Cultivating Our Future

2013-14 Annual Report

Robert Mondavi Institute for Wine and Food Science UC**DAVIS**

Enhancing our quality of life through wine, brewing and food sciences



Executive Director, Robert Mondavi Institute for Wine and Food Science UCDAVIS

From the Executive Director

he 2013-14 fiscal year was an outstanding year of growth and achievement for the Robert Mondavi Institute for Wine and Food Science, an organization that supports research and broad educational programs at the University of California, Davis.

The university itself continues to strengthen its position as a global leader in the fields of food and agriculture. UC Davis has been ranked 9th overall and 4th in the United States for its commitment to the environment and sustainability, thanks to such stateof-the-art facilities as the Jess S. Jackson Sustainable Winery Building. The facility was dedicated in May 2013 and is expected to be the first building at any university to be certified Net Zero Energy under the Living Building Challenge. For the second year in a row, the College of Agricultural & Environmental Sciences was ranked No. 1 in the world for research and teaching in agriculture and forestry.

The Robert Mondavi Institute helps cultivate the university's current and future excellence through a number of different programs. Our Industry Partnership Program supports outstanding graduate students in the departments of Food Science and Technology, and Viticulture and Enology. Olivia Yu was the recipient of a \$40,000 Graduate Fellowship from Pentair to support one year of her research on the impacts of wastewater irrigation on vineyard soil composition. Yu joins two other exceptional young women who have been awarded Graduate Fellowships through our Industry Partnership

Cultivating Our Future

Program over the last two years. We hope to expand this program in the coming year.

The institute is also home to three independent centers that complement the academic work of the departments with outreach, education and applied research activities. Last year, the Olive Center provided the research for the world's toughest olive oil standards, mentored one of only 12 Ph.D. candidates honored internationally by the American Oil Chemists Society, initiated or completed 27 research projects and expanded into online education.

Our Honey and Pollination Center hosted the firstever Mead Makers Short Course, which quickly filled up, attracting attendees from across the U.S., Canada and South America. The center will also spearhead efforts to remedy the dearth of research on the "world's oldest fermented beverage."

The Robert Mondavi Institute continues to cultivate the general public's interest in foods and beverages with programs that introduce visitors to UC Davis research. Hundreds enjoyed guided tours of our LEED platinum winery, brewery and food and milk processing laboratory last year and special events focused on honey, beer, cheese, and wine. Our Friends of the Robert Mondavi Institute Program has grown substantially, enabling us to expand these initiatives even further.

Thank you for your support of the Robert Mondavi Institute and helping us to further the mission with which Robert Mondavi charged us: *enhancing the quality of life through wine, brewing and food sciences!*

New and Noteworthy

UC Davis Ranked No. 1 Globally for Agriculture and Forestry



QS World University Rankings, an organization

that annually ranks universities in 30 subject areas, recently announced that *UC Davis is the No. 1 university in the world* for teaching and research in agriculture and forestry for the second consecutive year.



UC Davis Ranks in the Top 10 Worldwide for Sustainability and Environment-Friendly Management by UI GreenMetric World University Ranking

The campus is **9**th overall and **4**th in the United States. "Our commitment to the environment and sustainability permeates everything we do, and the solutions being realized on our campus are helping to transform the world," said Chancellor Linda P.B. Katehi. Out of all of the UC campuses, **only Davis made the top 10**.

Helene Dillard Appointed as New Dean of the College of Agriculture and Environmental Sciences

On January 27, 2014, Helene Dillard, a plant disease expert, native Californian, and UC Davis alumna, started her tenure as the ninth dean of the College of Agricultural and Environmental Sciences (CA&ES) at UC Davis.

Dean Dillard joined UC Davis after a long and distinguished career at Cornell University as associate dean, and head of Cooperative Extension.

Born and raised in the San Francisco Bay Area, she received her bachelor's degree from UC Berkeley in 1977. She continued her studies at UC Davis, earning a master's degree in soil science in 1979 and a doctoral degree in plant pathology in 1984.



Dean Helene Dillard, right, discussing career options with a UC Davis student. (photo: TJ Ushing / UC Davis)

"UC Davis faculty, staff, and students lead the way in initiatives that address the key societal challenges inherent in issues of food production and food security, sustainable and healthy living, climate change and environmental stewardship."

