

thesis review 2010

As a culminating experience for the master's degree program, the thesis attests to the highest level of the student's academic, scholarly, and creative abilities. Each student works under the guidance of a faculty thesis chair and committee. The resulting thesis is viewed with pride as a reflection of the scholarly promise of the student and a commitment to excellence for the university. This summer and fall 2010, 66 students completed theses in areas as varied and original as the students themselves. What follows is a complete list of Summer/Fall 2010 theses by college/school and some research highlights.

JORDAN COLLEGE OF AGRICULTURAL SCIENCES AND TECHNOLOGY

Animal Sciences and Agricultural Education

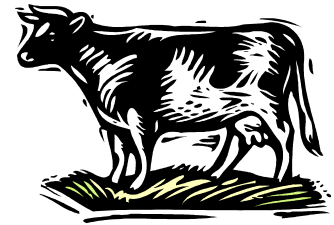
Elise Chad

Nutrient Composition of Alpaca (*Vicugna pacos*) Milk
(Chair: Jon Robison)

← Elise Chad studied nutrient composition of **alpaca milk** to improve upon existing supplements for alpaca crias.

Lea Pereira

Comparison of Analytical Methods to Measure Total Nitrogen and Total Phosphorus in Feed and Feces of Dairy Cattle
(Chair: Jon Robison)



Julia DiPiero assessed viscosity, syneresis, and palatability in the development of a healthy

yogurt beverage. ➤

Food Science and Nutrition

Akshay Aswani

Development of a Beverage from Whey
(Chair: Gour Choudhury)

Christina Bawana

Efficacy of Chitosan as a Transparent Edible Coating in Extending the Shelf Life of Fresh-Cut Peaches
(Chair: Gour Choudhury)

Julia DiPiero

Development and Analysis of a Yogurt Beverage Containing Probiotics and Prebiotics
(Chair: Gour Choudhury)



Preetam Sarkar examined the possibility of using **peach pomace** as a source of soluble dietary fiber in expanded extruded food products➤

Chelsea Zweigle worked to develop an alternative market for **pistachio industry byproducts**, thus generating additional income for farmers and reducing the environmental hazards that their current disposal presents. ➤

Mary Perez

How Pistachios May Favorably Influence an Individual's Metabolic Profile and Risk for Chronic Diseases Associated with Inflammation
(Chair: Lisa Herzig)

Preetam Sarkar

Peach Pomace Utilization Using Twin Screw Extrusion Processing
(Chair: Gour Choudhury)

Nikhil Setia

Extrusion Processing of *Opuntia*
(Chair: Gour Choudhury)

Chelsea Zweigle

Pistachio Byproducts as Substrate for Shiitake Mushrooms
(Chair: Gour Choudhury)

Plant Science

Shashi Yellareddygar

Efficacy of Slow Release Nitrogen Formulations Applied to Vegetables
(Chair: Dave Goorahoo)

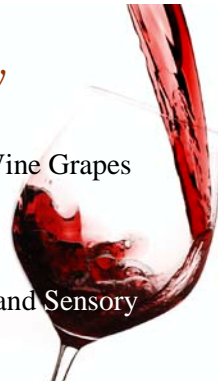
Viticulture and Enology

Hatice Durgun

The Quantification of Rot in Wine Grapes
(Chair: Roy Thornton)

John Giannini

Yeast Strain and Its Chemical and Sensory Impact on Red Wine Phenolics
(Chair: Roy Thornton)



◀John Giannini's 2-year study sought to determine if differences in **wine phenolic profile** could be attributed to yeast strain.



COLLEGE OF ARTS AND HUMANITIES

David Gejeian writes about the **California** he knows, one far removed from the coastal paradise those from outside the state often perceive it to be. ➤

English

David Gejeian *M.F.A.*
California Living
(Chair: Alex Espinoza)



Students in the university's English Department have written 158 master's theses in the last 11 years, which ranks English as the top thesis-producing program during that time. The M.F.A. in Creative Writing is similarly productive, having written 125 collections of stories, poems, essays, or stand-alone novels over the same period.* Many of these creative writers have gone on to publish their work in respected literary magazines and journals.

*Data through AY 2010

Marilyn Riddle Harper M.F.A.

This is Just the Crate
(Chair: Timothy Skeen)

Lisa Lieberman M.F.A.

All My Bad Boyfriends
(Chair: John Hales)

Olivia Munoz M.F.A.

The Mouth on That Girl
(Chair: Steven Church)

Laura Musselman M.F.A.

