RO concentrate. *Journal of Arid Environments* 43:1-7. https://doi.org/10.1016/j.jaridenv.2016.04.003.
- Picchioni, G.A., *S.A. Martinez*, J.G. Mexal, and D.M. VanLeeuwen. 2016. Vegetative growth and leaf nutrient status of 'Carpino' chrysanthemum on a pecan wood-amended commercial substrate. *HortScience* 51:177-185. (Journal cover article). <a href="https://doi.org/10.21273/HORTSCI.51.2.177">https://doi.org/10.21273/HORTSCI.51.2.177</a>.
- Flores, A.M., B.J. Schutte, M.K. Shukla, G.A. Picchioni, and A.L. Ulery. 2015. Time-integrated measurements of seed germination for salt tolerant plant species. Seed Science and Technology 43:1-7. https://doi.org/10.15258/sst.2015.43.3.09.

- *Barrick, B.*, R. Steiner, G.A.Picchioni, A. Ulery, and J. Zhang. 2015. Salinity responses of selected introgressed cotton lines grown in two soils from organic and conventional cotton production. *Journal of Cotton Science* 19:268-278. https://doi.org/10.56454/UGIH4461.
- Picchioni, G.A., *J. Ruiz*, R.M. Goss, and J.G. Mexal. 2014. Nursery crop growth response to municipal biosolids: Species salt and xeric adaptation a key factor? *Compost Science and Utilization* 22:138-152. https://doi.org/10.1080/1065657X.2014.900461.
- Mexal, J.G., G.A. Picchioni, M.K. Shukla, A.L. Ulery, and W.C. Lindemann. 2014. Land application of municipal wastewater to desert ecosystems: Case studies identifying risks and opportunities. *Journal of Arid Land Studies* 24:109-112.
- *Tiwari, R.S.*, G.A. Picchioni, R.L. Steiner, S.E. Hughs, D.C. Jones, and J. Zhang. 2013. Genetic variation in salt tolerance during seed germination in a backcross inbred line population and advanced breeding lines derived from upland cotton x Pima Cotton. *Crop Science* 53:1974-1982. <a href="https://doi.org/10.2135/cropsci2013.01.0028">https://doi.org/10.2135/cropsci2013.01.0028</a>.
- *Tiwari, R.S.*, G.A. Picchioni, R.L. Steiner, D.C. Jones, S.E. Hughs, and J. Zhang. 2013. Genetic variation in salt tolerance at the seedling stage in an interspecific backcross inbred line population of cultivated tetraploid cotton. *Euphytica* 194:1-11. https://doi.org/10.1007/s10681-013-0927-x.
- Picchioni, G.A., J.G. Mexal, M.K. Shukla, A. Ruiz, *M. Babcock*, D.L. Daniel, and *D.S. Rodriguez*. 2012. Land application of treated industrial wastewater on a Chihuahuan Desert shrubland: Impacts on the natural vegetation. *Arid Land Research and Management* 26:312-327. https://doi.org/10.1080/15324982.2012.694396.
- Picchioni, G.A., M.K. Shukla, J.G. Mexal, *M. Babcock*, *A. Ruiz*, T.W. Sammis, and *D.S. Rodriguez*. 2012. Land application of treated industrial wastewater on a Chihuahuan Desert shrubland: Implications for water quality and mineral deposition. *Arid Land Research and Management* 26:211-226. https://doi.org/10.1080/15324982.2012.680656.
- *Green, S.R.* and G.A. Picchioni. 2011. Floriculture and fundraising: A public-student partnership for learning job readiness. *HortTechnology* 21:700-702. https://doi.org/10.21273/HORTTECH.21.6.700.
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  I. Growth and yield. *Tropical and Subtropical Agroecosystems* 14:137-147. https://doi.org/10.56369/tsaes.674.
- *Green, S.R.*, G.A. Picchioni, L.W. Murray, and M.M. Wall. 2010. Yield and quality of field-grown *Celosia* and globe amaranth cut flowers at four plant densities. *HortTechnology* 20:612-619. https://doi.org/10.21273/HORTTECH.20.3.612.
