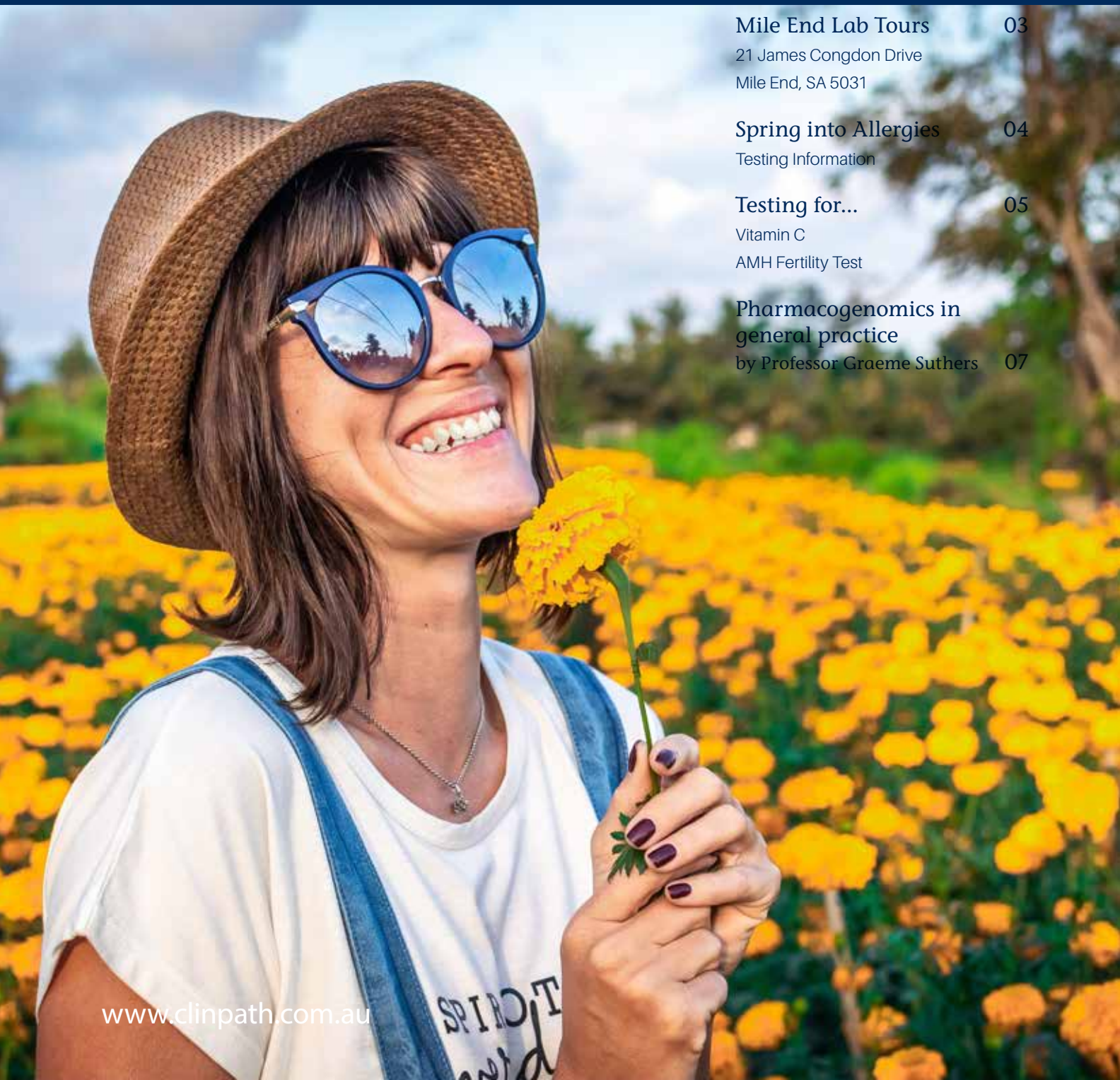
CLINPATH PATHOLOGY

Doctors' Newsletter

SPRING 2019



www.clinpath.com.au

HISTOLOGY SA
Packed house for the education session and lab tour

Since Opening the Mile End Lab

It has been a pleasure sharing our state-of-the-art Pathology Laboratory with everyone! And you've enjoyed it too with comments to us such as "Seeing the cutting edge technology and professional staff at work is a South Australian company to be proud of". Come and witness yourself how the work is done and the enthusiasm of our staff for their jobs.

