MONASH University

MONASH MEDICINE, NURSING AND HEALTH SCIENCES

MICROMON GENOMICS

NEXT-GENERATION SEQUENCING

Next-generation sequencing provides a powerful, flexible and cost-effective means to answer a diverse range of biological questions – it's more than just sequencing! Applications range from standard DNA sequencing through to expression profiling, epigenetics, metagenomics, all on a genome-wide scale. Next-generation sequencing allows you to answer questions that were never previously possible... Quickly and easily!

Next-generation Sequencing at Micromon, with the Monash Bioinformatics Platform (MBP)

We provide a comprehensive service ranging from project planning and scoping through to sample submission, library preparation, sequencing, data validation, data delivery and bioinformatic analysis.

If you're not familiar with next-generation sequencing...

…or you're not sure where to start, then you may prefer to utilise the full breadth of our service. We specialise in working closely with you throughout the entire NGS project, and we can convert your biological questions into NGS experiments. Start with an informal discussion, then progress to a project planning meeting with your group, Micromon and the Monash Bioinformatics Platform, including budgeting, technical and grant writing assistance. We can determine the scale and type of sequencing that will best answer your questions and maximise the value for your sequencing dollar. We will advise you of the sample types required and how to prepare them and, once we have received your samples, we will construct a sequencing library, carry out the necessary quality control, and generate your sequencing data. Your data and quality report will be returned to you electronically or by post, depending on your preference.

If you're already familiar with next-generation sequencing...

...then you can pick and choose components of our service as you require them – for example, we can prepare sequencing libraries for you, or we can sequence your pre-prepared libraries. We can return your raw sequence data as it comes from the instrument, or we can provide bioinformatics support (in conjunction with the co-located Monash Bioinformatics Platform).

Contact us today to discuss your requirements – details overleaf.

SERVICES

- Genomic DNA sequencing
- Exome sequencing
- Transcriptomics / RNA-seq (expression profiling)
- Small RNA discovery and analysis
- ChIP-seq (DNA binding protein analysis)
- Bacterial genome sequencing
- Metagenomics
- Bacterial 16S Survey sequencing
- Affordable, highly multiplexed plasmid sequencing
- Amplicon sequencing
- Rapid turn-around sequencing library QC
- Illumina-compatible library construction
- Customer-prepared library sequencing
- Fluorometric DNA and RNA quantitation
- Microfluidics- and capillary-electrophoresis based QC of DNA and RNA
- Single cell transcriptomics
- 10X Genomics Chromium based linked-reads for long-range structural variation detection, de novo assembly, complex assembly and genome phasing
- Grant writing assistance
- Project planning, scoping and technical consultation

TECHNOLOGY & CAPABILITIES

- MGISEQ-2000
- Illumina MiSeq and NextSeq
- Selectable read length from 25bp to 550b*
- Single or paired reads
- 10X Chromium Controller
- Agilent Bioanalyzer and Fragment Analyzer

* Using sub-assembly of paired end reads. Ask us for more information!

Like us on Facebook for information, news and events in the Next-Generation Sequencing world!

www.facebook.com/micromon

Micromon
ADVANCED DNA AND RNA TECHNOLOGIES

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MICROMON GENOMICS

SANGER SEQUENCING

ABOUT MICROMON AND OUR SERVICES

Micromon Genomics has been providing molecular biology services to the research community for more than two decades and is committed to providing premium quality products and services with fast turnaround.

Our Sanger Sequencing facility can accept premixed template and primer, or both sent separately are available as a single pipeline service. You just need to send us your template! We'll carry out the labelling reaction, separate the sequencing products and deliver the sequencing data to you electronically. Alternatively, you can run your own sequencing reactions and send them to us for separation – we supply discounted BigDye™ sequencing reagents.

Contact us for a quote or for an informal chat about your Sanger Sequencing requirements.

SANGER DNA SEQUENCING

- Applied Biosystems 3730 technology
- Long reads in excess of 1,000 Q20+ base calls using the proprietary PeakTrace basecaller
- Fast turn-around (typically next-day)
- Discounts for high-throughput and plate lots
- Discounted BigDye™ sequencing reagent
- Phone and email technical support

CONTACTS

Sanger Sequencing

Level 1

35 Rainforest Walk
Monash University,
Clayton campus

W: *monash.edu/researchinfrastructure/micromon*
E: *sequence@monash.edu*
T: 03 9905 4847

Next Generation Sequencing
E: *MicromonGenomics@monash.edu*
T: 03 9905 8592

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