- *Babcock, M.*, M.K. Shukla, G.A. Picchioni, J.G. Mexal, and D. Daniel. 2009. Chemical and physical properties of Chihuahuan Desert soils irrigated with industrial effluent. *Arid Land Research and Management* 23:47-66. <a href="https://doi.org/10.1080/15324980802598607">https://doi.org/10.1080/15324980802598607</a>.
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- Picchioni, G.A., *J. Singh*, J.G. Mexal, and R. Goss. 2007. Merging the roles of learning, research, and outreach in a nursery irrigation exercise. *HortTechnology* 17:379-385. https://doi.org/10.21273/HORTTECH.17.3.379.
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- Picchioni, G.A., W.A. Mackay, and *M. Valenzuela-Vazquez*. 2007. Correlative supply and demand functions of *Lupinus havardii*: A forgotten side of cut flower physiology? *Journal of the American Society for Horticultural Science* 132:102-111. (Journal cover article). https://doi.org/10.21273/JASHS.132.1.102.
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- Ruiz, A., T.W. Sammis, G.A. Picchioni, J.G. Mexal, and W.A. Mackay. 2006. Irrigation scheduling protocol for treated industrial effluent in the Chihuahuan Desert. American Water Works Association Journal 98:122-133. <a href="https://doi.org/10.1002/j.1551-8833.2006.tb07594.x">https://doi.org/10.1002/j.1551-8833.2006.tb07594.x</a>.
- Picchioni, G.A., C.J. Graham, and A.L. Ulery. 2004. Gypsum effects on growth and macroelement uptake of field-grown *Asimina triloba* (Pawpaw) irrigated with low-saline, sodic water. *HortScience* 39:1104-1109. <a href="http://dx.doi.org/10.21273/HORTSCI.39.5.1104">http://dx.doi.org/10.21273/HORTSCI.39.5.1104</a>.
- *Quiroga-Garza*, *H.M.* and G.A. Picchioni. 2003. Photoperiod effects upon shoot growth and color of bermudagrass fertilized with slow-release nitrogen sources. *HortScience* 38:1441-1445. https://doi.org/10.21273/HORTSCI.38.7.1441.
- *Al-Jamal, M.S.*, T.W. Sammis, J.G. Mexal, G.A. Picchioni, and W.H. Zachritz. 2002. A growth-irrigation scheduling model for wastewater use in forest production. *Agricultural Water Management* 56:57-79. <a href="https://doi.org/10.1016/S0378-3774(02)00003-3">https://doi.org/10.1016/S0378-3774(02)00003-3</a>.
- Picchioni, G.A., *M. Valenzuela-Vazquez*, and L.W. Murray. 2002. Calcium and 1-MCP delay cut raceme desiccation of *Lupinus havardii*. *HortScience* 37:122-125. https://doi.org/10.21273/HORTSCI.37.1.122.
- Picchioni, G.A. and C.J. Graham. 2001. Salinity, growth, and ion uptake selectivity of container-grown *Crataegus opaca*. *Scientia Horticulturae* 90:151-166. https://doi.org/10.1016/S0304-4238(00)00261-2.
- Picchioni, G.A., *M. Valenzuela-Vazquez*, and *S. Armenta-Sanchez*. 2001. Calcium-activated root growth and mineral accumulation of *Lupinus havardii* Wats.: Ecophysiological and horticultural significance. *Journal of the American Society for Horticultural Science* 126:631-637. <a href="https://doi.org/10.21273/JASHS.126.5.631">https://doi.org/10.21273/JASHS.126.5.631</a>.
- *Quiroga-Garza, H.M,* G.A. Picchioni, and M. Remminga. 2001. Bermuda turfgrass fertilized with slow-release nitrogen sources. I. Nitrogen uptake and nitrate leaching losses. *Journal of Environmental Quality* 30:440-448. <a href="https://doi.org/10.2134/jeq2001.302440x">https://doi.org/10.2134/jeq2001.302440x</a>.
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# REFEREED BULLETINS, BOOK CHAPTERS, TECHNICAL REPORTS

Shukla, M.K., A. Ben Ali, S. Cerra, B. Schutte, G.A. Picchioni, and C. Gard. 2021. Irrigation with brackish groundwater and desalination concentrate: Effect on soil microbial properties,