- Helene Dillard Dean, CA&ES, UC Davis



Industry Partnership Program: Helping Industry Innovate

PENTAIR

(Industry Partner)

www.pentair.com

Pentair is a global water, fluid,

industry leading products and

equipment protection partner with

services. Pentair provides critical

inputs to a wide range of essential

thermal management, and

Benefits of membership in the Industry Partnership Program include:

- Single point of access to connect to faculty across UC Davis
- Annual research update tailored to each Partner interest area
- Facilitated access to cutting-edge facilities, including the LEED Platinum winery, brewery, food, and milk processing laboratories
- Unique engagement with students. including the opportunity to name a graduate fellow in the company name

ROLL GLOBAL (Founding Industry Partner) www.rollglobal.com

Roll Global is a privately held, \$3 billion international company committed to the health of its customers, employees, and the planet. Roll Global grows, harvests, packages, and markets a diverse range of healthy products, including fruits, nuts, flowers, water, wine, and juices.



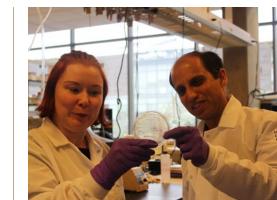
Chin. Ph.D. student in the laboratory of Carolyn Slupsky, and

2013-14 Roll Global fellow recently completed her year-long research project on citrus greening disease.

industries including: filtration and processing, flow management, and thermal management. Olivia Yu, a Ph.D. student in Kerri Steenwerth's

laboratory, was





From left: Ph.D. candidate Erica Vonasek with Professor Nitin Nitin.

Erica Vonasek, who received the 2012 Del Monte Fellowship, began her sponsored research in early 2014 in the laboratory of Nitin Nitin.

According to Professor Nitin, "In order to address the challenges of plaque removal from oral surfaces, this project aims to develop unique material formulations that can improve partitioning of antimicrobial agents into the plaque, facilitate degradation of the plaque extracellular matrix, and target specific microbes using bacteriophages and other food grade antimicrobials."

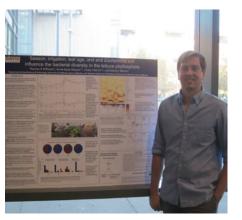
Graduate Fellows receive \$40,000 to support one year of their research

The Robert Mondavi Institute hosted the fourth annual Graduate Student Research Poster Competition on October 17, 2013. Winners received a monetary award (\$1,500, \$1,000, \$500 for first, second, and third place respectively) and an engraved plaque.

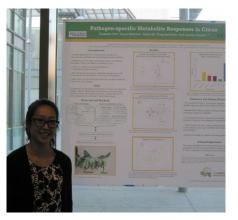
Supporting Our Student

From left: (front row) Jonathan Cave, Bonnie Dixon, Elizabeth Chin, Yuanjie Pan, and Sharon Shoemaker, (back row) John Ashby, Warren Quilliam, Sam Cunningham, Al Giuliani, and Thomas Williams.

Bonnie Dixon and Yuanjie Pan both received honorable mention and \$250 for their posters.



First Place: THOMAS WILLIAMS, Ph.D. candidate in the laboratory of Professor Maria Marco, for his poster: "Season, irrigation, leaf age, and *Escherichia coli* influence the bacterial diversity in the lettuce phyllosphere."



Second Place: ELIZABETH CHIN, Ph.D. candidate in the laboratory of Professor Carolyn Slupsky, and 2012 Roll Global graduate fellow, for her poster: "Pathogen-specific metabolite responses in citrus plants."



Third Place: JONATHAN CAVE, Ph.D. candidate in the laboratory of Professor Andy Waterhouse, for his poster: "Elucidation of pigmented tannin structure in red wine color by high resolution mass spectrometry."

Jess S. Jackson Sustainable Winery Building Dedicated

he Jess S. Jackson Sustainable Winery Building was dedicated on May 29, 2013. This state-of-the-art facility was made possible by a \$3 million gift from the late Jess S. Jackson and his wife Barbara Banke, proprietor of Jackson Family Wines.

WHEN FULLY EQUIPPED, THE JACKSON WINERY BUILDING WILL:

- Enable the adjacent teaching and research winery, brewery, and food-processing facility to operate in a selfsustainable manner with onsite capture of energy and water.
- House equipment and systems for capturing and sequestering carbon dioxide from wine fermentation, and filter and recirculate water for wine, beer, and food processing.
- Produce chilled water using a solar-powered icemaker, and generate hydrogen gas by electrolysis, fueling a hydrogen fuel cell for nighttime energy use.

