Org. No. A003523F

PARAFFINALIA NEWSLETTER

VOLUME 24, NUMBER 1 March 2019

HGVT

The HGVT aims to provide a dynamic continuing education program in which all persons with an interest in Histology and Histotechnology are freely invited to participate.

CONTENTS:

President's Report National Conference Flyer Under the Microscope with Sukwinder Sohol (Romy) Review of February Scientific Meeting National Conference Competition Case Study and Journal Discussion Future Events 2019

PATHOLOGISTS - MAKE LIFE BETTER

Join the esteemed ranks of...



...already using the innovative RMT solutions.



From the other room From the other building From the other state From the other country

In crystal clear HD, live & real time.



RMT's microscope-based *iMedHD2*[™] Telepathology solutions are specifically designed to meet and exceed demanding requirements of pathologists, surgeons, and physicians alike with *iMedHD2*[™] *Scope LITE*, *iMedHD2*[™] *Scope PRO*, and *iMedHD2*[™] *Scope PRO Expansion*. Specimen can be safely and securely broadcast LIVE over the Internet for collaborative and concurrent image sharing with dynamic annotations between all parties at another location on-site, across the country, or across the world. These innovative, high performance and scalable offerings provide exceptional image quality



at both low and high magnification levels and are utilized as a real-time turnkey system for any trinocular microscope with C-mount. These highly versatile solutions can also be used to enhance and supercharge existing image-based microscope systems to meet secure, high-performance telepathology requirements. Whether you are looking for a new breakthrough packaged solution or a way to enhance and upgrade your current microscope-based imaging system, the **RMT iMedHD2**[™] Scope Telepathology offering can exceed your expectations.

• UPGRADABLE • EXPANDABLE • EASY TO ENHANCE • HIGHEST IMAGE QUALITY • NO PIXELIZATION

Proudly sold and supported by



When you need to know

0400 289 318

SALES @ VETOMEDTECH.COM.AU

VETOMEDTECH.COM.AU

Features include...

- **1080p HD Image Resolution** for greater visual clarity to effectively evaluate specimen
- Highly Secure Real-Time Experience Without Delay
- Live Snapshot and Video Capture
- All Participant Annotation Collaboration
- Adaptive to mobile devices and tablets (iPads, iPhones, and Android Devices)
- **Meets diverse needs** with customizable and upgradable add-on capabilities, such as live video with Voice-Over IP and multi-user webcam

O2019 Remote Medical Technologies, LLC. All Rights Reserved. Specifications subject to change without notice.

Committee Page

The members of the Histology Group of Victoria 2019 are:

Name	Institution
Samantha Arandelovic	Clinicallabs (Geelong)
Adrian Warmington	Clinicallabs (Ballarat)
Mark Bromley	Sullivan Nicolaides Pathology
Elizabeth Baranyai	Cabrini Health
Kellie Madigan	Leica Biosystems
Alison Boyd	St. Vincent's Pathology
Kellie Vukovic	Sullivan Nicolaides Pathology
Sue Sturrock	Melbourne Pathology
Kerrie Scott-Dowell	Dorevitch Pathology/Leica
Darcee McNair	Clinicallabs (Geelong)
Emma Pan	Walter & Eliza Hall Institute
Alistair Townsend	Royal Hobart Hospital
Sukwinder Sohal(Romi)	University of Tasmania
Meghan Leo	Histolab
Bindi Bates	Peter Mac

Contact us at

http://www.hgv.org.au/contact-us Membership enquiries: membership@hgv.org.au General enquiries: secretary@hgv.org.au Sponsorship/Advertising enquiries: trade@hgv.org.au Newsletter enquiries: editor@hgv.org.au

Advertising for the next edition of Paraffinalia closes: 31stMay, 2019

Paraffinalia Rates:

A4 Electonically Submitted \$300 (no GST) Flat Rate Per page \$1000 yearly package Positions Vacant- No Logo up to 75 words FREE to email membership FREE list on Website Used Equipment- 50 words – no logos/no pictures FREE A4 with logo \$200 (no GST)

Articles & Reports:

Author enquiries and readers wishing to contribute articles or reports can contact the Editor - editor@hgv.org.au

Please email articles (preferably Microsoft Word format) for inclusion in the next edition to <u>editor@hgv.org.au</u> All items submitted for publication will then become the sole property of the Histology Group of Victoria Inc.