Bloodletting
(Chair: Steven Church)

↳ Lisa Lieberman takes readers through stories of law-abiding drug dealers; online dating;

pot-smoking, small town sheriffs; relapsing

drug-addicted Hawaiian fishermen who swim with Christians and men eating sharks; and learning to date with a loaded shotgun under her bed.

Emily Scalzo M.F.A.

Sugar Moon
(Chair: Connie Hales)

Amber Tidwell M.F.A.

In Spite of Myself
(Chair: John Hales)

Ria Williams M.F.A.

Amateur Vice
(Chair: Connie Hales)

↳ Amber Tidwell's memoir explores her experiences with faith and

corporate religion.



Linguistics

Galen Balcom

Automated Part of Speech Induction to Improve Understanding of the Parts of Speech
(Chair: Sean Fulop)

Mass Communication and Journalism

John Haisten Willis

The Worldwide Leader Takes on The Final Frontier: An Early Analysis of ESPN'S Local Sports Web Sites in Chicago and Boston
(Chair: Kelley McCoy)



Modern and Classical Languages and Literatures

Erica Avina

Madres de la modernidad Mexicana: La naturaleza híbrida y lenguaje creador de Malinche y Sor Juana
(Chair: Saúl Jiménez-Sandoval)



Oscar Lopez-Aguirre analyzes novels by Yáñez and Rulfo as they manifest Octavio Paz's theory of the **Mexican Mask**. ➤



Claudia Plascencia studies **changes in the Spanish novel** as a result of the historical events and literary movements that were emerging during the 19th and 20th centuries. ➤

Daniel Calleros Villareal

La identidad del Mexicano postrevolucionario: Enfundada y desenfundada
(Chair: Saúl Jiménez-Sandoval)

Alejandra López

La promesa incompleta de la modernidad: La identidad cultural en Martín Luis Guzmán, Octavio Paz, Rodolfo Usigli y Carlos Fuentes
(Chair: Saúl Jiménez-Sandoval)

Óscar López-Aguirre

Ideología, religión y devenir en Paz, Yáñez y Rulfo
(Chair: Saúl Jiménez-Sandoval)

Fernando Márquez-Martínez

Una mirada preliminar a la poetica del paisaje en El arte de ensoñar
(Chair: Saúl Jiménez-Sandoval)

Claudia Plascencia

The Problematics of the Narrator in the XIX & XX Centuries
(Chair: Debbie Avila)

KREMEN SCHOOL OF EDUCATION AND HUMAN DEVELOPMENT

Counseling, Special Education, and Rehabilitation

Alicia Sandman

Dynamic Indicators of Basic Early Literacy Skills
(Chair: Colleen Torgerson)

◀Alicia Sandman evaluated the validity and reliability of the **Dynamic Indicators of Basic Early Literacy Skills (DIBELS)** using a sample of 30 special education students.

Soua Thao

Cultural Perspectives of Hmong Families Toward Disabilities and Special Education
(Chair: Colleen Torgerson)



Educational Research and Administration

Nina Palomino

The Effects of Decreased Funding on Higher Education: Perspectives from Administrators
(Chair: Susan Tracz)

◀Nina Palomino took a close look at the changing landscape of higher education through the eyes of university administrators, all of whom have modified the traditional model of service delivery in the wake of **decreased funding** from state and federal government.

Literacy and Early Education

Stephanie Bondy

How Modeled Echo Reading Affects Oral Reading Fluency of English Learners When Compared to Repeated Reading
(Chair: Glenn DeVoogd)

Brigitte Cushman

The Impact of Self-Efficacy Beliefs on English Language Learners' Academic Effectiveness in High School and Other Institutions
(Chair: Imelda Basurto)

Tsunami Turner

Children's Development of Positive Body Image: Determining Prevention Effectiveness in Populations of Young Children
(Chair: Pamela Lane-Garon)



◀Tsunami Turner examined the development of **body dissatisfaction** in children as it relates to the influences of sociocultural factors: parents, media, and peers.

LYLES COLLEGE OF ENGINEERING

Civil Engineering

Nathan Shwiyhat

Geo-Mechanical Effects of Suffusion on Sand-Kaolinite Mixtures
(Chair: Ming Xiao)

COLLEGE OF HEALTH AND HUMAN SERVICES

Communicative Disorders and Deaf Studies

Aubrie Hagopian

Concurrent Treatment as a Motor-Skill Approach for Childhood Apraxia of Speech (CAS)
(Chair: Steven Skelton)

◀Aubrie Hagopian found that concurrent treatment can be adapted for use in treating speech disorders associated with **Childhood Apraxia of Speech**.

