



Histology Group of Victoria Inc.

Org. No. A003523F
ABN 49 725 623 468

<http://www.hgv.org.au>

Facebook: <http://www.facebook.com/groups/6832145876/>

PARAFFINALIA

Volume 20 Number 5

October, 2015

Contents:

- Blurb from the Bush
- Under the Microscope with Kellie Vukovic
- Waxing Lyrical-Mellow Yellow
- Scientific Meeting review-IHC vs Special stains by Meghan Leo
- HGV Most Interesting Case Study Competition by Samantha Arandelovic
- HGV Histo-Ography Competition
- HGV Committee Nomination Form
- Next Scientific Meeting Notice
- Future Events 2015

Editor: Elizabeth Baranyai

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

Committee Page

The members of the Histology Group of Victoria 2015 are:

Name	Institution
Adrian Warmington	St. John of God Pathology (Victoria)
Mark Bromley	Melbourne Pathology
Elizabeth Baranyai	Cabrini Health
Samantha Arandelovic	St. John of God Pathology (Victoria)
James Cvetkovski	RMIT
Kellie Vukovic	Peter MacCallum Cancer Centre
Sue Sturrock	Peter MacCallum Cancer Centre
Kristy DeGeorge	Austin Pathology
Jesenska Jefic	Austin Health
Maria Flynn	Melbourne Pathology
Meghan Leo	Histolab
Tania Marsden	Royal Children's Hospital
Kerrie Scott-Dowell	Dorevitch Pathology/Leica
Alison Boyd	St. Vincent's Pathology

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: **1st February, 2016**

Paraffinalia Rates:

A4 Electronically Submitted \$250 (no GST)
(Will be colour for e-newsletter and B&W for hard copy)
Flat Rate Per page colour

Used Equipment FREE
50 words – no logos/no pictures

Positions Vacant
No Logo up to 75 words FREE
A4 with logo \$150 (no GST)

Electronic Rates:

Positions Vacant-FREE email to membership

-FREE list on Website

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 editor@hgv.org.au
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.

BLURB FROM THE BUSH

As I write this on a day that is forecast for 34C, it appears the long winter is behind us. As is another boring Hawthorn victory!

Our last scientific meeting in September attracted a huge crowd. It was great to see a large contingent of students in the audience, particularly from Holmesglen TAFE. The HGV are trying to make more contact with the TAFE sector particularly to get student involvement as they start thinking about where their qualifications might take them. The HGV will also be adding to its long standing RMIT student award by introducing student prizes for courses undertaking histology subjects in both the TAFE and higher education sectors.

Our last scientific meeting for the year is in November which is also combined with our traditionally brief yet important AGM. The HGV continues to work to offer relevant and highly professional continuing education, and is always keen to get new keen faces on our committee to achieve this goal. If you are at all interested in contributing to the operations of the HGV please speak to a committee members, or simply complete the nomination form included in this newsletter.

Adrian Warmington
HGV President



An **Agilent Technologies** Company

IQFISH

Panel for Lung Cancer

Fastest Time to Result



ALK

ROS1

RET

MET



Read more at www.dako.com



Agilent Technologies

Under the Microscope with Kellie Vukovic

Anatomical Pathology

Grade 1 Scientist

Peter MacCallum

1. What was your first job?

I worked at Ray's Outdoors selling tents even though I had never been camping.

2. How long have you worked in histology?

I completed my placement year at Peter Mac in 2010 and have been there ever since.

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

I am completing a complex cut up training program at Peter Mac so I tell people I cut body parts into tiny pieces so we can diagnose what disease they have.

4. Who would you most like to have dinner with and why?

Channing Tatum – so he could show me some Magic Mike moves.

5. What is your all-time favourite movie?

Stepbrothers – The one liners are priceless.

6. What is your favourite stain?

Grocott – the colours make a perfect piece of artwork.

7. What is your favourite food/Restaurant?

Anything involving chicken.

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

Cape Schanck – for the winery tour

9. Favourite beverage?

It's a tie – Homemade vodka jelly shots and Jägermeister.

10. What is your dream holiday destination and why?

Bora Bora – Amazing beaches.



Reported by: Kellie Vukovic
Peter Mac

The Pathology Company

Leica
BIOSYSTEMS

NOW AVAILABLE



HistoCore Arcadia Embedding System

The Simple Solution to Complex Embedding

Smooth workflow, simple operation and precise control.

