



CLINPATH
PATHOLOGY

Doctors' Newsletter

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21 James Congdon Drive
Mile End, SA 5031

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Welcome

This is a very exciting new beginning for Clinpath as we introduce state of the art chemistry lines designed to enhance productivity, efficiency and above all quality. Clinpath is the first company in the world to introduce an Alinity chemistry platform with a GLP track which is designed to streamline laboratory workflow and innovate the way in which we operate.

This technology has been designed specifically for the workflow of our laboratory and aims to improve analytic processes, routing and turn around times.

As a business we embrace innovation and the delivery of high quality services and it will be our absolute pleasure to offer tours of our new laboratory to further demonstrate our commitment to the pathology market within South Australia.

We are thrilled the official opening of this new laboratory is to be held with the Governor, His Excellency the Honourable Hieu Van Le AC late May 2019.

Dr Fergus Whitehead
BMBS, FRCPA, FIAC, Dip Cytopath RCPA
CEO - Clinpath Pathology

BrandSA held their April Health Luncheon in our new Mile End Conference Room. We took guests on a tour of the laboratory afterwards.

Image right is Fergus with Peter Joy, BrandSA Executive Chairman



Image below

A group on the BrandSA Luncheon Laboratory Tour including our own Tammy Braendler, Simone McArthur and Kathleen Ryke with BrandSA's Nicole Martin, General Manager Corporate Partnerships and guests



Mile End Laboratory

Our new facility encompasses the latest in laboratory technology, ensuring we can continue to provide the highest standard of health care to all South Australians.

Located at Mile End, only 2 kilometres from Adelaide's city centre, we are able to showcase a specifically designed laboratory which includes flexible open spaces to further enhance and foster interdisciplinary collaboration, while providing an environment to solve the complex diagnoses required of modern medicine.

Clinpath will continue to offer a comprehensive range of services to General Practitioners, Specialists Private Hospitals, Aged Care Facilities and the community.

We are committed to the highest standards of medical practice and our specialised pathologists and experienced senior and scientific staff are available for consultation and professional support at all times.

Laboratory tours will be available in the coming months, allowing you an opportunity to have a behind the scenes experience.

PHOTOS

The photos across these pages were captured during our construction/build, move in and day one stages.

We appreciate the dedicated project team for their efforts. The Mile End Laboratory is now fully operational.



Reproductive carrier screening

Single-gene disorders such as cystic fibrosis (CF), spinal muscular atrophy (SMA) and Fragile X syndrome (FXS) are more common than chromosome disorders in the children of younger mothers. Reproductive carrier screening can provide couples with information about the chance of such conditions and inform their reproductive choices.



Professor Graeme Suthers
Director of Genetics
Sonic Healthcare (Australia)

A parent who is a carrier of a recessive mutation, that is, having one normal and one abnormal copy of a gene, will not be affected by the abnormal gene.

Everyone is a carrier for one or more disorders; this is of no immediate consequence and there usually is no family history of the disorder.

The situation changes if both parents are carriers of mutations in the same gene located on one of the autosomes (chromosomes 1-22).

The chance of their child inheriting the abnormal gene from each parent, and so developing an autosomal recessive disorder, is 25%.

The situation is similar for a woman with a recessive mutation on an X-chromosome: each of her sons is at 50% risk of inheriting the abnormal gene and being affected, and half of her daughters will be carriers.

Overall, the risk of a woman who is an X-linked carrier having an affected child is approximately 25%.

There are hundreds of inherited recessive disorders that present in childhood. These disorders are individually rare but, together, they are more common than chromosome disorders.

Further, the risk of these recessive disorders does not vary with maternal age.

For mothers under 35 years of age, the risk of having a child with a serious childhood-onset recessive disorder is greater than the risk of having a child with a chromosome disorder.

Until recently, the only way of identifying a carrier of a recessive disorder was to diagnose the disorder in their affected child. This has now changed.

It is possible to screen a couple for mutations in autosomal genes, and a woman for mutations in X-linked genes, to determine whether they are at 25% risk of having an affected child.

This screening test is called 'reproductive carrier screening'.

Sonic Genetics offers reproductive carrier screening for CF and SMA (both autosomal recessive) and FXS (X-linked recessive). Approximately 6% of people are carriers of one or more of these conditions, and 0.6% (one in 160) couples are at 25% risk of having an affected child. Those couples who are identified as carriers can consider options, such as IVF with a donor gamete, pre-implantation genetic diagnosis, prenatal diagnosis by CVS, or they may make an informed decision to accept the risk.

