“Supporting the Next Generation of Food and Beverage Innovators”
I am pleased to share the 2015-2016 Annual Report of the Robert Mondavi Institute for Wine and Food Science at the University of California, Davis, one of the world’s leading cross-disciplinary research and teaching institutions.


Programmatic activities at the Robert Mondavi Institute stem from six mission objectives: 1) support and promote academic excellence of the Departments of Food Science & Technology (FST) and Viticulture & Enology (VEN), 2) provide financial support for graduate students, 3) foster industry linkages to UC Davis, 4) provide educational and leadership experiences for students, 5) develop outreach and education programs for the public, and 6) secure the Institute’s financial health. I am particularly proud of our financial support for students, which continues to increase year after year.

Last year the Institute awarded more than $115,000 in scholarships, fellowships, internships and other awards to students in VEN, FST, and Entomology & Nematology—nearly double what was awarded in 2014-2015.

The Institute’s two Centers of Excellence, the Olive Center and Honey and Pollination Center, continue to play key roles in the Institute’s support of students, faculty research, serving industry stakeholders through short courses and engaging the public via outreach and education. The Olive Center’s research program continues to thrive under the direction of Dr. Selina Wang, who was recently promoted to Adjunct Assistant Professor in FST. The Honey and Pollination Center added the Honey Sensory Experience and World of Honey Tasting Series to its slate of many educational programs.

Our Industry Partnership Program has provided $200,000 in Fellowships to five graduate students since 2012. Congratulations to Ryan Dowdy, the 2016 Arla Foods Fellow. Pentair recently announced a significantly enhanced partnership with the Institute and will support Graduate Fellows in both Brewing and Dairy Science for 3 years in addition to donating over $1.2 million in equipment for both research programs.

Although 2015-2016 was a very successful year for the Robert Mondavi Institute, we were greatly saddened by the recent death of Margrit Mondavi. “There is so much beauty in the world, if we look for it, so much” Margrit often said. She brought beauty and grace to many lives at the Robert Mondavi Institute and UC Davis and we will miss her greatly.

Clare Hasler-Lewis
Executive Director,
Robert Mondavi Institute for Wine and Food Science

Margrit Biever Mondavi, widow to Robert G. Mondavi, died on September 2, 2016 at age 91.

Margrit was Vice President of Cultural Affairs at Robert Mondavi Winery. She joined the winery in 1967, pursuing a life-long interest in uniting wine with fine arts, music and culinary artistry. Under her direction, Robert Mondavi Winery developed cultural and culinary arts programs that are now benchmarks for the wine world. She founded the winery’s popular Summer Music Festival in 1969 and in 1984, the Festival of Winter Classical Concert Series. In 1977 Margrit introduced the Great Chefs culinary series. “Like painting and music, wine and food speak to the heart,” said Margrit.

Married to Robert Mondavi from 1980 until his passing in 2008, Margrit traveled with him around the world. Upholding the family’s philosophy that all the arts contribute to an enhanced quality of life. In 2001, she and Robert donated $10 million to UC Davis to launch the Robert and Margrit Mondavi Center for the Performing Arts.

Margrit remained an active ambassador for the winery and Napa Valley culture until her death.
Ryan Dowdy was recognized as the 2016 Arla Foods Graduate Fellow in April. Dowdy is a Ph.D. student in the laboratory of Assistant Professor Christopher Simmons, Department of Food Science & Technology. Dowdy’s research is focusing on “Microbial Desalination and Membrane Fouling Control for Dairy Processing.” He received $40,000 for one year to support his research. (From Left: Harry Barraza, Arla Foods; Ryan Dowdy; Clare Hasler-Lewis, Executive Director, Robert Mondavi Institute.)

The 2015 Arla Foods Fellow, Fang (Diane) Dou is currently completing her research project on rapid detection of bacteriophages in dairy and cheese processing. Diane is a Ph.D. student in the Department of Food Science & Technology working with Professor Nitin Nitin.