- plant uptake, and ion deposition in soil. New Mexico Water Resources Research Institute Tech. Compl. Rept. TR 397 (47 pp.). NM-WRRI, Las Cruces. Available online at <a href="https://cduaws.nmwrri.nmsu.edu/wp-content/uploads/PDF/tr397.pdf">https://cduaws.nmwrri.nmsu.edu/wp-content/uploads/PDF/tr397.pdf</a>.
- Picchioni, G.A., *T.N. Hooks*, B.J. Schutte, and D.L. Daniel. 2015. Drought, salinity, and invasive plants: A new model for sustainable water management. New Mexico Water Resources Research Institute Tech. Compl. Rept. TR 368 (60 pp.). NM-WRRI, Las Cruces. Available online at <a href="http://nmwrri.nmsu.edu/?page\_id=4568">http://nmwrri.nmsu.edu/?page\_id=4568</a>.
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- Picchioni, G.A. and A.E. Watada. 1998. Membrane structural lipid changes in fresh-cut organs: Revisiting the wounding and aging phenomenon. International Postharvest Conference, Taupo, New Zealand, June 24-28, 1996. Published in *Acta Horticulturae* 464:237-242.
- Picchioni, G.A., S. Miyamoto, and J.B. Storey. 1990. Salt resistance of pistachio, p. 378-383. In: *Visions of the future Proceedings of the Third National Irrigation Symposium, Phoenix, Arizona*. American Society of Agricultural Engineers, St. Joseph, Michigan.

## SEVENTY ABSTRACTS AT SCIENTIFIC MEETINGS

# **COMPETITIVE GRANTS-PARTIAL LISTING**

Container Farming to Support Wellness, Conservation, and Participatory Research in Underserved Communities of New Mexico

Investigators: G.A. Picchioni (P.I.), G.R. Garcia, O. Lavrova, K.A. Lombard, S. Norris-Parish,

L. Stanford, G.L. Torell, and S.J. Walker

USDA/NIFA. Pending.

Exploring the Benefits of Halophytes and Brackish Waters for Human Health (2021-2023)

Investigators: G.A. Picchioni (P.I.), I. Guzman, B.J. Schutte, and M.K. Shukla

USDA/NIFA/AFRI Foundational and Applied Science Program

Irrigation with Brackish Groundwater and Desalination Concentrate: Effect on Soil Microbial

Properties, Plant Uptake, and Ion Deposition in Soil (2017-2021)

Investigators: M.K. Shukla (P.I.), G.A. Picchioni. B.J. Schutte, and C. Gard

New Mexico Water Resources Research Institute

Drought, Salinity, and Invasive Plants: A New Model for Sustainable Water Management (2014-2015)

Investigators: G.A. Picchioni (P.I.) and B.J. Schutte

New Mexico Water Resources Research Institute

Invasiveness of Selected Brassicaceae Plants on Wastewater-Treated Rangelands in New Mexico: Is Sodium a Causal Element? (2012-2014)

Investigators: G.A. Picchioni (P.I.), J. Ashigh, B.J. Schutte, L. Lauriault, and T. Dominguez New Mexico Agricultural Experiment Station Rangeland Ecosystems Program

Land Application of Industrial Effluent on a Chihuahuan Desert Ecosystem: Impact on Soil Physical and Hydraulic Properties (2008-2010)

Investigators: M.K. Shukla (P.I.), J.G. Mexal, G.A. Picchioni, T. Sammis, D. Daniel, P. Adhikari, and M. Babcock

New Mexico Water Resources Research Institute

Vegetation, Soil, and Water Quality Monitoring to Develop a Wastewater Reutilization Model in the Chihuahuan Desert (2004)

Investigators: G.A. Picchioni (P.I.), W.A. Mackay, and J.G. Mexal

USDA/CSREES, Efficient Irrigation for Water Conservation in the Rio Grande Basin

Land Application of Saline Wastewater on a Chihuahuan Desert Upland (2004)

Investigator: G.A. Picchioni (P.I.)

USEPA/Southwest Council for Environmental Research and Policy

Floriculture as "Hands-On" Learning Medium to Promote Water Appreciation, Career Awareness, and the Scientific Method (2004)

Investigators: G.A. Picchioni (P.I.), S.R. Green, and W.A. Mackay

USDA/CSREES, Efficient Irrigation for Water Conservation in the Rio Grande Basin

Strengthening Floricultural Academic Programs at New Mexico State University – Targeting Education, Applied Research, and Rural Economies (2002)

Investigator: G.A. Picchioni (P.I.)

