ENDOWMENT PURPOSE
The Ernest Gallo Fund for Education in Enology and Viticulture was established in 2009 by the trustees of the Ernest Gallo 1977 Educational Trust. From 1977 to 2009, the trust supported an endowed chair at UC Davis known as the Maynard A. Amerine Professor of Enology and Viticulture. Upon Mr. Gallo’s passing in 2007, the trustees terminated the trust, directing its undistributed income and principal to UC Davis. This created the Gallo Fund for the purpose of supporting an endowed chair, known as the Ernest Gallo Endowed Chair in Viticulture and Enology at UC Davis. The endowed chair was established to attract and sustain outstanding scholars and scientists in the department of Viticulture and Enology and to provide the occupant with the opportunities to conduct exemplary research and teaching.

RESEARCH
During the past year, this endowment has allowed our laboratory to continue to explore mechanisms of extraction of phenolics from skins in red wine fermentations. Specifically, we have studied the effects of pumpover frequency and pre-fermentation cold soak on extraction of color and phenolics in our Teaching and Research Winery. This continues our work in conjunction with E&J Gallo examining the effects of temperature and pumpover volume on phenolic extraction. In addition, we have continued to investigate the fundamental mechanisms controlling ethanol tolerance in yeast. Finally, we have examined the use of unique enzymes to produce oligosaccharides with potential health benefits.

TEACHING
In the past year, I have taught Biotech Facility Design and Regulatory Compliance in the Department of Chemical Engineering and Materials Science, as well as Wine Technology and Winery Systems in the Department of Viticulture and Enology. In addition, I have mentored several graduate students, including two that have been supported by this endowment. Michelle Lozada worked on the yeast ethanol tolerance project and completed her Ph.D. in Chemical Engineering earlier this year. Rogelio Jimenez is working on the enzymatic production of oligosaccharides and will be completing his Ph.D. in Chemical Engineering in the next few months. The funds from this endowment also enabled both of these students to attend the Annual Meeting of the American Institute of Chemical
Engineers in November 2013 and present talks on their research.

OUTREACH
As part of my position, I engage in many outreach events each year both on campus and around the state. This past year, that included talks in Sonoma, Lodi, Napa, Paso Robles, and in Davis. I also presented one of our research projects at the American Society for Enology and Viticulture Meeting. Last November, I was invited to speak at an industry meeting in South Africa and also at Stellenbosch University. I receive frequent industry visitors at the Department and spend time to show them our facilities and the cutting edge concepts we are piloting for the wine industry. The endowment enables these activities by defraying the costs not covered by other sources.

UPCOMING ACTIVITIES
In the coming year, I plan to continue to use the endowment to support research in my laboratory as leverage for other existing funding and as seed funding for new projects just starting in my laboratory.

SPECIAL ENDOWMENT USE
This year, I have been able to start a project on irrigation down to single-vine resolution, along with a sabbatical visitor from the University of Michigan and colleagues from several departments around UC Davis. The endowment has let me pay for equipment and student support for this project that I hope will grow into a full-scale project in my laboratory.

THANKS
I am very grateful to the Gallo family and the E&J Gallo Winery for their continued support of my research and teaching programs. This type of endowment is critical to being able to pursue new ideas and technology that may be of benefit to the wine industry without having to wait for a grant or other types of funding.