Disclaimer:

Any opinions expressed in this publication are solely those of the contributing author and are not necessarily reflective of the Histology Group of Victoria Incorporated or the editor.

NOTE: No responsibility is assumed by the Histology Group of Victoria Incorporated for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material herein. It is the user's responsibility to ensure that all procedures are carried out according to appropriate Health and Safety requirements.

Copyright of this newsletter "Paraffinalia" is held by the Histology Group of Victoria Incorporated. No material may be reproduced in part or in whole without written consent from the copyright holders. All rights reserved.



HistoCyte Control Material

Laboratories often struggle for sustainable control material. HistoCyte Laboratories cell lines controls are standardized, developed, and manufactured to provide consistent results throughout the block.

They have developed a range of controls, some with as few as two cell lines providing a positive and negative: Standard Controls. There is also a supply of more comprehensive products with as many as five cell lines, providing a range of expression and sensitivity: The Dynamic RangeDR.



Breast Analyte

Control





Estrogen Receptor Control Analyte Control

HPV/p16 Analyte Control



PD-L1 Analyte Control

Progesterone

Receptor

Analyte

Control



Lymphoma

(NPM-ALK)

Analvte

Control

(EML4-ALK)

Analyte

Control



Breast Analyte

Control (ER.

PR and HER2)





HPV/p16 Analyte Control

ROS1 Analyte Control







President's Report – Blurb from G'town!

I hope everyone had a very Merry Christmas and a safe New Year. Is it really March already? Well I'm sure that everyone was looking forward to cool change and some rain after a few hot, dry months.

It's been a busy start to the year. The committee has set up a great program for 2019. Four scientific meetings are planned and a site visit to Leica. We started off with something new this year. "Interesting cases" was our first scientific meeting, which was well attended by over 70 people. It was great to hear from first-time speakers and would like to thank them for sharing their labs interesting case.

Last year our first Scientific meeting in Hobart was well attended. This year we are planning a Scientific meeting in November in Launceston. I look forward seeing you all there.

And of course, our hugely popular Trivia night will be held on Friday 19thn July at The Metropolitan Hotel. This is the highlight of the HGVT social calendar and a great chance to catch up with colleagues from all around the state.

The 9th National Histology Conference in Adelaide is on May 24th- 26th 2019. The full program has been released and the HGVT have a competition running with the winner getting to attend this event complements on us (competition details are in this newsletter). For more information about the conference check out the website, and get your registration in.

https://nationalhistologyconference.com

Samantha Arandelovic

HGVT President

Summer Break in Thailand





Experience an Enhanced Workflow and Ease of Operation

HistoCore PELORIS 3 Premium Tissue Processing System

The **High Quality** tissue processing you trust, now with added **Track and Trace** features to enhance and maintain the quality in your lab.

TRACEABILITY AND ACCOUNTABILITY

Bar code scanner and on-board reporting module associate the samples with processing program, reagent details and user information.

2 REAGENT MONITORING

Two built-in density meters reduce potential errors in reagent exchanges and allows for better reproducibility.

3 BETTER VISIBILITY

LED back lit bottles with enhanced labeling allows for easy identification of liquid levels and reagent state.

4 USER FRIENDLY FEATURES

Basket with integrated handle provides stability during transport. Wedges on retort lid allow for secure basket placement.

5 CLEANING MADE EASY

Convenient wax scraper and liquid level sensor tools help reduce cleaning time and enhance productivity.

INTUITIVE GRAPHIC USER INTERFACE Quickly and easily start runs, preprogrammed or customised protocols, easy to use workflows.

Contact Leica Biosystems for more information: (Aust) 1800 625 286 or (NZ) 0800 400 589

LeicaBiosystems.com



Copyright © 2017 by Leica Biosystems Melbourne Pty Ltd, Melbourne Australia. LEICA and the Leica Logo are registered trademarks of Leica Microsystems IR GmbH.