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

LeicaBiosystems.com

Copyright © by Leica Microsystems, Melbourne, Australia, 2015. All rights reserved. LEICA and the Leica Logo are registered trademarks of Leica Microsystems IR GmbH. HistoCore Arcadia is a trademark of Leica Biosystems and its affiliates.
95.13580 Rev B 10/2015

Mellow Yellow

Yellow is the new black. Well, everywhere outside of the laboratory it seems. Yellow streamers (again), hot yellow sun (novelty in October), Wattle, our National floral emblem. But the only thing I can find that is yellow in the lab, apart from fat in cut-up, is the Professional Practice student. I suppose I did go a bit hard on the OH&S being a newly-minted rep. I have taken to the task like a Registrar to a shopping website after it was suggested that my resume needed some putty by my Mad Manager. Anyway, the poor PP is afraid of the microtome now and we've had to send her to Human Resources for reassurance. Lord knows if she will ever return, let alone section anything.

Speaking of yellow, I once again volunteered for the evening shift on Trivia nite in August. Not that I am unconfident of my general knowledge, but the lure of a late CSF and the blatant use of smart phones at the 2014 quiz skewing the result, swayed me to skip it. I am sure my absence was noted and remarked on, but a girl has principles. Unfortunately, the same teams won in a different order, so perhaps my stand had no effect, except for the CSF. Still, social media and several carefully placed Trivia scabs amongst the 99 attendees outlined the frivolity, fun and free drinks had by all - except me of course ;_(. They tell me Meerkat Manor (Royal Children's) won the prestigious wax perpetual trophy, from Rear-End Path (Anat Path) and Big Mac (Peter Mac) third. Apparently, the presenter was a professional, but that might have been a view from the inside of beer goggles. I'll look out for him on next year's series of the Bachelor just in case.

Wine and beer were consumed in quantity to drown the sorrows of those at Peter Mac when Louise Keelan, celebrity magnet and golfing guru, retired after many years of dedication. You will find Louise in a top restaurant, travelling business class or slaying them in Pennant at Latrobe, but not in the laboratory. Dedication to the good life is something we can all aspire to.

Our man down South, Alistair Townsend, having battling Snobart conditions to make the Trivia nite, was seen at the 'G' supporting his beloved Hawks last weekend. Watching the 'thugs' battle the 'drugs' seems to be the eternal Groundhog Day for our intrepid traveller. Poor lad, life in football purgatory must be getting so boring for you....

As I struggle with the slippery bowels of lab life, I wonder if grappling with colonic contents is really worth it and then I catch a whiff of Carnoys and think "How lucky am I?" The essence of chloroform always stirs me to greater performance heights. And if I am really on my game my Mad Manager lets me get out the Picric acid for my Gram counterstain. That's yellow you know....

Waxing Lyrical

Merck Millipore

Fast and reliable. All you need for histology.

Each of our microscopy products is registered as "in vitro diagnostic medical device" (IVD) and certified as CE product according to international standards, such as ISO 9001 and ISO 13485 guidelines. Furthermore, our solutions fulfil all environmental regulations to ensure safe usage and disposal. Thanks to a sophisticated R&D process and stringent quality controls during production, our microscopy products and stains provide the highest standards in reliability and reproducibility. And, should you need support with your application, we offer expert technical advice. With Merck Millipore's microscopy solutions, you can expect nothing less than brilliant results.

- Insert sheets for all CE registered products are available on the internet at: www.merckmillipore.com/microscopy
- ISO 9001 compliant
- CE certificate acc. to IVDD

Select from:

- **Osteosoft®** - for gentle decalcification of tissues containing calcium.
- **Osteomoll®** - a bone decalcifying solution.
- **Histosec®** Paraffin Wax.
- **Entellen™** new - for manual mounting.
- **Entellen™** new - for Coverslippers.
- **DPX new** - a less hazardous mounting medium.
Colour stability of sample guaranteed for 10 years.

Try one of a selected range of Merck Millipore Histology products **FREE!**

**Conditions apply*

Contact Merck Millipore for more information or to request a sample -1800 335 571.

Terms & Conditions:

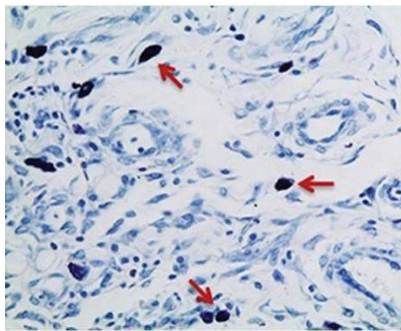
- *Offer only applies if you have not purchased that item previously.
- *Limit of one free-of-charge sample per laboratory.
- *Offer expires 30th November 2015.



