



COMPATH

HEALTH MONITORING SERVICES

JANUARY 2021

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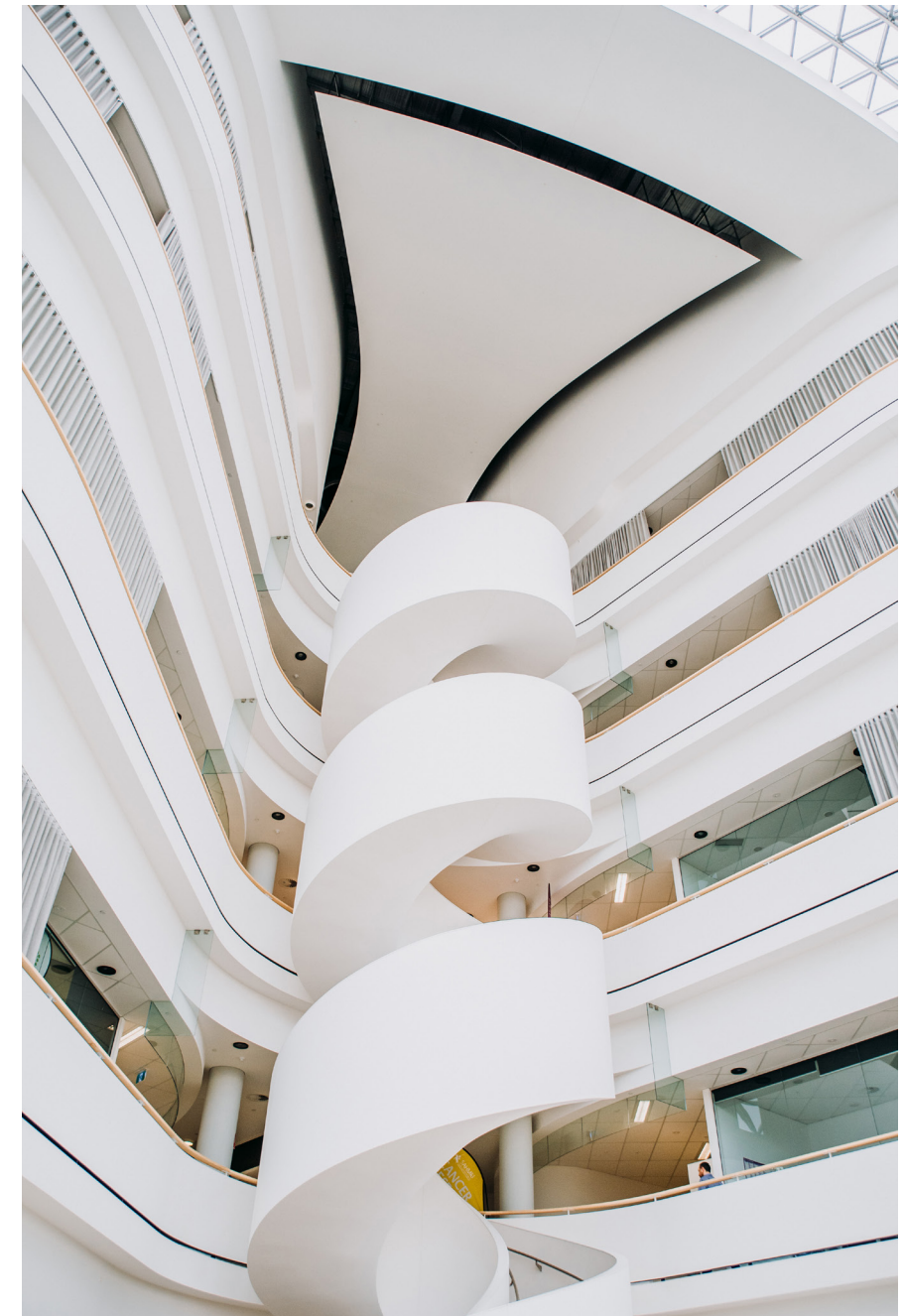
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Introduction

Complete.
Comparative.
Committed.

ComPath is committed to be Your Partner in Research Facility Health Monitoring. With over 30 years' experience in the industry we have adapted and grown to suit the changing needs of Biomedical Research. Our specialised team provides services including Serology, Molecular Diagnostics, Bacteriology, Parasitology, Disease Investigation and Pathology Consultation Services Australia-wide and within the Asia-Pacific region.

ComPath has a strong relationship with the Department of Agriculture, Water & the Environment (DAWE) enabling us to perform Quarantine clearance testing as well as hold animals in Approved Arrangements on site. ComPath operates under strict Quality Management Systems and was amongst the first in Australia to gain compliance with the newest version of the standard - ISO 9001:2015.