9[™] NATIONAL HISTOLOGY CONFERENCE 2019

ADELAIDE • SOUTH AUSTRALIA

The Histology Group of South Australia and its organising Committee warmly invites delegates, presenters and trade representative to Adelaide, South Australia for the 9th National Histology Conference. The event will be held at the Adelaide Convention Centre on the weekend of 24–26 May 2019.

The theme is 'Diagnosis to Prognosis & Beyond' which will see delegates experience a range of workshops and educational, plenary sessions over the three days to provide continuing education and professional development to those within the medical science, clinical and research fields. Modern equipment and consumables will also be showcased by trade sponsors and a range of social activities to indulge in what our great city has to offer.

REGISTRATION

Early bird registration closes 28 February 2019

Full Registration Fees	Early Bird Price	Standard Price
Conference Registration + Gala Dinner	\$610	\$710
Conference Registration	\$470	\$570
Student Conference Registration	\$170	\$170
Day Registration Fees	Early Bird Price	Standard Price
Saturday Day Registration	\$290	\$340
Student Saturday Only*	\$120	\$120
Sunday Day Registration	\$200	\$250
Student Sunday Only*	\$95	\$95

*Student Registration Fees apply to students currently enrolled at a recognised University or TAFE.

KEYNOTE SPEAKERS



Arie Perry, M.D



Ian Olver AM

WORKSHOPS

Friday 24 May 2019 \$95 per workshop

Workshops are limited to a maximum of 30 participants.

Morning Workshops

- AM Workshop 1 | Complex Cut-up Workshop – "Down the Ureter"
- AM Workshop 2 | "Troubleshooting from diagnosis to prognosis - error reduction in the anatomical pathology laboratory"

Afternoon Workshops

- PM Workshop 1 | "Syphilis down the scope"
- PM Workshop 2 | "Troubleshooting from diagnosis to prognosis - error reduction in the anatomical pathology laboratory"

IMPORTANT DATES

Mid-Late December | Call for Abstracts & Early Bird Registration Open

8 February 2019 | Abstract Close

28 February 2019 | Early Bird Registration Fees Cut-Off – normal registrations fees apply

1 March 2019 | Abstract Acceptance

Visit: www.nationalhistologyconference.com for online registration, abstract submission and more information.

SOCIAL

'Bats, Balls and Divas' Adelaide Oval Walking Tour Friday Afternoon, 24 May 2019

Duration: 90 mins (approx. 2.5kms walk with some stairs and escalators) **Cost:** \$55 per person (minimum numbers apply)

'Rivers of Gin'

Popeye, River Torrens Cruise Friday Afternoon, 24 May 2019

Duration: 90 mins (includes 45-minute masterclass and 3x glass gin flight) **Cost:** \$55 per person (minimum numbers apply)

Friday Night Trade Opening Welcome Reception Friday 24 May 2019 Time: 1800 – 2000

This function is inclusive for all full delegates Day delegates must pay the extra ticket cost of **Cost:** \$85 per person.

'Through the Looking Glass...' Conference Gala Dinner Saturday 25 May 2019

Sponsored by Agilent

Time: 1900 til late Cost: \$150 per person [included with 'Full Conference + Gala Dinner' Registrations]



Under the Microscope with Romy

1. What was your first part-time job?

My first part-time job was at hotel Chilworth Manor in Southampton, UK. I was part of the hotel reception team. I used to work there on the weekends and do my postgraduate studies, research at the University of Southampton and Southampton General Hospital in the weekdays.

2. How long have you worked in histology?

17 years, currently representing North of Tasmania for HGVT.

3. When people ask, "So, what do you do?" How do you explain Histology?"

We prepare tissue for examination by pathologists for diagnostic purposes and to understand disease manifestations. This also greatly helps with research to find new markers and therapeutic targets.

4. What is a skill you'd like to learn and why?

I am very keen to further develop my skills on stereological assessments of tissue. Being researcher in chronic lung disease, especially interested in assessment of the number and morphology of terminal and transitional bronchioles, airspace size (mean linear intercept), and alveolar surface area. Very important to understand, as small airways get destroyed early on in smokers with disease picked up clinically quite late.

