



LYON ARBORETUM SUMMER INTERNSHIP PROGRAM 2008

Set within a Hawaiian tropical rainforest minutes from downtown Honolulu, the Lyon Arboretum offers unique learning opportunities through our ten-week internship program (June 2 through August 8, 2008). Program areas include Education, Ethnobotany, Horticulture, and Research. Preference for the **5 available positions** will be given to current undergraduate and graduate students in plant related disciplines. Interns will be assigned duties and receive training in their program areas by their respective managers and will be expected to complete a summer-long project. The internship will include working outdoors, sometimes in inclement weather and on difficult terrain. Interns are expected to work from 8:00am until 4:00pm, Monday through Friday for the duration of the program. Interns will be compensated with a stipend of \$3,000. Interns will be responsible for their own meals, transportation and housing. Applicants must rank in order of preference the following five program areas on the application form:

Education

- K-12 Environmental Education
- Adult Education programs
- Guides program
- Community outreach

Ethnobotany

- Beatrice Krauss Ethnobotanical Garden
- Hawaiian Forest Section
- Ongoing projects

Horticulture/Greenhouse

- Tropical plant propagation
- Native Hawaiian Plant Garden
- Outplanting

Horticulture/Grounds

- Grounds maintenance (weeding, pruning, planting)
- Herbarium/ Field Collections maintenance
- Invasive species maintenance
- Database management
- Archives
- Mapping

Research

- Hawaiian Rare Plant Program
- Conservation biology
- Rare plant seed conservation
- Tissue culture/ micropropagation laboratory

APPLICATION PROCEDURE:

To apply, please submit 1) a cover letter describing the applicant's area of focus and intent, 2) a résumé, 3) two letters of recommendation, 4) and a completed application form. Please mail your application to:

Lyon Arboretum
c/o Intern Selection Committee
3860 Manoa Rd.
Honolulu, HI 96822

DEADLINE: Applications must be postmarked **no later than March 1, 2008** in order to qualify for review by the selection committee. For more information please contact via email: Richard Sears, Internship Coordinator, rsears@hawaii.edu.

Lyon Arboretum Summer Internship Program 2008

Internship Descriptions:

1. Education

Lyon Arboretum offers a wide range of education programs for a diverse audience, including preK-12 school programs, adult and children's workshops and classes, garden tours, docent and teacher training, and interpretive materials. The Arboretum's unique natural and cultural resources are integral to our Education programs. Interns will gain experience in all education program areas, and will select a specific area of interest for their designated project.

2. Ethnobotany

Minimum Qualifications:

- * background in landscape maintenance
- * background in basic botany and ethnobotany
- * able to work in variable weather conditions
- * able to lift 50 pounds or more
- * self-directed, motivated individual
- * background in MS Access
- * background in mapping, GPS and GIS

Desirable Qualifications:

- * background in Hawaiian Botany and Hawaiian Ethnobotany
- * background in restoration ecology
- * proficient in MS Access
- * experience in mapping, GPS and GIS
- * experience in landscape maintenance and design

3. Research/Plant Conservation

The Lyon Arboretum Hawaiian Rare Plant Program (HRPP) utilizes micropropagation as a tool for plant genetic conservation. HRPP's primary focus is to preserve the plants that are most at risk of becoming extinct, such as the native plant species that have 20 or fewer representatives left in the wild. Currently, there are more than 12,000 plants in the laboratory, consisting of 260 native plant taxa (169 are federally

listed as endangered or threatened), 73 varieties of Polynesian introduced taro, and 8 varieties of Polynesian introduced banana.

The Lyon Arboretum HRPP summer intern will aid the program in fulfilling its objectives, which are: 1) to prevent further extinction of native Hawaiian plant species and Polynesian introduced crop plants, 2) to propagate plants for approved restoration projects and garden use, and 3) initiate and maintain an *in vitro* germplasm collection of the “critically endangered” Hawaiian plants. The intern will become familiar with the methods, materials, procedures and techniques utilized in the micropropagation of plants. Duties will include initiation and maintenance of *in vitro* plant cultures, plant media preparation, lab and labware maintenance, data collection, computer database entry and some greenhouse work.

4. Horticulture/Grounds

An internship at Lyon Arboretum offers unlimited opportunities for an intelligent, motivated, hard-working person to learn about tropical plants, their importance, and their care. Special collections include native Hawaiian and ethnobotanical plants, tropical trees, palms, gingers, heliconias, Marantaceae, aroids, ferns, cycads, bromeliads, and more.

The work is both physical and intellectual. The physical part includes working with the crew on trail maintenance, land clearing, planting, weeding, mowing, and weed-eating. All this takes place on fairly rugged terrain, often in the rain. The intellectual part includes plant identification, documentation, inventory, database and map updates, labeling, and plant rescue and propagation. The intern will work with, and add to, a large collection of catalogued photos, research pertinent information for each plant, and format the photos and information for posting on our website.

5. Horticulture/Greenhouse/Native Plant Garden

Interns who select this program will gain experience in horticulture, garden development, landscape maintenance, plant sales and new plant introductions. Primary activities will be learning to identify, collect, propagate and maintain (in the nursery and garden) a wide variety of native Hawaiian plants and tropical species from around the world.