

Botanical Encounters

Level 3

AN INTERACTIVE & VIRTUAL TOUR

Huntington Education



THE HUNTINGTON
Library, Art Museum, and Botanical Gardens

Welcome to the Botanical Encounters Level 3 virtual tour!

Each slide features a plant, tree, or flower with questions, activities, and links to additional information.

Henry and Arabella Huntington loved to collect art, books, and plants. What do you like to collect? Video games? Posters? Sports memorabilia?

In this interactive journey you'll dive further into the Botanical collections.

Let's go exploring!



Botanical Vocabulary

Click on a vocabulary word to start your tour!
Each word relates to something at The Huntington.

Cryobiotechnology

Ginger

Orchid

Passion Fruit

Penjing

Puya

Once you have explored all six cards, [click here!](#)

Orchid

The Rose Hills Foundation Conservatory for Botanical Science

- Orchids have been popular at The Huntington since Arabella Huntington's day. She loved orchids and had quite a collection. Do you like orchids?
- In the wild, there are three ways orchids grow: on trees (epiphytes), on rocks (lithophytes), and on the ground (terrestrials).
- There are more than 25,000 species of orchids, making them the largest family in the plant kingdom.
- While all those orchid species might look different, there are two distinct characteristics they all share: they all have 3 petals and 3 sepals, and they have both male (stamen) and female (pistil) parts in one column.

Activity

Explore the online tour [Orchids: Around the World on Six Continents](#). Find an orchid that catches your eye. Which orchid did you choose? Why did you pick that particular orchid? Where does it grow? Does it have any cultural or culinary significance?

Click on these links to explore more

[Orchid Collection](#)

[King of Orchids](#)

[Orchids Forever](#)

(From top): *Masdevallia infracta*
'Huntington's Angel'; *Paphiopedilum*
tigrinum 'Huntington's Crouching Tiger';
Trichopilia suavis. The Huntington Library,
Art Museum, and Botanical Gardens.

Pick
Another



Puya

Desert Garden

- Found in the Desert Garden, puyas are terrestrial bromeliads (*Bromeliaceae*) that are native to the South American countries of Chile, Peru, and Ecuador.
- Puyas are known for their extraordinary colors when blooming: teal, chartreuse, hot pink, and purple. The bright colors attract bees that help pollinate the flowers, and their sweet nectar attracts birds that also aid in pollination.
- While puyas may vary in color, all puyas do the same thing after they bloom: their petals twist together. Why do you think this happens?
- Fun fact: Puyas are from the same family as pineapples. Do puyas remind you of pineapples?

Activity

The Huntington frequently showcases its Botanical collections on its [Instagram](#) page. Design an Instagram post for one of these puya images. You can write out your caption or sketch out your idea.

Click on this link to explore more
[Puyas in Bloom](#)

Pick
Another



(From top): *Puya alpestris*; *Puya venusta*.
The Huntington Library, Art Museum, and
Botanical Gardens.

Cryobiotechnology

Plant Tissue Culture and Cryopreservation

- At The Huntington, a team of scientists work in the Cryobiotechnology Lab. This space is dedicated to preserving seeds, pollen, and plant cultures through cryopreservation: in other words, by putting them into a deep freeze.
- Plants or seeds can be placed in liquid nitrogen (-196°C) and stored long-term in the lab. If the plants are ever needed, they can be unfrozen and regrown in the lab and later in the gardens. Properly prepared and frozen, plant material can be stored for centuries, theoretically forever.
- Some plants currently being researched in the Cryobiotechnology Lab include avocados, aloe, agaves, cacti, magnolias, oaks, and cycads.

Activity

Plant research is important to plant preservation. Would this be a career path that would be interesting to you? Why or why not? Write a quick response to this question.

Click on these links to explore more

[Botanical Conservation Program](#)

[Strengthening Bonds with Mexico Through Cryopreservation](#)

[A Garden in Deep Freeze](#)

Pick
Another



Lourdes Delgado dissects a shoot tip from an *Agave cerulata* plant in preparation for cryopreservation. The Huntington Library, Art Museum, and Botanical Gardens.

Ginger

The Rose Hills Foundation Conservatory for Botanical Science

- The two images at right showcase different plants that are part of the Ginger family. Look closely at each image. How are the two plants similar and how are they different? Why do you think certain elements are different?
- The *Zingiber olivaceum* ginger is often referred to as “Beehive Ginger” because the inflorescences (top cones) look like beehives. This variety of ginger grows in tropical environments like Thailand.
- When we think of ginger, what often comes to mind is ginger root, which is used as a spice in many recipes. The root is not the only part of the ginger plant that is used for cooking. Sometimes the stem, flower buds, and seed pods are used in culinary dishes.

Activity

Ginger has a strong flavor. Do you like eating or cooking with ginger? If so, what dishes do you make with this spice? Is there a dish with ginger you would like to try? If so, what dish?

Click on this link to explore more

[View a recipe from 1954 that uses ginger](#)

Pick
Another



(From top): *Etlingera elatior*; *Zingiber olivaceum*. The Huntington Library, Art Museum, and Botanical Gardens.

Penjing

Liu Fang Yuan 流芳園, Chinese Garden

- Penjing is a horticultural art form from China that is similar to Japanese bonsai.
- Penjing are miniature landscape scenes contained in a single pot. There are three forms of penjing: single tree, waterscape, and mountain landscape.
- This botanical art form was a common feature in classical Chinese scholars' gardens, especially in Suzhou, China. The Huntington's Chinese Garden was modeled after these traditional Suzhou gardens.
- Can you think of another horticultural art form? What culture practices this garden art?

Activity

Design your own horticultural art form. Will it include flowers, plants, trees, or a combination? Is it related to your culture or purely aesthetic? Sketch out your idea.

Click on these links to explore more

[The Chinese Garden](#)

[The Art of Penjing](#)

Pick
Another



Penjing trees in the Chinese Garden. The Huntington Library, Art Museum, and Botanical Gardens.

Passion Fruit

Herb Garden and Potager

- Have you ever eaten passion fruit before? Maybe you are familiar with how they look inside: bright yellow with edible black seeds. Did you know that the plant that produces this fruit also has amazing flowers ?
- Look closely at this flower for 30 seconds. What do you see? Now, look again at the flower for 15 seconds. Do you notice any new details?
- Why do you think part of the flower is growing vertically out from the center? How do you think this helps the flower?
- This flower can be found in the Herb Garden. Why do you think it is in the Herb Garden as opposed to the Conservatory or the California Garden?

Activity

Design a garden that prominently features a passion fruit plant. What other plants, flowers, or trees will be in your garden? How will they be arranged? Sketch your concept.

Click on this link to explore more

[Explore other Mediterranean plants](#)



Passiflora hybrid (Passion Flower), The Huntington Library, Art Museum, and Botanical Gardens.

Now that you have explored six plants, flowers, and trees, do you have a favorite? Which one? Why do you like this one best?

Was there a plant, flower, or tree you really didn't like? Which one? Why don't you like it?

What is one thing you learned about plants today?

Check out what is blooming at The Huntington [here!](#)

Thank you for coming on this journey with us!

We would love to see the art and writing you made!

#TheHATHome