Jessica Strahan

Naturalistic Treatment for Phonological Disorders Through Conversational Recast Method
(Chair: Steven Skelton)

Kinesiology

Brian Ferguson

Effects of Short-Term Sodium Bicarbonate Supplementation with Acute Caffeine Ingestion on Simulated 3-KM Cycle Performance
(Chair: Felicia Greer)



Gregorio Matíaz

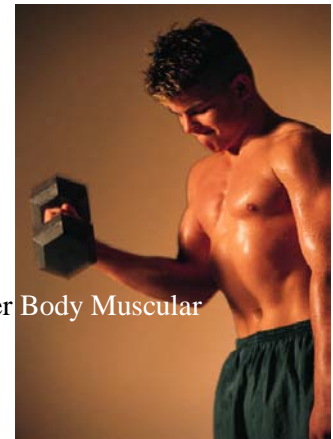
Physiological Responses in Hyperthermic Versus Thermoneutral Environment in Trained Cyclists

(Chair: Felicia Greer)

Andrew Quesada

Effects of 8 Weeks of Chronic L-Arginine Supplementation on Upper Body Muscular Strength in Recreational Body Builders

(Chair: Felicia Greer)



Sandrine Rangeon

Mapping the World of Coaching Science: A Citation Network Analysis

(Chair: Wade Gilbert)

◀ Sandrine Rangeon found that **coaching science** is highly influenced by a small set of key publications and researchers in the United States, the United Kingdom, and Canada.

Public Health

Leslie Abasta

Exploring Missed Appointments in the Health Care Safety Net in the San Joaquin Valley: A Pilot Study

(Chair: John Capitman)

◀ Leslie Abasta studied the ways **missed medical appointments** threaten practice efficiency and provider productivity.

Katrina Arthur

Performance on the California Physical Fitness Test and Its Correlation to Physical Activity Opportunities in Fresno, California: An Exploratory Study

(Chair: Mohammad Rahman)

Karina Macias

An Investigation of the Drinking Behaviors of Fresno State Students

(Chair: Miguel A. Perez)



Chia Thao

Asian American College Students' Sexual Practices: Findings from ACHA-NCHA Web-Based Data 2009

(Chair: Miguel A. Perez)

Gilda Zárate

Overweight and Obesity Factors for Adults in the San Joaquin Valley, California: Data from the Behavioral Risk Factor Surveillance System, 2000-2005

(Chair: Miguel A. Perez)

◀ Gilda Zárate identified factors that may affect **Body Mass Index** variances between men and women in California's San Joaquin Valley by assessing physical activity against social, demographic, and economic situations.

COLLEGE OF SCIENCE AND MATHEMATICS

Biology

Lori Bono

Central Pacific Coast Hard Tick (Acari: Ixodidae)
Distribution, Abundance, and *Toxoplasma gondii* Prevalence
(Chair: Paul Crosbie)



Rowena Chu

Secretome Analyses of Staged Pancreatic Cancer
Cell Lines
(Chair: Jason Bush)

◀Rowena Chu sought to improve the low survival rate of patients with **pancreatic cancer** through efficient methods of premature detection.

Steve Galentine

Ecto and Endoparasitic Prevalence in Peri-Domestic
Medium-Sized Mammals in Stanislaus County,
California
(Chair: Paul Crosbie)



◀Steve Galentine addressed a significant public health concern in his study on **parasite prevalence and intensity** in raccoons, fox, skunks, and opossum, which carry a nematode known to cause serious neurological pathogenesis in humans.

Michael Gledhill

Regulation of Methyl Farnesoate During the Life History
of the Tadpole Shrimp, *Triops longicaudatus*
(Chair: Brian Tsukimura)

Vanessa Gonzales

The Population Dynamics of Mitten Crab Larvae in the San Francisco Bay
(Chair: Brian Tsukimura)



Israel Gutierrez

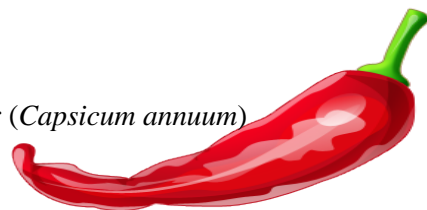
Microbes that Degrade Chloropicrin
(Chair: Alice Wright)

Whitney Janzen

The Effects of Cortisol on the Hormonal Regulation of Food Intake, Glucose Metabolism, and the Growth Hormone/Insulin-Like Growth Factor (GH/IGF) Axis in Tilapia
(Chair: Larry Riley)

Shaynon Scheidt

Characterization of Various Repetitive Elements in Pepper (*Capsicum annuum*)
(Chair: Jim Prince)



Biotechnology

Venu Polineni

Development of Methodologies to be Applied
in the Establishment of Transgenic *Meloidogyne incognita* Lines
(Chair: Alejandro Calderón-Urrea)

◀Venu Polineni set out to develop new strategies for the control of *Meloidogyne incognita*, a **root knot nematode** that infects various commercial crops and accounts for a crop loss of \$100 billion a year worldwide.

