Molecular Breeding Discovery Scientist

Job Location US-IN-Lebanon

Overview

WHO WE ARE
AgReliant Genetics is a leader in seed research, production, and quality focused on providing trusted seed solutions that help farmers grow.

Created July 1, 2000 as a joint venture between two of the world's largest independent seed companies, KWS and Limagrain, AgReliant Genetics is now one of the fastest growing independent seed companies in the industry, ranked as the third largest corn seed company in the U.S., and operates one of the largest research programs in North America.

At AgReliant Genetics we have a unique multi-brand strategy that gives farmers across the U.S. and in Canada access to our products, regardless of geographical location or operation size. Through our seed brands – AgriGold®, LG Seeds® and PRIDE Seeds® – and our digital ag platform Advantage Acre®, AgReliant Genetics demonstrates commitment to our vision by developing meaningful relationships, delivering valuable seed solutions, and providing an excellent customer experience.

OUR CULTURE & OUR PEOPLE
AgReliant Genetics is dedicated to fostering a diverse and inclusive workplace. At every level, our people are an essential part in maintaining our values and furthering our growth. We pursue individuals who demonstrate commitment, excellence, integrity, safety and innovation in their work.

At AgReliant Genetics you have the opportunity to be part of a culture where we value our employees' passion and believe in giving people the space to navigate challenges, invent solutions and excel in a rewarding career.

You can learn more about AgReliant Genetics and our brands at agreliantgenetics.com or by following @AgReliant on Facebook and Twitter.

Job Overview

Drive field evaluation and discovery of molecular breeding methods and germplasm integration for AgReliant breeding. Responsible for integrating leading-edge novel analytical and predictive systems from internal and external organizations to enhance the integration of corn germplasm and technology such as genomics and GS in our breeding programs. Key responsibilities include field activities, genomic selection methods, genetic and statistical methodology and molecular breeding.

Responsibilities

• Design and implement experiments to optimize and refine the predictive ability of whole genome prediction datasets in support of germplasm characterization and integration, product development and commercialization.
• Lead field experiments to contribute to continuous improvement of genetic analysis, genomic selections, calibration data set development, environmental classification methodology.
• Participate in the development, validation and deployment of novel phenotyping and data analysis methodologies.
• Identify, validate, and deploy trait variation for the traits of interest within elite germplasm, by conducting extensive genetic analyses, including molecular and statistical analysis, QTL detection, whole genome prediction, and field experiments.
• Design novel concepts and develop experimental validations to contribute to accelerate the rate of genetic gain of our breeding programs.
• Work with breeders to define specific trait development needs, targets, and strategies and help develop and implement research plans
• Act as key liaison among functional groups, line breeding/hybrid breeding, biostatistics, aerial imaging, and molecular technologies
• Collaborate within existing research groups to identify and monitor germplasm structure and diversity using molecular tools and its application.
• Participate in strategic evaluations of new technologies & methodologies to support the breeding organization.
• Develop and manage field experimentation aimed at generating supporting evidence to drive technology adoption.
• Other duties as assigned.

Qualifications

EDUCATION/EXPERIENCE:
• PhD in Molecular Breeding, Plant Breeding, Plant Sciences, or related discipline.
• Minimum of two (2) to three (3) years of experience in the following areas:
  o Quantitative/population genetics, meta-analysis, genome wide prediction methods, and other molecular breeding methods.
  o Analysis of large-scale datasets utilizing data science and programming principles.
• Experience with the interpretation of genomic data, breeding experiments and marker-trait association studies, marker-based genome analysis, marker-assisted selection and introgression is highly desired.

KNOWLEDGE/SKILLS/ABILITIES:
• Knowledge of field research processes and phenotypic data analyses and utilization is essential.
• Programing experience with at least one/or data querying and one scripting language (eg. SQL, Python, R) and visualization tools (Tablaeu, Spotfire).
• Strong organizational skills to plan and coordinate experiments across projects and abilities to effectively share results across the organization are required.
• Excellent interpersonal skills required for effectively developing strong internal and external working relationships with a diverse group of people.
• Strong verbal and written communication skills
• Proven ability to work well in a team environment.
• Ability to plan and manage multiple projects completely and accurately.
• Ability to quickly identify solutions when challenges arise.
• Excellent planning and organization skills
• Proficient in the use of Microsoft Office (Word, Excel, PowerPoint)

PHYSICAL DEMANDS:
• Ability to lift up to 50 lbs (if applicable)
• Ability to travel up to 15%
• Ability to work outdoors 20%
• Must have valid driver's license and meet MVR Requirements

AgReliant Genetics, LLC is an equal opportunity employer. We value and openly welcome diversity at AgReliant. Diversity and inclusion is a key part of our strategy for long-term success.