Dr Fergus Whitehead

MOLECHECKS AUSTRALIA
A lunch session and skin lesson by Dr Craig James included a lab tour and was thoroughly enjoyed by all!

OFFICIAL OPENING
Sonic Healthcare, Clinpath Pathology and AMASA guests attended the Official Opening of the new Mile End Laboratory

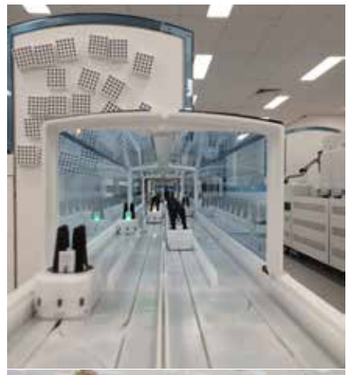
Showcasing Modern Pathology in Action

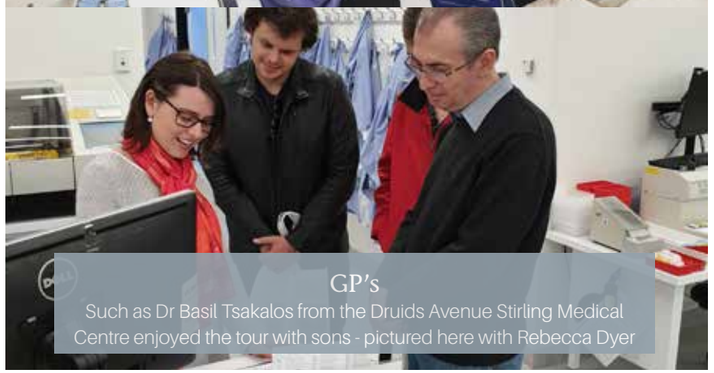
Similar to a Scaletrix model, when samples enter the GLP track system they are transported via cars to pre-analytical devices, which includes an Australian first bulk loader, a centrifuge, de-capper and aliquoters, routed onto state of the art analysers. In reality, it looks like a big train set – and we'd be happy to show you through!

During the 30 minute tours we explain the journey of the test tube from blood collection through to lab processing and archiving.

BOOK YOUR LAB TOUR TODAY
clinpath.eventbrite.com
or contact Charlie to co-ordinate a group booking, pleas email crobinson@clinpath.com.au

AMASA
The South Australian AMA Councillors held their Council meeting in our Conference Room after their Lab Tour!





GP's
Such as Dr Basil Tsakalos from the Druids Avenue Stirling Medical Centre enjoyed the tour with sons - pictured here with Rebecca Dyer

Spring into Allergies

Allergies are very common and increasing in Australia and New Zealand, affecting around one in three people at some time in their lives. There are many different causes of allergy, and symptoms vary from mild to potentially life-threatening.

Allergy occurs when a person's immune system reacts to substances in the environment that are harmless for most people.

These substances are known as allergens and are found in house dust mites, pets, pollen, insects, moulds, foods and some medicines.

Allergic sensitivity tends to run in families. However, although there is a genetic (inherited) tendency to develop allergic diseases, allergy to a particular substance may not be inherited. Most people with allergies are affected by more than one allergen and everyone reacts differently; something that is a problem for one person may not be for someone else.

When ordering Allergy Tests, we ask that you nominate which allergens you would like tested.

A comprehensive menu of allergens that we stock and test for is available. *Contact your Client Liaison to request a booklet via busdev@clinpath.com.au

Some "allergy symptoms" may result from intolerance mechanisms (salicylates, amines, MSG, metabisulphite) and detection of IgE to them is not useful or possible. You can request the allergens using their alphanumeric codes.