5. If money was no object, what would you do all day?

Without any doubt, medical research in chronic lung disease.

6. If you could witness any event of the past, present or future, what would it be? My son was born on 7th of July 2013 and daughter on 13th of Feb 2018. The days they were born and seeing them growing every day is just so delightful! Would love to see my son playing Cricket for Australia.

7. Who do you most admire in life?



Specialists in the formulation of standard and customised stains and fixatives for Diagnostic Pathology

Australian made and owned

In house QC Laboratory

A comprehensive range of Class 1 and Class 2 TGA IVD registrations

Accredited to ISO13485 for the manufacture of Medical Devices

Product Listing Now Available – please call or email for your copy



т:	03 5176 2855
E:	enquiries@australianbiostain.com.au
A:	24-26 Stratton Drive, Traralgon, VIC 3844 Australia
W:	www.australianbiostain.com.au

Under the Microscope with Romy

Late Professor Konrad Muller (Pathologist), University of Tasmania. Great mentor, teacher, guide, human being. Miss him badly.

8. What is the best conference you have ever attended?

European Respiratory Society (ERS) meeting 2013 Barcelona, I was selected Young Scientist of the year by ERS. The award recognized the first report made by me on the process of epithelial to mesenchymal transition (EMT) in smokers and patients with chronic obstructive pulmonary disease (COPD). Which has now bought a paradigm shift in understanding the link between COPD and lung cancer but also small airway fibrosis. Also got to drove a Ferrari in Barcelona, in 100 Euros you can do that!

9. What's on your bucket list?

Mobile clinic for lung function measurements, especially for rural areas, Skydiving, Bungee Jumping, Safari in Africa.

10. What is your dream holiday destination and why?

Chamonix, at the junction of France, Switzerland and Italy. For great walks and skiing and was the site for first Winter Olympics in 1924.



Sukwinder Sohal(Romy)





Artisan Link Pro

The consistent, safe and easy choice for special stains

The Artisan Link Pro Special Staining solution is designed to provide pathology labs with consistent staining results, optimal user safety and significantly improved efficiency. Automate your special stains with Artisan Link Pro and experience an easy and uncomplicated process for consistent results, slide after slide.

- Up to 14 protocols stained simultaneously
- 28 high-quality Ready-to-Use standardized stain kits
- 30 optimized, validated protocols that are editable for easy, yet flexible, results





Interesting Cases from Many Sources – Thursday 21st February 2019

Kerrie Scott-Dowell and her powers of persuasion gathered together speakers from seven institutions for the first meeting of 2019. The crowd was large, vocal and swaying in the foyer before the first Scientific Meeting of the newly formed HGVT held at Peter Mac. This could have been attributed to the excitement of getting together with our new Tasmanian members, or it might have been the anticipation of an assemblage of clinical stories that really got the histology juices flowing. I suspect it was, however, late catering and rumbling stomachs. Some of the audience had been up early for embedding, you understand, and concentration required a finger sandwich and a melon wedge to take in the juicy morsels presented.

Case 1

The first case was delivered as a double-act from **Dorevitch**, **Heidelberg** with **Sarah Saweirs** setting the diagnostic dilemma of mesothelioma vs adenocarcinoma in a 61 year old female's PAP stain and cell block. All immunohistochemical markers including Calretinin and Napsin A were negative - more sleuthing was required. **Matt Killen** went back to the future and focussed our attention on the brown pigment in the cytoplasm of tumour cells in the PAP stain (see image 1). Could it be that old pretender melanoma? S-100, Melan A and SOX10 confirmed the suspicion and VATS surgery followed to remove the mass.

Image 1 -PAP stain of the ascitic fluid showing the large multinucleated tumour cells, one with pigment.