USDA/CSREES, Hispanic Serving Institutions Grants

Vegetation, Soil, and Water Quality Monitoring to Develop a Wastewater Reutilization Model in the Chihuahuan Desert (2002)

Investigators: G.A. Picchioni (P.I.), K.B. Marcum, and J.G. Mexal

USDA/CSREES, Efficient Irrigation for Water Conservation in the Rio Grande Basin

Land Application of Saline Wastewater on a Chihuahuan Desert Upland (2002)

Investigators: G.A. Picchioni (P.I.) and D.J. Saucedo

USEPA/Southwest Council for Environmental Research and Policy

High-Performance Liquid Chromatography for Study of Wounding and Salinity Stress on Plant Membranes (2001)

Investigator: G.A. Picchioni (P.I.)

USDA/CSREES, National Research Initiative Grants

Mechanism of Boron Phytotoxicity: A Case Study in Mature Pecan Trees (1997)

Investigator: G.A. Picchioni (P.I.)
Oak Ridge Associated Universities

Pilot Study for an Integrated Waste Treatment and Disposal System Along the Mexico/U.S.

Border: Ojinaga as a Prototype (1997)

Investigators: J.G. Mexal (P.I.) and G.A. Picchioni

USEPA/Southwest Center for Environmental Research and Policy

Improving Undergraduate Science Education in Horticulture and Agricultural Education (1997)

Investigators: J.G. Mexal (P.I.), G.A. Picchioni, and J.L. Fowler

USDA/CSREES Higher Education Challenge Grants

Salinity and Boron Tolerance of *Pistacia* Species (1989)

Investigator: G.A. Picchioni (P.I.)

Texas A&M University Thomas B. Slick Research Fellowship Grant

## FOUNDATION AND COMMODITY GRANTS

NMSU Grants Indoor Food Production: Container Farming for Community Food Distribution and Workforce Development (2021-2024)

Investigators: G.A. Picchioni, S. Walker, K. Lombard, G. Torell, J. Lilywhite, and O. Lavrova Tri-State Generation & Transmission Association

National Intercollegiate Floral Crop Quality Evaluation and Design Competition (2003)

Investigator: G.A. Picchioni (P.I.)

American Floral Endowment

Exploring the Benefits of Methylcyclopropene (1-MCP) for Vaselife Extension of Cut Lupinus havardii (Bluebonnet) Flowers (2000)

Investigators: G.A. Picchioni (P.I.) and M. Valenzuela-Vazquez

Fred C. Gloeckner Foundation

Calcium Nutrition and its Potential to Extend the Vase Life of Cut *Lupinus havardii* (Bluebonnet) Flowers--Mechanism of Action at the Cell Membrane Level (1999)

Investigator: G.A. Picchioni (P.I.)

Fred C. Gloeckner Foundation

Calcium Nutrition and its Potential to Extend the Vase Life of Cut Bluebonnet Flowers:

Mechanism of Action at the Cell Membrane Level (1998)

Investigator: G.A. Picchioni (P.I.)

Fred C. Gloeckner Foundation

Effects of Alternate Bearing on Nutrient Demand, Storage, and Uptake in Pistachio (1991)

Investigators: G.A. Picchioni (P.I.), S.A. Weinbaum, and P.H. Brown

California Pistachio Commission

## INSTITUTIONAL RESEARCH GRANTS AND OTHER FUNDING

NMSU BR&R Funding for Fabian Garcia and Skeen Hall Greenhouse Renovations: Greenhouse Misting Renovation (2018); Greenhouse Bench Renovation (2016); Greenhouse Shade and Irrigation System Renovation (2013)

Revisiting the Wounding and Aging Phenomenon in Plant Cells and its Relationship to Membrane Lipid Metabolism: A Practical Case Study in Horticulture (1996)

Investigator: G.A. Picchioni (P.I.)

Louisiana Tech University Office of the President

Cell Membrane Stability and the Role of Calcium in Postharvest Quality of Apples (1995)

Investigators: G.A. Picchioni (P.I.) and A.E. Watada

Louisiana Tech University Office of the President, USDA/Beltsville

Water Quality as Limiting Commercial Mayhaw Production in Louisiana (1994)

Investigator: G.A. Picchioni (P.I.)