Specific IgE is measured to confirm an allergic aetiology (cause) for symptoms when there is a history that suggests a possible allergic cause.

All our specific IgE testing is now performed on the Phadia ImmunoCAP® system.

As the majority of published studies in allergy use this testing method, it is widely considered the benchmark for quantifying specific IgE.

Where did 'RAST' come from?

Early versions of allergy testing were performed using a different method called RadioAllergoSorbent Tests (RAST) and the word 'RAST' is still commonly used to describe the laboratory in-vitro specific IgE tests we do today.

If you simply write "RAST" we will test as follows:

- Child 6 years or less: dust mite, egg white, cow's milk, peanut and soy
- Adult or child over 6 years: dust mite, cat, dog, grass pollen and alternaria

If you write "food and inhalant allergens", we will test a staple food mix (includes egg white, cow's milk, peanut, soy, wheat and codfish), dust mite, fescue grass pollen-which cross-reacts with almost all other grasses and, alternaria-an outdoor mould with small spores that can easily be inhaled into the small airways .

We do recommend some extended panels of individual allergens and can specifically design panels for you and your patients.

Billing Policy For Allergy Testing
Our policy is to respect your request for the allergens and decode them according to our best practice.

If your test request exceeds our allowance under Medicare, we will still test for the allergens, but will need to bill your patient according to our price menu for any additional tests.

Additional tests will incur an allergen test fee, plus the costs of the extra allergens ordered.

What symptoms might a patient experience?

- Nose and/or eyes – hay fever (allergic rhinitis/conjunctivitis)
- Skin – eczema, hives (urticarial)
- Lungs – asthma
- Skin – hives (urticarial)
- Stomach or bowel – colic, cramps

Anaphylaxis is a less common but far more serious reaction that affects the whole body, can be life-threatening, and requires urgent medical treatment.

Some people may develop an intolerance to food, however this is not an allergic reaction. For example, with milk there may be an inability to digest lactose (milk sugar), however no allergen specific IgE is involved.

Some irritable bowel symptoms may be due to digestive enzyme deficiency resulting in intolerance to lactose*, sucrose, mannose or fructose, while other irritable bowel symptoms may benefit from a low fermentable (FODMAP) diet.

To discuss available tests, please contact your GP Client Liaison or email busdev@clinpath.com.au

*Lactose tolerance testing is available

Vitamin C

This blood test is used to evaluate Vitamin C levels and can determine if there is a vitamin C deficiency.

Book test

Vitamin C, also known as ascorbic acid, is necessary for the growth, development and repair of all body tissues.

Decificency symptoms include fatigue, depression, and connective tissue defects (eg, gingivitis, petechiae, rash, internal bleeding, impaired wound healing).

A patient booking in for this test is imperative due to time critical restraints. The sample must reach the laboratory for testing within the hour.

Clinpath have created a QR Code to assist your patients locate and book their tests online (picture above). This includes the booking of Vitamin C tests.

AMH Fertility Test

When assessing a woman's egg reserve the anti-Mullerian Hormone (AMH) is proven to produce the most reliable pathology results.

Often called the "egg-timer", AMH measures the concentrations of anti-Mullerian, a hormone that is produced by cells in women's ovaries. AMH controls the development of follicles in the ovaries, from which eggs develop. AMH's role in the ovary is to limit the progression of all but a very few of the eggs to the final stage, preparatory to ovulation.

AMH is produced by the granulosa cells surrounding each of the eggs with serum levels correlating with the total number of viable eggs. As would be expected, the AMH level falls with age and after 35 this tends to be rapid in most women. A test result of below 11 pmol/L is indicative of a poor egg reserve.

Testing can be done at any time of day or time of cycle because AMH tends not to fluctuate significantly with the time of menstrual cycle.

Oral contraceptives do not appear to influence levels of AMH and patients can continue with their normal regimes.

High intake of biotin (Vitamin B7) may interfere with the AMH test and produce a falsely low results.