Pentair, a global water, fluid, thermal management, and equipment protection partner, has been a member of the Industry Partnership Program since 2013. Pentair recently announced they will significantly expand their partnership with the Robert Mondavi Institute. The company has pledged $240,000 to support one graduate student in dairy food science and one graduate student in brewing science each year for three years. Further, Pentair will provide approximately $1,200,000 in equipment to support dairy and brewing education and research in the Anheuser-Busch InBev Brewery and the Milk Processing Laboratory at the Robert Mondavi Institute. The Pentair Graduate Fellows in Brewing and Dairy Science will be announced in early 2017.

www.pentair.com

www.arla.com
Josh Cohen, a Ph.D. Student in the Department of Food Science & Technology, received $1,500 for his poster: "Pilot scale isolation of bioactive oligosaccharides from whey permeate".

Gordon Walker, a Ph.D. Student in the Department of Viticulture & Enology, received $1,000 for his poster: "Effects of the [GAR+] prion on S. cerevisiae UCD932 fermentation capacity, cell physiology, and metabolism".

Randall Robinson, a Ph.D. Student in the Department of Food Science & Technology, received $500 for his poster: "A novel method for high-throughput analysis of bioactive oligosaccharides".

Nina Kirmiz, a Ph.D. Student in the Department of Viticulture & Enology, received $500 for her poster: "Insights into human milk oligosaccharide utilization by Bifidobacterium longum subsp. longum SC596 and Bifidobacterium breve SC95".

Yamile Mennah-Govela, a Ph.D. Student in the Department of Food Science & Technology, received $500 for her poster: "Sweet potatoes microstructural changes during in vitro gastric digestion".
Laura Ward¹ and Sara Winsemius²: Exploring potential routes of neonicotinoid exposure within pollinator hedgerows adjacent to seed-treated sunflower • ¹ Ph.D. Candidate, Dept. of Environmental Science, Policy & Management, UC Berkeley; ² Staff Research Associate, UC Berkeley

W. Cameron Jasper: Investigating potential synergistic effects of chronic exposure to amitraz and multiple pesticides on honey bee (Apis mellifera) survivorship • Ph.D. Candidate, Dept. of Entomology & Nematology, UC Davis

Brittney Goodrich: Honey bee colony health: economic implications for beekeepers in almond pollination • Ph.D. Candidate, Dept. of Agricultural & Resource Economics, UC Davis

John Mola: Fine-scale population genetics and movement ecology of the yellow-faced bumblebee (Bombus vosnesenskii) • Ph.D. Candidate, Graduate Group in Ecology, UC Davis

Graduate students from UC Davis and UC Berkeley participated on May 7, 2016. They were awarded $1,000, $750, $500 and $250 for first, second, third and fourth place, respectively.
ALEXANDER LEVIN
Doctoral Student, Viticulture & Enology
AWARD: $1,500
MEETING: X International Symposium on Grapevine Physiology and Biotechnology, Verona, Italy, June 2016
ABSTRACT: The Response of Stomatal Conductance to Vine Water Status

YAMILE MENNAH-GOVELA
Doctoral Student, Biological & Agricultural Engineering
AWARD: $750
MEETING: Institute of Food Technologists Annual Meeting (IFT) & Food Expo, Chicago, IL, July 2016
ABSTRACT: Red Beet Structural Changes during in Vitro Gastric Digestion as Influenced by Processing Method and Sample Size

TIAN TIAN
Doctoral Student, Food Science & Technology
AWARD: $750
MEETING: Institute of Food Technologists Annual Meeting (IFT) & Food Expo, Chicago, IL, July 2016
ABSTRACT: Identification and Characterization of Potential Prebiotic Oligosaccharides in Brewed Coffee and Spent Coffee Grounds

TONG XU
Doctoral Student, Food Science & Technology
AWARD: $750
MEETING: Institute of Food Technologists Annual Meeting (IFT) & Food Expo, Chicago, IL, July 2016
ABSTRACT: Oil Surface and Interfacial Tension as Affected by Composition, Temperature and Time
ANA SKOMAL RECEIVES $2,000 BROADENING HORIZONS SCHOLARSHIP

Skomal, an undergraduate in the Department of Food Science & Technology, served as Co-Director for the on-campus organization, Chicanos in Health Education. Broadening Horizons is a program dedicated to supporting underrepresented undergraduate students in the Departments of Food Science & Technology, and Viticulture & Enology.

