



GIFS | GLOBAL INSTITUTE
FOR FOOD SECURITY



Accelerate your *research.*



New at GIFS: HiFi long-read sequencing with PacBio Revio



Genomics & Transcriptomics



Bioinformatics



Machine Learning & AI



Proteomics & Metabolomics



Precision Fermentation



Plant Growth & Transformation

Discover, develop, and *deliver* with GIFS

Scale and accelerate your research with leading-edge **technological services** from the Global Institute for Food Security (GIFS) at the University of Saskatchewan.

Sequencing

- PacBio **Revio** HiFi long read
- **Illumina** short read
- Whole genome
- Genotyping
- RNA-Seq
- Kinnex full-length RNA
- Iso-Seq
- Shotgun metagenomics
- Targeted panel
- Hi-C (chromosomal conformation capture)

Plant Growth, Transformation, & Technologies

- Greenhouse space
- Growth chamber space
- Plant transformation
- Imaging capabilities
- Plant pathology
- Seed increase & cleaning
- Expertise & high-quality care from seed to harvest
- Double haploid production

Bioinformatics

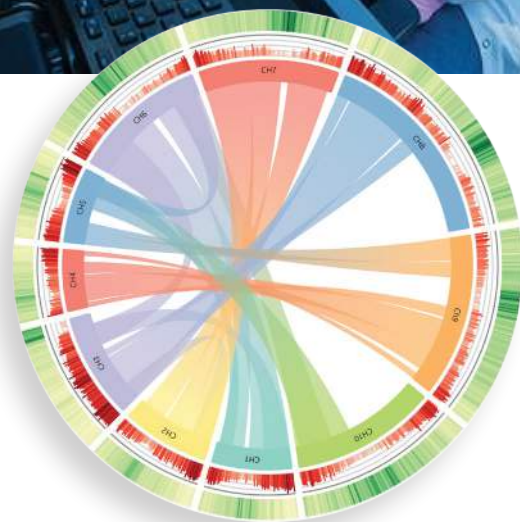
- Genome assembly
- Genome annotation
- Variant calling
- Differential expression
- Microbial community classification

Data Management & Analytics

- Customized data visualization tools
- Genomic selection modelling
- Machine learning & artificial intelligence
- Software licensing
- Full-stack software development

Engineering Biology

- Combinatorial DNA assembly
- Microbial strain engineering
- Protein engineering
- Microbial phenotyping (microlitre to multi-litre benchtop scale)
- Microbial culturing & fermentation
- Metabolomics & proteomics
- Lab automation consulting



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Contact us for **free consultation.**



Email partnerwithus@gifs.ca.