If your patient is on supplements containing large doses of biotin please advise her to refrain from taking it for 24 hours prior to blood collection.

This test is not eligible for a Medicare rebate. Please contact your Client Liaison if you require additional information regards testing.

Dr Devika Thomas
BSc (Hons), MBBS, M Surg, MAACB, CCD, FRCPA, PhD
Medical Director
Director of Chemical Pathology

Our VitaminC Collection Centres are located at:

Adelaide CBD (285 Wakefield Street)
Ashford Specialist Centre
Bayside Family Medical Practice
Blackwood Family Care
East Adelaide Healthcare
Fountain Corner Family Practice
Health on Kensington
Hutt Street General Practice
Magill Family Practice
Martins Rd Family Medical
Mawson Medical Centre
Pooraka Clinic
Prospect Medical Centre
Reynella (42 Hillier Road)
Sportsmed Specialist Centre
Tea Tree Plus Shopping Centre
Western Specialist Centre (Cudmore Tce, Henley Beach)

Our Vitamin C Hospital Locations are:

St Andrew's Hospital (within St Andrew's Medical Cntr)
Western Hospital, Henley Beach
Calvary Central Districts Hospital
Calvary North Adelaide Hospital

To discuss further, please contact your Client Liaison or email busdev@clinpath.com.au

Go with the only pathology service provider in South Australia to offer the multiday myPatch-sl Holter

Clinpath Pathology uses the latest Holter and cardiac reporting technology, to help improve diagnostic care and quality. The myPatch-sl is a lightweight, waterproof multiday Holter providing superior heart data and better results for your patients.

The multiday myPatch-sl Holter helps to increase detection rates while providing improved patient comfort, compliance and 2-3 channel recordings for more accurate data.

Attached in 30 seconds, the myPatch-sl allows for in clinic checks, to ensure an informed diagnosis when access to a specialist cardiologist is not an option.

With patients able to return to regular routines and activities in comfort, myPatch-sl allows for multiday studies – which are shown to yield more results beyond 24hrs and up to 14 days.

myPatch-sl Holter records continuously on 2 channels up to 14 days and on 3 channels for up to 9 days of continuous ECG data. Holter Monitors are fitted and removed at one of our collection centres by appointment. They are reimbursed under Medicare (bulk-billed) up to 24 hours.

4 patient centred features for choosing myPatch-sl

1. Waterproof IP rated 68 allows patients to shower and exercise as normal for the entire heart study
2. 3 -channel recording up to 9 days and 2-channel recording for up to 14 days
3. Three sizes – Adult, Paediatric and Neonate – better results at any age
4. Lightweight 25g device ensures greater comfort and freedom to get on with day-to-say activities

Discuss further with your GP Client Liaison - or to book call Client Services on 08 8366 2088 or online via www.onlinepatientbookings.com.au

Clinpath Pathologists

Did you know Clinpath employee base includes 36 Pathologists, all located here in South Australia?

As we continue to invest in the South Australian marketplace, we will also continue to invest in the delivery of high quality services, supported by highly trained expert Pathologists, backed by the strength of the Sonic Healthcare global network.

We offer education sessions for all Doctors, as much as we participate in them.

For example A/Prof Jurgen Stahl and Dr Nick Rodgers host monthly Gastrointestinal Meetings to review the imaging findings as presented by Dr Frank Voyvodich from Bensons Radiology, to correlate these with the anatomical pathology diagnosis in a multidisciplinary clinical context.

It stands without question we remain committed to medical leadership and the provision of expert advise.

Clinpath provides a 'total' pathology service and do not differentiate or discriminate services based on cost, profitability or convenience.

Local people
At Clinpath we have real people, employed locally, to provide a genuine personalised service.We do not use national call centres nor do we engage 'off-shore' labour resources for data entry or other support services.

Pharmacogenomics in general practice

Despite potential savings of more than $1 billion annually, awareness of pharmacogenomic tests amongst Australian prescribers is low and national guidelines for their use have not been developed. This void contributes directly to the continued prescribing of ineffective medications, unacceptably high rates of adverse drug reactions and associated personal and economic costs.