Introducing the ESPO Path Slide Printer

Unleash the power of on-demand printing





Workflow efficiency

- Dual slide cartridges for ease of changing H&E and IHC slides
- Front feed printing option for specials
- Each slide prints in only 3 seconds

Control and reliability

- Touch screen monitor
- High resolution print
- Multiple interface options
- Connectivity for barcode scanner

Showing the right path

www.trajanscimed.com

Case2

Michelle Dekker from the **Austin** gave us a case of queried renal colic in a 50-year-old female with associated thoracic back pain. Degenerative changes in T8/9 with a calcified disc were identified as the cause of the pain on CT, but incidental findings in the kidney and liver opened a very surprising and rare entity for discussion – Angiomyolipoma (AML). An 8mm renal lesion and a golf-ball sized liver lesion were biopsied under ultrasound guidance demonstrating enlarged spaces and fat macules on H&E. CD34 positivity with negative Hepar1 supported this diagnosis. AML in multiple concurrent sites can imply the serious genetic condition Tuberous Sclerosis and genetic studies should be conducted for mutations in TSC1/TSC2 gene to rule this out. Maybe imaging for back pain is worthwhile despite current opinion.

Image 2- IHC showing the normal liver and the angiomyolipoma



HMB-45 positive

Mel-A positive

Case 3

February is the time of year when new Dermatology Registrars traditionally discover direct immunofluorescence (DIF) on skins. To our chagrin, most of these cases are dead negative and have caused much traditional teeth grinding by immunohistochemists in the dark of the microscope room. But, as **Ali Sert** of **HistoLab** demonstrated very well, DIF can diagnose very serious auto-immune conditions such as Pemphigous Vulgaris – a life-changing, painful long-term illness with no cure. Ali presented a 45-year-old female with oral blisters featuring flaccid bullae, vesicles and erosions. The clinical images were graphic and disturbing. The H&E showed vesiculation of the suprabasilar layer of the epidermis and the classic 'chickenwire' pattern of IgG on the basement membrane on DIF. Corticosteroids and numbing agents are the only treatments available currently and secondary infections produce a 15% mortality rate. The face, trunk and scalp can also be affected.

MEGA SALE UP TO 50% OFF BEST DEAL OF THE MONTH

Economy Tweezers made from corrosion resistant stainless steel. Popular tweezer styles for various jobs where other cheap fine point tweezers would bend. For fine work such as handling TEM Grids we recommend both our Dumont and Economy Tweezer Range.



(07) 4773 9444

sales@proscitech.com

11 Carlton St, KIRWAN QLD 4814 AUSTRALIA



Free Shipping* - Only applies to orders over AUD200.00

Image 3 -C1q staining on the Pemphigous Vulgaris



Case 4

A 38-year-old female presented with an increased level of HCG post partum leading to a hysterectomy and bilateral salpingectomy at RWH. This may seem drastic based on biochemistry alone, as **Jess Thorn** of **RCH** told us, but was essential to remove a placental trophoblastic tumour. Peritoneal washings revealed large cells with eosinophilic cytoplasm, irregular nuclei and clumped chromatin. H&E of the myometrium showed similar cells resembling trophoblasts. Unfortunately, the serosal membrane was breached by tumour. IHC confirmed the trophoblastic origin with AE1/3, CD10 and Alpha Inhibin all positive. Stong hPL confirmed the diagnosis. Prognosis for these tumours is excellent with 100% survival rate after 10 years if restricted to the uterus. This patient may have reduced survival due to the extra-uterine invasion.

Image 4 H&E x40 Trophoblastic tumour cells with marked nuclear atypia





ARTHUR BAILEY SURGICO PTY LTD

rob@arthurbailey.com.au 02) 9555 1588 0407 976 811

Introducing Waterbath 1000



Modern, newly designed for paraffin sections in the Histology Laboratory

TRIPLE ILLUMINATION – Glare-free light PRECISE TEMPERATURE ADJUSTMENT CLEAR TOUCH SCREEN DISPLAY MINIMUM WATER LEVEL SENSOR EASY TO CLEAN & MAINTAIN UNMATCHED QUALITY



Case 5

Piero Nelva from **Monash** provided us with a tip for false negative CD20 in cases of Diffuse Large B Cell Lymphoma (DLBCL) previously treated with Rituximab (R-CHOP). Rituximab is a genetically engineered monoclonal antibody directed against CD20 on B cell lymphoma cells. It is a large molecule which acts to activate NK cells, complement causing cell lysis and produce apoptosis. Rituximab does not target B-cell progenitors or plasma cells making it an attractive treatment option. In relapsed DLBCL after treatment with Rituximab, loss of CD20 expression can be seen in 60% of cases. Surveillance of tumour load in bone marrow trephines with CD20 IHC can be negative despite the presence of tumour cells. Fortunately, PAX-5 is preserved and so should always be applied in DLBCL panels. 'Beware the history of Rituximab (R-CHOP)' was Piero's takeaway message.

