



# WE ARE HIRING

## Biostatistics and Quantitative Genetics Lead – Center for Innovation

LOCATION: CENTER FOR INNOVATION, WASCO, CALIFORNIA

Sun World International is a California-based agriculture and technology firm engaged in fruit variety development, technology, intellectual property, and licensing. Technology and IP pursuits include one of the world's leading fruit breeding/genetics programs, a broad-based portfolio of plant patents and trademarks and investments in agriculture technology start-ups benefiting its global licensees. Licensing consists of sharing new proprietary stone fruit and table grape varieties, and the IP they comprise, with like-minded fruit growers and marketers in more than 15 countries around the world. The Company prizes creativity, innovation, and an entrepreneurial spirit. Its people strive for excellence by demonstrating leadership, passion, kindness, authenticity, courage, initiative, and curiosity.

### ABOUT THE DEPARTMENT

At the heart of Sun World's business is a commitment to developing new fruit varieties that can be grown in a sustainable way and optimized for yield, flavor, and appearance. Research focuses on fast-moving technology and developing the next generation of fruit genetics to meet grower challenges and consumer expectations. The program is located at the Sun World Center for Innovation in Wasco, California -in the heart of San Joaquin Valley agriculture production. At Sun World you are part of a team that values passion, respect, and leadership to envision and create the future.

### ABOUT THE OPPORTUNITY

The Biostatistics and Quantitative Genetics Lead will play a key role in developing and executing on technical strategies to enable the use of predictive breeding methods, including genomic selection, and incorporating them into a plant breeding program that has an excellent track record of variety development. This position will partner closely with the Breeding team to further optimize breeding strategies by utilizing new tools, technologies, and methods to increase the accuracy, precision, and speed of the program. The position will work closely with Breeding, R&D, and Global Technical Services teams to incorporate state-of-the-art technologies to deliver industry-leading varieties across our global and regional market segments in an accelerated timeline.

REPORTS TO: Chief Science Officer

WORKS WITH: Sun World Breeding, R&D, Marketing and Licensing, Global Technical Services, and IP teams

HOURS: Full time, 40 hours/week, Monday-Friday working nights and weekends as needed

#### RESPONSIBILITIES:

- Report to the Chief Science Officer and support breeding programs utilizing advanced breeding technologies to deliver best-in-class varieties in an accelerated timeline
- Work closely with Breeders to design and enable optimized germplasm structure, parent selection, progeny selection, and trialing programs that incorporate sound experimental design and advanced breeding methods
- Guide and support predictive breeding strategy for qualitative and quantitative traits
- Drive phenotypic and genotypic data analysis such as genetic mapping, genome-wide association, and genomic prediction to derive trait insights and to identify favorable alleles and QTL for target traits for key market segments for both qualitative and quantitative traits
- Guide training set strategy including continuous improvement to increase prediction accuracy and optimize selection
- Drive design, analysis, and execution of genomic selection initiative directly or through others, and ensure timely delivery during advancement cycles and within budget
- Contribute to the design of genotyping platforms and deployment of genomic resources including management of a bioinformatics pipeline
- Contribute towards the delivery of an analytical data pipeline for trials resulting in a visualization dashboard and standardized outputs for genomic selection and prediction, high-throughput phenotyping, marker-trait associations, heritability estimates, and genomic estimated breeding values
- Support efforts to evaluate climate change scenarios and their potential impact on traits, yield, and prediction of future growing areas
- Drive cross-functional collaborations, leverage existing knowledge and expertise, and foster creativity to accelerate technology implementation and adoption
- Contribute to the development of genomic resource enablement and a breeding technology toolbox for an expanded crop portfolio beyond core crops of table grape and stone fruit
- Keep current with internal and external scientific advancements in germplasm, breeding and genetics methodologies and genomics and analytics. Propose and lead development of new tools, protocols, and methods and share experience across crops and functions
- Engage in external collaborations when necessary and regularly report on research outcomes and project advancement
- Support the development of a data-driven culture that enables team members to grow and learn new skills
- Lead people and teams through direct or matrixed reporting structures

#### PROFESSIONAL SKILLS & QUALIFICATIONS:

##### REQUIRED

- Ph.D. degree in Quantitative Genetics, Statistical Genetics; or Ph.D. in a relevant discipline with 3+ years in Quantitative/Statistical Genetics; or Master's degree with 6+ years of relevant experience
- Advanced data fluency including experience with open-source programming languages
- Demonstrated skills in experimental design and analysis of large, diverse, and complex datasets and data visualization

- Outstanding organizational and communication skills in English, strong interpersonal skills and able to work in a diverse, multi-cultural environment
- Proven ability to problem-solve, foster innovation, influence, and collaborate with diverse, and global teams
- Flexible and adaptable; able to be effective in a fast-paced environment
- Possess a technology and digital-first mindset
- Ability to work on site at least 50% of the time
- Available for domestic travel and the ability to travel internationally without restrictions up to 5-10% of time

#### PREFERRED

- Demonstrated experience leading teams and developing people through formal or informal channels
- Experience working with perennial/asexually propagated crops

#### PHYSICAL DEMANDS:

The position is regularly required to sit, use hands-to-finger, handle controls, and talk and hear. The employee is required to stand, walk, and stop. Employee must regularly lift and move up to 25 pounds. Specific vision abilities required by this job include close vision and the ability to adjust focus, as well as work with a computer monitor and in the field.

For more information or to apply please send your resume to [jpetersen@sun-world.com](mailto:jpetersen@sun-world.com)

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