RANZCOG recommends that couples be offered information about such screening.

The cost of this three-gene panel is approximately \$400* per person.

There is no Medicare rebate available; there are exceptions (and restrictions) for people with a documented family history of CF or FXS.

Sonic Genetics also offers the Beacon Expanded Carrier Screen of more than 300 genes which cause serious recessive childhood disorders.

We estimate that approximately 70% of Australians are carriers for one or more conditions included in this screen and 3% (one in 30) couples are at 25% risk of having an affected child.

This screen currently costs \$995* per person or \$1,750* for couples tested together.



- It is important to consider some of the nuances in relation to Fragile X syndrome (carriers may develop adult-onset conditions), and when there is a family history of a recessive disorder (always seek expert advice). It is also important to recognise that some couples will not want this carrier information – and others will demand it. Each person needs to be free to make their own decision about what information they wish to have.
- Sonic Genetics offers genetic counselling free-of-charge[^] for couples who are identified by either of these screens as being at high risk of having an affected child. Further details regarding eligibility and process are provided on our website and with relevant test reports.
- It is accepted practice that every woman is offered screening for chromosome disorders in pregnancy. In a similar vein, every couple should be offered reproductive carrier screening for recessive disorders, irrespective of age and family history. This simply represents good medical practice.

References

- RANZCOG. Prenatal screening and diagnostic testing for fetal chromosomal and genetic conditions. 2018 (August).
- Archibald AD, Smith MJ, Burgess T, et al. Genet Med. 2017; 20(5):513-523 [Available online doi:10.1038/gim.2017.134.]
- Sonic Genetics. (2018) Reproductive carrier screening [Online] <www.sonicgenetics.com.au/rcs>

*Prices correct at time of printing. [^]Terms and conditions apply. Please refer to www.sonicgenetics.com.au/rcs/gc

Proposed Reproductive Carrier Screening Seminar
Please check our page 06 for further details

For all enquiries with regard to reproductive carrier screening, please contact Dr Graeme Suthers, Director of Genetics, Sonic Healthcare on (08) 8366 2000

Skin Cancer Surgical Audit

Excellence in skin cancer diagnosis and management requires a collaborative approach between the referring doctor and reporting histopathologist to ensure optimal patient outcomes.

Our Skin Cancer Surgical Audit is a professional development tool that uses peer-comparisons to encourage ongoing refinement of diagnostic, detection and collection skills amongst our participants. It is an independent program with an extensive, national database.

Reproductive Carrier Screening

RANZCOG now recommends that information about reproductive carrier screening for common disorders be offered to every woman either prior to conception (preferred) or in early pregnancy.

Whilst recognising the clinical and medico-legal significance of reviewing family histories, the reality is that most children with a familial genetic disorder do not have a family history of that disorder.

The presence of a family history of a disorder is an important clue; the absence of such a history provides little information.

A test to screen for genetic carriers can provide information about the risk of a familial disorder that is not evident from reviewing the family history.

Professional Development

While new enrolments for the audit will not qualify for Category 1 points, due to entering the last interval for the triennium, we still welcome participant registrations to allow you to compare among peers.

Once registered you will automatically be enrolled for the new triennium 2020-2022.

Proposed Seminar

Clinpath Pathology and Sonic Genetics would like to hear from interested General Practitioners and Obstetricians & Gynaecologists regarding a reproductive carrier screening seminar.

Professor Graeme Suthers, one of Australia's most respected experts in the field of genetics, will present along with an expert panel presenting case studies and clinical information.

A tour of the new Mile End laboratory and light lunch will be offered at the conclusion of the seminar.

Please lodge your expression of interest for the seminar or ask to hear more about Reproductive Carrier Screening.



To register for a Skin Cancer Surgical Audit

...or to access the Gateway to your reports, evaluations and on-line services, please login with your Sonic Dx account login and password. For more information contact: busdev@clinpath.com.au

To lodge an expression of interest

Please contact:
Charlie Robinson
crobinson@clinpath.com.au
(08) 8366 2020

For more information about Reproductive Carrier Screening, please contact:

Jill Hall
Sonic Genetics Product Specialist
jhall@clinpath.com.au
0408 819 430

Troponin I Assay

Introduction to the Troponin I Assay

Clinpath Pathology changed its Troponin assay from high-sensitivity troponin T (TnT) to high sensitivity troponin I (TnI) in April. This changeover was as a result of new state-of-the-art instrumentation being deployed throughout all of the Clinpath laboratories.

