

2023 Regional Cluster Interview Contest

Graduate Division

Choose one of the following job descriptions to apply to. Contestants should submit a resume and cover letter specific to the position they are “applying” to by tailoring their own personal skills and experiences, in addition to skills and experiences they may add in the future, that align with the skills and experiences the job description is asking for.

Remember that this contest is a simulation of the job application process and contestants may have limited or no experience. In these cases, consider highlighting transferable skills from classes or co-curriculars. It is acceptable to describe skills and experiences that you have not yet had (but would fit the requirements of the job description) in your resume, cover letter, and/or the interview portions of this contest. Just make sure to remove embellishments for future real applications!

The top 5 scoring submissions per graduate and undergraduate division will advance to compete in the onsite interview contest. Finalists will be notified at the latest, by the Monday of each cluster week. All participants will receive feedback from each review stage.

For complete contest guidelines, visit: [2023 Regional Contest Guidelines \(manrrs.org\)](https://manrrs.org)

Job Description 4

Position Title: Area Integrated Pest Management Advisor

Position Summary

The Integrated Pest Management Advisor will implement an innovative applied research and extension education program to address high priority pest management needs and problems in the various crop production and landscape systems in Southern California. Various crops (nurseries, vegetables, field, and horticultural) are grown on large and small acreages in San Diego County. This region lies on the border between Mexico and along the Southern CA coastal lines, hence is exposed to invasive insect pests, such as the South American palm weevil (shown in picture) that could cause serious damage to California’s palm trees and date palms with San Diego as the major entry point.

The IPM Advisor will focus on long-term IPM systems, reducing economic, environmental, and human health impacts from pests and pest management practices, and addressing changes in pest pressures resulting from climate change. The IPM Advisor will also address methods to prevent new pest introductions or the spread of established pests to uninfected areas. It requires identifying potential routes of invasion to reduce the likelihood of infestation.

This is an exciting opportunity to develop and deliver relevant program content to have meaningful impacts in local communities and throughout California.

Opportunities abound for extension and research partnerships that link growers and their associations, Pest Control Advisers, and affected clientele/commodity boards, policy makers and public agencies. The IPM Advisor will also provide pest management support for UC Master Gardener volunteers and has the potential to implement research and delivery with UC Master Gardener or California Naturalist Volunteers. The Advisor will deliver training to licensed Pest Control Advisers (PCA), pesticide applicators (QAL/QAC/PA), growers, and professional landscape managers.

The advisor will also join a team of highly motivated UCCE colleagues who are passionate about their work, and are dedicated to making a difference within the communities and throughout California. The potential for collaborative projects within the UC ANR system is nearly limitless.

Qualifications and Skills Required

Education: A minimum of a Master's degree in a pest management discipline (entomology, plant pathology, weed science) or a closely related field is required at the time of appointment. Knowledge of integrated pest management principles and practices, including tactics for prevention, avoidance, monitoring and suppression of pests is essential. Quantitative skills and knowledge of, and experience using, statistical analysis and experimental designs is required.

Additional Requirements

- Valid driver license.
- Live within a commutable distance of the position headquarters during period of appointment.

- The CE Advisor must obtain a Qualified Pesticide Applicator Certificate (QAC) prior to applying pesticides or supervising the application of any pesticide.

Desired Experience

- Passion and desire to pursue a career in Cooperative Extension and community development
- Experience in building partnerships and with multidisciplinary teams
- Demonstrated ability to effectively plan, manage teams and implement an applied research program, including setting measurable goals and objectives

Preferred Qualifications

Demonstrated quantitative skills and knowledge of, and experience using, statistical analysis and experimental designs is preferred.

Job Description 5

Position Title: Production Manager

Position Summary

Valent BioSciences is a global organization that embraces a team-focused, fast-paced, challenging and professional work environment offering its employees room to grow. As a leading supplier of environmentally friendly, highly effective products and services for agriculture, public health, and forestry, we are always looking for people who share our passion and commitment to improving the quality of life for people worldwide. The Valent Biosciences manufacturing site located on an expansive 73-acre site in Osage, IA is a state of the art 130,000 square foot plant and is the largest purpose-built biorational facility in the world. It serves as the manufacturing and quality control center for Valent Biosciences broad portfolio of fermentation products.

JOB SUMMARY and KEY OBJECTIVES

The purpose of this position is to assist production in meeting all safety, quality, delivery, and cost goals set by VBC Management. The individual will have knowledge of fermentation science and biochemical engineering principles, theory, and practice with special focus on microbial fermentation operations in an industrial setting or a strong interest in acquiring

such skills. The Fermentation Engineer will also act as mentor and leader to Production Specialists and Interns.

