

# 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*

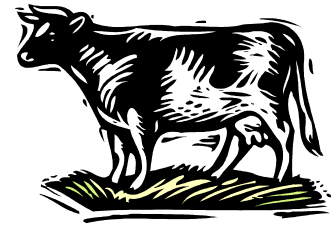
#### **Elise Chad**

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)

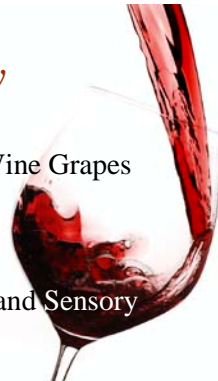
## Viticulture and Enology

### 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 man 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 19<sup>th</sup> and 20<sup>th</sup> 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**

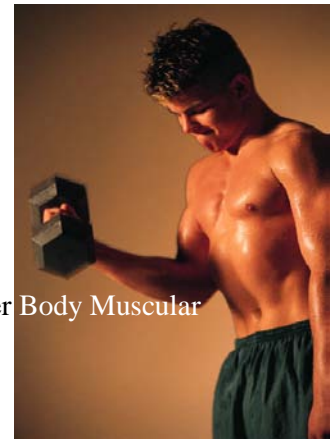
Physiological Responses in Hyperthermic Versus Thermoneutral Environment in Trained Cyclists

(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

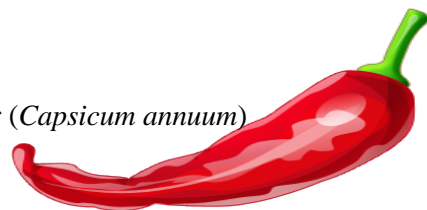
Microbes that Degrade Chloropicrin  
(Chair: Alice Wright)

#### 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 Sarvabowan

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)

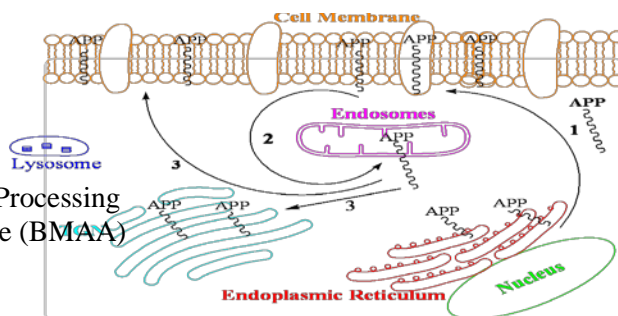
◀Preethi Sarvabowan developed a transformation protocol to manipulate a species of green algae for the purpose of producing biofuels and other secondary metabolites

## 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)

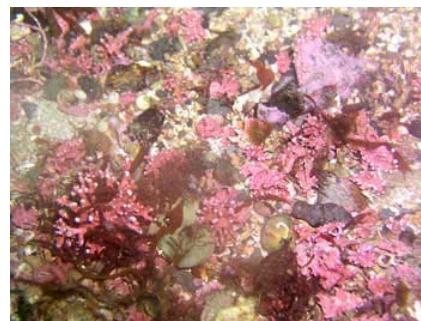
(Chair: Joy Goto)

## 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.

