

# WINEGROWING RESEARCH INTERNSHIP

**JUNE-DECEMBER 2022** 

LOCATION: MODESTO, MADERA, OR HEALDSBURG, CA

**APPLICATION DEADLINE: MARCH 30, 2022** 



# WHY E. & J. GALLO WINERY?

Named a Glassdoor "Best Places to Work" five years in row, we couldn't be prouder of our company culture. As the largest family-owned winery in the world with over 100+ unique wine and spirits brands, our products are synonymous with life's special occasions. Come celebrate with us!

Your Talent & Gallo | A Perfect Pairing

## WINEGROWING RESEARCH DESCRIPTION

Explore internship opportunities in research and development including Chemistry Research, Research Applications, Micro and Systems Biology, Enology Research, and Precision Viticulture and Grape Breeding! Many different focus areas are available for individuals interested in grape, wine and spirts production and research. Please see our other internship opportunities for Gallo Vineyards, Grower Relations, and Applied Viticulture Research and Winemaking, Research Winemaking and Distillation to learn more.

#### INTERNSHIP OPPORTUNITIES:

# Winegrowing Research Internship Program

Imagine what you could learn working with the industry's most innovative grape growing and winemaking research and development team. Contribute to cutting edge research while learning firsthand how high-quality wines and spirits are produced. Interns work cross-functionally to support the research projects and production-support platforms required to produce nearly 100 million cases of wines and spirits annually. It won't take long for you to see our passion and expertise for grape and wine research or to experience our culture where innovation and continuous improvement are highly valued. For nearly a century the members of our winegrowing research team have helped to establish E&J Gallo as the world's leader in wine innovation.

Our internship program provides students interested in grape and wine research the opportunity to spend five to six months working alongside scientists and technical professionals at one of our production sites. Most internships begin in early to mid-summer and continue through harvest in the late fall, providing participants with a unique experience for technical training and professional development. Interns support a wide variety of corporate initiatives and research projects as well as conduct individual projects which will be presented to our management team at the completion of their internship.

Internship opportunities are related but not limited to a wide variety of academic disciplines including Chemistry, Biochemistry, Microbiology, Molecular Biology, Cellular Biology, Enology, Food Science, Chemical, Biochemical and Agricultural Engineering, Viticulture, Plant Science, and Plant Breeding and Genetics. Additional details on specific opportunities are provided below.



# WHAT YOU WILL DO

#### CHEMISTRY RESEARCH

Location: Modesto, CA

Interns conduct research activities that progress our foundational knowledge in grape and wine chemistry. Students gain hands-on experience with state-of-the-art analytical equipment and method development, enhancing the skills and experience necessary for graduate school and/or future careers in R&D. Interns participate in team projects that elucidate chemical metrics to improve our commercial processes, product quality, and predictive sensory capabilities. What you will do:

- Develop methodologies to characterize aroma and mouthfeel properties of grapes and wines.
- Establish relevance of chemical metrics by modeling their relationship to sensory and quality attributes.
- Employ appropriate statistical methods to analyze data and generate insight.

#### RESEARCH APPLICATIONS

Locations: Modesto and Madera, CA

Interns assist in research and production support activities involving the chemical analyses of grapes and wine. Students gain experience in the operation of cutting-edge analytical equipment and execution of advanced analytical methods. Interns participate in cross-functional projects which contribute to the improvement of grape growing and winemaking practices.

# What you will do:

- Evaluate the chemical characteristics of grapes throughout their maturation process.
- Research and implement rapid and high-throughput analytical methods to measure and monitor juice and wine attributes.
- Facilitate the scale up and commercialization of research advancements in grape and wine chemistry.

#### MICRO AND SYSTEMS BIOLOGY

Location: Modesto, CA

The Micro and Systems Biology team uses a multi-disciplinary approach to study the biology of yeast, bacteria and grap evines in order to better understand the regulation of key regulatory pathways at the molecular level. The group also studies the impact of yeast, bacteria, and enzymes on winemaking processes, wine composition and sensory attributes. Interns will assist in research focused on the characterization of interactions between grapes and yeast, the biotransformation of aroma and mouthfeel compounds during fermentation as well as the evaluation of novel processing technologies in the winemaking process.