Essential Functions

- Support and comply with all VBC safety and environmental training policies and programs
- Track and trend yield and quality data for each fermentation batch for all products to identify and eliminate special cause variation and recommend continuous improvement projects
- Chart, track and analyze other production data to recommend and implement lean manufacturing projects
- Identify, develop, and implement creative practical solutions to improve the economics of the fermentation, recovery, and formulation processes
- Write, update, and maintain production master batch records, work instructions and other standard operating procedures and training manuals
- Proactively identify problems and develop solutions to improve manufacturing operations and safety
- Review and adjust cost standards/bill of materials
- Assist production with troubleshooting, drive root cause analysis investigations and implement fail safe solutions as corrective/preventive actions (CAPA)
- Participate in cost-saving initiatives, and maintain or improve product quality and yield
- Establish procedures to ensure efficient operation and maintenance of commercial scale fermenters and all related recovery and formulation equipment
- Provide fermentation, recovery, and formulation support to production
- Advise and train plant operators, production specialists and supervisors
- Foster a continuous process improvement environment and help implement new technologies
- Sponsor Capital investments/technical changes

Additional Responsibilities and Tasks

- Assist in new product development and realization projects
- Write, review and execute process validation procedures
- Help conduct experimentation for studying the critical process parameters of fermentation, recovery and formulation processes, recommend and help with the

implementation efforts of changes in order to increase the quality and yield and reduce costs and processing times

- Help develop statistical models of the fermentation, recovery and formulation processes and then help with optimizing the processes and with the implementation of the improved methods
- Other duties as required

Preferred Qualifications/Education

- BS in chemical engineering, bioengineering, biotechnology, biochemical engineering, biology, or other related fields is required, M.S. or Ph.D. preferred
- Hands-on experience with industrial scale microbial fermentation processes or a strong interest in developing such skills is desired
- Must have excellent verbal and written communication skills
- Must be able to work independently and as a part of an interdisciplinary, diverse team
- Good working knowledge of chemical and biochemical process unit operations is a plus
- Excellent computer skills are desired
- Working knowledge and understanding of process control and automation is a plus
- Industrial scale hands-on plant experience with process optimization and Six Sigma experience is a plus
- Must have flexibility to work some limited off-shift and weekend hours in order to support all production shifts when needed

Job Description 6

Position Title: Research Food Technologist

Position Summary

Agricultural Research Service's Postdoctoral Research Associates are hired to supplement a lead scientist's research on agricultural problems of high national priority affecting American agriculture.

DUTIES

- Perform research on specialty crop preservation.
- Record and analyze data.

REQUIREMENTS

CONDITIONS OF EMPLOYMENT

- Individuals who were born male after 12/31/1959 must be Selective Service registered or exempt.
- Subject to satisfactory adjudication of background investigation and/or fingerprint check.
- Direct Deposit: Per Public Law 104-134 all Federal employees are required to have federal payments made by direct deposit to their financial institution.
- Successfully pass the E-Verify employment verification check. To learn more about E-Verify, including your rights and responsibilities, visit E-Verify at <https://www.e-verify.gov/>

QUALIFICATIONS

This position requires a recent Ph.D in Food Technology or a related field of study that has equipped the applicant with the necessary knowledge, skills and abilities to perform the duties and responsibilities of the position.

The basic requirements for this position are outlined below.

Basic Requirements:

1. **Degree:** food technology, or dairy technology, microbiology, biology, chemistry, physics, or a related discipline or field of biological or physical science. The course work must have been comprised of at least 30 semester hours in the basic biological and physical sciences, and included at least 20 semester hours in food technology and closely related subjects, or 20 semester hours in subjects that can be applied directly to food technology.

or

2. **Combination of education and experience** – courses equivalent to a major, including the course work specified, as shown in A above, plus appropriate experience or additional education.

In addition to the requirements outlined above, the candidate must also have research experience in Food Technology, Food Science, or Food Engineering. Enough to have equipped the candidate with the knowledge, skills and ability to perform research regarding crop preservation.

Education

This position has a positive education requirement. You must submit a copy of your academic transcripts OR a list of college courses with credit hours, dates completed, and grades received to verify education when applying for this position. If this information is not provided, your education may not be appropriately evaluated and you may lose consideration for this position. If you are selected for this position, you will have to provide an official copy of your transcripts prior to entering on duty. Application materials will not be returned.

A Ph.D. is required that was obtained within the last four years.