The Jackson Winery Building is expected to be the first building at any university to be certified Net Zero Energy under the Living Building Challenge.

14 Advanced Teaching Fermentors Unveiled

On May 7, 2014, over 75 people gathered in the J. Lohr Fermentation Hall of the LEED Platinum Teaching and Research Winery at the Robert Mondavi Institute to celebrate the unveiling of 14 new state-of-the-art 500-gallon fermentors. The tanks were designed by Department of Viticulture and Enology Professor and Chair David Block and Winemaker Chik Brenneman, and have been named by or for California's pioneering wine families through their generous donations, totaling some \$700,000.

- Beaulieu Vineyard, in memory
 of André Tchelistcheff
 - J. Lohr Vineyards & WinesJordan Vineyard & Winery
- Bart and Daphne Araujo
- Cakebread Cellars
- Peter Mondavi, Sr., and Charles Krug Winery
- Far Niente Winery
- Heitz Cellar

- Opus One
- Paul Hobbs Winery
- Ramey Wine Cellars
- Trefethen family
- Wente family
- Winiarski Family Foundation

Peter Mondavi Sr. and Sons Visit the Teaching and Research Winery



The Charles Krug Winery honored Peter Mondavi Sr. by naming one of the large winery fermentors in his honor. The fermentor will recognize this legacy with the following statement: "Peter Mondavi Sr., the Father of Cold Fermentation."



Walt Klenz Lectureship on Wine Business

ZELMA LONG reflected upon her 43-year career in the wine business during her lecture on November 7, 2013. Long studied viticulture and enology from 1968 to 1970 at UC Davis. Her honors include inductions into the Culinary Institute of America's Vintners Hall of Fame and the James Beard Hall of Fame.

On April 8, 2014, MERRY EDWARDS discussed her "Forty Year Journey" in the wine industry. Edwards was inducted into the Vintners Hall of Fame by the Culinary Institute of America, and received the James Beard Foundation Award for Outstanding Wine, Beer or Spirits Professional, only the fourth woman to receive this prestigious honor.



"Whatever new is discovered here at UC Davis will travel around the world."

Zelma Long Owner, Vilafonté Vineyards



"I'm proud to be in California, and to be making the wines that we grow here."

Merry Edwards Owner, Merry Edwards Winery More than 100 friends, donors, and guests attended the 2013 year-end holiday gathering

iends

of the

obert *Mondavi*

nstitute



Our Friends of the Robert Mondavi Institute program has a whole new look and exciting new benefits.

DONORS TO THE ENDOWMENT

- Victor C. Chu Estate
- Paul and Sandra Montrone
- Douglas and Julianne Muhleman
- College of Agricultural and Environmental Sciences

CORPORATE LEVEL FRIEND

ETRI (Electronics and Telecommunications Research Institute)

EPICUREAN LEVEL FRIEND

Douglas and Julianne Muhleman

RESERVE LEVEL FRIEND

- Clare Hasler-Lewis and Cameron Lewis
- Bancroft-Clair Foundation
- Margaret Lawson
- Glenn and Julie Nedwin
- Harold McGee
- Al and Margaret Giuliani
- Darrell Corti
- Guneet and Kulbir Bajwa
- Randy Cobb
- Jane Killebrew

- Wayne and Jacque Bartholomew
- John Lescroart and Lisa Sawyer
- Roger White
- Abel and Kathy Barrientes
- Michael Cello
- Chuck and Lori Krouse
- Laurence Seigler
- Suzanne and Dan Kimmel
- Kay Gist
- Donald Wilson
- Erinne and Jim Aboytes

VINTAGE LEVEL FRIEND

- Karl Gerdes and Pamela Rohrich
- Maynard Skinner and Cristy Jensen
- Kathy and Vince McClean

CULINARY LEVEL FRIEND

- Murry and Laura Baria
- Charles and Nancy Shulock
- Rafael de la Fuente
- Travie and Janet Westlund
- Robert and Barbara Leidigh
- Jina Lopez
- Amy and Robert B. Day, Jr.
- John and Christine Bruhn

"Fine wine, fine beer, fine food, fine events; RMI has it all, and it is likely the finest facility of its kind in the World. RMI is a real jewel of UC Davis!"