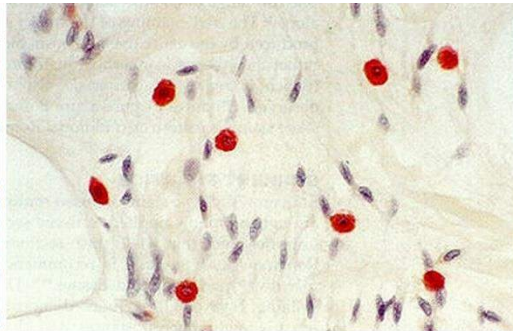
Scientific Meeting Review-IHC vs Special Stains by Meghan Leo

The topic of IHC vs. special stains was sure to be interesting and relevant to all and as a result there was a fantastic turnout to the meeting, with almost all seats being occupied. The meeting did not disappoint with four fantastic presentations given.

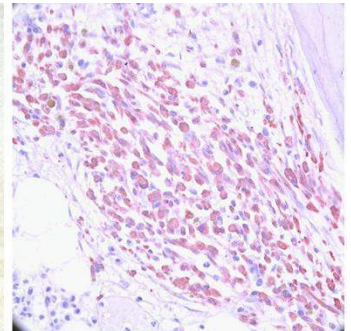
Mast cells:



Toluidine blue



Chloroacetate esterase



anti Mast cell tryptase

To start the presentations off was Kellie Vukovic from Peter Mac. Kellie's presentation gave us a comparison of special stains vs. IHC for mast cells.

H&E is not a reliable stain for mast cells as they are difficult to see, therefore Diff Quick, Toluidine Blue or Chloroacetate Esterase are common special stains that can be used for the demonstration of mast cells.

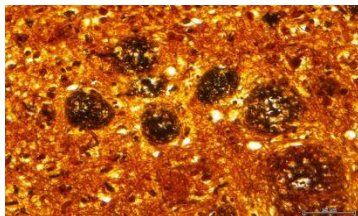
Diff Quick and Toluidine Blue have advantages of both being fast, simple and cheap to perform.

Chloroacetate Esterase on the other hand takes a little longer to perform and is more costly.

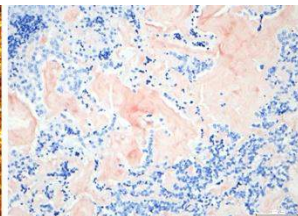
CD2, CD25, CD117 (c-Kit) and mast cell tryptase are all IHC antibodies that may be used to demonstrate mast cells.

The IHC takes longer and is more costly than the special stains but it is more specific and easier to interpret, and is needed to officially diagnosis systemic mastocytosis according to WHO classification.

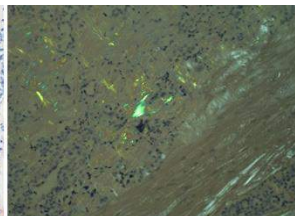
Amyloid



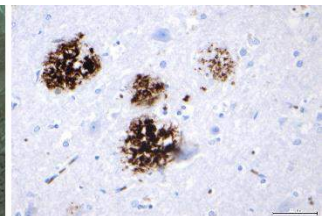
Bielschowsky



Congo Red-unpolarised



Congo Red-polarised



anti β -amyloid

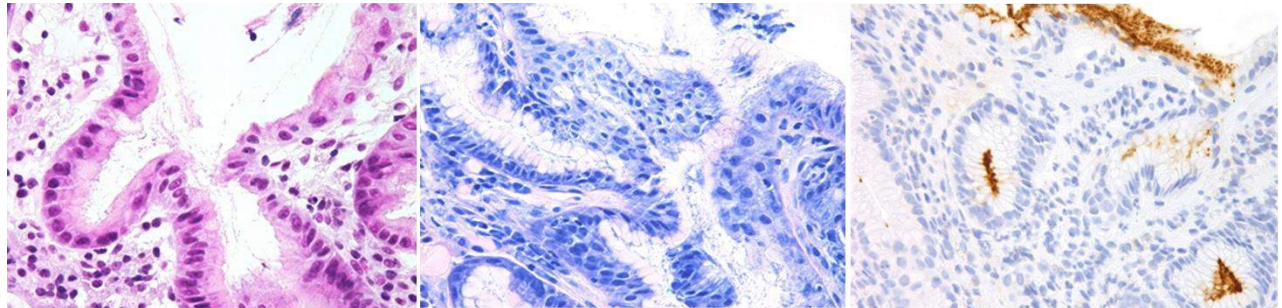
Luciana Rigoni from Austin Health gave the second presentation on Amyloid detection, special stains in combination with IHC.

H&E, Congo Red and Bielschowsky will all detect amyloid. Austin Health uses Congo Red as a screening stain for amyloid as it's a relatively fast and simple stain to do and if it doesn't stain in Congo Red then it won't in IHC.