Methodology

Serology

ComPath uses commercially sourced and validated EIA plates and IFA slides for all serology testing. Our primary supplier is Charles River Laboratories (CRL) and whilst these reagents are considerably more expensive than others in the market, we have dedicated many hours to comparing the alternatives and found that the sensitivity and specificity of CRL reagents is superior.

ComPath has performed extensive validation studies on the use of dried blood spot cards as a means of sample delivery. Dried blood spot technology provides an excellent alternative to serum for serological monitoring of mice and rats as it can significantly reduce labour and transport costs as well as minimising the need for lethal blood collection. ComPath uses TEGO™ cards for dried blood spot testing and we are happy to supply these to you upon request.

ComPath has received confirmation from DAWE that samples submitted using dried blood spot cards are accepted for Hantavirus testing and subsequent clearance from biosecurity control/Approved Arrangements. This will allow for simple, survival blood collection techniques to be used as only a single drop of whole blood is required for the M-AQIS/R-AQIS (HAN) panel.



Bacteriology

At ComPath, we have a purpose-built bacteriology laboratory able to accommodate high-volume sample processing and quality analysis of all bacteriology samples sent for testing. In our health monitoring packages, samples from live animals are routinely collected aseptically from respiratory and enteric tracts. These respiratory and enteric samples are primarily screened for the microorganisms recommended by FELASA which comprise both primary and opportunistic pathogens of laboratory animals. Some of these reported organisms comprise low-level opportunists which are widely considered commensal bacteria and their presence in the normal flora of healthy laboratory rodents is often of little significance.

All bacterial cultures are identified using selective media and commercial identification kits. All listed organisms can also be confirmed by PCR on request. Any "Other Pasteurellaceae"



positives will be excluded as being *P.pneumotropica* by our specific PCR at no additional charge.

We are happy to provide advice on sample collection, suitable sites for maximum pathogen recovery, disease investigation and routine bacteriological testing for health monitoring purposes.



Molecular Diagnostics

ComPath's Molecular Diagnostics Laboratory is run by our highly-qualified PCR scientists. We offer a comprehensive range of assays to aid in the detection of infectious agents in specimens such as tissues, cell lines, faeces and environmental samples. Separate rooms are used for nucleic extraction, PCR set-up and interpretation of results to prevent cross-contamination between these steps. ComPath utilises the latest technology available with DNA/RNA extractions performed using magnetic bead technology to maximise nucleic acid recovery. Our TaqMan qPCR assays offer highly sensitive and specific results while the quantitative nature of the assay allows further context to be placed around positive results.

The ComPath R&D team has committed many hours to investigating and analysing the use of environmental samples including Tecniplast Interceptor filters, Allentown Sentinel filters and cage swabs as a means of health monitoring surveillance. Our studies have corresponded with published peer-reviewed papers proving that environmental testing is a comparable, and, in many cases, more sensitive approach, than soiled-bedding sentinel screening. ComPath now offers PCR testing for every FELASA recommended pathogen and opportunistic agent which means that environmental sampling can be used as a primary screening method in your facility.

Our PCR team are constantly working to design and validate new PCR tests and we are happy to work with you to incorporate specific requests as required.



Parasitology

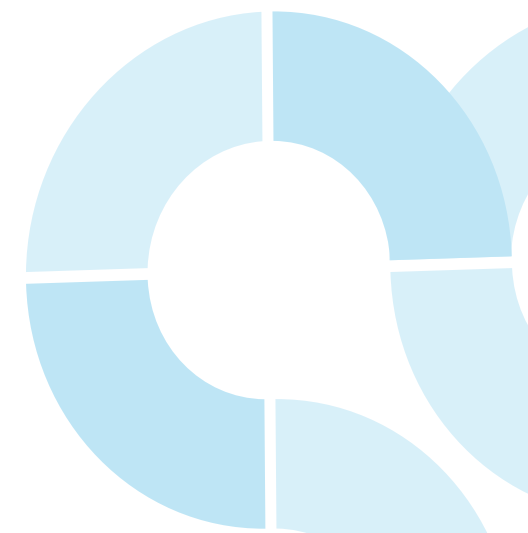
Comprehensive endo- and ectoparasite screenings are part of all our standard "HM" profiles. Our scientists are highly trained in parasite identification and our state-of-the-art microscopes can capture still and/or active pictures of any observed organism for further confirmatory identification or for your records and training.

Necropsy/Pathology

ComPath provides a range of pathology services designed to accommodate both disease investigation and routine health monitoring schedules. Our pathology laboratory offers the ability for high throughput sample collection and analysis. Our staff are trained in gross necropsy techniques and can readily identify gross lesions. In all our health monitoring packages, gross lesions are processed and reported at no extra cost. Comprehensive routine histopathology on grossly normal tissues is also available on request.