- RANDY COBB, RESERVE LEVEL FRIEND

Uncorked

at the Robert and Margrit Mondavi Center for the Performing Arts

An exclusive wine tasting experience before select performances for donors to the Robert Mondavi Institute at the Reserve level and above. We are grateful to the wineries that poured during the 2013-14 season:

Cline Cellars Bonny Doon Vineyard Pride Mountain Vineyards **Ram's Gate Winery Robert Mondavi Winery Paradise Ridge Winery** Navarro Vineyards **Raymond Vineyards Clarksburg Wine Company** Heitz Cellars **Seavey Vineyard Boeger Winery Grgich Hills Estate**

More than 450 guests celebrated the bounty of the fall harvest in the Good Life Garden on Friday, October 4, 2013. All proceeds from the "Bid to Build Your Cellar" silent auction were used to support the Food Science Graduate Student Association.

THE PALATE PROJECT

Fermentation at its Finest: Beer and Cheese Pairings



For the fifth consecutive year, the Robert Mondavi Institute hosted its very popular beer and cheese tasting event. Anheuser-Busch Endowed Professor Charles Bamforth and Seana Doughty, president of the California Artisan Cheese Guild, led a guided tasting of the following eight cheeses and beers:

- Loma Alta and Sudwerk Hefeweizen
- Whole Jersey Milk Ricotta and Marin Brewing Stinson Beach Peach
- Two Rock Valley Goat Cheese and Firestone Pale 31
- Central Coast Goat Gouda and Gordon Biersch Brewing Festbier
- Humboldt Fog and Russian River Temptation
- Bleating Heart Fat Bottom Girl and Anderson Valley Brother David's Triple
- Valley Ford Estero Gold Reserve and Lagunitas Brown Shugga
- Point Reyes Bay Blue and Sierra Nevada Warhal



Made possible in part by a \$2,500 donation from the *Julia Child Foundation for Gastronomy and the Culinary Arts.*

2013 Winkler Dinner

The Winkler Dinner is hosted by student members of the Davis Enology and Viticulture Organization (DEVO). The event was named after the historic Winkler Vine, and honors the late Albert J. Winkler, chair of the department from 1935 to 1957. Proceeds from the dinner support student activities, including international scholarship awards.



News and Updates Center for Wine Economics

Conference Held on Economics of Pest Management

The Robert Mondavi Institute's Center for Wine Economics hosted "Pests, Germs and Seeds: The Economics of Policies, Programs and Technologies for Managing Agricultural Pests and Diseases," on March 28 and 29, 2014. Participants traveled to



From left: Alan Olmstead, Helene Dillard, Pam Marrone, Dan Sumner

Davis from all around the United States and beyond and were welcomed by Helene Dillard, dean of the College of Agricultural and Environmental Sciences. The program included 28 presentations on research related to the theme of the conference across a wide range of specific topics.

CONTRACTOR OF CONTACTOR OF CONTACTOR OF CONTACTOR OF CONTACTOR OF CONTACTOR OF CONTACT

News and Updates

Annual short courses at the UC Davis Olive Center are helping consumers, growers and producers improve global standards for olive oil quality and production.

> he UC Davis Olive Center hosted three short courses last year. The Master Milling Course (October 9-12, 2014) featured on-site olive oil bottling and involved international olive oil authority Leandro Ravetti. Sensory Evaluation of Olive Oil (May 9-10, 2014) featured the UC

Davis Olive Center Taste Panel leader, and international olive oil expert, Sue Langstaff. Advanced Sensory Evaluation of Olive Oil, (September 16-18, 2013) attracted attendees from 13 states, Canada and Japan.

UC Davis Olive Center seeks to do for olives what UC Davis did for wine by:

- **Pursuing innovation.** Applying modern scientific knowledge and technology to an ancient crop.
- **Providing services.** Offering independent chemical and sensory analysis.
- Pushing the tipping point. Providing independent, research-based information to professional buyers and regulators to help consumers embrace quality.

Sensory scientist Sue Langstaff discusses defects at the Sensory Evaluation of Olive Oil Short Course, May 2014, in the Silverado Vineyards Sensory Theater

1 8

the lot

THE DEFECTS WHEEL

21

....



Director of UC Davis Olive Center Wins \$1,500 Award of Excellence

Dan Flynn won the 2013 Chancellor's STAR Award, which is given to managers and senior professionals who have gone "above and beyond" in support of the campus's core values. Under Flynn's direction, the

"[Flynn] is always looking into innovative ways to include and engage faculty and students to inspire and support excellence."