Image 5 IHC showing the previously CD20 positive lymphoma post Rituximab treatment now negative for CD20 and the use of PAX5 to help confirm recurrence



Case 6

Histology of baby prawns and weedfish were the fascinating cases from **Kate Wilson** of **Australian Clinical Labs, Clayton**. Gribbles Pathology (morphing into Healthscope and now ACL) have been performing veterinary pathology since 1989. ACL serves Werribee Vet School, Melbourne University, Melbourne Zoo, Healesville, Fisheries and Wildlife and Aquatic services, as well as domestic animals and wildlife.

Kate showed the prawn babies in transverse sections on slides – no decal required. They have a very large brain for their size. The weedfish was euthanized at Melbourne Zoo following failure of its swim bladder. Fish with this defect fail to stay upright when swimming and are found against the tank filter, their only way of staying upright. The head and tail of the fish were sectioned to show the kidney and immune organ (swim bladder). No significant findings could be made on microscopic examination.

Tek Equipment

Digital Macro Imaging available on all Down-Draft Grossing Workstations

> The Cirdan PathLite Compact system provides an all-in-one macro imaging solution for clinical laboratories.

> > With added imaging capabilities, Kugel Down-Draft Grossing Workstations are now even more versatile.



www.TekEquipment.com.au

1300 368 138

CIRDAN

info@tekequipment.com.au

Image 6 H&E of young prawns



Case7

Alistair Townsend flew up from **Royal Hobart Hospital** to fly the flag for Tasmania. Alistair presented a 66-year-old male with an enlarged lymph node in the left inguinal region which was excised and sent for Flow, cytogenetics and histology. H&E showed complete effacement of normal architecture by lymphoma suggestive of DLBCL. IHC gave positive results for CD10, Cyclin D1, bcl-2 and bcl-6. These last 3 were unexpected and the differential was revised to include Mantle cell lymphoma. Cytogenetics and FISH were requested to clarify. Specifically, chromosome 11 was examined for a CCMDI gene translocation which produces increased expression of Cyclin D1. In this case, changes were seen in areas controlling myc, bcl-2 and bcl-6 changing the diagnosis from straight forward DLBCL to 'triple hit' lymphoma.

The identification of a triple or double hit lymphoma drastically changes the prognosis. DLBCL has a 5year survival rate of 60-65% and, as we saw from Piero, treatment options are available. Triple hits have only a 4-18-month survival rate with no clear treatment options at present.

This patient would likely go on a clinical trial in a bid to uncover a therapeutic solution. Alistair reminded us that the WHO recommends investigation of all DLBCL's for the possibility of a triple or double hit lymphoma.



Note that and the	-								
equest Details lequest ID		16/S00297			NHI		PID0003		
ither ID		10/200231			Urgency		Routine		
atient name	I	Plover, Kentish	1						
pecimen Details									
pecimen ID		1 (1 of 1)			Blocks		10		
pecimen Type		APPER			Remaining		No		
pecimen Descrip	tion A	Appendix							
lock Details									
Block	-	Pieces Proced	lures	Block Type			& E Decal	Block Comments	
		1 HE		Paraffin	No	1	N/A		
1/B N		1 HE		Paraffin	No	1	N/A		
1/C N		1 HE, AB		Paraffin	No	1	N/A		
) 1/D N	AS 1	Many AB		Paraffin	No	1	N/A	Block contains small specimen fragments	
				Paraffin	No	1	N/A		٦
				Paraffin	No	1	N/A		-
					No	1	N/A		-1
					No	1	N/A	A	4
							-	(A CONTRACT OF A CONTRACT. CONTRACT OF A CONTRACT. CONTRACT OF A CONTRACT OF A CONTRACT OF A CONTRACT OF A CONTRACT. CONTRACT OF A CONTRACT. CONTRACT OF A CONTRACT OF A CONTRACT OF A CONTRACT. CONTRACT OF A CONTRACT OF A CONTRACT OF A CONTRACT. CONTRACT OF A CONTRACT OF A CONTRACT OF A CONTRACT. CONTRACT OF A CONTRACT. CONTRACT OF A CONTRACT OF A CONTRACT OF A CO	

