

BALL HORTICULTURAL COMPANY

2011 SUMMER INTERNSHIP PROGRAM

For more than two decades, Ball Horticultural Company has offered a wide variety of internships to students majoring in Horticulture, Plant Science, Agribusiness, and related fields. Each year, our internship projects are linked to specific business initiatives, which encompass a range of horticulture disciplines including advanced research, breeding and genetics, marketing, business operations, production, and trialing. All internships require a minimum of Junior-level standing at a regionally accredited, four-year university or college. Historically, Ball interns arrive with significant academic and/or related extracurricular accomplishments, although consideration is given to those students demonstrating exceptional promise. When applying for these internship projects, students should consider the following:

- All internships are offered during the summer months for a period of 10-12 weeks.
- Starting and ending dates are relatively flexible, depending upon the schedule of the student and the needs of the department; however, the Trial Gardens internships require start dates of May 16 or May 23, 2011 due to stringent planting schedules.
- Unless otherwise noted, internships are located in West Chicago, Illinois, which is a suburb approximately 35 miles west of Chicago.
- Rate of pay is \$10.00 per hour. Students typically work 40 hours/week, although some internships require overtime during critical periods.
- We provide fully furnished and appointed apartments in a nearby complex and absorb the majority of the rental costs. The student portion of housing costs generally run about \$200.00 per month; food, telephone and transportation costs are not included. Students are required to have their own transportation since housing is not within walking distance from work locations and public transportation is not available.
- A major goal of the program is to expose students to multiple aspects of our business operations; presentations and tours of departments throughout the corporation are provided on a regular basis during the summer. Similarly, interns are expected to participate in relevant company and industry events including the OFA Short Course and Ball Customer Day.
- All internships culminate in early August with a final presentation made to members of Ball's Executive and Senior Management Teams.
- The application deadline is March 1, 2011. Intern selections will be determined by mid-March 2011. All applicants will be notified of our decisions.

Students interested in pursuing one of these internships should forward a cover letter and resume to:

Ball Horticultural Company
Attn: Mike Williams
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West Chicago, IL 60185
630-231-3600, ext. 3308
Fax: 630-231-3592
E-mail: mwilliams@ballhort.com
Website: www.ballhort.com

TRIAL GARDEN INTERNSHIP (2 OPENINGS)

WEST CHICAGO, ILLINOIS

Description

The students will supervise and participate in the planting and the maintenance of The Gardens at Ball display and field trials. This involves all aspects of planting and maintaining the Gardens. The interns will work with the Grounds Staff in loading plant material, laying plants out in beds, planting the beds and then maintaining them during the summer by reviewing specific gardens weekly to report on their health and needed improvements.

Summer interns will also help with the garden tour program in giving plant and garden tours to both customers and home gardeners after completing a training course with the Trials & Education Manager. Students will also assist in planting the combination container program by helping locate plant material from the greenhouses and cold frames, fill containers with potting soil, label all plant material and identify container placement in the gardens.

Interns will also have additional responsibilities of watering and maintaining selected gardens on a daily basis and planning for the set up of special garden events. These maintenance responsibilities include deadheading as well as weeding. Garden event preparation includes coordinating the various marketing campaigns within the gardens verifying the plants and marketing materials are in place for the event.

This intern will spend a majority of time working outdoors and may be required to do some local traveling.

Requirements

Junior or senior level student majoring in horticulture, landscape design and maintenance or related field. These internships require intermediate-level proficiency with MS Word, Excel, Outlook and PowerPoint. Selected interns must be self-directed, have the ability to organize and prioritize their work, as well as work a flexible schedule during peak planting periods and in advance of special events. Similarly, these hands-on internships require that students are able to work under a variety of environmental conditions, including heat, humidity and rain for prolonged periods of time, as well as lift 50+ pounds and perform physical labor.

NEW CROPS INTERNSHIP

ELBURN, ILLINOIS

Description

This student will have two primary projects:

- Develop documentation on harvest windows, yield and produce quality for potential home garden vegetable cultivars and for germplasm for the vegetable breeding projects. The intern will assess and develop documentation on harvest initiation and termination dates, weekly yields, Brix, disease ratings, and subjective taste tests.
- Investigate the value of polypoidy in selected vegetables. The intern will evaluate already treated vegetable plants for success using stomatal/chloroplast comparisons, chromosome counts and flow cytometry, as appropriate. Pilot studies will be performed on various polyploid lines for quality and performance traits.

This internship will require significant work in a field/greenhouse environment, hands-on with plant material.

Requirements

Graduating senior level student, or someone who has already graduated, majoring in horticulture or biology. Experience with a light microscope will be required – experience can be obtained from a Microbiology course, as an example. Preferred completed coursework includes Taxonomy, Plant Physiology, Plant Propagation, Plant Genetics/Breeding and Vegetable Crop Production. Some proficiency with MS Word, Excel, Outlook, and PowerPoint. The selected intern must be self-directed, able to work independently, as well as part of a team, and possess exceptional attention to detail.

YOUNG PLANT CULTURAL RESEARCH

WEST CHICAGO, ILLINOIS

Description

This internship will involve cultural research in seedling germination and vegetative cuttings. The goal will be to determine if environmental conditions can be modified and unified for both the seed germination process and the rooting process.

Work on these projects will involve both in the lab and greenhouse. Some local travel may be required.

Requirements

Junior or senior level student majoring in horticulture, biology or related plant science discipline. Intermediate-level proficiency with MS Word, Excel, Outlook, and PowerPoint. The selected intern must be self-directed, able to work independently, as well as part of a team, and possess exceptional attention to detail.

