

The course will be a combination of lectures, demonstrations, hands-on experiments and use of computers for data analysis.

Hands-on experiments

- Automated sample extraction and preparation.
- Analysis of SNPs
- Analysis of microsatellites
- Automated DNA and data analysis
- Use of robotic workstations
- Computer analysis of sequence data
- Troubleshooting techniques
- Approaches to simplify existing techniques
- Protein based diagnostics

Lectures/Workshops

- Basis of rapid genetic analysis
- Use of robotics
- Microsatellite analysis
- Forensic identification
- SNPs analysis
- Microarray analysis
- DNA sequencing and database searching
- Data inputs/outputs from analytical systems

Demonstrations

- Robotic workstations
- Genomics platform instrumentation

Tour of the WA State Agricultural Biotechnology Centre

University Credit:

Two points of University credit towards a Postgraduate Certificate or Diploma in Applied Molecular Biology Techniques can be applied for after successful completion of the assessment.

There is an additional charge of \$200 (+ GST) for the accredited assessment, which is scheduled approximately three weeks after the workshop. Please contact Prof. Mike Jones, Program Chair of Postgraduate Studies, Biological Sciences and Biotechnology, Murdoch University on Ph: 9360 2424 for more information.

Major Sponsors:



murdochuniversity

High-throughput Genetic Analysis in Diagnostic Biotechnology

A five-day course with hands-on experiments in molecular techniques for rapid genetic analysis, and applications to the latest research in plant breeding, animal production, diagnostics and forensics.

This course can be taken for University credit

1st - 5th May 2006

Organised on behalf of:



www.murdoch.edu.au



High-throughput Genetic Analysis

The aim of this course is to introduce the participant to the core processes involved in the rapid molecular analysis of samples from plants, animals, diagnosis or forensics.

Each participant will obtain hands-on experience with the core techniques covering the whole analytical cycle from sample collection, extraction and processing to molecular analysis. Emphasis will be on major methods for the analysis such as analysis of microsatellites and Single Nucleotide Polymorphisms (SNPs) as well as the use of microarrays. Protein based diagnosis will also be covered for the diagnosis of barley strains.

Automation at all stages of the diagnostic cycle will be covered, including the cost effective use of robotics and techniques that can simplify these processes.

This workshop is suited to people already working in molecular biology diagnostics for animal, plant, diagnostic and forensics systems;

- University staff and students
- Scientific Corporations; research & sales
- Government Departmental staff

The technical processes involved in commercialisation developments will be covered.

A good understanding of molecular biology principles is required.

Presenters

Prof. Keith Gregg, Director, Centre for High-throughput Agricultural Genetic Analysis (CHAGA), other centre staff, Dr David Groth, Lecturer, Curtin University and Dr David Berryman, Manager, WA State Agricultural Biotechnology Centre will present the lectures and practical components for the course.

Workshop Details

When?

Monday 1st to Friday 5th May 2006;
8.40am - 4.30pm (approx.) each day; last day finishes ~2.00pm.

Where?

WA State Agricultural Biotechnology Centre, Loneragan Building, Murdoch University, Perth.

Cost?

\$2100 for external applicants plus 10% GST; \$1890 for Murdoch University staff and students (GST applies to all payments except internal transfers). An additional \$200 + GST applies if you nominate to undertake the assessment to obtain university credit.

Provided in the Registration Fee

Detailed course notes, morning/afternoon teas and lunch each day, drinks on the final day, free car parking, supervision by fully qualified demonstrators (1 per 4 participants).

Early Bird Registration

Registrations close Friday 14th April 2006.
A late fee of \$100 applies after this date.

Cancellation

An administration fee of \$50.00 applies to all cancellations. A cancellation fee of half of the registration fee may be applied if your place cannot be filled.

Contact/ Enrolment Address

Andrea Tongue / Lyn Lendrum
Biological Sciences & Biotechnology,
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Murdoch University, Perth WA 6150
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L.Lendrum@murdoch.edu.au

Note: This course can be taken for 2 points of University credit subject to successful completion of the course and associated assessment; see back page for details.

Registration

Title: First Name:

Last Name:

Affiliation(Comp/ Dept):

Position:

Address:

Postcode:

E-mail:

Phone (Daytime):

Fax:

Preferred name for name badge:

Special Dietary Needs?

I do not want my name and company address details to be printed in the manual

Payment:

I elect to do the assessment for another \$200 (+ GST)

1. Murdoch Uni applicants only: \$1890 or
 \$2090 (with assessment) to be debited from

Account code: _ _ _ _ _ OTR

2. External applicants: Please make cheques payable to "High Throughput Short Course", cross "Not Negotiable" and return to Andrea Tongue, SABC, Murdoch University, 6150.

Alternatively payment can be made by credit card:
 Visa Bankcard Mastercard

Expiry date: ____/____/____

Amount to be paid:
 \$2310 \$2530 (with assessment)

Card Holder's Name: _____

Signature: _____

Murdoch University, South St., Murdoch, 6150.

Murdoch University ABN: 61 616 369 313

This form is a tax invoice for external applicants.