



Role Profile

Role Title: Senior Bioinformatics Scientist

Reports To: Bioinformatics Lead

Position Location: Wauankee, WI or Remote

Company Background:

Genus is a global FTSE 250 company, headquartered in the UK and listed on the London Stock Exchange. With revenues of around £500 million, Genus has a presence in over 70 countries, with a global workforce of approximately 3,200 employees. One of the best performing stocks on the London Stock Exchange, the Company's market capitalization is around £2 billion. It is a worldwide leader in porcine and bovine animal genetics, partnering with farmers to transform how we nourish the world – a mission that is important to a sustainable future.

Each generation of animals is selected based on a number of desired traits, including greater health, fertility, productivity or feed efficiency. With superior animal genetics, Genus helps its customers in the dairy, beef and porcine supply chains around the world produce offspring with improved robustness, superior production efficiency and greater sustainability. Genus's vision of *"pioneering animal genetic improvement to help nourish the world"* is supported by its core values to be customer-centric, results-driven, pioneering, people-focused and responsible.

Genus is an agricultural biotechnology pioneer. At the core of its accelerated rates of genetic improvement is a proprietary technology platform. Genus focuses its research and development through four routes, all of which may be applied across species, but currently the Company's focus remains on the bovine and porcine species:

- genomic selection (the analysis of the genome and selection of traits important to commercial producers for sustainable production);
 - biosystems engineering (delivering genetics through technology solutions, such as our pioneering sexed semen technology);
 - gene editing (precise editing of the genome, in which DNA can be deleted); and,
- advanced reproductive technologies (embryology and related technology).

Overall Responsibilities:

The Applied Genomics department at Genus seeks a Bioinformatics Scientist to help us change the future of animal breeding, through strategic and actionable uses of genomic data. Join a growing team using next generation sequencing and bioinformatics to improve decision making and accelerate genetic improvement in bovine and porcine genetics. A senior scientist is expected to be able to independently serve as the bioinformatics lead on projects. This includes understanding the goals of the project, assisting in experimental design, and making recommendations for the next courses of action and what analysis should be done. Projects can include analysis of single cell sequencing, miRNA, transcriptomics, or WGS sequencing data, and custom script development.

Specific accountabilities:

- Thrive in an environment of increasingly large datasets
- Participate in all phases of the genomics data lifecycle from experiment conception, pipeline development and execution, and management of data assets to address current and future questions
- Have a bias towards curiosity and extraction of actionable intelligence from the data
- Enjoy working in a collaborative team environment
- Have a communication style that is effective for both technical and lay audiences
- Serve as the primary bioinformatics expert on projects
- Provide support for users to understand the results of the analysis
- Drive and review experimental design for projects

Qualifications and experience:

- Master's or PhD in Bioinformatics or related Life or Computational Science with 2+ years post graduate experience
- Deep experience of standard NGS bioinformatics toolsets at the command line
- Experience with RNA-seq whole transcriptomic datasets
- Preferred experience working with 10x Single cell data analysis
- Preferred experience working with the Qiagen Ingenuity Pathway Analysis (IPA) software
- Strong coding skills in appropriate languages for bioinformatics (perl / python)
- Experience in HPC environments and/or cloud computing
- Gene network experience beneficial but not required
- Experience in bovine and/or porcine genomics is beneficial but not required

Capabilities and behaviors:

- Reflects Genus R&D's aim of having the strongest talent in the industry
- Lives and displays the Genus ABS Values and behaviors at all times in day to day work.
- Maintains professional verbal and written communications with co-workers, internal and external customers, and vendors at all times.
- Flexible with job responsibilities and consistently strives to be an effective team member.
- Strives to advance skills and displays a willingness to accept future development.
- Actively participates in Company training opportunities to further develop applicable skills.



- Gains a thorough understanding of the Company's business and the department's role within the company.

Equal Employment Opportunity:

Genus is an equal opportunity employer. In accordance with anti-discrimination law, it is the purpose of this policy to effectuate these principles and mandates. Genus prohibits discrimination and harassment of any type and affords equal employment opportunities to employees and applicants without regard to race, color, religion, sex, sexual orientation, gender identity or expression, pregnancy, age, national origin, disability status, genetic information, protected veteran status, or any other characteristic protected by law. Genus conforms to the spirit as well as to the letter of all applicable laws and regulations.