All histopathological interpretations are provided by consultant Pathologists. Additional comments relative to research implications and disease management as appropriate will be made by our Veterinarians, Dr Chris Christou or Dr Anna Acuna.

In addition to routine histology and pathology procedures, specialist services such as specific stains and electronic imaging are also available.





Alternative Health Monitoring

Exhaust air dust filters are the latest method of capturing pathogens that can be transmitted via aerosol and air-borne dust particles. ComPath has performed extensive validation and optimisation studies on Tecniplast's Interceptor™ system and Allentown's Sentinel™ system to ensure our DNA/RNA extraction methods and PCRs are sensitive enough to detect pathogens from exhaust air dust filters. All alternative samples (plenum swab/filter etc.) are extracted using magnetic particle extraction (ThermoFisher MagMAX) and processed using highly sensitive and specific singleplex TaqMan technology.

ComPath offers multiple alternative/environmental sample panels that incorporate screening for the most prevalent or important pathogens in animal facilities. Our internal research studies, as well as literature reported around the globe provide overwhelming evidence to support the benefits of incorporating EAD testing into routine Health Monitoring Programs.



Quality Control

ISO 9001:2015 certification

In June 2016 ComPath was granted ISO 9001:2015 certification which signifies our laboratories and processes meet the International Standard Organisation (ISO) requirements for Quality Management Systems. Additionally, ComPath is an Institutional Member of the International Council for Laboratory Animal Science (ICLAS). ICLAS members are part of a network of national and international organizations that promotes basic harmonisation in standards for laboratory animal science, with a priority of encouraging quality animal-based science in developing nations. Each year ComPath participates in the ICLAS Performance Evaluation Program (PEP) for serology, microbiology and molecular diagnostics, which helps diagnostic laboratories to monitor and improve their diagnostic performance through a process of self-assessment.



Reporting

ComPath Online Reporting Application

Our online submission and reporting platform, CORA, has been operating since September 2013. CORA is a web-based application that allows you to be in control of entering samples and tests in your own time (or as a Manager you can view all those that have been sent from your facility from your staff), and track reports as they become available from any device at work or home. CORA archives all reports so it has never been easier to monitor what is going on in your facility. Furthermore, reports are available for download either in PDF format or in an easy to use Excel spreadsheet giving you the flexibility to distribute and record results as you like.

It is important to differentiate between a laboratory report provided by ComPath and a Health Monitoring (HM) Report. A laboratory report will consist of results relevant to the samples submitted and does not make allowances for the microbiological status of the unit. FELASA recommendations suggest that the HM Reports should be produced by the person in charge of the HM program as they will differ between facilities as agents listed and/or screened for may depend on local circumstances.

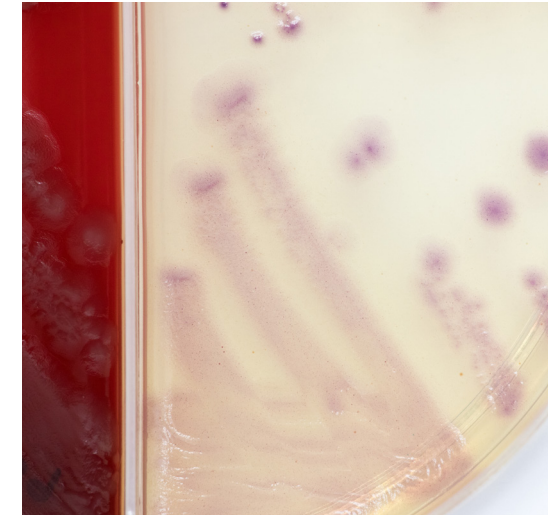


Expertise

We're Here to Help

ComPath has a strong reputation as a leader in Laboratory Animal Science and Health Monitoring testing. We pride ourselves on keeping up with the latest trends in testing and our team of resident veterinary specialists and scientists are dedicated to supporting you and your facility by providing free expert advice and consultation on any matter. Our Veterinarian consultants have extensive experience in the management of animal facilities; the advice and insights that can be offered are directly relevant and unmatched by other providers. Whether it is regarding animal health, symptoms, outbreak management, treatment, or minimisation strategies and how to integrate this into your animal facility Standard Operating Procedures, we are your partners in laboratory animal science.

Through our contact network at SAHMRI and SA Pathology we have access to internationally recognised specialists in all fields of testing which we can utilise to confirm results or perform additional services such as bacterial sequencing and comprehensive microbial sensitivity testing.



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