## What you will do:

- Perform molecular biology laboratory techniques including the extraction of nucleic acids from grapes and yeast.
- Perform microbiological techniques including the identification and maintenance of yeast strains.
- Perform RTqPCR, protein and nucleic acid electrophoresis, exclusion chromatography and spectroscopy.
- Characterize the biotransformation of high-impact wine sensory compounds during primary and secondary fermentations.
- Evaluate novel grape and wine processing technologies and their impact on product differentiation.

#### **ENOLOGY RESEARCH**

Location: Healdsburg, CA



Interns will assist in daily research and production support activities focused on the evaluation and improvement of winemaking practices. Students gain valuable experience in all aspects of the winemaking process including grape processing, fermentation, and aging.

# What you will do:

- Assist with bench, pilot, and plant scale experiments.
- Document and interpret experimental findings, process and organize data.
- Crush and process grapes, monitor fermentations, ingredient additions, cap management, and barrel aging.

## PRECISION VITICULTURE AND GRAPE BREEDING

Locations: Modesto, Madera and Healdsburg, CA

Interns assist in projects focused on the improvement of grape production practices, the deployment of precision viticulture practices, and the advancement of grape germplasm and genetics. Focus areas include irrigation scheduling and water management, yield forecasting, mechanization, clonal and new variety evaluation, grape genetics and breeding, and trait phenotyping. This work is closely linked to and supported by other Winegrowing Research disciplines, our internal production partners and external research collaborators from industry and academia.

#### What you will do:

- Measure vine growth and physiology parameters, including leaf area, canopy microclimate, water status and photosynthesis.
- Assist with the operation and evaluation of precision viticulture tools, sensors and field equipment.
- Determine grapevine yield components and fruit quality at harvest.
- Remote sensing and GIS field mapping.
- Phenotype key grape yield, fruit composition and environmental adaptation genetic traits.

#### WHAT YOU WILL NEED

- High School diploma or State-issued equivalency certificate.
- Currently enrolled at a college or university and working towards a Bachelor's degree or Master's degree in the school of Life Sciences, Agricultural Sciences, or Engineering; OR have obtained a Bachelor's degree or Master's degree in the school of Life Sciences, Agricultural Sciences, or Engineering.
- Strong applied technical skills and analytical problem-solving skills.
- Good oral and written communication skills.
- Candidates for this position must have a valid driver's license and a safe driving record. Required to obtain a California driver's license or appropriate state driver's license within 30 days of hire.
- Reliable transportation to and from work.
- Required to lift and move up to 40 lbs. when necessary.
- Required to work at heights of 50 feet, on tops of tanks inspecting wine surfaces when necessary.
- Required to be 21 years of age.
- Requires availability to work evenings, weekends and holidays when necessary.

#### WHAT WILL SET YOU APART

- Junior or Senior class standing at a college or university and working towards a Bachelor's degree in the school of Life Sciences, Agricultural Sciences, or Engineering; OR working towards a Master's degree in the school of Life Sciences, Agricultural Sciences, or Engineering.
- Excellent organizational and team skills and experience managing multiple assignments.
- Experience conducting research independently and in teams.



• Familiarity with grape, wine, spirits, and alcoholic beverage research and/or production.

Gallo does not sponsor for employment based visas for this position now or in the future.

# PHYSICAL DEMANDS AND WORK ENVIRONMENT

The physical demands and work environment described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- Inside/Outside conditions: Work ranges from inside in research and production laboratory facilities to outside with weather of varying types.
- Must be able to lift and carry 40 pounds.
- Wet/Slippery conditions vary and may include work in rain.
- Noise levels may vary. Occasional situations where ear protection is required.

# **How to Apply**

Candidates who wish to be considered need to submit a formal application. Each candidate will be assessed for all placements listed in the description above.

Once your application is received, you will be notified of next steps via email. If moved forward, we will reach out to schedule an interview with you.

Offer and placements will be based on your preferences, our assessment of where your skills will make you most successful, and business need.

If you have any questions, email CollegeRecruiting@ejgallo.com.

Link to Apply: <a href="https://tinyurl.com/cvRESEARCH2022">https://tinyurl.com/cvRESEARCH2022</a>