DIANE WU RECEIVES $4,000 INTERNATIONAL INTERNSHIP AWARD

A first year Master's student in the Department of Viticulture & Enology, Ms. Wu earned Bachelor's and Master's degrees in Food Science from McGill University in Montreal, Canada. The Robert Mondavi Institute Award supported her harvest internship with Hans-Jörg Rebholz in Pfalz, Germany.

RANDALL ROBINSON
Doctoral Student, Viticulture & Enology
AWARD: $500
ABSTRACT: A Novel Method for High-Throughput Analysis of Bioactive Oligosaccharides

JAKE URETSKY
Doctoral Student, Viticulture & Enology
AWARD: $500
MEETING: 67th Annual ASEV National Conference, Monterey, CA, June 2016
ABSTRACT: Evaluating Grape Root Architecture in a 10114Mgt x 110R Genetic Mapping Population
• The Center welcomed nine undergraduates to the research lab and two Ph.D. candidates from the Department of Food Science & Technology: Lauren Crawford, who is fully funded by a California Department of Food & Agriculture (CDFA) Specialty Crop Block Grant, and Juan Polari, a fully-funded Fulbright Scholar from Argentina.

• The Center assisted Frank Zalom, Department of Entomology & Nematology, and Maria Marco and Kyria Boundy-Mills, Department of Food Science & Technology, in the application for two Specialty Crop Block Grants, totaling $409,574. Both grants were recommended for funding by CDFA, and the Marco/Boundy-Mills grant, “Development of Starter Cultures to Obtain Consistent, High Quality Sicilian-style Olives” was approved by the USDA for $215,264.

• The Center’s fall harvest in the West Davis orchard was the most successful ever, bringing in five tons of olives in one day. Approximately 20 students volunteered with Winters, Calif. harvest contractor Joe Martinez, owner of Martinez Ranches Inc. This was the first year mechanical harvesting equipment was used. Olive varieties harvested included Arbosana, Arbequina, Koroneiki, and Leccino.

• Selina Wang, the Center’s research director, was promoted to Adjunct Assistant Professor in the Department of Food Science & Technology. Shirley Li, the Center’s assistant director, was promoted to research specialist, a permanent position.

• The Center was featured on the PBS program, America’s Heartland, in an episode devoted to Olive Oil.
News & Updates

The Center’s report on fraudulent naming and standards for extra virgin olive oil sold in CA received press coverage by the OliveOilTimes in a story titled: Five Years Later, UC Davis Report Still Sends Shockwaves.

The Center released a travel-size (100 ml) bottle of its Estate Extra Virgin Olive Oil for the first time, now available for purchase ($7.50) at all UC Davis bookstores. The oil was hand-harvested with student volunteers from the only organic grove at UC Davis.

The Center offered two short courses which attracted attendees from 15 states and 12 countries:

- The Master Milling Certificate Course (October 1-4, 2015), which helps olive oil processors produce better oil more efficiently, was attended by over 70 participants.

- The Sensory Evaluation of Olive Oil Certificate Course (June 14-17, 2016) attracted 41 attendees who learned from sensory scientist Sue Langstaff how to gain expertise in evaluating olive oil.