SAA, Calcitonin, Transthyretin, β -amyloid, kappa and lambda are the IHC antibodies that can be used to demonstrate not only amyloid but also what type of amyloid it is, which the special stains can't always do.

Luciana gave us four cases that showed how special stains and IHC can work together to demonstrate amyloid and diagnose the type.

Helicobacter pylori



H&E

Diff Quick

anti H. pylori

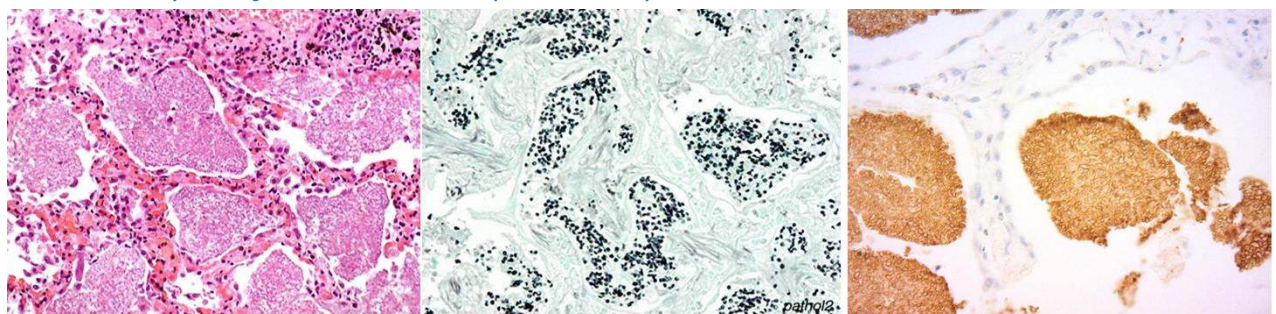
The third speaker of the night was Janelle Window from Dorevitch Pathology who presented Helicobacter pylori, diagnostic applications of H&E, Diff Quick and IHC.

An H&E stain alone is unreliable for H. pylori as it relies on morphology, therefore if the pathologist isn't an experienced gastrointestinal pathologist, there are low numbers of H. Pylori or there is some pleomorphism. axillary stains will be needed.

Diff Quick is the most common stain for H. pylori as it is extremely quick and easy to perform, cheap, reproducible and reagents are readily available in most labs. H. pylori are easier to see in a Diff Quick than a H&E but the stain still relies on morphology.

The IHC antibody Anti Helicobacter pylori on the other hand, reacts with the somatic antigens of the bacteria. Therefore it has increased sensitivity and specificity compared to the Diff Quick and results in fewer false positives and negatives. Drawbacks of Anti Helicobacter pylori though are that it's a longer process and costs more to perform.

Pneumocystis jirovecii & Treponema pallidum



H&E

Grocott's Methenamine Silver

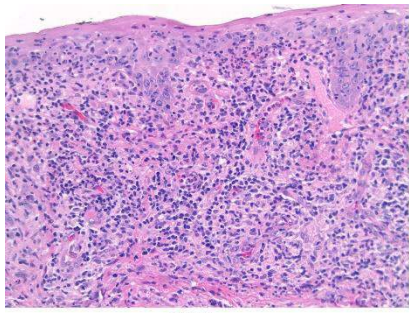
Anti pneumocystis jirovecii

The last but not least presentation of the night was on Pneumocystis jirovecii and Treponema pallidum given by Adrian Warmington from St John of God Pathology.

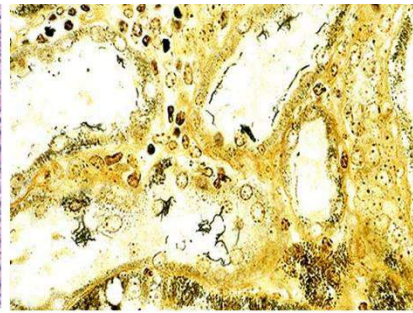
Adrian experienced every speaker's worst nightmare when he realised that he had saved his final presentation copy onto his desktop rather than USB. Despite having to work with an earlier draft of his presentation Adrian rallied and showed us what a good memory he has.

Pneumocystis jirovecii is an opportunistic yeast like fungus that is the causative agent of pneumonia. Grocott's Methenamine Silver stains the cysts of the fungi whereas the IHC antibody Anti

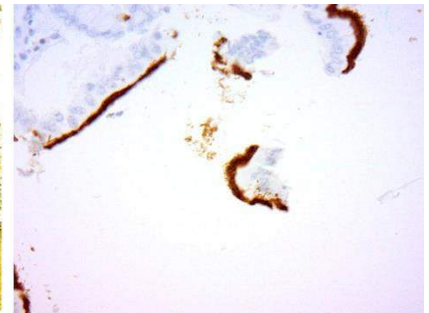
Pneumocystis jirovecii is specific for the whole organism, and will stain positive for the fungi's whole life cycle and not just its cyst form.