Further clinical queries should be directed to Dr Devika Thomas.

If you require additional information packs or Troponin I Assay reference cards, please contact Business Development via busdev@clinpath.com.au



New Lactose Test

Genetic test for lactose intolerance is now available exclusively through Clinpath



The 'lactose intolerance genetic test', also referred to as the 'lactase persistence' test, differentiates between primary lactose intolerance due to lactase deficiency, and secondary causes of lactose intolerance due to other more serious conditions that affect the small bowel.

After infancy, approximately 75% of the population lose the ability to digest lactose due to a deficiency in lactase.

The remainder maintains their tolerance for lactose-containing foods because of genetic variants that enable continued production of lactase, referred to as lactase persistence.

The test can be requested on a standard pathology request form by any medical practitioner.

A simple blood test or buccal swab sample is required, making this test suitable for both children and adults. The cost to the patient is \$75.

For more information about please contact:

Jill Hall
Sonic Genetics, Product Specialist
jhall@clinpath.com.au
0408 819 430



Electronic Reports of National Bowel Cancer Screening Results available

The National Bowel Cancer Screening Program commenced operations in January 2018 and at present we provide you with paper reports for your patients who have been tested through this Program.

While we can continue to send these results by paper, we are now offering electronic delivery as many of our General Practitioners have requested this form of result delivery.

You may have received a letter from Dr Lawrie Bott, Sonic Healthcare's Chief Medical Officer, notifying you that we can send these results in an electronic format directly into your practice management system. For more information contact: busdev@clinpath.com.au (08) 8366 2000

Anatomical Pathologist

Dr Adam Swalling

Dr Adam Swalling says his thirst for understanding and knowledge was not being satisfied and he still wanted to know more. So, he turned to pathology for the answers!



The Royal College of Pathologists of Australasia reports Australia's pathology workforce consists of about 24,000 people who collect process and report on approximately 500 million pathology tests each year.

These tests play a vital role in more than 70% of medical diagnoses and inform many of the clinical decisions related to patient care.

It's why he turned his own career path towards pathology. During Dr Swalling's former career as a paramedic, his patients were (through standard

process) handed over to a hospital for treatment.

He felt he lost touch with the outcomes of patients and wanted to know more.

So, he changed the direction of his career towards becoming a General Practitioner. However he still felt that often the more challenging patients ended up being managed by a treating specialist in a specific medical field.

His thirst for understanding and knowledge was not being satisfied and he still wanted to know more.

Dr Swalling has embarked on a career in Anatomical Pathology which is the diagnosis of disease from examining tissue samples and cellular smears.

He joins our team of 34 dedicated pathologists of various disciplines at Clinpath Pathology who he says, along with other pathology professionals on the team; all enjoy the multidisciplinary approach towards the one goal of getting it right for the patient.

Anatomical Pathologist

Dr Adrian Hui

Fascination is a word Dr Hui has used to describe pathology. And, as his career has progressed, he has realised it was a fascination for how diseases start which initially drew him into this world of pathology. It comes from his personality trait to investigate further and to understand more.



Dr Hui's family background harks from the medicine world with his father being a radiologist who enjoyed the black and white nature of his craft (due to him being colour-blind quite incidentally). After studying science and then medicine, Dr Hui found he was more aligned to the subject and work of pathology than radiology, as he found it personally more intellectually satisfying.

This interest took him behind the scenes and then behind the microscope for a hands-on approach to assisting in the diagnosis of many patient diseases using the science of pathology.

Within Clinpath, we use a multidisciplinary team approach in the analysis of a specimen internally and then work with the treating GP or specialist externally.

Our pathologists frequently provide expert clinical advice relating to the interpretation of pathology results to treating practitioners, such as explaining the significance of particular test results or how a disease should be managed based on test results.

Please join us in wishing Adrian well as he settles into his new role with us.

Collection Centres

Clinpath operates over 140 licensed collection centres throughout metropolitan Adelaide. Are you supporting your local?

The Clinpath Locations App is available on iPhone, iPad and Android devices via Apple App store or Google Play store, and provides up to date opening and closed times for you and your patient.

