

# thesis review 2005

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 2005, 37 students completed theses in a variety of areas. What follows is a complete list of summer 2005 theses by topic and some research highlights.

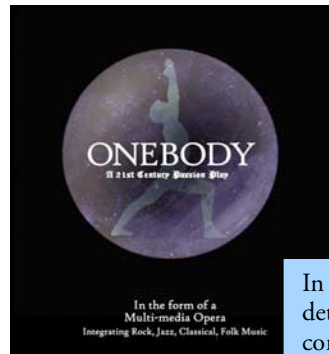
## ART

### *Creative Writing*

**Priya Mangtani** (read [ABSTRACT](#))  
Tandem Dances  
(Chair: Steve Yarbrough)

### *Music*

**James Michael Coventry** (read [ABSTRACT](#))  
Onebody: An Interdisciplinary Look at Producing Multimedia Performance Art  
(Chair: Wendy March)



In his thesis, James Coventry details the work of writing, composing, directing, and staging his "21<sup>st</sup> Century Passion Play," *Onebody*.



## COACHING

**Amy Eilean McRae** (read [ABSTRACT](#))  
The Keys to Success: Coaching Styles of Professional Championship Team Sport Coaches  
(Chair: Wade Gilbert)

## COMMUNICATION

**Anna Moradian-Donmyer** (read [ABSTRACT](#))  
Gestural Perception: A Comparison of Cultural Differences in the Use of Gesture  
(Chair: Michael Botwin)

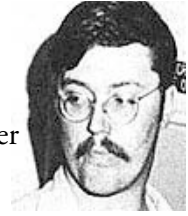
Anna Moradian-Donmyer adopted a cross-cultural view on gesture between English-speaking Californians and Mandarin-speaking Chinese. She found that similarities exist between cultures in the use of communicative gestures.



## CRIME

**Jay Healey** (read [ABSTRACT](#))

The Construct of Psychopathy and Its Application to Serial Sexual Murder: The Cases of Ted Bundy and Edmund Kemper  
(Chair: Eric Hickey)



## EDUCATION

### *Elementary*

**Judy Hansen** (read [ABSTRACT](#))

Personality Factors Influencing Behavior and Academic Ratings in the Elementary School Setting  
(Chair: Michael Botwin)

Judy Hansen found that the less like the teacher a student is for two personality variables (conscientiousness and extraversion), the more likely the teacher is to view the student as exhibiting problem behavior and therefore to assign the student a lower grade.

**Karla Spain** (read [ABSTRACT](#))

An Assessment of Treatment Integrity in Teacher Implemented Interventions in Elementary School Classrooms  
(Chair: Marilyn Wilson)

### *Learning Problems/Disabilities*

**Jeri Anna Armstrong** (read [ABSTRACT](#))

Dynamic Indicators of Basic Early Literacy Skills (DIBELS) and Preservice Teachers' Ratings of Test Acceptability in the Assessment of Learning Problems  
(Chair: Marilyn Wilson)

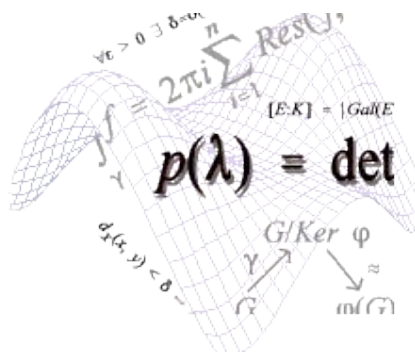
**Renee Frigon** (read [ABSTRACT](#))

School Psychologists' Perspectives of Learning Disabilities  
(Chair: Karen Carey)

Renee Frigon examined school psychologists' beliefs about learning disabilities and their perceptions of current and proposed classification processes for students with learning disabilities. Her findings indicate that practitioners are ready for a change in the current learning disability assessment model.

**Jennifer Rochelle Kerber** (read [ABSTRACT](#))

Using Concurrent Therapy in Treatment of Phonologic Disorders  
(Chair: Steven Skelton)



### *Mathematics*

**Jason Paul Terry** (read [ABSTRACT](#))

Group Theory of Extended Languages and Its Application to the Method of Quotients  
(Chair: Walter Read)

## ***Nutrition***

**Terri Lynn Soares** (read [ABSTRACT](#))  
General Integration Methodology and Nutrition  
Integration Methodology Use by Central California  
Classroom Teachers  
(Chair: Sandra Witte)

Terri Soares will use the results of her thesis in teacher preparation workshops and the development of nutrition education curriculum.