H&E



Warthin Starry



anti Treponema pallidum

Treponema pallidum is the causative agent of diseases such as syphilis. Warthin Starry will stain spirochetes black but there is often a large amount of background and debris and the stain doesn't differentiate between *Treponema pallidum* spirochetes and others.

Anti *Treponema pallidum* on the other hand is specific for syphilis and has a clean background.

In summary, IHC definitely wins with its staining specificity, ease of interpretation and assisting in a diagnosis. The cost and time can be a drawback for IHC though and where special stains come in handy.

30% OFF



now
\$857

Paraffin Section Mounting Bath

The low profile unit has a removable rectangular glass basin for easy cleaning. The glass basin is obliquely illuminated by LED which results in a high contrast, glare-free image. When the light is off the specimens are seen against a black background.

See page U9, cat. no. UM-WBG

We are over-stocked and selling existing stock at a fantastic discount

GET IT NOW!

Incredible discount, purchase your dream machine.

Prices include shipping within Australia



\$11,459

Automated Tissue Processor

Tissue processing is critically important to a high-volume, high-quality histology laboratory. This 12-phase tissue processor combines proven technology and a modern, functionally enhanced design.

See page U5, cat. no. UM-TP



\$7,604

Histology Embedding Centre

The centre console is complete for wax infiltration, orientation and embedding of specimens. The hot wax tank is very large and there are two heated receptacles, heated tweezers holders, a small cold plate and hot corrugations to remove excess wax. There is a touchplate switch to open an (adjustable flow-rate) valve for filling cassettes. A footswitch is provided to alternatively operate the heated wax dispenser.

See page U5, cat. no. UM-EC2800



ProSciTech Pty Ltd

ProSciTech Pty. Ltd.

11 Carlton St, Kirwan, QLD
www.proscitech.com

Phone: +61 7 4773 9444

E-mail: pst@proscitech.com

Master the art and science of H&E staining

with the new VENTANA HE 600 system^{}*

- Individual slide staining for risk mitigation of tissue cross contamination
- Fresh reagents on every slide using "ready to use" system reagents facilitating reproducible and consistent staining
- Eliminates use of xylene or alcohol
- Integrated baking, drying, staining, coverslipping and curing of H&E slides
- CareGiver remote diagnostic support monitoring
- Limited daily maintenance
- Barcode tracking of patient slides and automated system reports

^{*}Available November 2015



Roche Diagnostics Australia Pty Ltd
ABN 29 003 001 205
31 Victoria Avenue
Castle Hill NSW 2154
Australia
Tel: + 61 2 9860-2222
Fax: +61 2 9860-2122

www.roche.com
www.ventana.com

© 2015 Ventana Medical Systems, Inc.

HGV Most Interesting Case Study Competition

The HGV is seeking submissions of interesting case studies from your Laboratory!

Case Studies will be printed in Paraffinalia each edition.

There will be a prize of \$250 for the most interesting case study of 2015.

The winner will be announced in the first edition of Paraffinalia 2016 and the prize

Maximum of 2 pages including images and referencing.

Please submit all case studies electronically to editor@hgv.org.au

Specimen : Small Bowel and Abdominal Mass.

Clinical notes:

79 year old male

Abdominal tumour resected at root of small bowel mesentery.

Further clinical history; the patient's inflammatory markers showed dramatic improvement after surgery

Small bowel resection.

Microscopy:

Sections through the mesenteric mass show well circumscribed lesion composed of atypical spindled and epithelioid