PRODUCTION TECHNICAL SUPPORT INTERNSHIP

WEST CHICAGO, ILLINOIS

Description

The primary purpose of this internship is to explore the role of media factors and mineral nutrition on bedding plants. This project will entail active involvement in experiments exploring the role of media pH, air porosity and mineral nutrition on the quality of bedding plants. The student will examine the effect of a wide range of media pH on the performance of important seed and vegetative crops for which little data on optimal ranges currently exists. The student will also examine the role of air to water ratio in media substrates on the performance of our top selling crops. Lastly, we will investigate the role of different nitrogen forms (nitrate vs. ammonium) on the development of pentas. The student will also be exposed to and assist with other related production research efforts as needed.

This internship will require some work in a greenhouse environment and may require local travel.

Requirements

Junior or senior level student majoring in horticulture, plant physiology, agronomy, biology, soil science or plant pathology. Previous greenhouse growing experience a plus. Basic knowledge and experience with use of common greenhouse instruments (pH/EC meters, temperature/light/humidity sensors) and basic computer software (i.e. Microsoft Word, Excel and Outlook) are helpful. Local travel will be required.

MOLECULAR GENETICS INTERNSHIP

WEST CHICAGO, ILLINOIS

Description

This internship involves working with the Applied and Molecular Plant Pathology Services group of Ball Helix. The assigned laboratory projects will have a direct impact on the Company and will be aimed at providing Ball's plant breeders with proprietary information that will drive new product development and novel plant introductions. Laboratory techniques such as DNA extraction, PCR, gel electrophoresis and DNA sequencing analysis will be utilized.

Some local travel will be required.

Requirements

Junior or senior undergraduate student majoring in genetics, molecular biology, microbiology or a related discipline. Preference will be given to applicants who have completed coursework in these areas, and have had experience learning or working in a laboratory environment. Proficiency with MS Word, Excel and Outlook are required. The selected intern must be self-motivated, capable of working independently as well as part of a team, and must possess exceptional attention to detail.

GENETIC RESEARCH INTERNSHIP

WEST CHICAGO, ILLINOIS

Description

The internship will be working within our advanced technology group, Ball Helix. This position will have work responsibilities in the laboratory as well as the greenhouse environment working on projects associated with plant genetics and cytogenetics. In the lab environment, the student will participate in activities such as plant sample preparation, light microscopy, and data recording. The work in the greenhouse will be to help manage the plants that are in our advanced genetics program with general activities such as labeling, sampling, transplanting, spacing, etc.

This internship will require both greenhouse and laboratory project work, along with some local travel.

Requirements

Junior or senior undergraduate student majoring in horticulture, genetics, molecular biology or related discipline. A preference will be given to applicants who have completed coursework in genetics and molecular biology, preferably in the plant field. In addition, we would prefer a candidate who has had some experience learning or working in a laboratory environment. Proficiency with MS Word, Excel and Outlook. The selected intern must be self-directed, able to work independently, as well as part of a team, and possess exceptional attention to detail.

CULTURAL RESEARCH INTERNSHIP

ELBURN, ILLINOIS

Description

This individual will create a database for cultural research data and photographs to support the PanAmerican Seed product lines. This information and photographs are frequently used by our Sales personnel and others in the Research department. Currently, this information is housed in different servers and is not consolidated for easy access and reference.

Some local travel may be required.

Requirements

Junior or senior level student majoring in horticulture, agriculture or other related field. This position requires a person who has good communication and computer skills, specifically a comfort working in Microsoft environment and analyzing data. In addition, individual should be a self-starter and have strong organizational skills.

BALL INNOVATIONS INTERNSHIP

WEST CHICAGO, ILLINOIS

Description

This individual will study the effects of different applications of Daniels Plant Food across multiple lines of products at varying times of the grow process. There are 4 primary projects which will include evaluation of Daniels on rooting vegetative cuttings; application of Daniels to young plants prior to shipment to evaluate finished product at retail; the effect of Daniels on poinsettia branching and in garden mum production.

This project will involve work in the greenhouse. Some local travel may be required.

Requirements

Junior or senior level student majoring in horticulture or related field with an emphasis on greenhouse production or have some classwork related to greenhouse production. This position requires a person who has good communication and computer skills, specifically a comfort working in MS Excel and analyzing data. In addition, individual should be a self-starter and have strong organizational skills.

MARKETING INTERNSHIP

WEST CHICAGO, ILLINOIS

Description

This individual will be immersed in the marketing side of the horticulture business. This internship consists of a few key projects. Areas of activity would include the following:

- Coordination of our annual summer retail shelf survey. This could include determining objectives of what is desired to review at point-of-sale, translation into actionable questionnaire and disseminated and have responsibility for data analysis.
- Creation of an ongoing set of analytics to monitor our web presence. This involves the determination of what metrics to track and then set in place a standard process to pull, analyze and report on this information. This would be inclusive of our websites and social networking sites.
- Follow-up on an intern survey from last summer in which we are looking to drill down further into specific customer segments and how Ball is or is not meeting their needs as a distribution company.
- Assist with the development of the log and messaging to support further development of our online garden coach – Burpee Garden Coach.

These projects will require the ability to perform project planning and analysis of information to make recommendations.

Some local travel may be required.

Requirements

Junior or senior level student majoring in horticulture, agribusiness or related field with an emphasis on marketing or product promotion. This position requires a person who has good communication and computer skills, specifically a comfort working in MS Excel and analyzing data. In addition, individual should be a self-starter and have strong organizational skills.