Pharmacogenomics (PGx) is the study of how the genome of an individual patient influences their response to a medication.

Pharmacogenomic testing, by aligning a given medication (and its dosing) to an individual's genetic potential for therapeutic or adverse response, adds a further dimension to the concept of personalised medicine.

The efficacy and safety of a medication, which must be established prior to its release and marketing, is currently assessed by clinical trials involving thousands of individuals.

The broadly applicable conclusions derived from this process have formed the evidence-base for prescribing over many decades but are antithetical to a clinical paradigm which is becoming increasingly personalised.

Pharmacogenomic testing provides the means whereby prescribing is no longer tied to population-derived norms but can be tailored to an individual's genotype.

The underlying principle is that genetic variation determines how much medication an individual patient will have in their body (that is, plasma concentration, sometimes called 'exposure') and whether they are at high risk of certain toxicities.

The continual identification of genetic variants associated with higher or lower plasma concentrations, and the increasing availability and falling cost of the technology involved in doing so, is realising the potential to personalise medicine and dose selection, maximising benefit and minimising harm as a consequence.

Those who will respond to a medication and those who will have to stop treatment because of toxicity can be identified before money is wasted or toxicity develops.

Pharmacogenomics provides only one type of information which can be used to explain a medication-related problem (that is, no response or toxicity) or to determine whether one medication might be more suitable for a patient compared to another, but the information it provides should not be used as the sole basis for prescribing decisions.

Pharmacogenomic information should be considered together with relevant clinical information, such as age, renal and liver function, medication history, concurrent medications and level of patient understanding, prior to prescribing.

Pharmacogenomics does not replace clinical assessment, other pathology or therapeutic drug monitoring.

The information it provides informs, but does not replace, clinical judgement.

The evidence for pharmacogenomics

Although there is still much work to determine the real potential of pharmacogenomics, there is already a large body of peer-reviewed clinical evidence that has been collated, assessed, and then developed into prescribing guidelines by international expert bodies, for example, the US-based Clinical Pharmacogenomics Implementation Consortium (CPIC) and the European-focused Dutch Pharmacogenomics Working Group (DPWG).

Independent Australasian guidelines are lacking at the moment, but providers of commercial pharmacogenomic tests give prescribing advice based on these International guidelines.

As an indication of the potential relevance of pharmacogenomics in the Australian setting, a recent study of approximately 5,400 Australians showed that 96% had at least one clinically actionable pharmacogenomic variant.

Professor Graeme Suthers
BSc (Med), MBBS, PhD, FRACP, FRCPA, GAICD
Director of Genetics, Sonic Healthcare (Australia)

Optimise prescribing with the Sonic PGx Panel

The Sonic PGx Panel is a pharmacogenomic test which is now available at Clinpath Pathology (through Sonic Genetics).

Based on the detection (or not) of defined genotypic variants, the report provides evidence-based, clinically relevant guidance concerning medication selection and dosing across a range of important therapeutic areas, including cardiology, gastroenterology, pain management, and psychiatry and addiction medicine. The guidance provided is specific to the patient's genotype and can be used as an adjunct to the information provided by clinical assessment and examination, medication history and results of other laboratory investigations.

Genomics has potential application in many areas, including pharmacotherapy. By providing a rational basis for medication selection based on the reliable expectation of optimum therapeutic response and absence of adverse reactions, pharmacogenomics represents an important advance in the development of personalised medicine.

Dr Tom Polasek and Dr Kym Mina are acknowledged for their significant contributions to this article.

Please contact busdev@clinpath.com.au if you require more information.

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Our Doctors' Newsletter contains articles focusing on current news, issues and recent developments in pathology.

Suggestions from you, which we invite wholeheartedly, are the best guarantee that our Doctors' Newsletter becomes a resource of maximum possible interest, information and relevance.

If you have topics you would like to suggest, please contact Charlie Robinson, Marketing and Communications via crobinson@clinpath.com.au

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