



Introductory Molecular Techniques Short Course

Part 1: Understanding Molecular Techniques

Part 2: Application of Molecular Techniques

30 June – 2 July 2009

Moreton Room, Gold Coast International Hotel, Surfers Paradise

Advances in molecular biology in recent decades have substantially contributed to our understanding of emerging infectious diseases. As DNA technologies continue to develop they provide opportunities for further advancement of animal, wildlife and human health research and diagnostics. Understanding the basis of molecular techniques and their uses assists practitioners and researchers to identify effective approaches for addressing the biosecurity challenges of the 21st Century.

This two part short course is designed for researchers, practitioners and students wishing to increase their understanding of the theory and application of molecular biology techniques. Part 1 provides an introduction to molecular biology and Part 2 covers the application of molecular techniques in veterinary epidemiology. Participants may attend either or both parts of the course.

This introductory short course is designed for participants with little or no background in molecular biology.

Part 1: Understanding Molecular Techniques
(1.5 days)
Dr Joanne Edmondston

8:00am 30 June – 12:30pm 1 July

A look at the theoretical basis of:

- DNA
- DNA amplification, including cloning and PCR
- DNA detection techniques
- Sequencing technologies
- Microarrays
- Bioinformatics

Part 2: Application of Molecular Techniques
(1 day)
Dr Petra Mullner

1:30pm 1 July – 1:30pm 2 July

Exploration of:

- *Strengths and weaknesses of different techniques and implications for their use in epidemiological studies*
- *Choosing a suitable typing technique for your study (considering aspects such as cost, practicality, discriminatory power). This will include critical appraisal of newly emerging techniques and discuss the link to diagnostic test performance.*
- *Tools and software for analysing and presenting molecular data (e.g. Bionumerics, PSI, MST)*
- *Molecular epidemiology in practice using examples from risk assessment and attribution studies*

For more information about this course, or to download a registration, form please visit:
The AB-CRC website: <http://www.abcrc.org.au/pages/Education.aspx?MenuID=48> or
The Epidemiology Chapter website: <http://epicentre.massey.ac.nz/acvsc/index.html> or
Contact **Ian Langstaff** at **Animal Health Australia** on (02) 6203 3909



**AUSTRALIAN COLLEGE OF VETERINARY SCIENTISTS
SCIENCE WEEK
EPIDEMIOLOGY CHAPTER**

Introductory Molecular Techniques Short Course
Part 1: Understanding Molecular Techniques (1.5 days)
Part 2: Application of Molecular Techniques (1 day)
8:00am 30 June – 1:30pm 2 July 2009

Surname.....First name.....

Address.....

Preferred name for tag.....

Telephone No.....Fax No.....Email address

College Member: Yes No AB-CRC Member: Yes No

Dietary requirements.....

REGISTRATION FEES

Registration must be received by 15 May 2009

TAX INVOICE
ABN 50 000 894 208

I will be attending the following (please tick one box):

	Part 1	Part 2	Parts 1 & 2
AB-CRC Student	Free <input type="checkbox"/>	\$250 <input type="checkbox"/>	\$250 <input type="checkbox"/>
Other Student	\$360 <input type="checkbox"/>	\$250 <input type="checkbox"/>	\$610 <input type="checkbox"/>
Epi Chapter member	\$415 <input type="checkbox"/>	\$220 <input type="checkbox"/>	\$635 <input type="checkbox"/>
AB-CRC member	\$415 <input type="checkbox"/>	\$250 <input type="checkbox"/>	\$665 <input type="checkbox"/>
Non-member AB-CRC/Epi Chapter	\$495 <input type="checkbox"/>	\$300 <input type="checkbox"/>	\$795 <input type="checkbox"/>

(Cost is in total Australian Dollars including GST)

TOTAL \$ _____

Please forward registration and payment by post or email to:

David Buckley
Epidemiology Chapter ACVSc,
27 Crowder Circuit,
Stirling ACT Australia 2611.
drbagenv@optusnet.com.au

Cheque enclosed or

Bankcard Mastercard Visa

Card No.....Expiry Date.....

Name on CardSignature.....