Louisiana Tech University Office of the President

## USDA/NIFA FUNDED HATCH PROJECTS

New Frontiers for Plants and Water Issues in the Southwestern U.S.-Landscape Ecology,

Human Health, and Curriculum Enhancement (2018-2023)

Waste Utilization and Mineral Nutrition of New Mexico Plants (2013-2018)

Mineral Nutrition of Ornamental Plants in the Chihuahuan Desert (1998-2013)

## PROFESSIONAL AWARDS AND RECOGNITION

Exemplary Teaching Professorship, Department of PES and College of ACES (2022-2024)

Donald C. Roush University Award for Teaching Excellence (2016)

Teaching and Advising Appreciation Award, PES Faculty and Graduating Students of 2013-14

College of ACES Team Award–Wastewater Land Application Team (2014)

College of ACES Distinguished Researcher Award (2013)

College of ACES Distinguished Teacher Award (2009)

ASHS Outstanding Ornamental Horticulture Publication Award (2008)

USDA National Team Award, Outstanding Integrated Program in Water Resources (2007)

College of ACES Faculty Senator Award (2006)

PES Teaching Appreciation Award (2006)

College of ACES Team Award, Rio Grande Basin Initiative (2005)

Texas A&M Vice Chancellor's Award in Excellence, Rio Grande Basin Initiative (2005)

Honorary member, New Mexico FFA Program (2004)

NACTA Distinguished Teacher Award (2003)

PES Teaching Appreciation Award (2003)

Oak Ridge Associated Universities Junior Faculty Achievement Award (1997)

Outstanding Researcher Award, College of Life Sciences, Louisiana Tech University (1995)

Thomas B. Slick Graduate Research Fellowship Award, Texas A&M University (1989)

NACAA Professional Information and Turfgrass/Horticulture Communication Awards (1984) General Dillingham Produce Industry Scholarship (1978)

## PROFESSIONAL SERVICES

## NATIONAL

ASHS Cross-Commodity Publication Awards Committee Member, 2025-present.

ASHS Ornamental Horticulture Publication Awards Committee Chair, 2024.

ASHS Ornamental Horticulture Publication Awards Committee Member, 2021-2023.

NM State Chair, W-3170 Multistate Research Project: Beneficial Reuse of Residuals and

Reclaimed Water: Impact on Soil Ecosystems and Human Health, 2015-2019

ASHS Working Groups (Plant Nutrition, Ornamentals, Floriculture, and Teaching), 2000-present

ASHS National Teaching Publications Award Committee Member, 2012-2016

ASHS National Research Awards Committee Chair, 1995-1996

### DEPARTMENT AND COLLEGE

PES Department Promotion and Tenure Committee Member (2008-2024)

PES Department Promotion and Tenure Committee Chair (2018-2019)

ACES Dean Faculty Advisory Committee Member (2017-2018)

PES Curriculum Committee Chair (2009-2012)

PES Awards Committee Member (2019-2024)

PES Department Awards Committee Chair (2015-2017)

PES Department Scholarship Committee (2014-2019)

ACES Greenhouse Committee Chair (2000-2024)

National Host, Pi Alpha Xi Intercollegiate Floral Judging and Design Competition (2023)

Faculty advisor, NMSU Intercollegiate Floral Judging and Design Team (1996-2024)

Faculty advisor, NMSU Horticulture Forum (1996-2025)

Faculty advisor, Louisiana Tech Horticulture Society (1994-1996)

#### University

University Senate–NMSU (2004-2006) Minority Recruitment Committee (2000-2004) Admission Appeals Committee (2000-2002) University Senate–Louisiana Tech University (1994-1996)

### U.S. BORDER REGION COMMUNITIES

After 50 years in the public education, cooperative extension, and research professions, I retired in May 2025. I count my years in training as being as challenging as the years working through the ranks. An important part of my retirement is to open up new possibilities that I have always wanted to experience but have never had the opportunities. Namely, to give back to a profession that has been so kind. Thus, I am volunteering for organizations that produce and distribute food to communities in need, and that educate the public about plants and the environment. I offer volunteer support in many ways including horticultural consulting, science lessons, working in food distribution lines, giving tours, producing vegetables and fruits, pulling weeds, sweeping floors, and any other ways that I can to help underserved people, the next generation of horticulturists, and the general public.