– Selina Wang, Research Director, UC Davis Olive Center Olive Center has become a world-renowned leading institution for olives and olive oils. Since its launch the center has generated nearly 100 research projects, engaged almost 90 faculty and research specialists, delivered 30 short courses, mentored 55 undergraduate and graduate students, has been awarded \$2.5 million

in grants, and educated millions around the world.

UC Davis Olive Center Obtains New Lab Space

From left: Selina Wang, research director; Dan Flynn, director; Clare Hasler-Lewis, executive director, Robert Mondavi Institute

Current research projects include correlating sensory perception with chemical markers for olives and olive oil, developing reference samples and bio-sensors for olive oil defective flavors and studying the effect of membrane filtration systems on the shelf-life of olive oil.

15

Honey and Pollination Center at the Robert Mondavi Institute New

News and Updates

he mission of the Honey and Pollination Center is to become the world's leading authority on honey bee health, pollination, and honey quality. In addition to short courses, other educational events and honey tastings, the center sells UC Davis Honey and Pollinator notecards. Proceeds are donated to support honey bee health research at UC Davis.

Many of the center's 2013-14 programs were supported by seed funding from the UC Davis Office of Research, the College of Agricultural and Environmental Sciences, and the Julia Child Foundation for Gastronomy and the Culinary Arts. The center hosted the first-ever Mead Makers Short Course on February 6-8, 2014. The sold-out event featured lectures from faculty representing the departments of Viticulture and Enology, Food Science and Technology, and Agricultural and Resource Economics.



On February 8, 2014, the center hosted its first fundraising event, The Mid Winter Beekeepers Feast. The sold out dinner generated \$6,000 in revenue from ticket sales and a silent auction.



On April 12, 2014 the center hosted Pollination Day. It was also the 100th anniversary of Picnic Day and more than 2,000 people visited the Robert Mondavi Institute to enjoy honey tastings, crafts for kids, photo opportunities with our famous bee costume, and sales of UC Davis honey.



On July 24, 2013, the center partnered with the UC Davis School of Education to host grade-schoolers for honey tastings and a tour of the Häagen-Dazs Honey Bee Haven. Later that evening, the students joined the the sold-out crowd of over 400 at the UC Davis Conference Center to view the DisneyNature Film, *Wings of Life*, narrated by Meryl Streep, and meet the film's director, Louie Schwartzberg.



17

Board of Executives 2013 - 2014



AROLD MCGEE was awarded the prestigious Johannes van Dam Prize by The Special Collections of the University of Amsterdam on January 17, 2014, during the Gala of the Cookbook. His book, *On Food and Cooking: The Science and Lore of the Kitchen*, is a standard reference in culinary schools and restaurant kitchens worldwide.

NEW MEMBERS:



R^{OB} TWYMAN is the regional president for Whole Foods Market, Northern California. He has worked at Whole Foods Markets across the country in various leadership positions, including at three locations in New York that he helped become the company's highest volume stores.



S TEPHANIE GALLO is vice president of marketing for E. & J. Gallo Winery. Gallo leads the company's worldwide marketing for prominent brands, including Barefoot and Gallo Family Vineyards. In 2011, she was named one of the Top Women in Grocery by *Progressive Grocer Magazine*. Additional Members of the Board of Executives:

Robert Boynton is an adjunct professor of applied economics and management at Cornell University and retired senior vice president of Marketing and Sales, Leprino Foods Company.

Paul Coletta served as the chief marketing officer for Jamba Juice, Pinkberry and POM Wonderful. He has worked at Disney, Viacom and Hewlett-Packard.

Darrell Corti is president of Corti Brothers, gourmet food and fine wine specialists in Sacramento, Calif.

Al Giuliani is the retired president and chief operating officer of Ready Pac Foods. He previously worked for Mars, US Foods, United Vintners and Quaker.

Clay Gregory is chief executive officer of Visit Napa Valley and former president of Jackson Family Wines. Previously, he was general manager of Robert Mondavi Napa Valley operations.

Greg Fowler is senior vice president, Operations, Constellation Wines U.S. where he oversees production and winemaking. **Margaret Lawson** is vice president and chief science officer at D.D. Williamson as well as past-president of the Institute of Food Technologists.

