

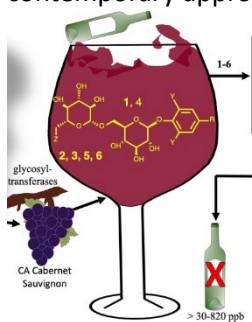
The Silicon Valley ACS invites you to the UC Santa Cruz Arboretum for wine-tasting & networking, a discussion of winemaking, and garden strolls

Saturday, October 7, 2023, 12:30-3pm at the UC Santa Cruz Arboretum & Botanic Garden, Horticulture Room 2. Cheese, fruit, and veggies will be served. All attendees 21 years+ will receive a glass of wine during the reception (12:30pm-1pm) and will taste four different wines during Phil Crews' presentation (1pm-3pm). [Reservations required](#) by September 29th: \$15 regular, \$10 students, Free for under 21. Pay at the door with cash or check. Includes access to the UC Santa Cruz Arboretum all day, 9am-5pm.

Wines from great vintages to wildfire catastrophes: Merging natural products chemistry fundamentals with sensory evaluations. A workshop to gain a 21st Century perspective.

Prof. Phil Crews, Department of Chemistry & Biochemistry, UC Santa Cruz

Abstract: Wine is a complex liquid comprised of many bioorganic compounds in a 12.5% alcoholic solution with a pH range of 3-4. Wine quality assessment and winemaking methods have been in place for many centuries. Nowadays, contemporary approaches to winemaking are quite scientific as many aspects of this complex drink appear to be understood. For example, there is an excellent contemporary book, "[Understanding Wine Chemistry](#)" (Waterhouse et al., 2017). Decades ago, *Wired Magazine* reported on the [Grapes of Math \(GoM\)](#) in a comprehensive article to underscore that consulting companies exist to help winemakers craft award winning wines. The GoM approach uses databases created via metabolomics approaches. On the other hand, many subscribe to the idea that successful winemaking and wine quality evaluations can be achieved by just using a "right-brained" approach. In this wine-centric event we will explore principles of wines and winemaking through natural products & sensory evaluations. Different flavor outcomes achieved in winemaking as a function of grape variety and the terroir differences of vineyards in California will be illustrated. The approaches to wine creation will be explored using case examples. Everyone at the workshop will have a chance to dissect the major and minor complex flavors and aromas associated with wines and to correlate them with a few key biomolecules. Answers to vexing questions will be sought by examining outcomes derived from tasting and talking about three different Burgundy style California wines. Also discussed will be recent advances obtained by the Santa Cruz campaign (UCSC & SC Labs) using small molecule natural product wine chemo-markers to forecast wine quality damage caused by wildfire smoke. *Recommended reading before the workshop:* <https://doi.org/10.1021/acs.jnatprod.2c00028> (open access)



Biography: Phil Crews is a California native and has spent most of his academic career in the state. He received his B.S. from the University of California at Los Angeles and his Ph.D. from UC Santa Barbara working with Domenick Bertelli. After becoming a postdoc at Princeton University, in 1970, he started as an Assistant Professor and is currently an Emeritus Professor for the Chemistry and Biochemistry Department at UC Santa Cruz. The primary goals of his research group were to understand the chemistry of tropical marine sponges and marine-derived fungi. Bioassay-guided isolation assisted in the discovery of natural products potent against human diseases such as cancer and neglected tropical diseases. The search for novel active compounds incorporated elements of structure elucidation, employing state-of-the-art nuclear magnetic resonance (NMR) techniques. [Crews Lab site](#)