## ***Reading***

**James Steven Echols** (read [ABSTRACT](#))  
Struggling Readers: Can the Complexity of Factors  
Determine Success?  
(Chair: Terry Sylvester)

## ***Secondary***

**Christina Dawn Harralson** (read [ABSTRACT](#))  
Contextualizing the Rhetoric of School Reform: Addressing Complexity in School Reform  
and Student Assessment  
(Chair: Rick Hansen)

# **HEALTH**

## ***Hmong***

**Teng Vang** (read [ABSTRACT](#))  
Hmong Knowledge of Nasopharyngeal Carcinoma  
(Chair: Helda Pinzon-Perez)

There have been few studies on cancer in the Hmong population. With more than 50,000 Hmong living in the Central Valley and with Nasopharyngeal Carcinoma being common to the Hmong, Teng Veng provides original and important insight into a health concern of regional significance.

## ***Obesity***

**Kimberly Courtney Samuelson** (read [ABSTRACT](#))  
Food Intolerances Following Roux-en-Y Gastric Bypass Surgery for Treatment of Obesity  
(Chair: Sandra Witte)

## ***Sexual Behavior***

**Kamryn Lee Molinari** (read [ABSTRACT](#))  
Perceived Sexual Behavior Norms Versus Reported Sexual Behavior Among a Sample of  
California State University, Fresno Students  
(Chair: Gerald Davoli)

## ***Volunteerism***

**Inge Irene Martin** (read [ABSTRACT](#))  
Volunteering and Subjective Well-Being  
(Chair: Constance Jones)



## ***Water Quality***

**Paul Charpentier** (read [ABSTRACT](#))  
The Reliability of Test Strips as Compared to Analytical Laboratory Tests for Measuring Nitrate Concentrations in State Small Public Water Systems in Tulare County, California  
(Chair: *Sandra Donohue*)

After decades of continuing and expanding agricultural and livestock production, Tulare County's groundwater quality has slowly deteriorated and nitrate levels in many public water systems (PWSs) within the county have steadily increased. Paul Charpentier examines the concern that nitrate levels in the county's drinking water will reach the point where they pose a threat to human health.



## ***Women's Health***

**Mary Stela Gallegos** (read [ABSTRACT](#))  
Knowledge, Attitudes, Health Beliefs, and Utilization of Preventive Screening Practices Among Southeast Asian and Asian Indian Women in Fresno County, California Regarding Breast Cancer  
(Chair: *Vickie Krenz*)

**Kelley Mouang Saechao** (read [ABSTRACT](#))  
Factors Affecting Laotian Women's Participation in Breast Cancer Screening  
(Chair: *Gerald Davoli*)

## **MEDIA**

**Justin Lee Matthews** (read [ABSTRACT](#))  
Facial Prominence: Connections to Gender and Occupational Status  
(Chair: *Constance Jones*)

Justin Matthews examined and coded 912 photographs from six popular magazines published in 2004. His findings indicate that men were portrayed with more facial prominence in intellectual occupations than women and with less facial prominence than women in physical occupations.

**Danh Ngoc Ngo** (read [ABSTRACT](#))  
The Role of Three U.S. News Networks—ABC, CBS, and NBC—in the Tsunami Relief Works  
(Chair: *Tamyra Pierce*)

## **PUBLIC ADMINISTRATION**

**Jennifer Ann Berry** (read [ABSTRACT](#))  
Recruitment of Diverse Individuals in Organizations  
(Chair: *James Aldredge*)

Jennifer Berry found that one way for an organization to recruit diverse individuals is to become active in community involvement and volunteerism.

## SCIENCE

### *Air Pollution*

**Manuel Contreras Arroyo** (read [ABSTRACT](#))  
Theoretical Studies of Acetyl Peroxy Radical Reactions  
in the Gas Phase  
(Chair: Alam Hasson)



### *Cancer*

**Justin Adams Costa** (read [ABSTRACT](#))  
*Livistona chinensis* Seed Extract Inhibits  
Angiogenesis in Various Model Systems:  
Characterization and Possible Mechanisms  
(Chair: Fred Schreiber)

For centuries, the Chinese have used the seeds from a rare palm tree as an herbal cancer remedy. In his thesis, Justin Costa showed that these seeds make a chemical that can stop blood vessels from forming. He studied the chemical in atomic detail and offered a model for how the chemical works.