Doug and Juli Muhleman are long-time supporters of UC Davis and the institute. Doug is a UC Davis Foundation trustee, and heads the Dean's Task Force for Development for the College of Agricultural and Environmental Sciences.

Glenn Nedwin CEO and President of Taxon Biosciences, Inc., has over 30 years of experience in the biotechnology industry.

Warren Quilliam is senior director, Corporate Brewing and Malting, for MillerCoors, where he oversees brewing and malting operations for MillerCoors' domestic and international operations.

Scott Ungermann is

the brewmaster for the Anheuser-Busch Brewery, in Fairfield, Calif. He studied brewing at UC Davis.

Jean-Michel Valette

is currently chairman of Peet's Coffee & Tea, Inc., as well as chairman of Vinfolio, Inc., San Francisco.



"Robert Mondavi's dream has become a reality – the departments of Viticulture and Enology, and Food Science and Technology collaborating and working together under one roof. The faculty, students and staff have created a vibrant teaching and learning environment supported by world-class facilities. I look forward to continuing to contribute to the success of the Robert Mondavi Institute."

- Al Giuliani Chair, Board of Executives

Executive Committee

David Block

Ernest Gallo Endowed Chair, and professor and chair, Department of Viticulture and Enology

Michael

McCarthy

Enology, Department of Viticulture and Enology

Bruce German Director, Foods for Health Institute and professor, Department of Food Science and Technology

Professor and chair, Department of Food Science and Technology: professor, Biological Department of and Agricultural Engineering

Diane Barrett Specialist in Cooperative Extension, Department of Food Science and Technology

Charlotte Biltekoff

Associate professor, American Studies and Department of Food Science and Technology

Linda Bisson

Professor and Maynard A. Amerine Entomology and **Endowed Chair** in Viticulture and

Agricultural and **Resource Economics** Sharon Shoemaker Executive director, California

Lovell (Tu) Jarvis

Professor,

Institute of Food and Agricultural Research

Francene Steinberg

Professor and chair, Department of Nutrition

Ed Lewis

Professor and vice chair. Department of Nematology



distinguished group of thought-leaders whose expertise and industry leadership represent, inspire, and honor the institutes's vision: Enhancing our quality of life through wine, brewing, and food *science* – for future generations.

- August A. Busch III Fritz Maytag •
- Francis Ford
 - Coppola
- Darrell Corti •
- Ann and Gordon •

Gettv

Agustin Huneeus

"It was at Davis that winemaking was said to be 'a craft elevated to an art.' A craft must be honed and refined to become art and this is what

is done in the viticulture and enology department at the Robert Mondavi Institute at UC Davis."

- Darrell Corti

President of Corti Brothers Grocers and Wine Merchants, Sacramento, Calif.

Honorary Board

Margrit Mondavi

Tim Mondavi

Paul Montrone

Wolfgang Puck

Martin Yan

Administration and Staff

Clare Hasler-Lewis Executive Director Robert Mondavi Institute for Wine and Food Science (530) 754-6349 cmhasler@ucdavis.edu

Dan Flynn Director UC Davis Olive Center (530) 752-5170 jdflynn@ucdavis.edu

Amina Harris Director Honey and Pollination Center (530) 754-9301 aharris@ucdavis.edu Kathy Barrientes Director of Development, College of Agricultural and Environmental Sciences (530) 752-1602 ksbarrientes@ucdavis.edu

Melissa Haworth Director of Development, College of Agricultural and Environmental Sciences (530) 979-1440 mdhaworth@ucdavis.edu

Selina Wang Director of Research UC Davis Olive Center (530) 752-0612 scwang@ucdavis.edu Stephanie Shimada Director of Industry Relations and Events (530) 752-4180 shimada@ucdavis.edu

Cindi Bradshaw Assistant Director of Community Relations (530)-752-5233 cabradshaw@ucdavis.edu

> Vanessa Rutledge Executive Assistant (530) 754-6349 vrutledge@ucdavis.edu

Shirley Li Lab Manager UC Davis Olive Center spsli@ucdavis.edu

Evan White Design and Communications emwhite@ucdavis.edu

Elizabeth Luu Student Assistant Honey and Pollination Center luu@caes.ucdavis.edu

> Zoey Wolinsky Student Assistant zwolinsky@ucdavis.edu





Robert Mondavi Institute

for Wine and Food Science

Enhancing our quality of life through wine, brewing and food sciences

www.RobertMondaviInstitute.ucdavis.edu