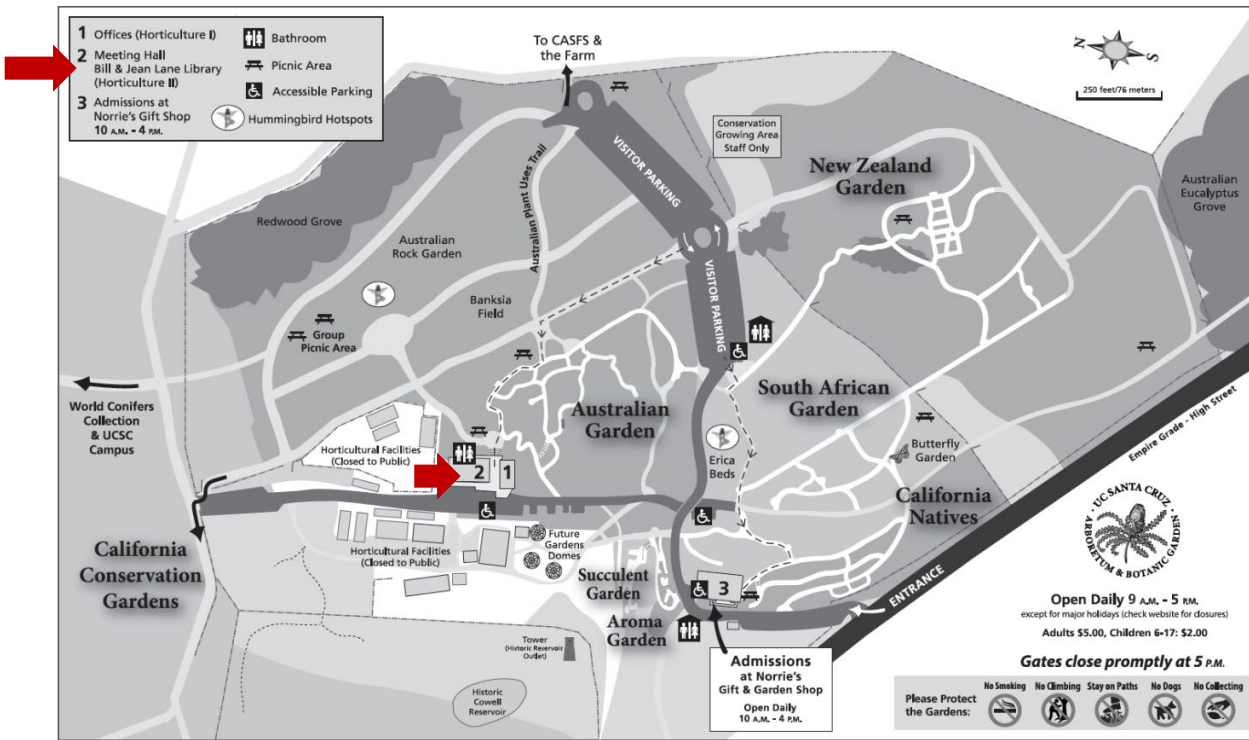
A passionate home-winemaker and wine educator, he took his "hobby" public. Specializing in Burgundian and Rhone style wines from select coastal vineyards, the [Pelican Ranch Winery](#) is a family owned and operated winery in the heart of Capitola. Established in 1997, the winery is just a few blocks from Monterey Bay, which provides a constant, cool, coastal influence that allows for the making of fine elegant wines.

[UC Santa Cruz Arboretum & Botanic Garden](#)

Hours: 9am-5pm Daily except for major holidays



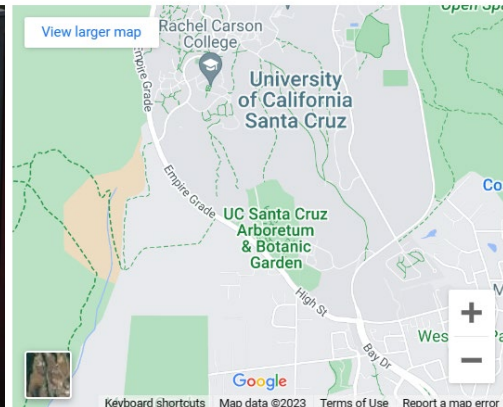
The Arboretum & Botanic Garden maintain collections of rare and threatened plants of unusual scientific interest. Particular specialties are world conifers, primitive angiosperms, and bulb-forming plant families. Large assemblages of plants from [California natives](#), [Australia](#), [South Africa](#), and [New Zealand](#) are displayed on the grounds. [More](#)



[View/download 2-page Visitor Guide & Updated Trail Map \(PDF format\)](#)



[Watch a video](#) narrated by Frans Lanting, noted wildlife photographer, explaining the unique value of the Arboretum & Botanic Garden.



[Directions](#)