



## Employment opportunity at Metabolix Oilseeds, Inc.

### Bioinformatician

Metabolix Oilseeds, Inc., a Canadian subsidiary of Yield10 Bioscience, Inc., is focused on the development of technologies to produce step-change improvements in yield of major oilseed crops to enhance global food security. We are seeking a highly motivated Bioinformatician to work with plant genomics data. The successful candidate will focus on the analysis of large NGS (DNA and RNA) datasets with in-depth knowledge of data-handling and sufficient knowledge of plant genomics. This position will provide rich opportunities for professional development and the acquisition of cutting-edge bioinformatics skills in utilizing the NGS data for improving crop productivity.

The successful candidate will be involved in a range of bioinformatics research projects with plant breeders, metabolic engineers and molecular biologists. The candidate must possess a working knowledge of bioinformatics, programming expertise in C++, Perl or Python, and should be comfortable within a UNIX environment. The candidate should also possess knowledge of cloud computing, data storage, and possess data management abilities. Preference will be given to candidates with prior experience in analyses of RNA-seq data, co-expression analyses, and with a good understanding of biological systems.

Duties will include but are not limited to:

- Next-generation sequencing data analysis, statistical data analysis, data mining and utilization.
- Development and maintenance of custom software as well as utilization of open source software in analyzing the NGS data to support ongoing research activities.
- Keeping abreast of new and emerging technologies and suggesting new ways of analyzing and integrating very large data sets.
- Working with other scientific staff in the company to ensure the bioinformatics tools are incorporated into the smooth flow of research activities.
- Development of standard operating procedures, documentation and pipelines for NGS data analysis
- Development of new software (complete with unit and integration tests) in C++ and R, using git for version control and Amazon Web Services (AWS) as the computational infrastructure.

#### Job Requirements

- Bachelor's or Master's degree in bioinformatics, or relevant experience in bioinformatics, mathematics, statistics or computer science.

- Advanced understanding of computer science and bioinformatics including a basic understanding of plant biology and/or genomics.
- Experience with next-generation sequencing analysis
- Demonstrated programming abilities (C++, Perl, Python etc.) and familiarity with Unix.
- Familiarity with statistical genomics and/or experience with development, testing and maintenance of databases (MySQL/MongoDB) is an asset.
- Demonstrated experience in NGS-based variant calling, transcriptome data analysis, differential gene expression studies, and alternative splicing. Should have familiarity with CRISPR sequencing and identification of gene edits in polyploid genomes.
- Excellent verbal and written communication skills
- Demonstrated interpersonal skills including the ability to work effectively with others in a team environment

Metabolix Oilseeds, Inc. is an equal opportunity employer offering excellent career opportunities as well as a competitive compensation and benefits package. Please forward resume with a cover letter and the contact names of three references to [careers@yield10bio.com](mailto:careers@yield10bio.com). No phone calls, please. [www.yield10bio.com](http://www.yield10bio.com).