### *Crustacean Endocrinology*

**William Nelson** (read [ABSTRACT](#))  
Juvenilizing Effects of Methyl Farnesoate on Reproduction and Development in the  
Riceland Tadpole Shrimp, *Triops longicaudatus*  
(Chair: Brian Tsukimura)

Po Shuan Wang investigated alternate energy sources to reduce the need for batteries or similar conventional energy storage units in a variety of applications, including biomedical research and automotive technology.

### *Energy*

**Po Shuan Wang** (read [ABSTRACT](#))  
Broad Frequency Band Vibration-Based Power  
Generation: Analysis, Design, and Control  
(Chair: Nagy Bengiamin)

### *Environment*

**Stephanie Lynn Arsenault** (read [ABSTRACT](#))  
Development of Methods for Analysis of Explosives by Mass-Spectrometry and Electron  
Capture Detector  
(Chair: Barry Gump)

**Paphavee Lertsethtakarn** (read [ABSTRACT](#))  
The Identification and Characterization of  
Methyl Iodide Degradors  
(Chair: Alice Wright)

Paphavee Lertsethtakarn's thesis is part of an effort to find a feasible soil fumigant to replace Methyl Bromide (MeBr), used in the agricultural industry for over 40 years. The Environmental Protection Agency's Clean Air Act required that MeBr be phased out by 2005 as it was identified to be "ozone depleting" in the early 1990s.

**Simone Michaela Schwartz** (read [ABSTRACT](#))  
Discovery of Procedural Inconsistencies and Their Effects on Results in an Environmental  
Analysis  
(Chair: Barry Gump)

## Evolution—Green Algae

**Daryl Lam** (read [ABSTRACT](#))

Phylogenetic Analyses of the Caulerpales (Ulvophyceae, Chlorophyta) Based on Rubisco Large Subunit Gene Sequences  
(Chair: Rick Zechman)

Scott Peat assessed the genetic identity of *Sarcocystis* isolates from multiple Southern sea otters to aid in the management of the already threatened Southern sea otter and determine the source of sea otter infection with *S. neurona*.

## Marine

**Scott Michael Peat** (read [ABSTRACT](#))

A Phylogenetic Analysis of *Sarcocystis* from the Southern Sea Otter (*Enhydra lutris nereis*)  
(Chair: Paul Crosbie)



## Sierra National Forest

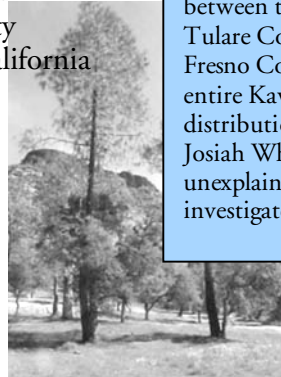
**Robin Ann Brake** (read [ABSTRACT](#))

Ghost Pine of the Kaweah: An Investigation into the *Pinus sabiniana* Range Discontinuity in the Southern Sierra Nevada Foothills, California  
(Chair: Ruth Kern)

**Jeffrey Eric Schneiderman** (read [ABSTRACT](#))

An Evaluation of the California Wildlife Habitat Relationships System: Small Mammal Assemblages in Sierran Mixed Conifer Habitat  
(Chair: David Grubbs)

*P. sabiniana* is indeed a ghost, inexplicably, in a 55-mile segment in the southeastern section of its range. The pine does not occur between the south fork of the Tule River, Tulare County, and the Kings River in Fresno County. It is missing throughout the entire Kaweah River watershed. This distribution discontinuity, first noted by Josiah Whitney in 1865, remains unexplained.” In her thesis, Robin Brake investigates possible causes.



James Meier’s thesis provides needed information for federal and state water management agencies to determine the feasibility and impact of future water banking projects. The physical model will assist the agencies in determining the impact of banking on local and regional aquifers

## Water Banking

**James Robert Meier** (read [ABSTRACT](#))

Soil Profile Modeling in the Kern County, California Water Banking Projects  
(Chair: Zhi Wang)

## Wine/Winemaking

**Christopher Gray Nelson** (read [ABSTRACT](#))

Development of a Rapid Automated Method for Analysis of Wine Phenolics  
(Chair: Barry Gump)

In his thesis, Chris Nelson automated the Folin-Ciocalteu procedure and delivered to winemakers a phenolics management tool that is easy to use and informative throughout the entire winemaking process. The automated version has many advantages over the manual method, including increased precision and accuracy as well as a high sample throughput of 48 samples per hour.