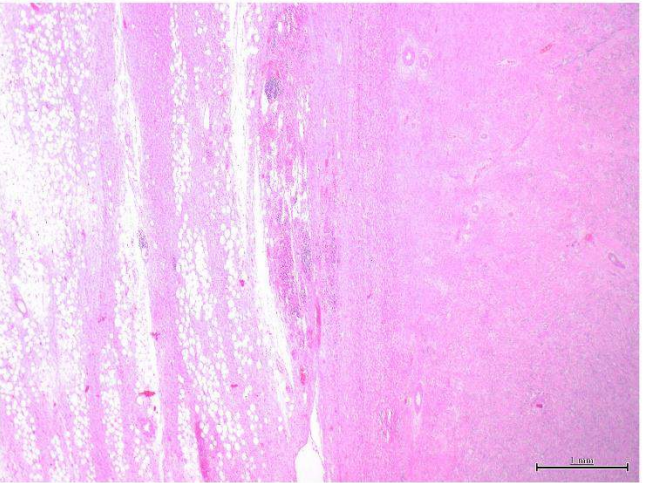
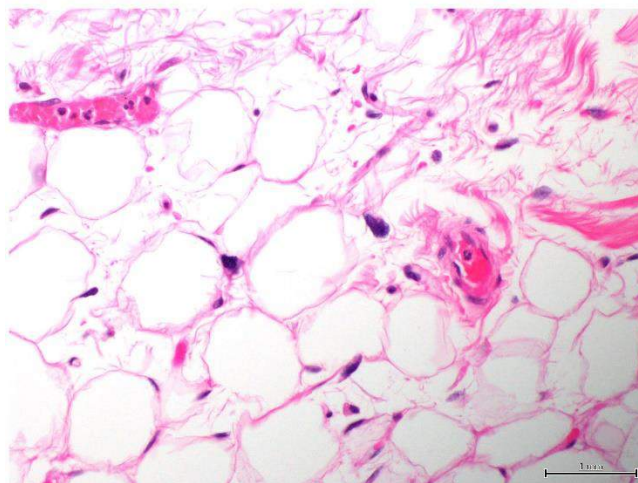
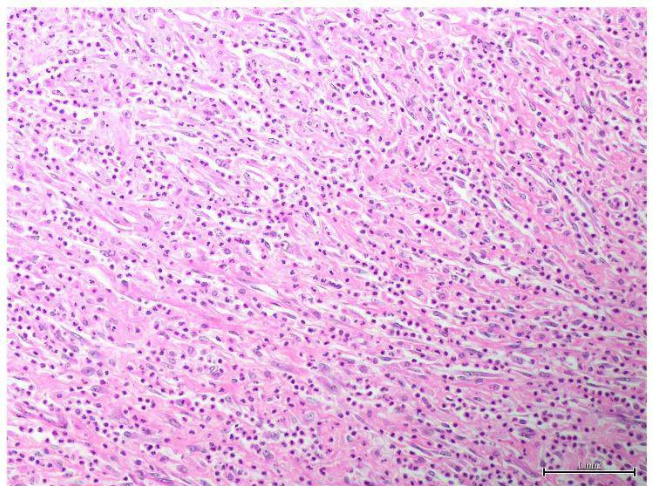
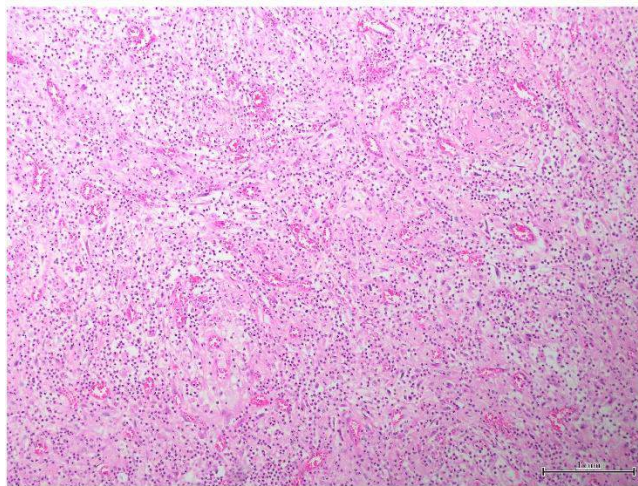
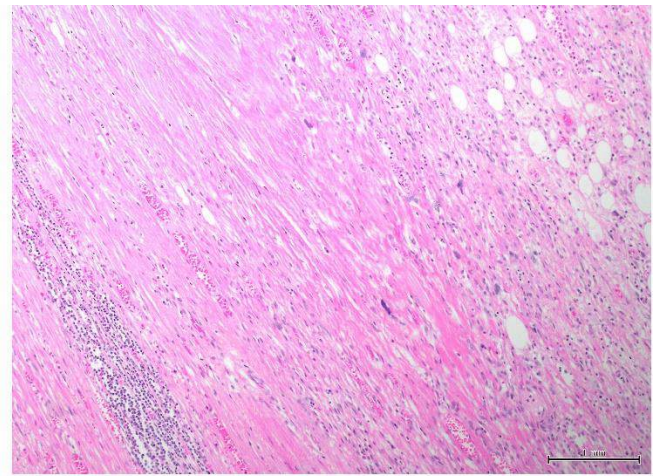
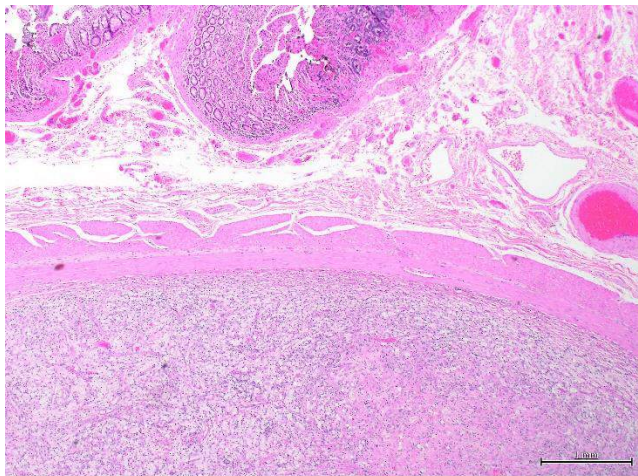
cells with enlarged and pleomorphic nuclei, some with prominent nucleoli. The histological features of this lesion are in keeping with dedifferentiated