Delphic AP

Designer software for your pathology workflow

- Eliminate the risk of error with bar-code driven, single-piece workflow, enabling full traceability of every specimen and item.
- Complete interfacing to cassette writers, slide writers, label printers and auto-stainers.
- Advanced pathology reporting with integrated RCPA reporting protocols.
- · Meets all Australian standards and billing requirements.
- Improve customer service and quality with optional electronic orders module and online/ mobile access to histopathology reports.

Image 7 Take away message from the case





Advancing Cancer Diagnostics, Improving Lives

for sponsoring the meeting.

Sue Sturrock

NATIONAL HISTOLOGY CONFERENCE

COMPETITION



Do you want to attend the conference in Adelaide, but need some financial \$\$\$ assistance to do so??

Well this is your opportunity



are sponsoring Flights, Accommodation and Full Conference Registration for someone who can tell us in 400 words or less why <u>they</u> should attend the National Histology Conference.

Submit entries to <u>http://www.hgv.org.au/contact-us</u> <u>By 31 March 2019</u> Only HGVT Members residing in Victoria or Tasmania need apply

^{GeneAb™} **р16^{INK4A}** (IHC116)

The p16 (p16^{INK4A}) protein is a cyclin-dependent kinase (CDK) inhibitor that plays an important regulatory role in the cell cycle. By controlling the transition between the G1 and S phases through regulation of retinoblastoma protein, p16 decelerates cellular differentiation and therefore acts as a tumor suppressor, making it the key marker in several human cancers including head and neck cancer, perianal lesions, melanomas, gliomas, lymphomas, and some types of leukemia. p16 is also clinically indicated in carcinomas of the esophagus, pancreas, lung, biliary tract, liver, colon, and urinary bladder.



≺ , ` }= ↓

Fig1. GeneAb[™] p16 [IHC116] on Cervical Cancer

Features

- GeneAb p16 [IHC116] is a high affinity antibody leading to improved specificity and increased staining intensities.
- Both concentrate (1:100 1:400) and predilute (RTU) format are available for your lab.
- Request a sample admin@metagene.com.au



Fig2. GeneAb[™] p16 [IHC116] on Breast Cancer

Product Information

REF	Description
IHC116-100	0.1 ml, Concentrate
IHC116-1	1 ml, Concentrate
IHC116-7	7 ml, Predilute
IHC116-PC	3 Positive Control Slides
Source	Mouse Monoclonal
Designations	IVD: 🚺 🏙 RUO: 🗮 💽 🚺



Fig3. GeneAb™ p16 [IHC116] on Ovarian Cancer



Case Study with Journal Discussion

By Kerrie Scott

This case was a woman in her 70's who presented with appendicitis. Imaging showed a tumour. Histologically it was called a Low grade mucinous neoplasms (LAMN).

Primary neoplasms of the appendix are present in less than 2% of surgical appendectomy specimens. Mucinous neoplasms of the appendix are a complex and diverse group of epithelial neoplasms. The rupture of the appendix can result in the dreaded complication of pseudomyxoma peritonei (PMP).

PMP refers to growth of neoplastic mucin secreting cells in the peritoneal cavity resulting in gelatinous mucinous ascites. The presences of mucin outside of the appendix excludes the diagnosis of Adenoma according to the WHO classification

In this case the normal appendix epithelium was completely replaced with the mucinous neoplasm and the appendix had ruptured.