Reports & Publications


Full reports at: olivecenter.ucdavis.edu
UC Davis is the only University offering educational short courses for the mead industry. These programs attract participants from around the world. Nearly 70 mead makers at all experience levels attended Beginners Introduction to Mead Making on November 13-14, 2015. Attendees had a unique hands-on experience under the direction of several professional mead makers and UC Davis winemaker, Chik Brenneman. On February 8-11, 2016, the Center held its first Continuing Mead Making and Business of Mead Making courses. In addition to a full day of sensory science, case studies, and mead tastings, participants visited Z Specialty Food, a Woodland, Calif. honey processing facility and Rabbit’s Foot Meadery in Sunnyvale, Calif.

MEAD SHORT COURSES November 2015 & February 2016

HONEY SENSORY EXPERIENCE May 2016

This inaugural short course on May 20-22 attracted industry professionals, honey packers and others from across the nation. Participants tasted over 50 honeys from around the world and learned the basics of sensory science and how to discern varietal honey aroma and flavor components.

BEE SYMPOSIUM: KEEPING BEES HEALTHY May 2016

Almost 250 attended the second-annual Bee Symposium on May 7, which featured keynote speakers Dennis vanEngelsdorp, a founding member of the Bee Informed Partnership and Yves LeConte, Director of the French National Bee Lab in Avignon, France. Speakers included professors from UC Berkeley, UC Riverside, and UC Davis.
FEAST: A CELEBRATION OF MEAD & HONEY
February 2016

The Center’s yearly fundraising dinner celebrated the importance of pollination to the bounty on our tables. Annotated menus explained the different pollinators responsible for the extraordinary meal. At the close of the evening, nationally renowned mead maker, Ken Schramm, of Schramm’s Mead, Ferndale, Mich., led a unique tasting in partnership with Darrell Corti, owner of Corti Brothers Gourmet Food and Fine Wine Specialists in Sacramento.

WORLD OF HONEY TASTING SERIES January & April 2016

This new series introduced participants to honeys from around the globe as well as entomology faculty at UC Davis. On January 27, the tasting featured honeys from California (orange blossom, coriander, avocado) and a discussion on bees in crisis with Assistant Professor Elina Niño, California Extension Apiculturist. On April 5, the tasting featured several international honeys: chestnut (France), vipers bugloss (New Zealand), coffee blossom (Guatemala) and Stingless Bee Honey (Brazil). Robbin Thorp, Distinguished Professor Emeritus, spoke on native bees from around the world.

CENTER WELCOMES NEAL WILLIAMS AS NEW FACULTY CO-DIRECTOR

Williams is an Associate Professor in the Department of Entomology & Nematology. He replaced department chair Michael Parrella who left the university in December to become Dean of the College of Agricultural & Life Sciences at the University of Idaho. Williams’ research program ranges from basic bee biology and pollination to applied research on native bee conservation and crop pollination.

CENTER SUPPORTERS

$50,000
- Springcreek Foundation
$2,500
- Natural American Foods
$1,000
- American Beekeeping Federation
$500
- Bee Progressive
- Z Specialty Food
$250
- First Northern Bank
- Golden Coast Mead
The Walt Klenz Lectureship Series, named in honor of former Beringer Blass CEO Walt Klenz, brings renowned wine business leaders to the Robert Mondavi Institute to share their insights and experiences with students, faculty and industry attendees.

May 17, 2016

MICHAEL MONDAVI
is widely credited with helping to establish and build the Napa Valley wine industry. He has been named Industry Executive of the Year by The Market Watch Leaders, and he received the “Who’s Who of Food & Beverage” award by the James Beard Foundation. In 1995 he was awarded the World of Food and Wine Lifetime Achievement Award, and in 2015, Wine Enthusiast Magazine named Michael their 2015 “Person of the Year.”