liposarcoma given the presence of small amount of well differentiated

liposarcoma with abrupt transition to a higher grade of undifferentiated pleomorphic sarcoma, inflammatory subtype.

Diagnosis:

SMALL BOWEL AND ABDOMINAL MASS - THE FEATURES ARE IN KEEPING WITH DEDIFFERENTIATED LIPOSARCOMA, 170MM IN MAXIMUM DIMENSION.



Submitted by Samantha Arandelovic
St John of God Pathology



There are no second chances with your histology specimen handling. Reduce the risk of potential error in your laboratory upfront.

Delphic AP

Designer software for your pathology workflow

Safeguard your lab with software that manages every stage of lab workflow processing and reporting.

- Bar-code driven, single-piece workflow, eliminates the risk of error and enables full traceability of every specimen and item.
- Interfaces to a range of cassette writers, slide writers, label printers for 'just-in-time' printing.
- Centralised data access for clinical statistics and workload reports.
- Fully integrated, compliant billing module that meets Australian regulations.
- Improve customer service and quality with optional electronic orders module and online/mobile access to histopathology reports.

Provide quality histopathology services to your clients and their patients.

Talk to Sysmex today and let us show you how Delphic AP can improve the quality of your lab services.

Marie Czarnecki

P: 0432 273 550

E: czarnecki.marie@sysmex.com.au

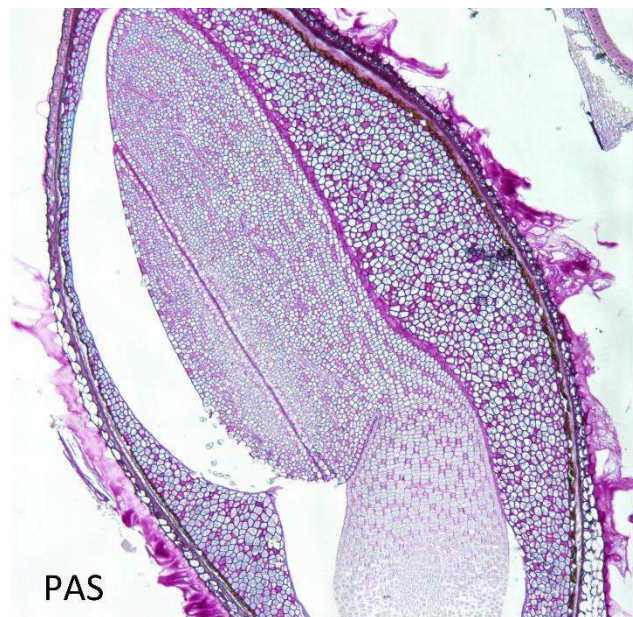
www.sysmex.com.au





Histology Group of Victoria Inc.

HISTO-GRAPHY COMPETITION



A sesame seed embedded into a polyp.

Submitted by Kerrie Scott-Dowell

Leica Biosystems Melbourne Pty Ltd

TekEquipment

a division of

TekMed



As a leading supplier of pathology and histology equipment our goal is perfection. We produce solutions in accordance to individual needs and technical standards. All of our equipment is designed to improve OH&S and workplace ergonomics

Down-Draft Grossing Tables | Ventilated Cabinets | Ventilated Staining Tables



www.TekEquipment.com.au

1300 368 138

info@tekequipment.com.au



Histology Group of Victoria Inc.
Org. No. A0035235F

Nomination Form for Election to the Committee of Management of the Histology Group of Victoria Inc.

Thursday 12th November, 2015 Peter MacCallum Cancer Centre

Nominated Person.....

Institution.....

Email Address.....