Patients may have specimens collected at any of these collection centre locations by our experienced specimen collection staff. Specimens are then transported to our laboratories by our couriers 24 hours a day, seven days a week.

We have simplified the process of booking patients pathology tests when needed. For tests which require a booking, patients can use onlinepatientbookings.com.au

Still unsure? Ask patients to contact our client services on (08) 8366 2000

New Collection Centres Opened

The Grove Shopping Centre
Lot 137, The Golden Way
Golden Grove, SA

This Collection Centre is open
Monday - Friday 8.30am - 12.30pm

Patient Brochures

Clinpath Pathology has a range of brochures and online services developed with patients in mind. They may assist you to help your patients, in a variety of ways

For example, patients may check and book their specific test online (if it isn't a routine offering), or they may read more detailed information about their test and the expectation from results. If you wish to know what is available, please contact busdev@clinpath.com.au



Book your next pathology test appointment online

For your convenience, Clinpath Laboratories now offers online bookings for tests that require an appointment

- | | | |
|--|---|--|
| <ul style="list-style-type: none">• Ambulatory blood pressure monitoring• Ammonia• Arterial blood gas• Autologous blood/venesection• Bone marrow biopsy• BRCA test• Catecholamines• Chain-of-Custody urine drug screen• Cold agglutinins• Cryoglobulins | <ul style="list-style-type: none">• Dexamethasone suppression test• DNA paternity• ECG• Fine needle aspiration cytology• Glucose tolerance tests• Growth hormone stimulating test• Helicobacter/urea breath test• Holter monitor• Lactose tolerance tests• Nasopharyngeal aspirate | <ul style="list-style-type: none">• NIPT (Harmony)• Nutripath• Paediatric bleeds• Quantiferon® - TB Gold Plus• Renin aldosterone• Scabies• Seminal fluid• Vitamin C |
|--|---|--|

- 1 Go to our website www.clinpath.com.au
- 2 Click on 'Online patient booking'
- 3 Select 'Make a booking'
- 4 Select the test required
- 5 Enter your location
- 6 Select a collection centre
- 7 Make an appointment
- 8 Set up a simple account
- 9 Receive automatic reminders

Please contact Client Services on (08) 8366 2000 if you require further information

Self-collected HPV test

Sonic Healthcare now has an accredited testing facility

January, 2019

Initiatives to improve participation in Cervical Screening have always been a focus of the Australian Cervical Screening Program. To this end, an important new component of the Renewed Cervical Screening Program, which began in Australia on December 1, 2017, was the introduction of a self-collected HPV test.

While only offered to a limited number of women meeting strict funding criteria (see below), the self-collected HPV test will increase participation by offering an acceptable alternative to those women who previously, for many reasons, have not felt comfortable to take part in this important women's health program.

Due to the requirement for the test to be validated by each individual testing laboratory, up until now the self-collected HPV test could only be performed by one Australian laboratory, located in Victoria.

Sonic Healthcare's Sydney based laboratory, Douglass Hanly Moir Pathology, in association with Family Planning NSW, have now completed the requirements for validation and are pleased to announce their accreditation to carry out the self-collected HPV test on behalf of all Sonic laboratories on site at their dedicated cervical screening unit.

1 Criteria for offering the self-collected HPV test

The self-collected HPV test is not intended as a routine alternative to clinician-collected cervical samples and should only be offered under the strict guidelines below:

- Patient must be at least 30 years of age.
- Patient must never have been screened or be at least two years overdue for screening (i.e. at least four years since last normal Pap test or seven years since last negative HPV test).
- Patient must decline a vaginal speculum examination.

2 Collecting the sample

- The patient must collect the sample in the surgery or healthcare clinic using a red-topped Copan 552C dry FLOQ swab (see below). The swab should be immediately returned to the clinician for referral to the testing laboratory. Patient instruction sheets (see right) are available and can be ordered from our Stores Department.
- The self-collected HPV test should not be offered to pregnant women.



The self-collected HPV test screening pathway differs from that for routine clinician-collected cervical samples and is shown overleaf.

For further information, please contact Business Development on (08) 8366 2020 or email busdev@clinpath.com.au

Pathology and Clinpath

Pathology is an essential medical service underpinning a high-quality health system, with 70 per cent of medical decisions and 100 per cent of cancer diagnoses relying on pathology tests.