ROB MONDAVI JR.
joined the Robert Mondavi Corporation in 2000. After three years in sales, he became the Director of Marketing, spearheading the Corporation’s trade marketing programs. In 2004 Rob was appointed President of Winemaking for Michael Mondavi Family Estate and, today, oversees all grape growing and winemaking for wines produced under the M, Animo and Emblem brands.
The Winkler Dinner honors the late Albert J. Winkler, chair of the Department of Viticulture & Enology from 1935 to 1957. Proceeds from the annual dinner support the activities of DEVO, the UC Davis Department of Enology & Viticulture student organization, including providing international scholarships.

The 2016 dinner, hosted in the Olive Grove at the Robert Mondavi Institute, consisted of five courses prepared by individual chefs paired with wines made by UC Davis alumni, and accompanied by auctions and live music. It was the most successful event to date raising $50,000 for DEVO.
More than 40 regional wineries, breweries, and eateries provided sample sips and bites on October 9 at TASTE 2015, the Robert Mondavi Institute’s annual fundraiser. Held in collaboration with the Mondavi Center for the Performing Arts TASTE raised $12,000 for students in the Departments of Food Science & Technology, and Viticulture & Enology, including Broadening Horizons, a program supporting Chicano/Latino students.

Photo: Mike Tentis
“Uncorked” is an exclusive wine tasting experience at the Mondavi Center for members of the Friends of the Robert Mondavi Institute Program at or above the Reserve level. We thank the wineries that poured during the 2015-16 season:

Priest Ranch  Bucher Winery  Boeger Winery
Broman Cellars  Gauthier Select Vineyards  V. Sattui Winery
Miner’s Leap  Bouchaine Vineyards  Robert Mondavi Winery

mondaviarts.org/uncorked/
Membership in our Friends of the Robert Mondavi Institute program funds scholarships, travel grants, and research awards for outstanding students in the Departments of Viticulture & Enology, and Food Science & Technology.

Our Friends Support:

Graduate Student Travel Grants
Graduate Student Research Poster Competition
Robert Mondavi Institute International Harvest Internship Award
Food Science Undergraduate Broadening Horizons Scholarship
DEVO, the student Davis Enology & Viticulture Organization
Tori Blommer-O’Malley
Barbara Fingerut
Karl Gerdes & Pamela Rohrich
Dana Hawkins
Mary Horton
Kim Lamb
Bill & Linda Schmidt
Jina Lopez
Tom & Rebecca Ramme
David Rocke & Janine Mozee
Susan & Robert Silva
Maynard Skinner & Cristy Jensen

Laura & Murry Baria
Robert & Janice Boynton
John & Christine Bruhn
Seth Brunner & Linda Clevenger
Grant & Lois Chappell
Paul Coletta
Rafael De La Fuente
Judy Doherty
Clay Gregory
Andy Jones & Kate Duren
Bill & Laura Lacy
Don Roth & Jolán Friedhoff
Chuck & Nancy Shulock
Dan Sperling
Nancy & Robert Tate
Jack Williams

Jim & Erinne Aboytes
Wayne & Jacque Bartholomew
Jeremy Benson
Bancroft-Clair Foundation, Inc.
Randy Cobb & Kathie Benko
Darrell Corti
Kay Gist
Al & Margaret Giuliani
Jose Goya
Jane Killebrew
Suzanne & Dan Kimmel
Chuck & Lori Krouse
Margaret Lawson
Bob & Barbara Leidigh
John Lescoart & Lisa Sawyer
Harold McGee
Glenn & Julie Nedwin
Ashok Patel
DeWayne Quinn
Nancy & Bill Roe
Dr. Laurence Seigler
James & Penelope Shackelford
Barb Stuckey
Rob & Sonya Twyman
Jean-Michel & Janet Valette
Michelle Vinnicombe
Roger White
Glenn Workman
Anonymous

Clare Hasler-Lewis & Cameron Lewis
Douglas & Julianne Muhleman
Victor C. Chu Estate
Paul & Sandra Montrone
Douglas & Julianne Muhleman
College of Agricultural & Environmental Sciences
Board of Executives

Robert Boynton is an Adjunct Professor of Applied Economics and Management at Cornell University and the retired Senior Vice President of Marketing and Sales at Leprino Foods Company.