Figure 1 H&E Tumour completely filling the appendix lumen (Apology for section wrinkles)





VENTANA DP 200 slide scanner

Robust, reliable, high-speed scanning with high image quality





VENTANA DP 200 slide scanner features

- · High-speed scanning: improved scanning speed at 20x and 40x magnifications
- No slide handling: the tray-based system to load slides for scanning eliminates slide handling errors and improves reliability
- High-quality images: outstanding images for various tissue types, including challenging slides and frozen sections
- DICOM compatibility: provide a standardised output file format for inter-operability with PACS servers
- · Colour management: ICC colour profile applied to every scanned image
- Dynamic focus: tracks tissue depth in real-time and uses the data for high-resolution images

VENTANA DP 200 slide scanner

Slide capacity	6 single slides, 3 double slides
Scan magnifications	20x and 40x
Focus method	Dynamic focus
Volume scan	Up to 15 layers
Time to view*	20x: <49 seconds, 40x: <85 seconds for a 15mm x 15mm AOI
Scan time	20x: approximately 36 seconds, 40x: approximately 73 seconds for a 15 × 15mm AOI
Slide handling	No slide handling, tray-based movement
Objective	Nikon CFI PLAN APO LAMBDA 20x
Dimensions / weight	49.78cm x 67.82cm x 46.23cm /<48 kg
Calibration	Auto-calibration
	·

*Time to view includes tray loading, thumbnailing and image acquisition.

VENTANA DP 200 slide scanner is for *in-vitro* diagnostic use.

Experience the difference the VENTANA DP 200 scanner offers pathology laboratories as the core of the Roche Digital Pathology solution.

Roche Diagnostics Australia Pty. Limited ABN 25 003 001 205 2 Julius Avenue North Ryde NSW 2113 Australia Tel: +61 2 9860 2222

www.roche.com rochediagnosticsaustralia.com

© 2019 Roche Diagnostics

VENTANA and the VENTANA logo is a trademark of Roche. All other trademarks are the property of their respective owners.

7719A-13 0318 RTDPC-DP-0068

Efficient

High speed scanning with a no-touch start process and intuitive user interface

Reliable

Automatic calibrations and built-in diagnostics produce high-quality images

Flexible

Designed and suitable for a variety of applications

Case Study with Journal Discussion



Figure 2 H&E Appendix mucosa completely replaced with tumour



Figure 3 H&E High power of areas of tumour with more mucin

thermoscientific

It's about time

Introducing the Thermo Scientific Revos workflow-enhancing tissue processing system

Bottlenecks in laboratory workflows reduce throughput, lengthen the time from tissue sampling to diagnoses and increase costs.

The Thermo Scientific[™] Revos[™] workflow-enhancing tissue processor, paired with Thermo Scientific[™] Syntri[™] Safeguard consumables, overcomes these challenges. It offers reduced tissue processing time and less risk of tissue damage – all with no reduction in processing quality.

Discover the benefits of a complete tissue processing solution – contact your local Thermo Fisher Scientific Anatomical Pathology representative today.





Find out more at **thermofisher.com/revos**

© 2018 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. M43021 0918

Case Study with Journal Discussion



Figure 4 Alcian Blue PAS stain showing intense blue mucin staining



Figure 5 ABPAS staining of the mucin in the attached fat

Mucin was observed in the fat of the mesoappendix with inflammatory cells. The patient will therefore be closely monitored for PMP.

Reference:. Mucinous neoplasms of the appendix: a current comprehensive clinicopathologic and imaging review

Cancer imaging 2013:13(1):14-25



Future Events:

<u>2019</u>

Org. No. A0035235F

Thursday 2nd May

Educational Meeting- Leica Tour and Speaker TBA

Venue-Leica 495 Blackburn Rd Mt Waverley

24th -26th May

National Histology Conference

Venue- Adelaide

Thursday 19th July

Trivia Night

Venue -TBA

Thursday 5th September

Educational Evening- AGM and Paediatric Brain Tumours, their IHC and the need for Molecular Profiling

Speaker- Hazel Chambers-Smith (RCH)

Venue- Peter Mac

Thursday 24th October

Educational Evening- Veterinary Pathology

Venue-Peter Mac

November

½ Day Educational Meeting

Venue- Launceston