The new Clinpath Pathology laboratory is a significant health industry milestone for South Australia.

Pathology is probably the most hidden medical specialty but is vital for diagnosis, monitoring of disease, guiding treatment and preventative health.

- ▶ 100% of cancers are diagnosed by pathology
- ▶ An estimated 70% of medical decisions require pathology results
- ▶ 1 in 3 problems seen by a GP requires a pathology test
- ▶ 1 in 2 Australians have a pathology test every year
- ▶ Pathology is vital for cancer screening such as tests for cervical cancer (HPV) and bowel cancer

Tests diagnose and monitor many chronic conditions.

For example, South Australia has the highest rate of diabetes compared to other states at 6.1%

Regular HbA1c tests are vital for managing diabetes effectively and preventing complications such as kidney disease, vision impairment or amputation.

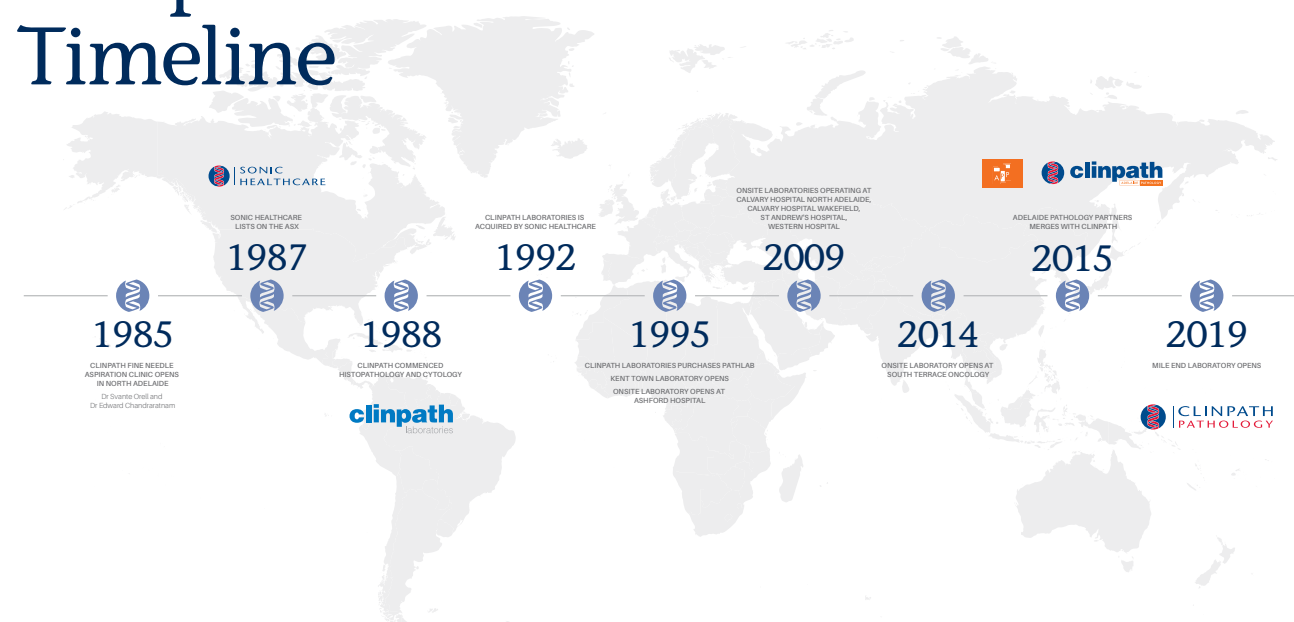
Several areas in South Australia also have high prevalence of heart disease. Blood tests are important in monitoring risk factors for heart disease such as high cholesterol, and tests such as troponin can be used to quickly diagnose a heart attack.

Around 20k babies are born each year in South Australia. Pregnant women undergo multiple tests during pregnancy to check the health of them and their babies. The newborn screening test is offered for every baby to check for serious health conditions, which can be better managed or treated if caught early.

Clinpath Dr Fergus Whitehead, Chief Executive Officer says,

"Our new facility encompasses the latest in laboratory technology, ensuring we can continue to provide the highest standard of health care to all South Australians."

Clinpath Timeline





Our Doctors' Newsletters contain 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 any topics you would like to suggest please contact Charlie Robinson our Marketing and Communications Officer via crobinson@clinpath.com.au

We look forward to hearing about your topics of interest and encourage your participation.

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