Paul Coletta is the CEO of Urban Remedy. He previously served as the chief marketing officer for Jamba Juice, Pinkberry and POM Wonderful.

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

Al Giuliani (Chair) 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.

Jane Killebrew is the Global Vice-President of Brewing and Quality at Anheuser-Busch/InBev.

Margaret Lawson is past-President (2004-2005) of the Institute of Food Technologists (IFT) and the recipient of IFT’s 2010 Calvert L. Willey Distinguished Service Award.

Harold McGee is an author, New York Times columnist, and recipient of the prestigious “Johannes van Dam Prize,” awarded to him in 2014 by the University of Amsterdam. His book On Food and Cooking: the Lore of the Kitchen is a standard reference in culinary schools.

Doug (Vice Chair) and Juli Muhleman are long-time supporters of UC Davis and the institute. Doug currently chairs the Brewing Science Strategy Group within the Department of Food Science and Technology.

Glenn Nedwin is the CEO and President of Second Genome, Inc., and CEO and President of TripleDNA Consulting, LLC.

Rob Twyman is the Regional President for Whole Foods Market, Northern California and Reno.

Jean-Michel Valette is Chair of the Board of Directors at Vinfolio, Sleep Number by Select Comfort; Lead Director, Boston Beer Company.

Glenn Workman is the Vice President and General Manager of the Robert Mondavi Winery.

Jeremy Benson is president of Benson Marketing Group, a leading marketing agency providing PR, social media, trade promotion, direct marketing and brand consulting services to wine and spirits marketers around the globe. Benson is the only wine-focused agency with offices in Napa Valley, New York and Paris.

Barb Stuckey is President and Chief Innovation Officer at Mattson, the country’s largest independent developer of foods and beverages for chain restaurant and retail foods industries. Her book, Taste, was released in paperback in 2013.
Honorary Board

A distinguished group of thought-leaders whose expertise and industry leadership represent, inspire, and honor the Institute’s vision: Enhancing our quality of life through wine, brewing, and food sciences — for future generations.

August A. Busch III
Francis Ford Coppola
Darrell Corti
Ann and Gordon Getty
Agustin Huneeus
Fritz Maytag
Margrit Mondavi
Michael Mondavi
Tim Mondavi
Paul Montrone
Wolfgang Puck
Martin Yan

Executive Committee

David Block (Chair)
Ernest Gallo Endowed Chair and Professor and Chair, Department of Viticulture & Enology

Charlotte Biltekoff
Associate professor, Departments of American Studies, and Food Science & Technology

Linda Bisson
Professor, Department of Viticulture & Enology

Linda Harris (Vice-Chair)
Specialist in Cooperative Extension and Chair, Department of Food Science & Technology

Julian Alston
Distinguished Professor, Department of Agricultural & Resource Economics

Maria Marco
Associate Professor, Department of Food Science & Technology

Sharon Shoemaker
Executive Director, California Institute of Food & Agricultural Research

Francene Steinberg
Professor and Chair, Department of Nutrition

Ed Lewis
Professor, Department of Entomology & Nematology, and Associate Dean for Agricultural Sciences, College of Agricultural & Environmental Sciences

BOARD OF EXECUTIVES STUDENT REPRESENTATIVES

Pauline France Lestringant
President, Food Science Graduate Student Association, Ph.D. Student, Department of Food Science & Technology

Jenna Huynh
President, Food Tech Club Undergraduate, Department of Food Science & Technology

Rebecca Jain
President, DEVO Undergraduate, Department of Viticulture & Enology

Laura Metrulas
President, Food Science Brewing Club, M.A. Student, Department of Food Science & Technology

A distinguished group of thought-leaders whose expertise and industry leadership represent, inspire, and honor the Institute’s vision: Enhancing our quality of life through wine, brewing, and food sciences — for future generations.