Position Nominated For	President	<input type="checkbox"/>
(Please tick box)	Treasurer	<input type="checkbox"/>
	Secretary	<input type="checkbox"/>
	Committee Member	<input type="checkbox"/>

All nominations must be signed by two HGV members
(If you receive Paraffinalia you are a member)

Name of Member.....Signature.....

Name of Member.....Signature.....

Nominations must have the consent of the nominee

Signature of Nominee.....

Nominations must be returned no later than Thursday 6th November, 2015.

Please send nomination form to:
The Secretary
Histology Group of Victoria
PO Box 1461
Collingwood, VIC 3166

Scanned and emailed to
secretary@hgv.org.au



Histology Group of Victoria Inc.
Org. No. A0035235F

Pathobin

Development and implementation of an innovative image
capture and application system

Speakers: **Dr Shane Battye**

Tissupath

Date: Thursday 12 November, 2015

Time: 6:00 – 6.45 Refreshments
 6.45 – 8.00 Presentation

Venue: Brockhoff Lecture Theatre
 Level 3, Smorgon Family Building
 Peter MacCallum Cancer Centre
 St. Andrew's Place, East Melbourne

Proudly Sponsored by



Org. No. A0035235F

Attendance at this meeting contributes to APACE points



Microtome Bundle Offer

Buy a Thermo Scientific™ HM 325 Rotary Microtome and you will receive **5 packs** of Ultra Microtome Blades **FREE***

Thermo Scientific™ HM 325 Rotary Microtome

*Feel the quality - Feel the cut - Feel the difference
For microtomists who prefer to "Feel" when to section*

A premier manual rotary microtome with additional capability to support rapid set-up and cleaning for improved workflow.

- 64mm vertical stroke can accommodate SuperMega™ Cassettes in horizontal orientation
- Wrap around detachable waste tray for safe and speedy debris collection and disposal
- XY fine orientation and zero positioning for rapid reorientation of pre-cut blocks
- Ultra-light touch, ergonomic flywheel
- Optional Section Transfer System supports workflow transition from ribbon to slide
- Compatible with Cool Cut to extend cutting periods for efficient step and serial sectioning



FREE*
Microtome Blades
Valued at \$700

Code	Item	Price
APM902100K	HM325 Microtome complete with knife holder and clamp	\$13,995

* Receive 5 packs of Ultra Microtome Blades Free, when you purchase a Thermo Scientific™ HM 325 Rotary Microtome. Offer expires December 31st, 2015. Offer not valid with any other discount or offer. Prices exclude GST. While stocks last.

ThermoFisher
SCIENTIFIC

For customer service, call 1300-735-292
To fax an order, use 1800-067-639
Visit us online: www.thermofisher.com.au

©2015 Thermo Fisher Scientific Inc. All rights reserved. A.B.N. 52 058 390 917



Histology Group of Victoria Inc.

Org. No. A0035235F

Future Events:

2015

~~Thursday 19th February~~

~~Scientific Meeting- RIMT Student Project Presentations~~

~~Venue: Peter Mac~~

~~Thursday 7th May~~

~~Scientific Meeting: Who Owns What?~~

~~The Requirements for Supply and for Tissue Samples.~~

~~Venue: Peter Mac~~

~~5-7 June~~

~~7th National Histotechnology Conference in conjunction with the~~

~~9th Asia-Pacific International Academy of Pathology Congress~~

~~Brisbane Convention and Exhibition Centre~~

~~Brisbane, Queensland~~

~~Thursday 25th June~~

~~Scientific Meeting~~

~~Venue: Peter Mac~~

~~Friday 14th August~~

~~Trivia night~~

~~Venue: The Metropolitan Hotel~~

~~263 William St.~~

~~Melbourne VIC 3000~~

~~August 28- September 2~~

~~NSH Symposium/Convention~~

~~Gaylord National Resort and Convention Centre~~

~~Washington, DC~~

~~USA~~

~~Thursday 10th September~~

~~Scientific Meeting~~

~~IHC vs Special Stains~~

~~Venue: Peter Mac~~

~~Thursday 12th November~~

~~Scientific Meeting/AGM~~

~~Venue: Peter Mac~~



Visit the
Trajan Booth to
Win an Avantik Block
Storage Cabinet

More event
details at:



Visit Trajan Scientific and Medical at the Australian Society of Cytology's 45th Scientific and Business Meeting in Brisbane 16 – 19 October for the chance to win an...

Avantik Block Storage Cabinet

- Hassle-free drawer technology providing more clearance between blocks and drawers to avoid jams.
- The interlocking stackable design has six fully removable drawers, and fits up to 2,310 cassette blocks.

1800 257 213

www.trajanscimed.com

