



The UK's leading
Diagnostic PCR Lab

Fast, reliable and accurate



Langford

VETERINARY SERVICES

University of Bristol

QPCR diagnostic laboratory testing

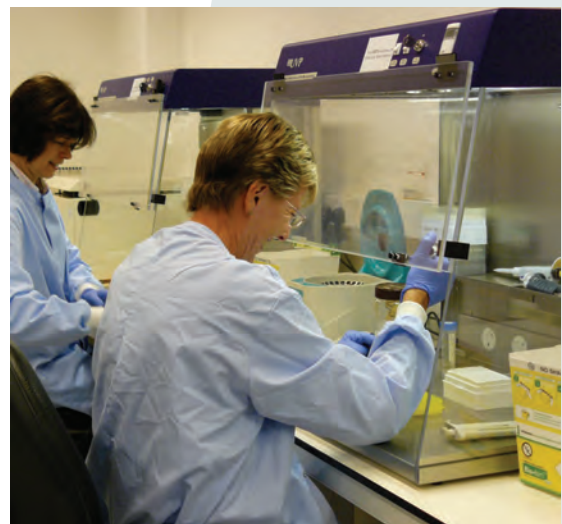
The **Molecular Diagnostic Unit** is part of Langford Veterinary Services, University of Bristol.

Background

The Molecular Diagnostic Unit was formed nearly **10 years ago** with the aim of using polymerase chain reaction (PCR) to detect bacterial and viral pathogens.

We were the **first** veterinary diagnostic laboratory in the UK to offer state of the art quantitative real-time PCR (QPCR) tests to veterinary surgeons and we have established an internationally renowned reputation for providing **excellent** quality results.

Over the past **6 years** we have been using QPCR for veterinary diagnostics; during this time we have processed over **20,000 samples**.



Most of our tests have been published in peer reviewed veterinary and scientific publications; more than **25 publications** currently support the validity of the QPCR tests we offer. We have a strong research and development ethos within the Unit and are continually developing new **QPCR tests**.

Ultimately QPCR gives our clinical pathologists much more information than can be derived by conventional PCR, allowing them to provide a better diagnostic service to the veterinary surgeon.

We strive to excel in the service we provide, combining **competitive pricing** with **state of the art diagnostic testing** and **fast turnaround times**

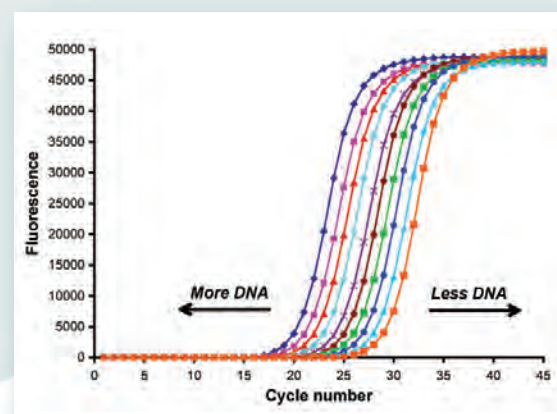
What is QPCR and what can it do for you?

- Quantitative real-time PCR (QPCR) is a method of **quantifying** the amount of a specific DNA present in a sample. Samples can be blood, tissue or cells collected on a swab. The target DNA can be of viral, bacterial or host origin and present at high or low levels.
- There is dramatic **reduction in the potential for false positive results** due to the closed tube system used in QPCR.
- It has a far **quicker turnaround time** with higher sample throughput, reducing the time between sample receipt and result reporting.
- The ability to easily include **internal amplification controls** to ensure that any problems with sample collection, submission or laboratory processing are quickly identified and false negative results avoided.

For these reasons we only offer QPCR in our diagnostic tests.

Who are the people behind the Molecular Diagnostic Unit?

- The unit is run by **Dr Chris Helps** a Senior Research Fellow who has over 16 years' molecular biology experience and has published over 70 scientific papers. He was recently the recipient of the **2008 BSAVA Amoroso award** for his major contribution to the development of PCR tests for the diagnosis of many feline infectious diseases.
- The unit also has the support of senior clinicians and clinical pathologists from the University of Bristol's Veterinary School.



Two-fold serial dilution showing the quantitative nature of QPCR - samples containing more DNA are detected at an earlier cycle number than samples containing less DNA.

Infectious disease QPCRs

Submission

Chlamydomphila felis

a plain or VCTM conjunctival swab

Feline Herpes virus

a plain or VCTM conjunctival or oropharyngeal swab

Feline haemoplasma

0.5ml EDTA blood

Canine haemoplasma

0.5ml EDTA blood

Feline leukaemia virus

0.5ml EDTA blood

Feline immunodeficiency virus

0.5ml EDTA blood

Tritrichomonas foetus

2-5ml faeces

Genetic disease QPCRs

Submission

Polycystic kidney disease

either 0.5ml EDTA blood or a buccal swab

Pyruvate kinase deficiency

either 0.5ml EDTA blood or a buccal swab

Maine Coon cardiomyopathy

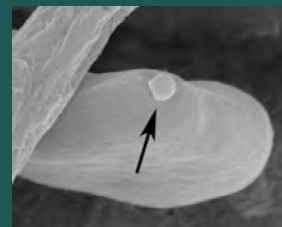
either 0.5ml EDTA blood or a buccal swab

Ragdoll cardiomyopathy

either 0.5ml EDTA blood or a buccal swab



QPCR testing is now available for the diagnosis of FeLV infection



QPCR is the only reliable method to diagnose & quantify haemoplasma infection in the cat

For details of the QPCR tests available, prices and submission forms please visit www.langfordvets.co.uk/lab_pcrnews.htm



a University of Bristol
Langford House
Langford
Bristol
North Somerset
BS40 5DU

t 0117 928 9412