Preethi Sarvahbowan

Growth characteristics of *Dunaliella primolecta* and *Botryococcus braunii* in Fruit Industry Wastewater and Development of a Protocol to Generate Transgenic Algae

(Chair: Alejandro Calderón-Urrea)

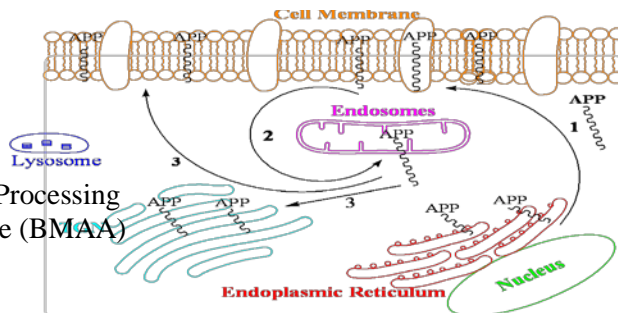
◀Preethi Sarvahbowan developed a transformation protocol to manipulate a species of green algae for the purpose of producing biofuels and other secondary metabolites

Chemistry

Rana Elayyan

Amyloid Precursor Protein (APP) Proteolytic Processing in the Presence of Beta-Methylamino-L-Alanine (BMAA) Cycad Neurotoxin

(Chair: Joy Goto)



Samuel Hernandez

Product Yield Study of the Reactions of Peroxy Radicals in the Troposphere

(Chair: Alam Hasson)

◀Samuel Hernandez focused his discussion on the reaction of organic peroxy radicals (RO_2) and hydroperoxy radicals (HO_2), which plays a key role in the **production of ozone** and other products that can have an effect on the climate and our health.

Cindy Xiong

The Metal Ion Content of *Drosophila melanogaster* Expressing Copper-Zinc Superoxide Dismutase (CuZnSOD)

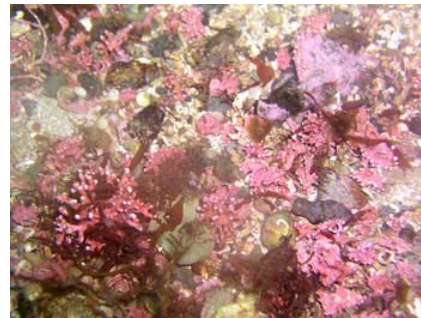
(Chair: Joy Goto)

Marine Science

Elsie Tanadjaja

The Role of Mechanical and Chemical Processes in Rhodalgal Sediment Production and Implications for Ocean Acidification (Baja California, México)

(Chair: Ivano Aiello)



Physics

Dulce Romero

Synthesis and Characterization of Rare-Earth Nanoparticles Using the Inverse Micelle Method

(Chair: Gerardo Muñoz)

Ulises Urbina

Instrument to Measure the Heat Capacity of Small Samples

(Chair: Pei-Chun Ho)

◀Ulises Urbina's objective was to produce an instrument to determine the internal energy of a given material in order to probe its **thermodynamic properties.**

Psychology

Rocio Carbajal

A Comparison of Group-Based and Home-Based Parent Training Using Applied Behavior Analysis Techniques
(Chair: Amanda Adams)

◀ Rocio Carbajal designed an Applied Behavior Analysis module to train parents of children with **developmental disabilities**.

Marguerite McCrow

An Examination of Behavioral Approaches in Increasing Medical Regimen Adherence Among Adolescents with Asthma
(Chair: Marianne Jackson)



Angela Persicke

The Effectiveness of the Headsprout Early Reading Program for Children with Autism
(Chair: Amanda Adams)

COLLEGE OF SOCIAL SCIENCES

History

Melissa Morris

The Paston Women and Gentry Culture:
The Development of Individual and Social
Identity in Fifteenth-Century England
(Chair: Mark Arvanigian)

Melissa Morris studied the way women in the Paston family of fifteenth-century England used **letter writing** to create an identity and positively influence their social status.

